Kaleido Software V5.40 User's Manual

December 22, 2006

1 The Kaleido System

The Miranda Kaleido Multi-Image Display System combines multiple inputs (audio, video and data) into a single signal that can be displayed on a large screen, high-resolution monitor, replicating the functionality of a traditional monitor wall. Unlike the traditional monitor wall, however, the Kaleido output can be reconfigured and restructured with infinite flexibility. Software within the Kaleido unit itself, and supporting software (Kaleido Layout Editor) in a remote computer, communicating through a TCP/IP interface, provides this Kaleido versatility.

1.1 Kaleido Hardware

There are currently three members in the Kaleido family:

Kaleido K2 Kaleido-K2 is Miranda's most sophisticated and comprehensive

multi-image display system.

It is a 4RU system and can have up to 32 video inputs (SD-SDI, HD-SDI, VGA, Composite, Y/C and Component), 48 audio inputs (Analog and AES/EBU), 66 GPI Inputs and 36 GPI Outputs.

Kaleido Alto & Quad Kaleido-Alto and Kaleido-Quad are the newest members of the

Kaleido family.

They are 1RU systems with 10 (Alto) or 4 (Quad) video inputs (HD-SDI, SD-SDI or Composite), 10 (Alto) or 4 (Quad) audio inputs (Analog or AES/EBU), 20 GPI Inputs and 10 GPI Outputs.

Kaleido and Kaleido Classic, Miranda's first and second-generation systems, are not supported in this version of software, due to hardware limitations.

1.2 Kaleido Software

There are two software components associated with the Kaleido system:

- Kaleido software is installed in the Kaleido unit, and performs the analysis of all the incoming signals and displays a comprehensive representation of the monitor wall.
- Kaleido Layout Editor (KEdit) software runs on a remote computer connected to the
 Kaleido through the Ethernet. It creates the on-screen layout formats used by the Kaleido and
 is used to configure the Kaleido system. It can function in on-line or off-line modes. While online, it can manipulate the monitor wall display in real time. While off-line, it can create layouts
 for future use. KEdit shows a schematic representation of the monitor wall display on its
 screen.

1.2.1 KEdit feature exclusions for Kaleido Alto & Quad

Kaleido Alto and Kaleido Quad do not support all the features available in the KEdit software package. A summary of these limitations is available here.

1.3 Installation and Connection

Please see the Installation Guide for detailed instructions on installing the Kaleido software and setting up the necessary network connections for its operation.

2 Kaleido System Concepts

Kaleido replaces the traditional physical display devices in a monitor wall, such as video monitors, audio meters and tally lamps, with graphical representations. Understanding the Kaleido will be simpler if a number of key concepts are explained.

2.1 Component

A COMPONENT is a graphical element appearing on the Kaleido display. Components include video screens, audio meters, tallies, under monitor displays (UMDs), streaming viewers, clocks, etc.

2.2 Monitor

A MONITOR is a group of components. A monitor includes a single video component, and may contain many other components of different types.

The Monitor is analogous to the common home TV set: it has a screen, speakers, possibly the option to display the closed captioning (CC), and some on-screen text to identify the current channel.

TV Monitor



Kaleido Monitor





2.3 Layout

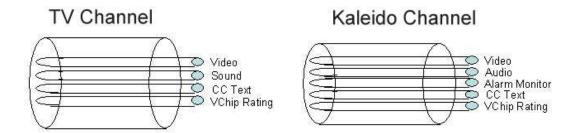
A LAYOUT is an arrangement of monitors and components on the Kaleido display. Layouts can be saved and recalled.

2.4 Channel

A CHANNEL is a group of elements, each described by its type (e.g. video, audio, text, tally, etc.) and by a description of where it can be found on the Kaleido's input ports. A Channel can only include a single video source, but it may include multiple instances of other source type. For instance, it may have four audio sources, two tally sources, three status monitors, etc.

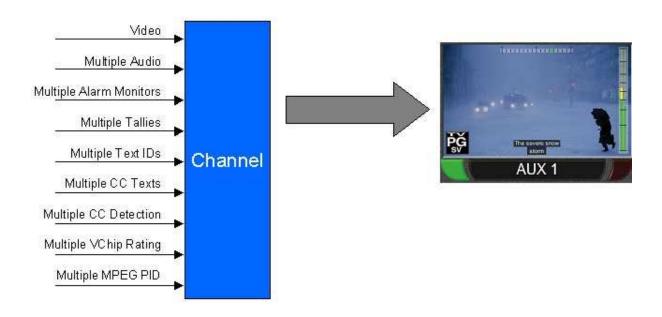
Continuing with the TV set example, a Kaleido Channel is conceptually the same as the broadcast or cable channel (which includes video, audio, closed captioning text, program

information, etc) captured by the TV set. Assigning a channel to a Kaleido monitor is equivalent to switching a TV set to a numbered channel.



2.5 Link Order

To distinguish between multiple instances of the same data type, each element in a channel and each component of a monitor is assigned a LINK ORDER. If there are, for example, three audio signals in a channel, they will each have a different link order, usually 1, 2 and 3. If the monitor has three audio meters, they will each have a different link order, also usually 1, 2 and 3. When this channel is assigned to this monitor, each display element shows the source in the channel with the matching type and link order. In this case, the audio source with link order 1 will be assigned to the audio meter with link order 1, etc. If there are more sources than meters, then the extra sources will not be shown. If there are more meters than sources, then the extra meters will be inactive



2.6 Alarm Monitors

ALARMS are used to report the status of a source in the Kaleido system.

Kaleido can detect certain critical events such as the loss of signal at an input, incorrect levels, pulses at a GPI input, etc. An alarm can be defined to monitor a signal for specific critical events, and to trigger a response if errors are detected. An ALARM MONITOR combines multiple alarms, and allows the user to program more specific responses to the presence of errors through the use of Actions.

An Alarm can identify and respond to four different states, whose typical meaning is:

Disabled: the status of the signal cannot be determined.

Normal: there is currently no problem with the signal.

• Warning there is currently no critical problem with the signal.

• Error: there is currently a problem with the signal.

An Alarm Monitor reports highest-priority error flagged by its individual alarms. This means that as soon as one alarm reports a status other than Normal, the Alarm Monitor will reflect it. Here is the status list in order of precedence:

- Error
- Warning
- Disabled
- Normal

2.7 Triggers and Actions

A TRIGGER is defined as something that starts an operation. In Kaleido the Trigger will start an Action. A Trigger can be a mouse click, a timer end-of-count, an Alarm Monitor status change, etc

An ACTION is defined as a sequence of one or more tasks. A task refers to something to execute, such as the loading of a layout, the starting of a count down timer, etc. Triggering the Action results in the execution of the series of tasks in the predetermined order.

2.8 Quality Control Monitor

A QUALITY CONTROL MONITOR is a Monitor configured to receive any available video source while it is still displayed in its assigned Monitor. The typical use of the Quality Control Monitor is to have a bigger view of a specified source. Quick and easy selection of the source using simple mouse clicks on the Kaleido screen is an important aspect of the functionality of a Quality Control Monitor.

3 On-Screen Components in Kaleido

3.1 Introduction to Components

A COMPONENT is a graphical element appearing on the Kaleido display. Components include video screens, audio meters, tallies, under monitor displays (UMDs), streaming viewers, clocks, etc. Each component is the on-screen manifestation of a data stream. Each Component must be defined from several points of view:

Input – the source of the data must be identified. Sources are defined in terms of physical inputs on the Kaleido chassis. However, a more flexible definition of the input, and control of the source, is provided through the use of Router control, whereby the data appearing at the designated Kaleido input may be sourced from a router whose cross points are controlled through the Kaleido. Certain types of data, e.g. closed caption text, UMD text, MPEG data stream analysis data, etc. may be sourced from third-party devices that are connected to Kaleido through its Ethernet port. In these cases, the IP address of the data source is required.

Appearance – the appearance of the component within the Kaleido display can be configured. Controllable features may include size, color, audio meter scales, presentation of alarm information (e.g. color, flashing or steady, etc.), transparency, etc.

Response – some components may be controlled by mouse actions on the Kaleido output screen. The relationship between stimulus and response must be defined.

KEdit provides the tools to create and configure Components.

The following sections provide complete details on creating and configuring each of the component types available in Kaleido.

3.2 Monitor

3.2.1 Creation:

Use the Monitor Browser to add a Monitor to the current Layout.

- 1. Open the Monitor Browser in KEdit in one of three ways:
 - Select its icon from the KEdit toolbar.
 - Select the Monitor Browser item in the <u>View menu</u>.
 - Push F6 on the keyboard.
- Select an appropriate Monitor from the pull down list, using the Preview to see its appearance.
- 3. Click on the preview, and drag a copy of the monitor onto the layout.

3.2.2 Configuration:

The attributes of a Monitor are adjustable using the Configuration Panel in <u>KEdit</u>. To access the panel for a Monitor:

- 1. Click on the Monitor to select it. Its boundary will appear in white, and control points will appear at the corners and the center of each side, showing it is selected.
 - NOTE: at this point the Monitor may be positioned (click and drag) and scaled (click and drag a control point) within the Layout.
- 2. Open the Configuration Panel for the Monitor by pushing F5, or from the Configuration Panel item in the <u>View menu</u>, or by right-clicking on the Monitor and selecting "Configuration Panel" in the contextual menu.

The Configuration Panel's appearance and functionality is the same in both online and offline operating modes – only the contents of the Channel pull-down box change, as noted below.

Assignment Tab

Assign Channel

The current Channel assignment is shown.

To change the assignment, select a Channel from the pulldown list, which shows all channels available, and then click Apply at the bottom of the panel:

Offline – shows the Channels available on the computer running KEdit

Online – shows the Channels available on the Kaleido-K2.

(Type/Link Order/Assignment)

A listing of all the signals contained in the channel identified in the Assign Channel text box. You cannot change these here. They are set at the individual component configuration panels.

Save Channel

Click the Save As... button to save a copy of the current assignment as a new Channel. You will be prompted to enter a name for the new Channel.

Size/Position tab

This tab shows:

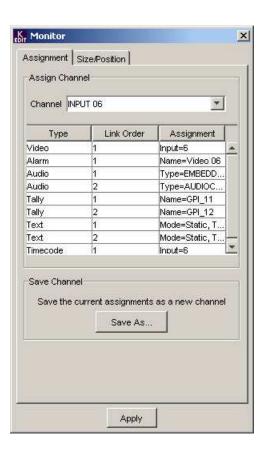
- the size (Horizontal, Vertical and Diagonal) of this monitor
- the position in the layout (Horizontal and Vertical) of the top left corner of this monitor.

The data boxes allow new size and position information to be entered, allowing monitors to be very precisely scaled and positioned in the layout. Click in a box and type new data – the other boxes are recalculated immediately.

The values can be expressed in a variety of units:

- Cm
- Inches
- Pixels
- % (of the layout size)

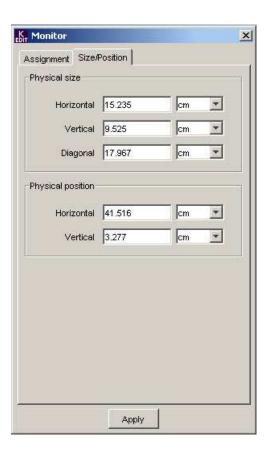
selectable from the pulldown list beside the data box. Note that the units available are a result of selections



made in the *New Layout Format* panel when the layout was created, or in changes made to those selections in the *Layout Properties Panel*, accessible from File – Layout Properties.

The size of the Monitor in the layout will not change until the *Apply* button is clicked.

Hint: to change a Monitor's size while retaining its aspect ratio, change the diagonal measurement. The Horizontal and Vertical dimensions will retain their proportions as their size changes.



3.2.3 Locking and Unlocking a Monitor

The contents of a Monitor (i.e. the number, position and configuration of the components inside it) can only be accessed when the Monitor is UNLOCKED.

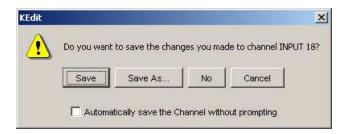
- To UNLOCK a Monitor, use one of these methods:
 - right-click on it and select Unlock Monitor from the contextual menu.
 - ALT-click on the Monitor (this also selects the component within the Monitor which was clicked)
- An UNLOCKED Monitor is identified by a YELLOW BORDER and YELLOW RESIZING HANDLES (disabled) in its corners.

When the contents of the Monitor have been configured, LOCK the monitor:

- To LOCK a Monitor, you can either:
 - Right-click on any component inside the Monitor, and select Lock Monitor from the contextual menu, or
 - Click in the layout outside the Monitor
- A LOCKED Monitor is identified by a WHITE border

If you change the assignment of signals to components while editing the contents of an unlocked monitor, the definition of the channel assigned to the Monitor will be changed. When you lock the Monitor, you will either:

- Automatically save the changes and redefine the Channel to match the new assignments, or
- Be prompted to either save the changes and redefine the channel, or save the changed assignments as a new channel, using this dialog:



You determine which of these options will occur using the **System Preferences** dialog accessed from the File-Preferences menu. Note that if you check the "Automatically save the channel without prompting" box, then any future changes to this channel will be saved without a prompt, but changing other channels will still invoke the "save changes" dialog. Checking the box does not override the choice you made in the Preferences dialog.

3.2.4 Operation

3.2.4.1 Assign Channel

This operation will assign a Channel to a Monitor. Note that if the Channel to assign is already used in the layout, then the Monitor that is currently assigned to the Channel will be unassigned, and its video will be shown in the new Monitor.

Using the Mouse

Right-click on the Monitor's Video screen on the Kaleido display. Choose Assign Channel, and select the desired Channel from the list of all available Channels by clicking on it.

Using Kaleido-RCP

Push the Select button on the <u>Kaleido-RCP</u>. Each Monitor in the Layout will show an ID number, and its current Channel assignment (either a Channel name or "No Channel"). A yellow box surrounds the ID of the Monitor currently being pointed to. Use the arrow keys to move the pointer box to the Monitor of interest. Then push Input. The pointer box turns red and a scrollable

window opens on-screen listing all the defined Channels stored in Kaleido. Scroll up or down to find the desired Channel, then push Enter to assign the channel to that monitor

Alternatively, press INPUT, select the Channel you want, and press Enter. Then, navigate through the Monitors using the arrow keys and press enter to assign that Channel to the selected Monitor.

When finished, press Esc to remove the Monitor IDs and Channel names from the screen.

Using a Keyboard

Push the Tab key on the keyboard. Each Monitor in the Layout will show an ID number, and its current Channel assignment (either a Channel name or "No Channel"). A yellow box surrounds the ID of the Monitor currently being pointed to. Use the arrow keys to move the pointer box to the Monitor of interest. Then push A. The pointer box turns red and a scrollable window opens on-screen listing all the defined Channels stored in Kaleido. Scroll up or down to find the desired Channel, then push Enter to assign the Channel to that Monitor

Alternatively, press A, select the Channel you want, and press Enter. Then, navigate through the Monitors using the arrow keys and press enter to assign that Channel to the selected Monitor.

When finished, press Esc to remove the Monitor IDs and Channel names from the screen.

3.2.4.2 Full Screen mode

Using the Mouse

You can display a Monitor in Full Screen mode using the mouse only if the Monitor's Video Screen has been configured with Full Screen as one of its Actions (by default Full Screen Action is configured on double-click). In that case, proceed as follows:

 Left-single-click or left-double-click (whichever was configured for the Full Screen Action) on the Monitor's Video Screen in the Kaleido display.

You can return from Full Screen mode to the previous Layout using the mouse only if you have programmed the Video Screen in the Full Screen Layout with Previous Layout as one of its Actions. In that case, proceed as follows:

 Left-single-click or left-double-click (whichever was configured for the Previous Layout Action) on the Video Screen in the Kaleido Full Screen display.

Using Kaleido-RCP

Push the Select button on the Kaleido-RCP. Each Monitor in the Layout will show an ID number, and its current Channel assignment (either a Channel name or "No Channel"). A yellow box surrounds the ID of the Monitor currently being pointed to, which is the current selection.

- Use the arrow keys to move the pointer box and change the current selection.
- Push the Full Screen button; the current selection will appear in Full Screen mode
- Push the Full Screen button again to exit Full Screen mode and return to Normal Mode

Using a Keyboard

Push the Tab button on the keyboard. Each Monitor in the Layout will show an ID number, and its current Channel assignment (either a Channel name or "No Channel"). A yellow box surrounds the ID of the Monitor currently being pointed to, which is the current selection.

- Use the arrow keys to move the pointer box and change the current selection.
- Push the F key; the current selection will appear in Full Screen mode
- Push the F key again to exit Full Screen mode and return to Normal Mode

3.2.4.3 Quality control mode

Use the mouse to enter or leave the Quality Control mode by double-clicking on Video Screens which have been configured for Quality Control (QC) functionality. These Video Screens are identified by the presence of markers in the four corners of the screen ($_{\Gamma,\ \gamma}$, $_{\perp}$ and $_{\perp}$), which are gray for a non-selected QC Monitor, and white for a selected QC monitor.

Double-click on		Result
•	Non-Selected QC Monitor:	The double-clicked QC Monitor is selected.
		Any previously-selected QC Monitor is deselected
•	Selected QC Monitor:	The double-clicked QC Monitor is deselected.
		Normal operation mode is restored.

Once a Monitor configured for Quality Control has been selected by a double click, then singleclicking on any other Monitor in the Layout that has been configured in the Router Reference Table will send its video to the Quality Control Monitor.

Note that:

- The normal single-click action function of these other Monitors has been pre-empted. The double-click action function remains available.
- A non-selected Quality Control Monitor acts like any other Monitor. It displays the signal for which it was configured, and its signal can be routed to the selected Quality Control Monitor by a single click.

3.2.4.4 Unlatch Error Status of Monitor

Using the Mouse

Right-click on the Video Screen of a Monitor in the Kaleido display using the mouse, and select Unlatch Monitor Status. The error detection of all components in that Monitor with error latching capability (Video Screens, UMDs, Text Labels and Status Indicators) will be unlatched.

Using Kaleido-RCP

Push the Select button on the Kaleido-RCP. Each Monitor in the Layout will show an ID number, and its current Channel assignment (either a Channel name or "No Channel"). A yellow box surrounds the ID of the Monitor currently being pointed to, which is the current selection.

- Use the arrow keys to move the pointer box and change the current selection.
- Push the DEL button; the error detection of all components in that Monitor with error latching capability (Video Screens, UMDs, Text Labels and Status Indicators) will be unlatched.

Using a Keyboard

Push the Tab button on the keyboard. Each Monitor in the Layout will show an ID number, and its current Channel assignment (either a channel name or "No Channel"). A yellow box surrounds the ID of the Monitor currently being pointed to, which is the current selection.

- Use the arrow keys to move the pointer box and change the current selection.
- Push the Delete key; the error detection of all components in that Monitor with error latching capability (Video Screens, UMDs, Text Labels and Status Indicators) will be unlatched.

3.3 Video Screen

3.3.1 Creation:

A Video Screen must be created as part of a Monitor. Use the Monitor Browser to add a Monitor to the current Layout.

- 1. Open the Monitor Browser in KEdit in one of three ways:
 - Select its icon from the KEdit toolbar.
 - Select the Monitor Browser item in the <u>View menu</u>.
 - Push F6 on the keyboard.
- 2. Select an appropriate Monitor from the pull down list, using the Preview to see its appearance.
- 3. Click on the preview, and drag a copy of the Monitor onto the layout.

All Monitors contain one, and only one, Video Screen. You cannot add a second Video Screen, or delete the one included in the Monitor.

3.3.2 Configuration:

The attributes of a Video Screen are adjustable using the Configuration Panel in <u>KEdit</u>. To access the panel for a Video Screen:

1. Select the Video Screen using one of these methods:

- Unlock the Monitor in which the Video Screen is located, by right-clicking and selecting
 Unlock Monitor from the contextual menu (an UNLOCKED Monitor is identified by a
 YELLOW BORDER and YELLOW RESIZING HANDLES in its corners), and then click on
 the video screen to select it
- ALT-click on the video screen. The monitor will unlock, and the screen will be selected.

NOTE: at this point the Video Screen may be positioned (click within the screen and drag) and scaled (click and drag a control point) within the Monitor. It will retain its aspect ratio when scaled, and cannot be moved outside the Monitor boundary.

2. Open the Configuration Panel for the Video Screen by pushing F5, or from the Configuration Panel item in the <u>View menu</u>.

The Configuration Panel's appearance will vary depending on the KEdit operating mode.

- Offline operation: KEdit is operating in a stand-alone mode, and is configuring a layout located on its local computer. Some information about the video inputs is not available, and certain configuration controls are not active. These items are grayed out on the configuration panel in the offline mode.
- Online operation: <u>KEdit</u> is connected online to a Kaleido-K2, and is configuring the Kaleido-K2's current layout. All configuration controls are active.

In the following section, all possible versions of the configuration panels are shown, and all parameter setting are discussed.

3.3.2.1 Offline Panels:

The offline Video Screen Configuration Panel has six tabs, each of which allows configuration of a specific class of parameters. Note that certain items in the Assignment tab are grayed out, as they can only be used while online. These items are not described in this section.

Assignment Tab

Assign Video Input:

Input Number: Enter the number of the Kaleido video input that is to appear on this video screen [enter a number between 1 and 32].

Input Format:

Kaleido detects and reports the format of the selected input in online mode only. In offline mode, the Input Format box reports that no video is assigned

Loss of Video:

Select the check box to display black on this video screen when the Signal Loss alarm is detected for the video stream. Leave the checkbox unchecked to display the video stream as found.



Border Tab

Border Color:

A border around the periphery of the Video Screen is used to show Alarms associated with this Video Screen component. For each of the four possible Alarm states, select the color and width of the border. For the Warning and Error states, border flashing can be turned on or off by clicking the box.

- The Color Fill icon shows the color currently selected for the border. Click on the down-arrow beside the Color Fill icon to open a color selection window and choose a different color.
- The border width pull-down shows the current width of the border for each error condition. Click on the pull-down to select a different value (range between 1 and 5)

Assign Alarm Monitor:

Select an Alarm Monitor to be assigned to this Video Screen component from the pull-down list of available Alarms. The status of the Alarm will be shown by the border.

New: open the <u>Alarm Monitor</u> panel to create a new alarm, which will be assigned to this Video Screen when the Alarm Monitor panel is closed.

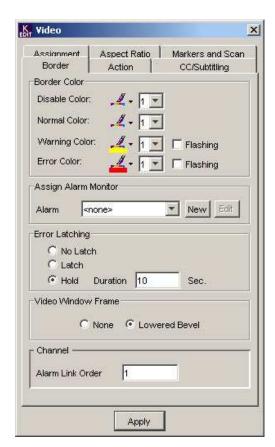
Edit: open the <u>Alarm Monitor</u> panel to edit the alarm selected in the pull-down list. Grayed-out if "none" is selected.

Error Latching:

Use these controls to keep the Alarm on after the error has passed, to make detection of transient errors easier.

- No Latch do not latch the error.
- Latch hold the Alarm on indefinitely.
- Hold hold the Alarm on for the duration specified in the box.

The latched status is indicated by the corners of the border, while the top, bottom and sides continue to show the current status.



Video Window Frame:

The appearance of the Video Screen at the Kaleido output can be enhanced by adding a frame which creates the appearance of depth. This frame does not appear in the KEdit rendition of the Layout. Select the format of the frame around the Video Screen:

- None no frame is shown.
- Lowered Bevel shows a frame with a beveled profile as a graphic effect at the Kaleido-K2 output.

Channel:

The channel assignment for this Video Screen will be shown and the Alarm Link Order box will be active. The alarm link order can be changed by entering a new value in the box.

Action Tab

Assign Actions

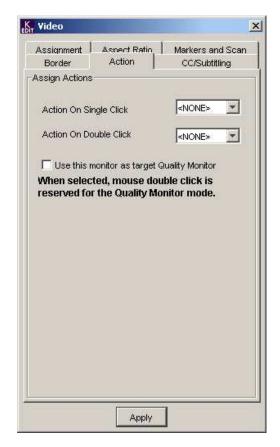
Action on single click: from the pull-down box, select the Action that will be executed when this Video Screen is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Video Screen is double-clicked using the mouse attached to the Kaleido-K2.

Use this Monitor as target Quality Monitor:

Ticking this box assigns this Monitor as a Quality Control Monitor at the Kaleido-K2 output. It will usually be a large Monitor that can be used on the Kaleido-K2 screen to quickly access a larger image of video from any other on-screen Monitor

Note that when a Monitor is assigned for Quality Control, the use of the double click to trigger an Action is disabled, since the double click is used to assign the Monitor for Quality Control.



CC/Subtitling Tab

Text Overlay

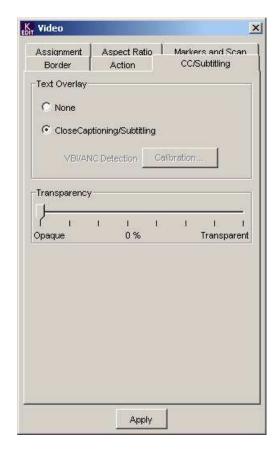
None: disables this feature

Close Captioning / Subtitling: turns on an on-screen presentation of Closed Caption or Subtitling information. This may duplicate the information seen on a CC Text component, but it is formatted to conform to the on-screen presentation that would be seen by a viewer looking at a monitor with standard CC decoding.

VBI/ANC Detection: in an On-line layout, the Calibration button is enabled. Click it to open the VBI/ANC Detection Calibration panel. Use it to select the Character set that will be used by the parser to decode the subtitling.

Transparency

Use the slider to select the transparency of the text.



Aspect Ratio Tab

Automatic Aspect Ratio

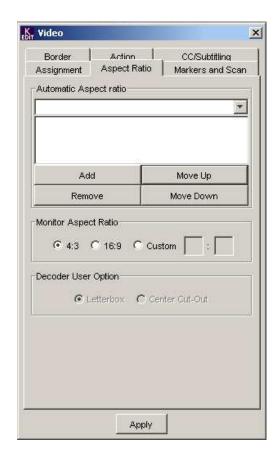
(Not available in the off-line panel)

Monitor Aspect Ratio

Click the appropriate radio button to set the aspect ratio for this video screen. If you select Custom, you must enter values in the two data boxes: Width on the left, Height on the right.

Decoder User Option

(Not available in the off-line panel)



Markers and Scan Tab

Aspect Ratio Marker:

Display Markers: select the checkbox to display the aspect ratio markers on the Kaleido display

Use the radio buttons to select 4:3, 16:9 or Custom markers. If you select Custom, you must enter values in the two data boxes: Width on the left, Height on the right.

Set the marker line color and background (area outside the marked zone) color using the two pulldowns

Transparency:

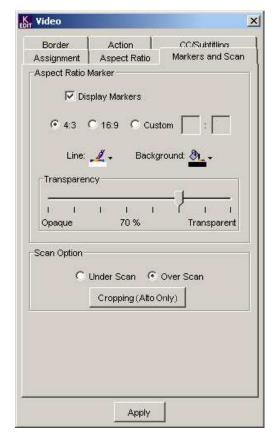
Set the transparency of the background zone using the slider.

Scan Option

Select Over Scan or Under Scan for this video screen.

Click the *Cropping (Alto Only)* button to open a dialog box allowing you to crop this video component if the layout is intended to be exported to Kaleido Alto or Kaleido Quad.

NOTE: The cropping effect will not be displayed if the layout is sent to a Kaleido-K2.





3.3.2.2 Online Panels – Analog Video (Kaleido-K2 only)

Assignment Tab

Assign Video Input:

Input Number: Enter the number of the Kaleido video input that is to appear on this Video Screen [enter a number between 1 and 32]

Input Format:

Kaleido detects and reports the format of the selected input.

NOTE: In the case of Analog Video, Kaleido cannot automatically distinguish between versions within certain families, so the user must specify which of the system versions it will process using a dialog that is accessed through the *Advanced...* button

- NTSC, select between:
 - NTSC M (3.58)
 - NTSC J (4.43)
- PAL, select between:
 - PAL BGDHI
 - PAL N

Loss of Video:

Select the check box to display black on this video screen when the Signal Loss alarm is detected for the video stream. Leave the checkbox unchecked to display the video stream as found.

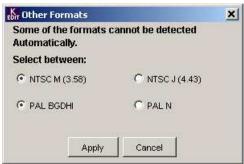
Router Control:

Router Input: If a router has been assigned to the selected video input (see Control of an External Router by Kaleido-K2), then this data entry box will be active. Enter the number of the router input that will be routed to this Kaleido-K2 input. [enter a number in the range from 1 to the highest input available on the router]

Video Detection Calibration:

Click on the Calibration button to set detection parameters for the three configurable types of error detected by Kaleido:





- Luma too high
- Black detection
- Freeze detection

Kaleido also detects loss of video, but there are no configurable detection parameters.

VBI Detection Calibration:

Click on the Calibration button to set detection parameters for the two signals whose presence in the VBI is monitored by Kaleido:

- CC text presence
- VChip presence

Border Tab

Border Color:

A border around the periphery of the Video Screen is used to show Alarms associated with the screen's video. For each of the four possible Alarm states, select the color and width of the border. For the Warning and Error states, border flashing can be turned on or off by clicking the box.

- The Color Fill icon shows the color currently selected for the border. Click on the down-arrow beside the Color Fill icon to open a color selection window and choose a different color.
- The border width pull-down shows the current width of the border for each error condition. Click on the pull-down to select a different value (range between 1 and 5 pixels)

Assign Alarm Monitor:

Select an Alarm Monitor to be assigned to this Video Screen component from the pull-down list of available Alarms. The status of the Alarm Monitor will be shown by the border.

New: open the <u>Alarm Monitor</u> panel to create a new alarm, which will be assigned to this Video Screen when the Alarm Monitor panel is closed.

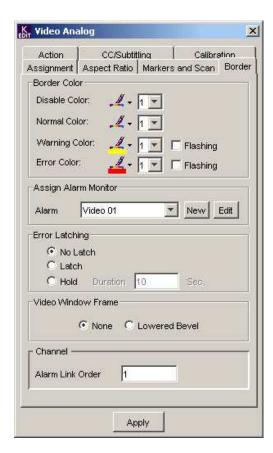
Edit: open the <u>Alarm Monitor</u> panel to edit the alarm selected in the pull-down list. Grayed-out if "none" is selected.

Error Latching:

Use these controls to keep the Alarm on after the error has passed, to make detection of transient errors easier.

- No Latch do not latch the error.
- Latch hold the Alarm on indefinitely.
- Hold hold the Alarm on for the duration specified in the box.

The latched status is indicated by the corners of the border, while the top, bottom and sides continue to show the current status.



Video Window Frame:

The appearance of the Video Screen at the Kaleido-K2 output can be enhanced by adding a frame, which creates the appearance of depth. This frame does not appear in the KEdit rendition of the layout. Select the format of the frame around the Video Screen:

- None no frame is shown
- Lowered Bevel shows a border with a beveled profile as a graphic effect at the Kaleido-K2 output.

Channel:

The Channel assignment for this Video Screen will be shown and the Alarm Link Order box will be active. The alarm link order can be changed by entering a new value in the box.

Action Tab

Assign Actions

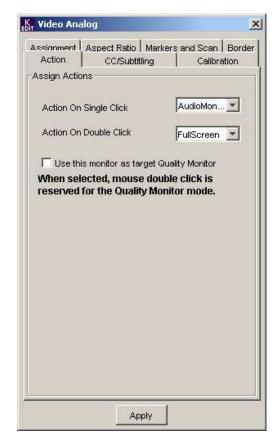
Action on single click: from the pull-down box, select the Action that will be executed when this Video Screen is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Video Screen is double-clicked using the mouse attached to the Kaleido-K2.

Use this Monitor as target Quality Monitor:

Ticking this box assigns this Monitor as a Quality Control Monitor at the Kaleido-K2 output. It will usually be a large Monitor that can be used on the Kaleido-K2 screen to quickly access a larger image of video from any other on-screen Monitor

Note that when a Monitor is assigned for Quality Control, the use of the double click to trigger an Action is disabled, since the double click is used to assign the Monitor for Quality Control.



CC/Subtitling Tab

Text Overlay

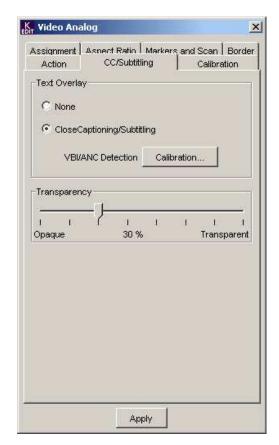
None: disables this feature

Close Captioning / Subtitling: turns on an on-screen presentation of Closed Caption or Subtitling information. This may duplicate the information seen on a CC Text component, but it is formatted to conform to the on-screen presentation that would be seen by a viewer looking at a monitor with standard CC decoding.

VBI/ANC Detection: Click the Calibration button to open the VBI/ANC Detection Calibration panel. Use it to select the Character set that will be used by the parser to decode the subtitling..

Transparency

Use the slider to select the transparency of the text.



Aspect Ratio Tab

Some signal formats carry information about the aspect ratio of their video signal. Kaleido allows the user to choose to use this information to modify how the signal is displayed on the Kaleido output. The available resources for aspect ratio detection using this source type are:

- WSS Wide Screen Signaling per ITU-R BT.1119-2 (NOTE: PAL only)
- Follow Input Resolution as detected by the Kaleido input card.

Automatic Aspect Ratio

Sets up a prioritized list to be used for automatic aspect ratio detection. Kaleido will look for aspect ratio definitions in the data stream in this order, and use the first data it encounters.

The window shows the current list.

 If the window is empty, automatic aspect ratio is disabled, and the default aspect ratio is used.

Click on the pulldown to see a list of the methods applicable to the current input card that are not already shown in the window. Click on one to select it

Click ADD to add the selected method to the window.

Click on a method in the window to select it, and use the MOVE UP and MOVE DOWN buttons to change its position within the list.

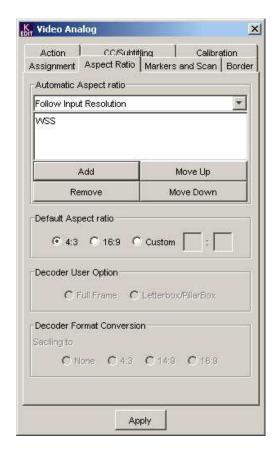
Click on a method in the window to select it and click REMOVE to delete it from the list.

Default Aspect Ratio

Use the radio buttons to select the default aspect ratio of the video screen. This aspect ratio will be used unless overridden by automatic aspect ratio when enabled. Options: 4:3, 16:9 or Custom. If Custom is selected, enter the H and V proportions in the data boxes.

Decoder User Option: N/A

Decoder Format Conversion: N/A



Markers and Scan Tab

Aspect Ratio Marker:

Display Markers: select the checkbox to display the aspect ratio markers on the Kaleido display

Use the radio buttons to select 4:3, 16:9 or Custom markers. If you select Custom, you must enter values in the two data boxes: Width on the left, Height on the right.

Set the marker line color and background (area outside the marked zone) color using the two pulldowns

Transparency:

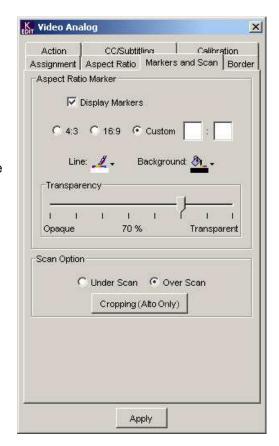
Set the transparency of the background zone using the slider.

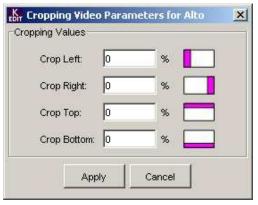
Scan Option

Select Over Scan or Under Scan for this video screen.

Clicking the *Cropping (Alto Only)* button opens a dialog box allowing you specify cropping for this video component that will take effect only if the layout is displayed on a Kaleido Alto or Kaleido Quad. The effect can only be seen at the Alto/Quad output.

NOTE: The cropping effect will not be displayed on the Kaleido-K2 showing this online layout. The panel is available here only because you may choose to export this layout to a Kaleido-Alto/Quad, and there the cropping will be applied.





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Calibration Tab

Calibration:

Set some picture parameters for the selected input to the Kaleido:

- Brightness [range 0-100, default 50]
- Color [range 0-100, default 50]
- Contrast [range 0-100, default 50]
- Hue [range 0-100, default 50]
- Sharpness [range 0-7, default 4]

so that its appearance on the Monitor Wall output is optimized.

Slider controls are provided for each parameter to establish a custom set-up. The default button selects the factory settings.

DeInterlacer:

Select the built-in deinterlacer's mode of operation for this input, in order to optimize the Monitor Wall output appearance:

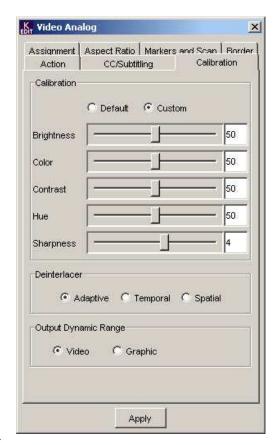
- Adaptive (better for some types of moving picture content)
- Temporal (better for some types of moving picture content)
- Spatial (better in Editing mode when the content is often still-frame)

Select one of the three using the buttons.

Note: the deinterlacer is engaged only when the resolution of the video displayed on the Layout is greater or equal to its native resolution

Output Dynamic Range:

The definition of a digital video signal places Video Black at 16 and Video White at 236 within the available range of 0 to 255. The Kaleido's monitor wall output is a VGA signal, with black at 0 and white at 255.



- Select *Video* to use the digital video signal values at the Kaleido's monitor wall output
- Select Graphic to expand the signal to place Video Black at 0 and Video White at 255 at the output, thereby expanding its dynamic range to match the graphic elements within the monitor wall display.

3.3.2.3 Online Panels – Digital Video (Kaleido-K2 only)

Assignment Tab

Assign Video Input:

Input Number: Enter the number of the Kaleido video input that is to appear on this Video Screen [enter a number between 1 and 32].

Input Format:

Kaleido detects and reports the format of the selected input.

Loss of Video:

Select the check box to display black on this video screen when the Signal Loss alarm is detected for the video stream. Leave the checkbox unchecked to display the video stream as found.

Router Control:

Router Input: If a router has been assigned to the selected video input (see Control of an External Router by Kaleido-K2), then this data entry box will be active. Enter the number of the router input that will be routed to this Kaleido-K2 input. [enter a number in the range from 1 to the highest input available on the router].

Video Detection Calibration:

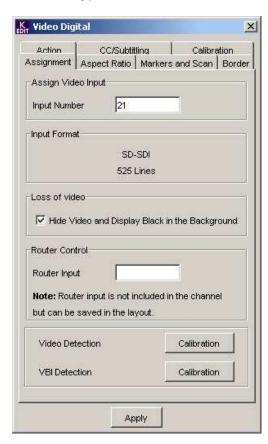
Click on the Calibration button to set detection parameters for the three configurable types of error detected by Kaleido:

- Luma too high
- Black detection
- Freeze detection

Kaleido also detects loss of video, but there are no configurable detection parameters.

VBI Detection Calibration:

Click on the Calibration button to set detection parameters for the two signals whose presence in the VBI is monitored by Kaleido:



- CC text presence
- VChip presence

Border Tab

Border Color:

A border around the periphery of the Video Screen is used to show Alarms associated with the screen's video. For each of the four possible Alarm states, select the color and width of the border. For the Warning and Error states, border flashing can be turned on or off by clicking the box.

- The Color Fill icon shows the color currently selected for the border. Click on the downarrow beside the Color Fill icon to open a color selection window and choose a different color.
- The border width pull-down shows the current width of the border for each error condition.
 Click on the pull-down to select a different value (range between 1 and 5 pixels)

Assign Alarm Monitor:

Select an Alarm Monitor to be assigned to this Video Screen component from the pull-down list of available Alarms. The status of the Alarm will be shown by the border.

New: open the <u>Alarm Monitor</u> panel to create a new alarm, which will be assigned to this Video Screen when the Alarm Monitor panel is closed.

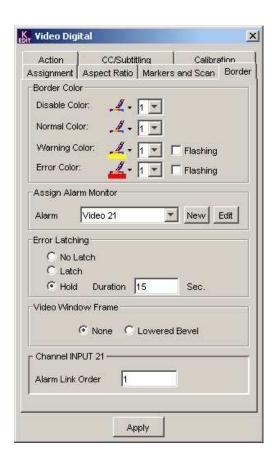
Edit: open the <u>Alarm Monitor</u> panel to edit the alarm selected in the pull-down list. Grayed-out if "none" is selected.

Error Latching:

Use these controls to keep the Alarm on after the error has passed, to make detection of transient errors easier.

- No Latch do not latch the error.
- Latch hold the Alarm on indefinitely.
- Hold hold the Alarm on for the duration specified in the box.

The latched status is indicated by the corners of the border, while the top, bottom and sides continue to show the current status.



Video Window Frame:

The appearance of the Video Screen at the Kaleido-K2 output can be enhanced by adding a frame, which creates the appearance of depth. This frame does not appear in the KEdit rendition of the Layout. Select the format of the frame around the Video Screen:

- None no frame is shown
- Lowered Bevel shows a frame with a beveled profile as a graphic effect at the Kaleido-K2 output.

Channel:

The Channel assignment for this Video Screen will be shown and the Alarm Link Order box will be active. The alarm link order can be changed by entering a new value in the box.

Action Tab

Assign Actions

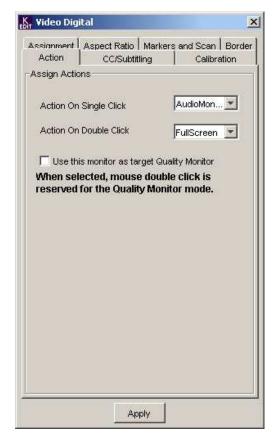
Action on single click: from the pull-down box, select the Action that will be executed when this Video Screen is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Video Screen is double-clicked using the mouse attached to the Kaleido-K2.

Use this Monitor as target Quality Monitor:

Ticking this box assigns this Monitor as a Quality Control Monitor at the Kaleido-K2 output. It will usually be a large Monitor that can be used on the Kaleido-K2 screen to quickly access a larger image of video from any other on-screen Monitor

Note that when a Monitor is assigned for Quality Control, the use of the double click to trigger an Action is disabled, since the double click is used to assign the Monitor for Quality Control.



CC/Subtitling Tab

Text Overlay

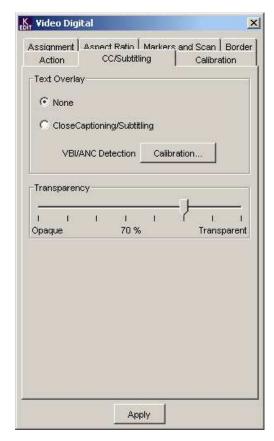
None: disables this feature

Close Captioning / Subtitling: turns on an onscreen presentation of Closed Caption or Subtitling information. This may duplicate the information seen on a CC Text component, but it is formatted to conform to the on-screen presentation that would be seen by a viewer looking at a monitor with standard CC decoding.

VBI/ANC Detection: Click the Calibration button to open the VBI/ANC Detection Calibration panel. Use it to select the Character set that will be used by the parser to decode the subtitling.

Transparency

Use the slider to select the transparency of the text.



Aspect Ratio Tab

Some signal formats carry information about the aspect ratio of their video signal. Kaleido allows the user to choose to use this information to modify how the signal is displayed on the Kaleido output. The available resources for aspect ratio detection using this source type are:

- WSS Wide Screen Signaling per ITU-R BT.1119-2 (NOTE: 625 operation only)
- AFD (videoIndex) Active Format Descriptor within the Video Index of an SD signal as defined in SMPTE RP 186
- Follow Input Resolution as detected by the Kaleido input card.

Automatic Aspect Ratio

Sets up a prioritized list to be used for automatic aspect ratio detection. Kaleido will look for aspect ratio definitions in the data stream in this order, and use the first data it encounters.

The window shows the current list.

 If the window is empty, automatic aspect ratio is disabled, and the default aspect ratio is used.

Click on the pulldown to see a list of the methods applicable to the current input card that are not already shown in the window. Click on one to select it

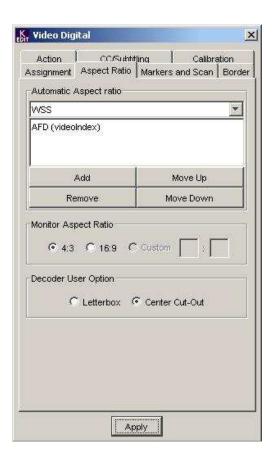
Click ADD to add the selected method to the window.

Click on a method in the window to select it, and use the MOVE UP and MOVE DOWN buttons to change its position within the list.

Click on a method in the window to select it and click REMOVE to delete it from the list.

Monitor Aspect Ratio

Use the radio buttons to select the aspect ratio of the video screen. This aspect ratio will be used unless overridden by automatic aspect ratio when enabled. Options: 4:3, 16:9 or Custom. If Custom is selected, enter the H and V proportions in the data



boxes.

Note that Custom is not permitted when AFD is included in the Automatic Aspect Ratio list; you must select either 4:3 or 16:9 (a pop-up warning will appear if Custom is selected in this case)

Decoder User Option (AFD only)

Use the radio buttons to select between these options in situations where the video image aspect ratio does not match the screen aspect ratio:

- Letterbox show the entire image on the screen, filling the unoccupied screen area with black.
- Center Cut-Out show the center portion of the image at full height

Safe Area Markers Tab

Aspect Ratio Marker:

Display Markers: select the checkbox to display the aspect ratio markers on the Kaleido display

Use the radio buttons to select 4:3, 16:9 or Custom markers. If you select Custom, you must enter values in the two data boxes: Width on the left, Height on the right.

Set the marker line color and background (area outside the marked zone) color using the two pulldowns

Transparency:

Set the transparency of the background zone using the slider.

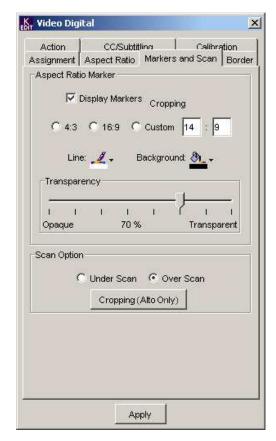
Scan Option

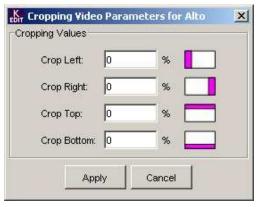
Select Over Scan or Under Scan for this video screen.

Click the *Cropping (Alto Only)* button to open a dialog box allowing you to crop this video component if the layout is resident on a Kaleido Alto or Kaleido Quad. The effect can only be seen at the Alto/Quad output.

NOTE: The cropping effect will not be displayed if the online layout is resident on a Kaleido-K2.

NOTE: Although a Kaleido Alto/Quad cannot be accessed online, it is possible to export the current layout (online on a Kaleido-K2) to an Alto/Quad, so this feature remains active in the online panels.





Calibration Tab

Calibration:

Set some picture parameters for the selected input to the Kaleido:

- Brightness [range 0-100, default 50]
- Color [range 0-100, default 50]
- Contrast [range 0-100, default 50]
- Hue [range 0-100, default 50]
- Sharpness [range 0-7, default 4]

so that its appearance on the Monitor Wall output is optimized.

Slider controls are provided for each parameter to establish a custom set-up. The default button selects the factory settings.

DeInterlacer:

Select the built-in deinterlacer's mode of operation for this input, in order to optimize the Monitor Wall output appearance:

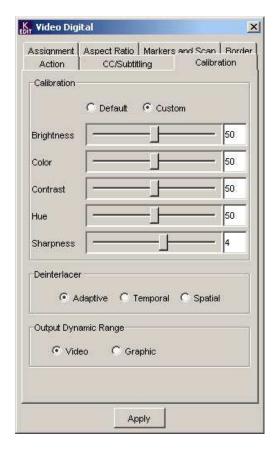
- Adaptive (better for some types of moving picture content)
- *Temporal* (better for some types of moving picture content)
- Spatial (better in Editing mode when the content is often still-frame)

Select one of the three using the buttons.

Note: the deinterlacer is engaged only when the resolution of the video displayed on the Layout is greater or equal to its native resolution

Output Dynamic Range:

The definition of a digital video signal places Video Black at 16 and Video White at 236 within the available range of 0 to 255. The Kaleido's monitor wall output is a VGA signal, with black at 0 and white at 255.



- Select Video to use the digital video signal values at the Kaleido's monitor wall output.
- Select Graphic to expand the signal to place Video Black at 0 and Video White at 255 at the output, thereby expanding its dynamic range to match the graphic elements within the Monitor wall display.

3.3.2.4 Online Panels – HD/SD Video (Kaleido-K2 only)

Assignment Tab

Assign Video Input:

Input Number: Enter the number of the Kaleido video input that is to appear on this Video Screen [enter a number between 1 and 32].

Input Format:

Kaleido detects and reports the format of the selected input.

Force detection of 480p format: When this box is checked, 480p60 will be detected instead of 1080i60.

Loss of Video:

Select the check box to display black on this video screen when the Signal Loss alarm is detected for the video stream. Leave the checkbox unchecked to display the video stream as found.

Router Control:

Router Input: If a router has been assigned to the selected video input (see Control of an External Router by Kaleido-K2), then this data entry box will be active. Enter the number of the router input that will be routed to this Kaleido-K2 input. [enter a number in the range from 1 to the highest input available on the router].



Border Tab

Border Color:

A border around the periphery of the Video Screen is used to show Alarms associated with the screen's video. For each of the four possible Alarm states, select the color and width of the border. For the Warning and Error states, border flashing can be turned on or off by clicking the box.

- The Color Fill icon shows the color currently selected for the border. Click on the downarrow beside the Color Fill icon to open a color selection window and choose a different color.
- The border width pull-down shows the current width of the border for each error condition.
 Click on the pull-down to select a different value (range between 1 and 5)

Assign Alarm Monitor:

Select an Alarm Monitor to be assigned to this Video Screen component from the pull-down list of available Alarms. The status of the Alarm will be shown by the border.

New: open the <u>Alarm Monitor</u> panel to create a new alarm, which will be assigned to this Video Screen when the Alarm Monitor panel is closed.

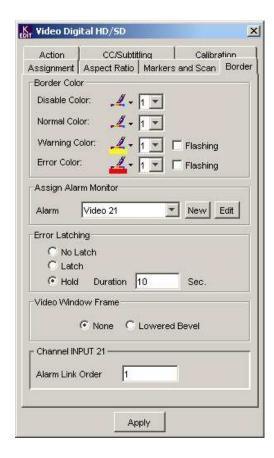
Edit: open the <u>Alarm Monitor</u> panel to edit the alarm selected in the pull-down list. Grayed-out if "none" is selected.

Error Latching:

Use these controls to keep the Alarm on after the error has passed, to make detection of transient errors easier.

- No Latch do not latch the error.
- Latch hold the Alarm on indefinitely.
- Hold hold the Alarm on for the duration specified in the box.

The latched status is indicated by the corners of the border, while the top, bottom and sides continue to show the current status.



Video Window Frame:

The appearance of the Video Screen at the Kaleido-K2 output can be enhanced by adding a frame, which creates the appearance of depth. This frame does not appear in the KEdit rendition of the Layout. Select the format of the frame around the screen:

- None no frame is shown
- Lowered Bevel shows a frame with a beveled profile as a graphic effect at the Kaleido-K2 output.

Channel:

The Channel assignment for this Video Screen will be shown and the Alarm Link Order box will be active. The alarm link order can be changed by entering a new value in the box.

Action Tab

Assign Actions

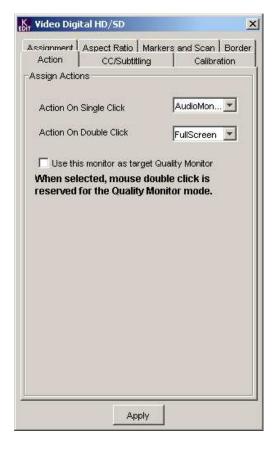
Action on single click: from the pull-down box, select the Action that will be executed when this Video Screen is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Video Screen is double-clicked using the mouse attached to the Kaleido-K2.

Use this Monitor as target Quality Monitor:

Ticking this box assigns this Monitor as a Quality Control Monitor at the Kaleido-K2 output. It will usually be a large Monitor that can be used on the Kaleido-K2 screen to quickly access a larger image of video from any other on-screen Monitor

Note that when a Monitor is assigned for Quality Control, the use of the double click to trigger an Action is disabled, since the double click is used for Quality Control assignment.



CC/Subtitling Tab

Text Overlay

None: disables this feature

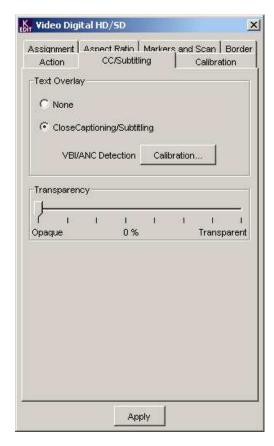
Close Captioning / Subtitling: turns on an onscreen presentation of Closed Caption or Subtitling information. This may duplicate the information seen on a CC Text component, but it is formatted to conform to the on-screen presentation that would be seen by a viewer looking at a monitor with standard CC decoding.

- For SD inputs, the NTSC Captioning per EIA-608-A is decoded
- For HD inputs, the NTSC Captioning per EIA-608-A that is encoded within the DTC data stream is decoded.

VBI/ANC Detection: Click the Calibration button to open the VBI/ANC Detection Calibration panel. Use it to select the Character set that will be used by the parser to decode the subtitling.

Transparency

Use the slider to select the transparency of the text.



Aspect Ratio Tab

Some signal formats carry information about the aspect ratio of their video signal. Kaleido allows the user to choose to use this information to modify how the signal is displayed on the Kaleido output. The available resources for aspect ratio detection using this source type are:

- WSS Wide Screen Signaling per ITU-R BT.1119-2 (NOTE: 625-line signals only)
- AFD (VideoIndex) Active Format Descriptor within the Video Index of an SD signal as defined in SMPTE RP 186
- AFD (HD ANC) Active Format Descriptor within the ANC data of an HD signal
- Follow Input Resolution as detected by the Kaleido input card.

Automatic Aspect Ratio

Sets up a prioritized list to be used for automatic aspect ratio detection. Kaleido will look for aspect ratio definitions in the data stream in this order, and use the first data it encounters.

The window shows the current list.

 If the window is empty, automatic aspect ratio is disabled, and the default aspect ratio is used.

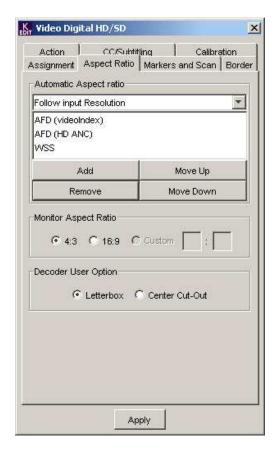
Click on the pulldown to see a list of the methods applicable to the current input card that are not already shown in the window. Click on one to select it.

 Note that both AFD (VideoIndex) and AFD (HD ANC) appear in the list. This function will only be active if the selected AFD type matches the input connected to the card (either SD or HD)

Click ADD to add the selected method to the window.

Click on a method in the window to select it, and use the MOVE UP and MOVE DOWN buttons to change its position within the list.

Click on a method in the window to select it and click REMOVE to delete it from the list.



Monitor Aspect Ratio

Use the radio buttons to select the aspect ratio of the video screen. This aspect ratio will be used unless overridden by automatic aspect ratio when enabled. Options: 4:3, 16:9 or Custom. If Custom is selected, enter the H and V proportions in the data boxes.

Note that Custom is not permitted when AFD is included in the Automatic Aspect Ratio list; you must select either 4:3 or 16:9 (a pop-up warning will appear if Custom is selected in this case)

Decoder User Option (AFD only)

Use the radio buttons to select between these options in situations where the video image aspect ratio does not match the screen aspect ratio:

- Letterbox show the entire image on the screen, filling the unoccupied screen area with black.
- Center Cut-Out show the center portion of the image at full height

Safe Area Markers Tab

Aspect Ratio Marker:

Display Markers: select the checkbox to display the aspect ratio markers on the Kaleido display

Use the radio buttons to select 4:3, 16:9 or Custom markers. If you select Custom, you must enter values in the two data boxes: Width on the left, Height on the right.

Set the line color and background color using the two pulldowns

Transparency:

Set the transparency of the markers using the slider.

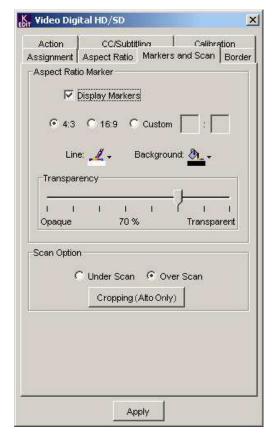
Scan Option

Select Over Scan or Under Scan for this video screen.

Click the *Cropping (Alto Only)* button to open a dialog box allowing you to crop this video component if the online layout is resident on a Kaleido Alto or Kaleido Quad.

NOTE: The cropping effect will not be displayed if the online layout is resident on a Kaleido-K2.

NOTE: Although a Kaleido Alto/Quad cannot be accessed online, it is possible to export the current layout (online on a Kaleido-K2) to an Alto/Quad, so this feature remains active in the online panels.





Calibration Tab

Calibration:

Set some picture parameters for the selected input to the Kaleido:

- Brightness [range 0-100, default 50]
- Color [range 0-100, default 50]
- Contrast [range 0-100, default 50]
- Hue [range 0-100, default 50]
- Sharpness [range 0-7, default 4]

so that its appearance on the Monitor Wall output is optimized.

Slider controls are provided for each parameter to establish a custom set-up. The default button selects the factory settings.

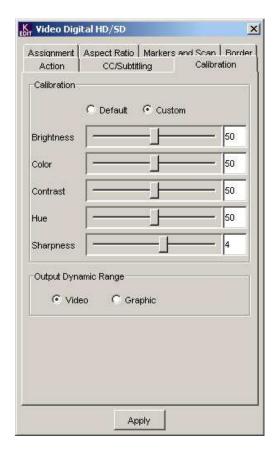
Output Dynamic Range:

The definition of a digital video signal places Video Black at 16 and Video White at 236 within the available range of 0 to 255. The Kaleido's monitor wall output is a VGA signal, with black at 0 and white at 255.

 Select Video to use the digital video signal values at the Kaleido's monitor wall output

Select *Graphic* to expand the signal to place Video Black at 0 and Video White at 255 at the output, thereby expanding its dynamic range to match the graphic elements within the monitor wall display.

3.3.2.5 Online Panels – VGA Video (Kaleido-K2 only)



Assignment Tab

Assign Video Input:

Input Number: Enter the number of the Kaleido video input that is to appear on this Video Screen [enter a number between1 and 32].

Input Format:

Kaleido detects and reports the format of the selected input.

Loss of Video:

Select the check box to display black on this video screen when the Signal Loss alarm is detected for the video stream. Leave the checkbox unchecked to display the video stream as found.

Router Control:

Router Input: If a router has been assigned to the selected video input (see Control of an External Router by Kaleido-K2), then this data entry box will be active. Enter the number of the router input that will be routed to this Kaleido-K2 input. [enter a number in the range from 1 to the highest input available on the router]

Note: some of the features available in online mode for other video formats are not supported for VGA video. These features are grayed out in this panel.



Border Tab

Border Color:

A border around the periphery of the Video Screen is used to show Alarms associated with the screen's video. For each of the four possible Alarm states, select the color and width of the border. For the Warning and Error states, border flashing can be turned on or off by clicking the box.

- The Color Fill icon shows the color currently selected for the border. Click on the downarrow beside the Color Fill icon to open a color selection window and choose a different color.
- The border width pull-down shows the current width of the border for each error condition.
 Click on the pull-down to select a different value (range between 1 and 5 pixels)

Assign Alarm Monitor:

Select an Alarm Monitor to be assigned to this Video Screen component from the pull-down list of available Alarms. The status of the Alarm will be shown by the border.

New: open the <u>Alarm Monitor</u> panel to create a new alarm, which will be assigned to this Video Screen when the Alarm Monitor panel is closed.

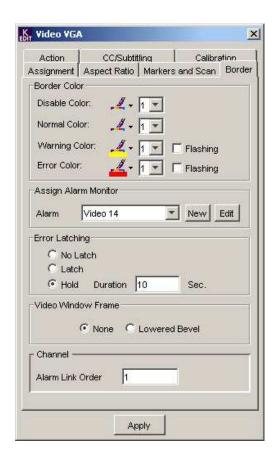
Edit: open the <u>Alarm Monitor</u> panel to edit the alarm selected in the pull-down list. Grayed-out if "none" is selected.

Error Latching:

Use these controls to keep the Alarm on after the error has passed, to make detection of transient errors easier.

- No Latch do not latch the error.
- Latch hold the Alarm on indefinitely.
- Hold hold the Alarm on for the duration specified in the box.

The latched status is indicated by the corners of the border, while the top, bottom and sides continue to show the current status.



Video Window Frame:

The appearance of the Video Screen at the Kaleido-K2 output can be enhanced by adding a frame, which creates the appearance of depth. This frame does not appear in the KEdit rendition of the Layout. Select the format of the frame around the screen:

- None no frame is shown.
- Lowered Bevel shows a frame with a beveled profile as a graphic effect at the Kaleido-K2 output.

Channel:

The Channel assignment for this Video Screen will be shown and the Alarm Link Order box will be active. The alarm link order can be changed by entering a new value in the box.

Action Tab

Assign Actions

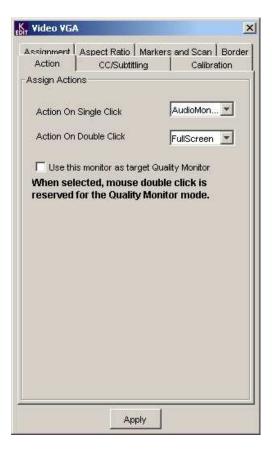
Action on single click: from the pull-down box, select the Action that will be executed when this Video Screen is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Video Screen is double-clicked using the mouse attached to the Kaleido-K2.

Use this Monitor as target Quality Monitor:

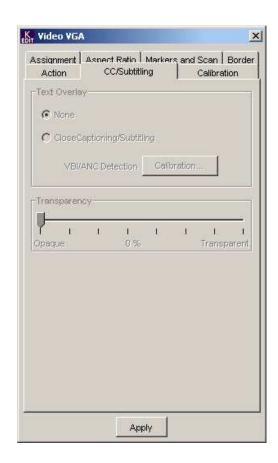
Ticking this box assigns this Monitor as a Quality Control Monitor at the Kaleido-K2 output. It will usually be a large Monitor that can be used on the Kaleido screen to quickly access a larger image of video from any other on-screen Monitor

Note that when a Monitor is assigned for Quality Control, the use of the double click to trigger an Action is disabled, since the double click is used for Quality Control assignment.



CC/Subtitling Tab

Close Captioning is not available for VGA video sources.



Aspect Ratio Tab

Some signal formats carry information about the aspect ratio of their video signal. Kaleido allows the user to choose to use this information to modify how the signal is displayed on the Kaleido output. The available resources for aspect ratio detection using this source type are:

 Follow Input Resolution – as detected by the Kaleido input card.

Automatic Aspect Ratio

Sets up a prioritized list to be used for automatic aspect ratio detection. Kaleido will look for aspect ratio definitions in the data stream in this order, and use the first data it encounters.

The window shows the current list.

 If the window is empty, automatic aspect ratio is disabled, and the default aspect ratio is used.

Click on the pulldown to see a list of the methods applicable to the current input card that are not already shown in the window. Click on one to select it

Click ADD to add the selected method to the window.

Click on a method in the window to select it, and use the MOVE UP and MOVE DOWN buttons to change its position within the list.

Click on a method in the window to select it and click REMOVE to delete it from the list.

Monitor Aspect Ratio

Use the radio buttons to select the aspect ratio of the video screen. This aspect ratio will be used unless overridden by automatic aspect ratio when enabled. Options: 4:3, 16:9 or Custom. If Custom is selected, enter the H and V proportions in the data boxes.

Note that Custom is not permitted when AFD is included in the Automatic Aspect Ratio list; you must select either 4:3 or 16:9 (a pop-up warning will appear if Custom is selected in this case)

Decoder User Option (N/A)



Safe Area Markers Tab

Aspect Ratio Marker:

Display Markers: select the checkbox to display the aspect ratio markers on the Kaleido display

Use the radio buttons to select 4:3, 16:9 or Custom markers. If you select Custom, you must enter values in the two data boxes: Width on the left, Height on the right.

Set the marker line color and background (area outside the marked zone) color using the two pulldowns

Transparency:

Set the transparency of the background zone using the slider.

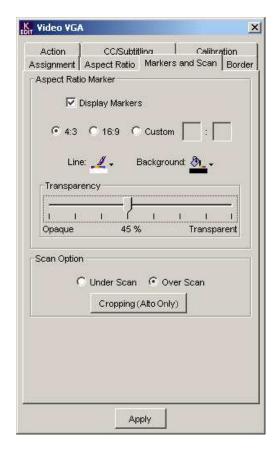
Scan Option

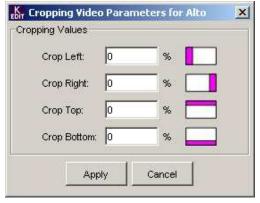
Select Over Scan or Under Scan for this video screen.

Click the *Cropping (Alto Only)* button to open a dialog box allowing you to crop this video component if the layout is resident on a Kaleido Alto or Kaleido Quad. The effect can only be seen at the Alto/Quad output.

NOTE: The cropping effect will not be displayed if the online layout is resident on a Kaleido-K2.

NOTE: Although a Kaleido Alto/Quad cannot be accessed online, it is possible to export the current layout (online on a Kaleido-K2) to an Alto/Quad, so this feature remains active in the online panels.





Calibration Tab

Video Resolution:

The VGA input card automatically detects the resolution of the incoming VGA signal, and the detected value is reported in this box.

Calibration:

Set some picture parameters for the selected VGA input to the Kaleido, in order to optimize its appearance on the Kaleido output.

Use the radio buttons at the top of the box to select between:

Default: factory default values are used. The sliders are inactive, and the data box shows the default value.

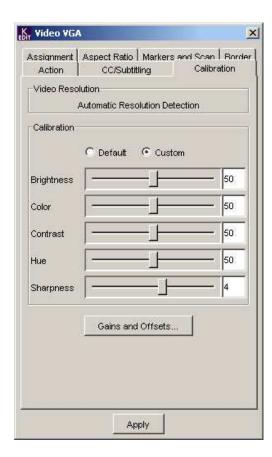
Custom: The slider controls are active; adjust the parameters to get the desired result. Data values can be typed directly into the data box.

These parameters are available on the main panel:

- Brightness [range 0-100, default 50]
- Color [range 0-100, default 50]
- Contrast [range 0-100, default 50]
- Hue [range 0-100, default 50]
- Sharpness [range 0-7, default 4]

Additional adjustments are available on the VGA Adjustment panel, opened by clicking on the *Gains and Offsets...* button.

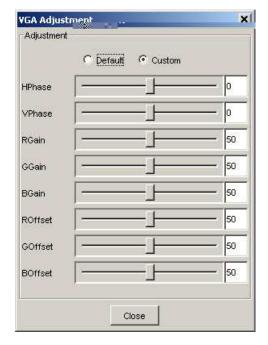
- HPhase (range –10 to +10, default 0)
- VPhase (range –10 to +10, default 0)
- RGain (range 0-100, default 50)
- GGain (range 0-100, default 50)
- BGain (range 0-100, default 50)
- ROffset (range 0-100, default 50)



- GOffset (range 0-100, default 50)
- BOffset (range 0-100, default 50)

Click *Close* to exit the VGA Adjustment panel and return to the Video VGA Calibration panel.

Click Apply to apply the selected values to the VGA Video screen.



3.3.3 Operation

3.3.3.1 Fire an Action

Left-click on the Video Screen in the Kaleido display using the mouse.

- Single-click fires the single-click Action configured for this Video Screen in the Action pane of its Configuration Panel
- Double-click fires the double-click Action configured for this Video Screen in the Action pane
 of its Configuration Panel UNLESS IT HAS BEEN CONFIGURED AS A QUALITY CONTROL MONITOR. In
 that case, double-click is reserved to assign the Video Screen as the active Quality Control
 Monitor.

3.3.3.2 Aspect Ratio

Using Kaleido-RCP

Push the Select button on the Kaleido-RCP. Each Monitor in the Layout will show an ID number, and its current Channel assignment (either a Channel name or "No Channel"). A yellow box surrounds the ID of the monitor currently being pointed to, which is the current selection.

- Use the arrow keys to move the pointer box and change the current selection. Push Enter to select this Monitor for adjustment. A dotted box will appear around the Monitor.
- If you want to change the aspect ratio of the Video Screens in multiple Monitors, use the arrow keys to move to each Monitor you want to change, and push the Enter button. All Monitors added to the selection group will show a dotted box. You can remove a Monitor from the group by pointing to it and pushing Enter again.

• Push the Aspect Ratio button. The Video Screens in all the selected Monitors will change from their current aspect ratio (4:3 or 16:9) to the other option.

The group of Monitors selected for adjustment is saved in memory. Pushing the Select key multiple times brings up the following displays:

First push Displays ID numbers and Channel assignments on all Monitors, and the

pointer.

Second push Highlights the group of Monitors last selected for adjustment with dotted

boxes.

Third push Highlights all adjustable Monitors with dotted boxes.

Fourth push Revert to the state of the first push (displays ID numbers and Channel

assignments on all Monitors, and the pointer)

Using a Keyboard

Push the Tab key on the keyboard. Each Monitor in the Layout will show an ID number, and its current Channel assignment (either a Channel name or "No Channel"). A yellow box surrounds the ID of the Monitor currently being pointed to, which is the current selection.

- Use the arrow keys to move the pointer box and change the current selection. Push Enter to select this Monitor for adjustment. A dotted box will appear around the Monitor.
- If you want to change the aspect ratio of the Video Screens in multiple Monitors, use the
 arrow keys to move to each Monitor you want to change, and push the Enter button. All
 Monitors added to the selection group will show a dotted box. You can remove a Monitor from
 the group by pointing to it and pushing Enter again.
- Push the R key. The Video Screens in all the selected Monitors will change from their current aspect ratio (4:3 or 16:9) to the other option.

The group of Monitors selected for adjustment is saved in memory. Pushing the Tab key multiple times brings up the following displays:

First push Displays ID numbers and Channel assignments on all Monitors, and the

pointer.

Second push Highlights the group of Monitors last selected for adjustment with dotted

boxes.

Third push Highlights all adjustable Monitors with dotted boxes.

Fourth push Revert to the state of the first push (displays ID numbers and channel

assignments on all Monitors, and the pointer).

3.3.3.3 Unlatch Error Status of Video Screen Border

Right-click on the Video Screen in the Kaleido display using the mouse, and select Unlatch Border Status. The Video Screen's error detection will be unlatched.

Note that if you select Unlatch Monitor Status, the error detection of all components in that Monitor with error latching capability (Video Screens, UMDs, Text Labels and Status Indicators) will be unlatched.

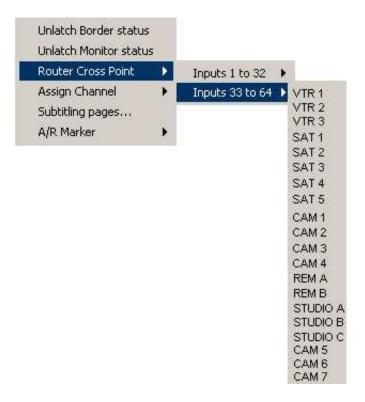


3.3.3.4 Router Input Selection

You can directly change the router input selection for a Video Screen component from the Kaleido output display, using the Kaleido's mouse.

To do so, right click over a Video Screen component. If that component's selected input is sourced from a Router (as defined in the Router Reference Table), then a pull-down list of available Router inputs is accessible, as shown in the following diagram. The current selection will be indicated by a check mark. Select a new input and the Video Screen component will immediately display that input. The virtual router hierarchy will switch audio and other elements of the Monitor at the same time.

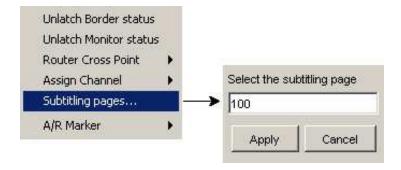
The inputs may be identified by name as shown in the figure, if those names were defined using the iRouter Manager. See the iRouter Manager manual for details.



3.3.3.5 Select Subtitling Pages

You can directly select the subtitling pages that will be displayed on a Video Screen component from the Kaleido output display, using the Kaleido's mouse.

To do so, right click over a Video Screen component. Select Subtitling pages... from the pop-up menu, and enter the appropriate page number in the dialog that appears (the dialog will open with the current page number displayed).



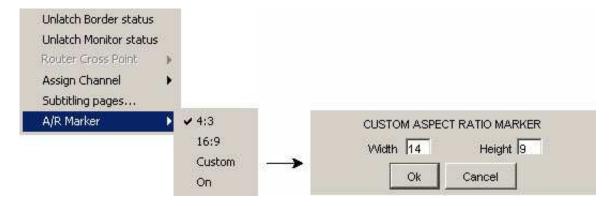
Note that this menu item will be only be available if you have selected "Teletext Standard" for this system in the VBI/ANC Data Standard Selection box available via *View-Setting-VBI/ANC Standard* in KEdit



3.3.3.6 Control Aspect Ratio Markers

You can turn Aspect Ratio markers on and off, and select the aspect ratio of those markers, from the Kaleido output display using the Kaleido's mouse.

To do so, right click over a Video Screen component. Select A/R Marker from the pop-up menu, and then click your desired option in the list that appears.



The bottom item toggles between On and Off depending on the current state of the markers. The current selection is indicated by a tick mark.

If you select Custom, the Custom Aspect Ratio Marker dialog opens, allowing you to create markers with any aspect ratio. Click OK to apply the custom markers.

3.4 Audio Meter

3.4.1 Creation:

Use the Monitor Browser to add a Monitor containing one or more Audio Meters to the current Layout.

- 1. Open the Monitor Browser in KEdit in one of three ways:
 - Select its icon from the KEdit toolbar.
 - Select the Monitor Browser item in the <u>View menu</u>
 - Push F6 on the keyboard
- Select an appropriate Monitor from the pull down list, using the Preview to see its appearance.
- 3. Click on the preview, and drag a copy of the Monitor onto the Layout.

Or add an Audio Meter to an existing Monitor in the Layout:

- Unlock the Monitor in which the Audio Meter is located, by right-clicking and selecting Unlock
 Monitor from the contextual menu. The Monitor's border will turn yellow, indicating it may be
 edited. You may also ALT-click anywhere in the Monitor, which will unlock the Monitor and
 select the item you clicked.
- Select the Audio Meter tool in the <u>KEdit toolbar</u>. Use the pull down arrow to change the current default meter selection if necessary.
- Click inside the Monitor, and drag to place an Audio Meter of the desired size.

Note that if the new Audio Meter extends beyond the Monitor boundary, then it will not be part of the Monitor.

Or add an Audio Meter that is not part of a Monitor to the Layout:

- Select the Audio Meter tool in the <u>KEdit toolbar</u>. Use the pull down arrow to change the current default meter selection if necessary.
- Click at the appropriate place in the Layout, and drag to place an Audio Meter of the desired size

Or copy an existing Audio Meter, inside or outside a Monitor:

• Select the Audio Meter to be copied.

- Use the Copy (CTRL+C) and Paste (CTRL+V) commands to create a new meter.
 - OR -
- While holding CTRL, click on the Audio Meter to be copied, and drag to a new location. The
 original Audio Meter will remain, and a copy will appear at the new location.

Note that if the new Audio Meter extends beyond the Monitor boundary, then it will not be part of the Monitor.

3.4.2 Configuration:

The attributes of an Audio Meter are adjustable using its Configuration Panel in <u>KEdit</u>. To access the panel for an Audio Meter within a Monitor:

- 1. Select the Audio Meter using one of these methods:
 - Unlock the Monitor in which the Audio Meter is located, by right-clicking and selecting
 Unlock Monitor from the contextual menu (an UNLOCKED Monitor is identified by a
 YELLOW BORDER and YELLOW RESIZING HANDLES in its corners), and then click on
 the Audio Meter to select it
 - ALT-click on the Audio Meter. The monitor will unlock, and the Meter will be selected.

NOTE: at this point the Audio Meter may be positioned (click on the Audio Meter and drag) and scaled (click and drag a control point) within the Monitor. It cannot be moved outside the Monitor boundary.

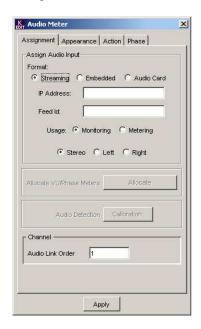
2. Open the Configuration Panel for the Audio Meter by pushing F5, or from the Configuration Panel item in the <u>View menu</u>

To access the panel for an Audio Meter that is not part of a Monitor:

- Click on the Audio Meter. Control points will appear at the corners and the center of the long side, showing it is selected.
 - NOTE: at this point the Audio Meter may be positioned (click on the Audio Meter and drag) and scaled (click and drag a control point) within the Layout.
- 2. Open the Configuration Panel for the Audio Meter by pushing F5, or from the Configuration Panel item in the View menu

3.4.2.1 Offline Panels

Assignment Tab







Assign Audio Input

Click the button that identifies the audio source: either audio from a streaming video source, embedded audio or an audio card. The upper portion of the tab varies with the selection, as shown in the figure.

Source	Data Box	Details
Streaming	IP Address	Specify the IP address of the streaming audio source.

- If the source is an Allegro1 encoder, the IP address is that of the encoder itself
- If the source is a Densité probe, the IP address is that of the Miranda Application Server that is controlling the Densité frame.

Feed ID Identify which of several possible feeds is to be displayed

- If the source is an Allegro1 encoder, give the ID of the feed as defined in the Allegro (typically C1, C2, etc.).
- If the source is a Densité probe, give the LongID of the Densité frame and card plus _A

Usage Monitoring: streaming video from the Allegro1 encoder includes audio, which can be played on the Kaleido's audio output (monitored), and whose level can displayed on an audio meter (metered). For Kaleido, the ability to monitor implies the ability to meter, so for an Allegro1 streaming source, select Monitoring.

Metering: A Densité probe will send only the level of the audio it is

measuring, and not the audio data itself. Therefore, select

metering if the streaming source is a Densité probe.

Embedded Video input Enter the number of the Kaleido video input in which the

embedded audio is found. [enter a number between 1 and 32].

Embedded audio can be extracted only from SD or HD feeds.

Group Identify which audio group is to be metered [enter a number

between 1 and 4]

AES/Stereo Identify the AES/Stereo group [1 or 2]

Audio Card AES/Stereo Enter the number of the Kaleido audio input [enter a number

between 1 and 48]

In all cases, define whether the Audio Meter will display stereo, left-only or right-only information.

Audio Detection Calibration is only available in online mode.

Channel:

If this Audio Meter is inside a Monitor, the Channel assignment will be shown and the Audio Link Order box will be active.

Enter a new value in the box to change the audio link order.

Appearance Tab

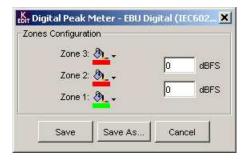
Meter Option:

- **Size:** Select Small, Medium or Large to set the displayed meter width.
- Orientation: Select horizontal or vertical orientation for the Audio Meter.
- Gradient: Show the tick marks and label them with values on the Audio Meter.

Use the text color pull-down to select a color for the label text.

- Ballistics: Select VU meter or peak meter. (for audio card and embedded input, both may be selected).
- Scale: Select the meter scale from the pulldown list (if the selected scale is not available it will appear on a red background).

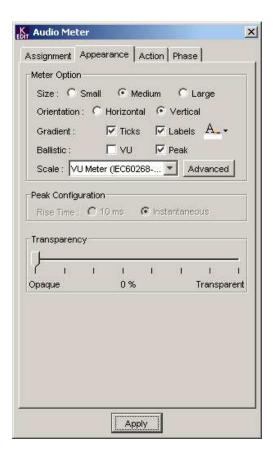
Each Audio Meter has three display zones. Click on the *Advanced* button to modify the Audio scale. Set the color of each zone, and the crossover levels between zones.



After adjusting the settings, click one of the three buttons at the bottom of the panel:

- Save redefine the existing scale with the new settings.
- Save As...- save these settings as a new scale, which will be named in the Save As dialog.
- Cancel exit the dialog and leave the values unchanged.

Transparency:



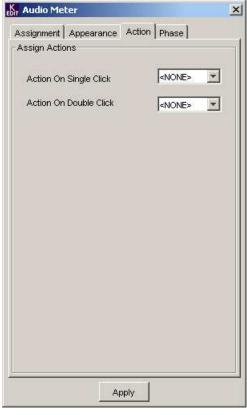
Use the slider to select a transparency for the Audio Meter. The transparency is only seen when the Audio Meter is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

Action Tab

Assign Actions

Action on single click: from the pull-down box, select the Action which will be executed when this Audio Meter is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action which will be executed when this Audio Meter is double-clicked using the mouse attached to the Kaleido-K2.



Phase Tab

Display Phase Meter:

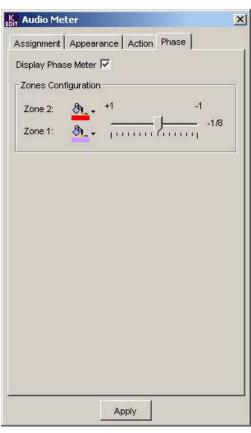
Click in the check-box to turn the Phase Meter on or off.

Selecting *On* modifies the on-screen Audio Meter to include a phase meter between the left and right channel displays.

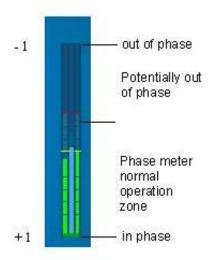
Zones Configuration

The phase meter has two zones whose color can be set independently using the pull down color selection menus.

The sensitivity of the phase meter can be chosen using the slider. The sensitivity scale is representative of a vector-display phase meter where +8/8 represents in-phase and -8/8 represents out-of-phase. Use the slider to select a value that reflects a sensitivity appropriate to the situation. This will determine the crossover point between the two zones.

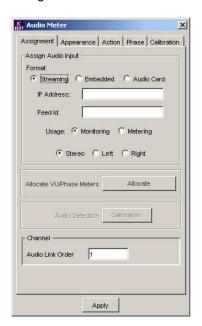


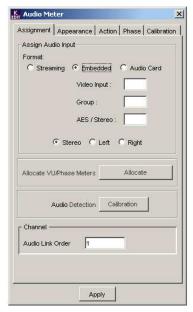
Note: The audio phase meter indicates a signal out of phase when the center bar between the audio level meters is predominantly filled. The bar should normally oscillate within the "Normal operation zone" indicated in the graphic on the right.



3.4.2.2 Online Panels (Kaleido-K2 only)

Assignment Tab







Assign Audio Input

Click the button that identifies the audio source: either audio from a streaming video source, embedded audio or an audio card. The upper portion of the tab varies with the selection, as shown in the figure.

Source	Data Box	Details
Streaming	IP Address	Specify the IP address of the streaming audio source.

- If the source is an Allegro1 encoder, the IP address is that of the encoder itself
- If the source is a Densité probe, the IP address is that of the Miranda Application Server that is controlling the Densité frame.

Feed ID Identify which of several possible feeds is to be displayed

- If the source is an Allegro1 encoder, give the ID of the feed as defined in the Allegro (typically C1, C2, etc.).
- If the source is a Densité probe, give the LongID of the Densité frame and card plus _A

Usage Monitoring: streaming video from the Allegro1 encoder includes

audio, which can be played on the Kaleido's audio output (monitored), and whose level can displayed on an audio meter (metered). For Kaleido, the ability to monitor implies the ability to meter, so for an Allegro1 streaming source, select Monitoring.

Metering: A Densité probe will send only the level of the audio it is measuring, and not the audio data itself. Therefore, select metering if the streaming source is a Densité probe.

Embedded Video input Enter the number of the Kaleido video input in which the

embedded audio is found. [enter a number between 1 and 32].

Embedded audio can be extracted only from SD or HD feeds.

Group Identify which audio group is to be metered [enter a number

between 1 and 4]

AES/Stereo Identify the AES/Stereo group [1 or 2]

Audio Card AES/Stereo Enter the number of the Kaleido audio input [enter a number

between 1 and 48]

In all cases, define whether the meter will display stereo, left-only or right-only information.

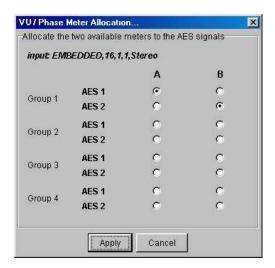
Allocate VU/Phase Meters:

Clicking the *Allocate* button opens a window where the inputs to the VU and phase meters can be selected.

Due to a hardware limitation, you can monitor only 2 AES VU or Phase inputs for each video input card. Here you have to select which AES you want to monitor. Doing this will not change the assignment of your Audio Meter, but will just enable the phase extraction.

If the phase you have selected (here it is video 16, Group 1, AES 1) is not the same as those you are monitoring, you won't see anything on your phase meter. In the example, you must select Group 2, AES 1 for either Phase Meter A or B, before you will be able to use the phase mater.

This restriction only applies when decoding embedded audio from MWI-SDI and MWI-HD modules. There is no such limitation when feeding an audio phase meter from the MWI-SA and MWI-AES audio input modules.



Audio Detection Calibration:

Click on the Calibration button to open the Audio Detection Calibration box. See Alarms and Alarm Monitors for a full description of these panels. Note that streaming sources are not supported for this function.

Channel:

If this Audio Meter is inside a Monitor, the Channel assignment will be shown and the Audio Link Order box will be active.

Enter a new value in the box to change the audio link order.

Appearance Tab

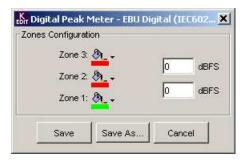
Meter Option:

- **Size:** Select Small, Medium or Large to set the displayed Audio Meter width.
- Orientation: Select horizontal or vertical orientation for the Audio Meter.
- Gradient: Show the tick marks and label them with values on the Audio Meter.

Use the text color pull-down to select a color for the label text

- Ballistics: Select VU meter or peak meter. (for audio card and embedded input, both may be selected).
- **Scale:** Select the meter scale from the pull-down list (if the selected scale is not available it will appear on a red background).

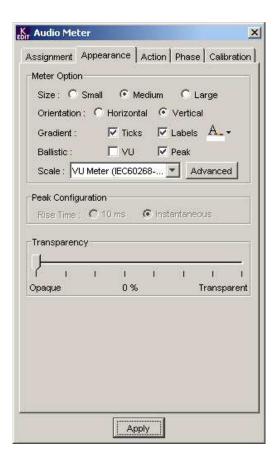
Each Audio Meter has three display zones. Click on the *Advanced* button to modify the Audio scale. Set the color of each zone, and the crossover levels between zones.



After adjusting the settings, click one of the three buttons at the bottom of the panel:

- Save redefine the existing scale with the new settings.
- Save As...- save these settings as a new scale, which will be named in the Save As dialog.
- Cancel exit the dialog and leave the values unchanged.

Peak Configuration (audio card only):



Set the rise time for Peak meters to reach their peak value. Choose between 10 ms and instantaneous.

NOTE: Once the user sets the Rise Time of one input it will change **all other audio card inputs.**

Transparency:

Use the slider to select a transparency for the audio meter. The transparency is only seen when the audio meter is overlaid on a video screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%

Action Tab

Assign Actions

Action on single click: from the pull-down box, select the Action which will be executed when this Audio Meter is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action which will be executed when this Audio Meter is double-clicked using the mouse attached to the Kaleido-K2.



Phase Tab

Display Phase Meter:

Click in the check-box to turn the Phase Meter on or off.

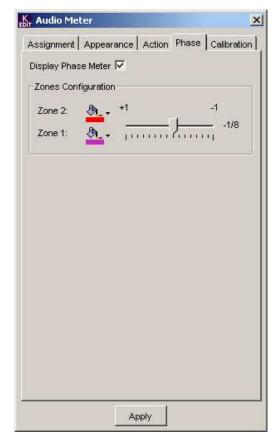
Selecting *On* modifies the on-screen Audio Meter to include a phase meter between the left and right channel displays.

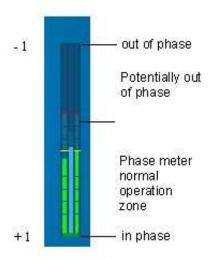
Zones Configuration

The phase meter has two zones whose color can be set independently using the pull down color selection menus.

The sensitivity of the phase meter can be chosen using the slider. The sensitivity scale is representative of a vector-display phase meter where +1 represents in-phase and -1 represents out-of-phase. Use the slider to select a value that reflects a sensitivity appropriate to the situation. This will determine the crossover point between the two zones.

Note: The audio phase meter indicates a signal out of phase when the center bar between the audio level meters is predominantly filled. The bar should normally oscillate within the "Normal operation zone" indicated in the graphic on the right.





Calibration Tab

This tab provides access to audio level calibration for the Kaleido's audio inputs.

 The audio level for an input can be adjusted from any meter assigned to that input

If the panel opens and displays only a warning message, one of the following situations applies:

You must assign a valid audio input

Return to the Assignment tab, and enter the number of a valid input in the "Assign Audio Input" section

Calibration Not Available for Streaming.

You have selected a Streaming input in the Assignment tab. Operational level adjustment is not available for Streaming inputs.

Setting

Click the radio buttons to select one of the available options:

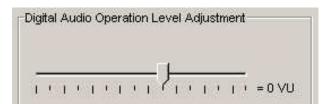
Custom Setting: use this panel to adjust the audio operation level FOR THIS INPUT ONLY

Master Setting: use this panel to adjust the audio operation level for ALL AUDIO INPUTS of the same type (analog or digital) that have "Master Setting" selected in their control panel.

- A warning will appear in the panel below the adjustment controls when this option is selected, to remind the user that this adjustment affects other inputs, not just the one monitored by this meter.
- Meters that have "Custom Setting" selected in their control panel are not affected when the Master Setting is adjusted

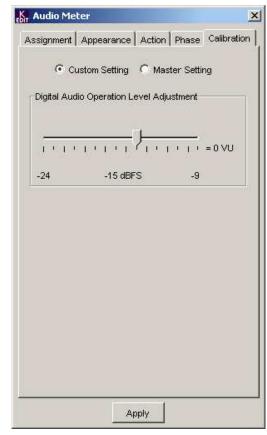
The next section of the panel will be titled according to the type of audio signal (digital or analog) being monitored by this meter, and the contents will vary accordingly.

Digital Audio Operation Level Adjustment











3.4.3 Operation

3.4.3.1 Action

Left-click on the Audio Meter in the Kaleido display using the mouse.

- Single-click fires the single-click Action configured for this Audio Meter in the Action pane of its Configuration Panel
- Double-click fires the double-click Action configured for this Audio Meter in the Action pane of its Configuration Panel

If the Action fired is the Audio Monitoring Output Action, then the signal being displayed by this Audio Meter will be routed to the Kaleido's audio monitor.

3.4.3.2 Select a Monitor for Audio Monitoring

Using Kaleido-RCP

Push the Select button on the Kaleido-RCP. Each Monitor in the Layout will show an ID number, and its current Channel assignment (either a Channel name or "No Channel"). A yellow box surrounds the ID of the Monitor currently being pointed to, which is the current selection.

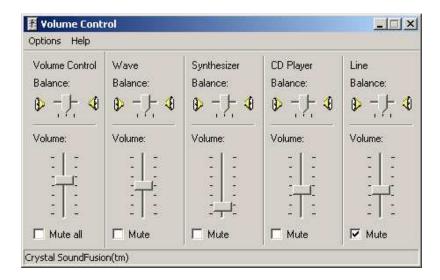
- Use the arrow keys to move the pointer box and change the current selection.
- Push the Audio Mon button. The audio from the Audio Meter with link order 1 in this Monitor will be heard on the Kaleido's audio monitor.
- Pushing Audio Mon again will cycle the audio monitoring source through the other Audio Meters within the Monitor, in link-order sequence, ending in Mute.

Use the Arrow buttons to adjust the audio monitoring:

Up and Down: Adjust the audio volume.

Note: if the audio originates in a .WAV file, its volume must be adjusted using the Kaleido's Windows volume control, as the signal is not processed through the Kaleido's hardware. You must connect a keyboard and mouse to the Kaleido to do this.

Display the Windows task bar on the Kaleido screen (CTRL+ESC or Windows Logo key) and click the Volume icon on the taskbar. Adjust the Volume Control in the window until the appropriate volume is heard on the audio monitor, then close the window.



Left: Switch between Mute the audio monitoring and revert to Normal.

 Right: Switch between Attenuate the volume by 20 dB and revert to Normal.

Using a Keyboard

Push the Tab key on the keyboard. Each Monitor in the Layout will show an ID number, and its current Channel assignment (either a Channel name or "No Channel"). A yellow box surrounds the ID of the Monitor currently being pointed to, which is the current selection.

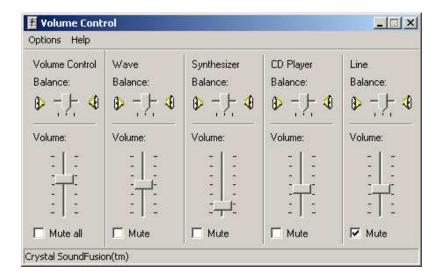
- Use the arrow keys to move the pointer box and change the current selection.
- Push the W key. The audio from the Audio Meter with link order 1 in this Monitor will be heard on the Kaleido's audio monitor.
- Pushing W again will cycle the audio monitoring source through the other Audio Meters within the Monitor, in link-order sequence, ending in Mute.

Use the Arrow keys to adjust the audio monitoring:

• Up and Down: Adjust the audio volume.

Note: if the audio originates in a .WAV file, its volume must be adjusted using the Kaleido's Windows volume control, as the signal is not processed through the Kaleido's hardware.

Display the Windows task bar on the Kaleido screen (CTRL+ESC or Windows Logo key) and click the Volume icon on the taskbar. Adjust the Volume Control in the window until the appropriate volume is heard on the audio monitor, then close the window.



Left: Switch between Mute the audio monitoring and revert to Normal.

 Right: Switch between Attenuate the volume by 20 dB and revert to Normal.

3.5 Under Monitor Display (UMD)

3.5.1 Creation:

Use the Monitor Browser to add a Monitor containing one or more UMDs to the current Layout.

- 1. Open the Monitor Browser in KEdit in one of three ways:
 - Select its icon from the KEdit toolbar.
 - Select the Monitor Browser item in the View menu.
 - Push F6 on the keyboard
- 2. Select an appropriate Monitor from the pull down list, using the Preview to see its appearance.
- 3. Click on the preview, and drag a copy of the Monitor onto the Layout.

Or add a UMD to an existing Monitor in the Layout:

- Unlock the Monitor in which the UMD is located, by right-clicking and selecting Unlock
 Monitor from the contextual menu. The Monitor's border will turn yellow, indicating it may be
 edited. You may also ALT-click anywhere in the Monitor, which will unlock the Monitor and
 select the item you clicked.
- Select a vertical or horizontal UMD tool in the KEdit toolbar.
- Click inside the Monitor, and drag to place a UMD of the desired size.

Note that if the new UMD extends beyond the Monitor boundary, then it will not be part of the Monitor.

Or add a UMD that is not part of a Monitor to the Layout:

- Select a vertical or horizontal UMD tool in the KEdit toolbar.
- Click at the appropriate place in the Layout, and drag to place a UMD of the desired size.

Or copy an existing UMD, inside or outside a Monitor:

- Select the UMD to be copied.
- Use the Copy (CTRL+C) and Paste (CTRL+V) commands to create a new UMD.
 - OR -
- While holding CTRL, click on the UMD to be copied, and drag to a new location. The original UMD will remain, and a copy will appear at the new location.

Note that if the new UMD extends beyond the Monitor boundary, then it will not be part of the Monitor.

3.5.2 Configuration:

The attributes of a UMD are adjustable using its Configuration Panel in <u>KEdit</u>. To access the panel for a UMD within a Monitor:

- 1. Select the UMD using one of these methods:
 - Unlock the Monitor in which the UMD is located, by right-clicking and selecting Unlock
 Monitor from the contextual menu (an UNLOCKED Monitor is identified by a YELLOW
 BORDER and YELLOW RESIZING HANDLES in its corners), and then click on the UMD
 to select it
 - ALT-click on the UMD. The monitor will unlock, and the UMD will be selected.

NOTE: at this point the UMD may be positioned (click on the UMD and drag) and scaled (click and drag a control point) within the Monitor. It cannot be moved outside the Monitor boundary.

2. Open the Configuration Panel for the UMD by pushing F5, or from the Configuration Panel item in the <u>View menu</u>

Three tabs are available to set different parameters for the UMD.

3.5.2.1 Offline Panels

Assignment Tab

UMD Static Text:

Click the selection button to select Static Text.

The text typed into the Text window will appear in the on-screen window of both the Monitor Wall output and the KEdit representation [enter any alphanumeric characters].

UMD Dynamic Text:

Click the selection button to select Dynamic Text. The source for the text could be the Gateway, or a third-party service.

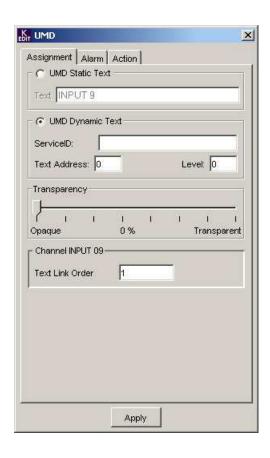
Gateway: Type *Gateway* in the ServiceID text box. Use the Gateway command <u>setKDynamicText</u> to send the text to this UMD.

Third-party service: See <u>TSL</u>, <u>Andromeda</u>, <u>Encoda and Kalypso</u> for an explanation of the services to use to get dynamic inputs for this Component.

- In the "ServiceID" field, type the alias or the Long ID of the service to be used
- In the "Text Address" field, enter the address to associate with this Component. Valid values vary depending on the service used:
 - TSL: value range 1 to 127.
 - Andromeda: value range 1 to 256.
 - Encoda: value range 1 to 255
 - **Kalypso**: the range of values depends on the value entered in the "Level" field:
 - Level = 0, 1, 2, 3: range is 1-48
 - Level = 4: range is 1-127

In the "Level" field, enter the level to associate with this Component. Valid values vary depending on the service used:

- TSL: value can be any of 0, 1 or 2.
- Andromeda: value range 0 to 14.



- Encoda: not used
- Kalypso: Enter the number of the option you wish to use for text display (value from 1 to 4)
 - Level 0 to 3 implies that the "Text Address" represents a Kalypso device output. In that case the "Text Address" must range between 1 and 48.
 - 0: the label represents the initial background feed
 - 1: the label represents the initial and the previous background feed
 - 2: the label represents the previous background feed
 - 3: the label represents the source id of the current background feed
 - Level 4 implies that the "Text Address" represents a Kalypso device Source ID. In that case the "Text Address" must range between 1 and 128.
 - 4: the label represents the source id of the current background feed

The KEdit window will show the ID, Address and Level of the source text. The Monitor Wall output of the Kaleido will show the text originating at that source.

Transparency:

Use the slider to select a transparency for the UMD. The transparency is only seen when the UMD is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%

Channel: If this UMD is within a Monitor, the name of the assigned Channel will be shown, and the Link order box will be active. Enter the link order of the UMD data within the channel that this UMD will display

Alarm Tab

Display Options:

For each of the four possible Alarm states, select the color of the UMD background and the color of the text, and whether the Transparency feature is enabled. You can also specify if the background will flash for Error and Warning states.

Select a background color from the list in the pull-down box.

Click on the down-arrow beside the Text Color icon to open a color selection window to choose a different font color.

Assign Alarm Monitor:

Select an Alarm Monitor to be assigned to this UMD from the pull-down list of available Alarms.

New: open the <u>Alarm Monitor</u> panel to create a new alarm, which will be assigned to this UMD when the Alarm Monitor panel is closed.

Edit: open the <u>Alarm Monitor</u> panel to edit the alarm selected in the pull-down list. Grayed-out if "none" is selected.

Error Latching:

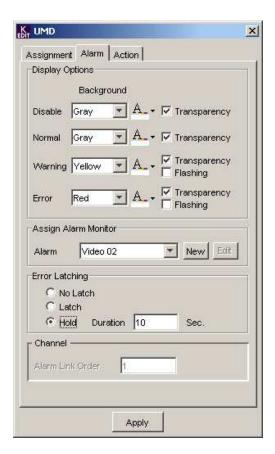
Use these controls to keep the Alarm on after the error has passed, to make detection of transient errors easier.

- No Latch do not latch the error.
- Latch hold the Alarm on indefinitely.
- Hold hold the Alarm on for the duration specified in the box.

The latched status will be indicated by the end segments of the UMD, while the central portion will continue to show the current status.

Channel:

If this UMD is inside a Monitor, the Channel assignment will be shown and the Alarm Link Order



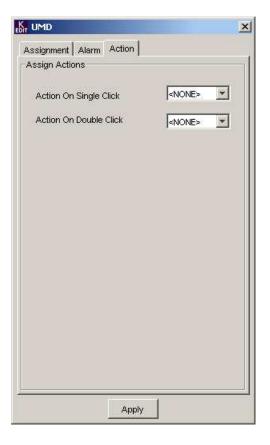
box will be active. Change the link order of the UMD by typing a new value in the box.

Action Tab

Assign Actions

Action on single click: from the pull-down box, select the Action that will be executed when this UMD is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this UMD is double-clicked using the mouse attached to the Kaleido-K2.



3.5.2.2 Online Panels (Kaleido-K2 only)

Assignment Tab

UMD Static Text:

Click the selection button to select Static Text.

The text typed into the Text window will appear in the on-screen window of both the Monitor Wall output and the KEdit representation [enter any alphanumeric characters].

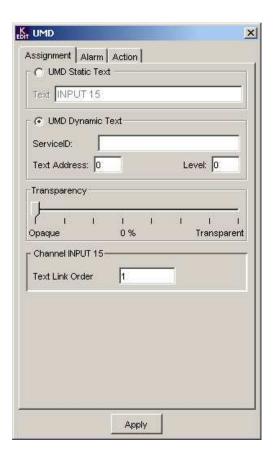
UMD Dynamic Text:

Click the selection button to select Dynamic Text. The source for the text could be the Gateway, or a third-party service.

Gateway: Type *Gateway* in the ServiceID text box. Use the Gateway command setKDynamicText to send the text to this UMD.

Third-party service: See <u>TSL</u>, <u>Andromeda</u>, <u>Encoda and Kalypso</u> for an explanation of the services to use to get dynamic inputs for this Component.

- In the "ServiceID" field, type the alias or the Long ID of the service to be used
- In the "Text Address" field, enter the address to associate with this Component. Valid values vary depending on the service used:
 - TSL: value range 1 to 127.
 - Andromeda: value range 1 to 256.
 - Encoda: value range 1 to 255
 - Kalypso: the range of values depends on the value entered in the "Level" field:
 - Level = 0, 1, 2, 3: range is 1-48
 - Level = 4: range is 1-127
- In the "Level" field, enter the level to associate with this Component. Valid values vary depending on the service used:
 - TSL: value can be any of 0, 1 or 2.
 - Andromeda: value range 0 to 14.



- Encoda: not used
- **Kalypso:** Enter the number of the option you wish to use for text display (value from 1 to 4)
 - Level 0 to 3 implies that the "Text Address" represents a Kalypso device output. In that case the "Text Address" must range between 1 and 48.
 - 0: the label represents the initial background feed
 - 1: the label represents the initial and the previous background feed
 - 2: the label represents the previous background feed
 - 3: the label represents the current background feed
 - Level 4 implies that the "Text Address" represents a Kalypso device Source ID. In that case the "Text Address" must range between 1 and 128.
 - 4: the label represents the source id of the current background feed

The KEdit window will show the ID, Address and Level of the source text. The Monitor Wall output of the Kaleido will show the text originating at that source.

Transparency:

Use the slider to select a transparency for the UMD. The transparency is only seen when the UMD is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

Channel:

If this UMD is within a Monitor, the name of the assigned Channel will be shown, and the Link order box will be active. Enter the link order of the UMD data within the Channel that this UMD will display.

Alarm Tab

Display Options:

For each of the four possible Alarm states, select the color of the UMD background and the color of the text, and whether the Transparency feature is enabled. You can also specify if the background will flash for Error and Warning states.

Select a background color from the list in the pull-down box.

Click on the down-arrow beside the Text Color icon to open a color selection window to choose a different font color.

Assign Alarm Monitor:

Select an Alarm Monitor to be assigned to this UMD from the pull-down list of available Alarms.

New: open the <u>Alarm Monitor</u> panel to create a new alarm, which will be assigned to this UMD when the Alarm Monitor panel is closed.

Edit: open the <u>Alarm Monitor</u> panel to edit the alarm selected in the pull-down list. Grayed-out if "none" is selected.

Error Latching:

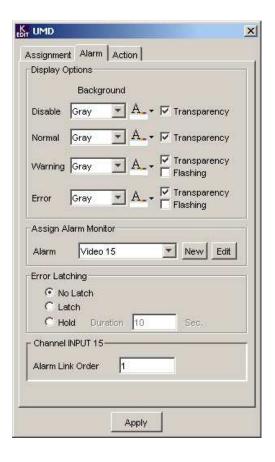
Use these controls to keep the Alarm on after the error has passed, to make detection of transient errors easier.

- No Latch do not latch the error.
- Latch hold the Alarm on indefinitely.
- Hold hold the Alarm on for the duration specified in the box.

The latched status will be indicated by the end segments of the UMD, while the central portion will continue to show the current status.

Channel:

If this UMD is inside a Monitor, the Channel assignment will be shown and the Alarm Link Order box will be active. Change the link order of the UMD by typing a new value in the box.

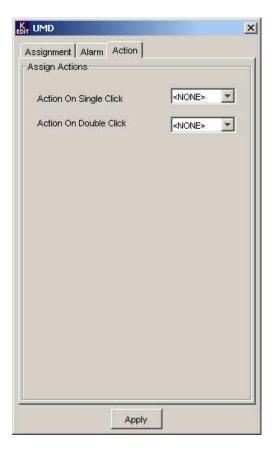


Action Tab

Assign Actions:

Action on single click: from the pull-down box, select the Action that will be executed when this UMD is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this UMD is double-clicked using the mouse attached to the Kaleido-K2.



3.5.3 Operation

3.5.3.1 Fire an Action

Left-click on the UMD in the Kaleido display using the mouse.

- Single-click fires the single-click Action configured for this UMD in the Action pane of its Configuration Panel
- Double-click fires the double-click Action configured for this UMD in the Action pane of its Configuration Panel

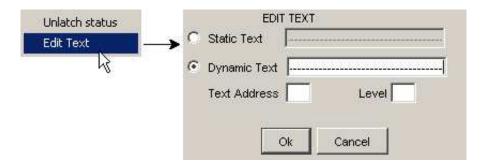
3.5.3.2 Unlatch Error Status

Right-click on the UMD in the Kaleido display using the mouse, and select Unlatch Status. The UMD's error detection will be unlatched



3.5.3.3 Define the text to be displayed

Right-click on the UMD in the Kaleido display, and select Edit Text from the pop-up menu.



In the Edit Text dialog that appears, use the radio buttons to select the source of text that will appear in this UMD:

Static Text:

The text typed into the Text window will appear in the on-screen UMD of both the Monitor Wall output and the on-line KEdit representation [enter any alphanumeric characters].

Dynamic Text:

Click the selection button to select Dynamic Text. The source for the text could be the Gateway, or a third-party service.

Gateway: Type *Gateway* in the "Dynamic Text" text box. Use the Gateway command setKDynamicText to send the text to this UMD.

Third-party service: See <u>TSL</u>, <u>Andromeda</u>, <u>Encoda and Kalypso</u> for an explanation of the services to use to get dynamic inputs for this Component.

- In the "Dynamic Text" field, type the alias or the Long ID of the service used.
- In the "Text Address" field, enter the address to associate with this Component. Valid values vary depending on the service used:
 - TSL: value range 1 to 127.
 - Andromeda: value range 1 to 256.
 - Encoda: value range 1 to 255
 - Kalypso: the range of values depends on the value entered in the "Level" field:
 - Level = 0, 1, 2, 3: range is 1-48
 - Level = 4: range is 1-127
- In the "Level" field, enter the level to associate with this Component. Valid values vary depending on the service used:
 - TSL: value can be any of 0, 1 or 2.
 - Andromeda: value range 0 to 14.
 - Encoda: not used

- **Kalypso:** Enter the number of the option you wish to use for text display (value from 1 to 4)
 - Level 0 to 3 implies that the "Text Address" represents a Kalypso device output. In that case the "Text Address" must range between 1 and 48.
 - 0: the label represents the initial background feed
 - 1: the label represents the initial and the previous background feed
 - 2: the label represents the previous background feed
 - 3: the label represents the current background feed
 - Level 4 implies that the "Text Address" represents a Kalypso device Source ID. In that case the "Text Address" must range between 1 and 128.
 - 4: the label represents the source id of the current background feed

The Monitor Wall output of the Kaleido will show the text originating at that source. The on-line KEdit window will show the ID, Address and Level of the source text.

3.6 Text Label

3.6.1 Creation:

Use the Monitor Browser to add a Monitor containing one or more Text Labels to the current Layout.

- 1. Open the Monitor Browser in KEdit in one of three ways:
 - Select its icon from the KEdit toolbar.
 - Select the Monitor Browser item in the View menu
 - Push F6 on the keyboard
- 2. Select an appropriate Monitor from the pull down list, using the Preview to see its appearance.
- 3. Click on the preview, and drag a copy of the Monitor onto the Layout.

Or add a Text Label to an existing Monitor in the Layout:

- Unlock the Monitor in which the Text Label will be located, by right-clicking and selecting
 Unlock Monitor from the contextual menu. The Monitor's border will turn yellow, indicating it
 may be edited. You may also ALT-click anywhere in the Monitor, which will unlock the
 Monitor and select the item you clicked.
- Select the Text Label tool in the KEdit toolbar.

• Click inside the Monitor, and drag to place a Text Label of the desired size.

Note that if the new Text Label extends beyond the Monitor boundary, then it will not be part of the Monitor.

Or add a Text Label that is not part of a Monitor to the Layout:

- Select the Text Label tool in the KEdit toolbar.
- Click at the appropriate place in the Layout, and drag to place a Text Label of the desired size.

Or copy an existing Text Label, inside or outside a Monitor:

- Select the Text Label to be copied.
- Use the Copy (CTRL+C) and Paste (CTRL+V) commands to create a new Text Label.
 - OR -
- While holding CTRL, click on the Text Label to be copied, and drag to a new location. The original Text Label will remain, and a copy will appear at the new location.

Note that if the new Text Label extends beyond the Monitor boundary, then it will not be part of the Monitor.

3.6.2 Configuration:

The attributes of a Text Label are adjustable using its Configuration Panel in <u>KEdit</u>. To access the panel for a Text Label within a Monitor:

- 1. Select the Text Label using one of these methods:
 - Unlock the Monitor in which the Text Label is located, by right-clicking and selecting
 Unlock Monitor from the contextual menu (an UNLOCKED Monitor is identified by a
 YELLOW BORDER and YELLOW RESIZING HANDLES in its corners), and then click on
 the Text Label to select it
 - ALT-click on the Text Label. The monitor will unlock, and the Text Label will be selected.

NOTE: at this point the Text Label may be positioned (click on the Text Label and drag) and scaled (click and drag a control point) within the Monitor. It cannot be moved outside the Monitor boundary

2. Open the Configuration Panel for the Text Label by pushing F5, or from the Configuration Panel item in the View menu

Four tabs are available to set different parameters for the Text Label.

3.6.2.1 Offline Panels

Assignment Tab

Label Static Text:

Click the selection button to select Static Text. The text typed into the Text window will appear in the onscreen window of both the Monitor Wall output and the KEdit representation [enter any alphanumeric characters].

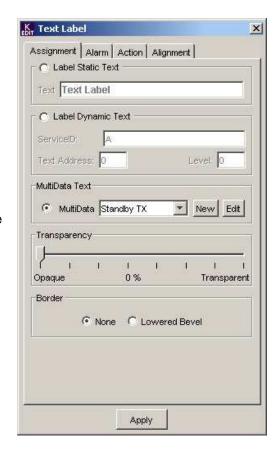
Label Dynamic Text:

Click the selection button to select Dynamic Text. The source for the text could be the Gateway, or a third-party service.

Gateway: Type *Gateway* in the ServiceID text box. Use the Gateway command setKDynamicText to send the text to this Text Label.

Third-party service: See <u>TSL</u>, <u>Andromeda</u>, <u>Encoda</u> <u>and Kalypso</u> for an explanation of the services to use to get dynamic inputs for this Component.

- In the "ServiceID" field, type the alias or the Long ID of the service used.
- In the "Text Address" field, enter the address to associate with this Component. Valid values vary depending on the service used:
 - TSL: value range 1 to 127.
 - Andromeda: value range 1 to 256.
 - Encoda: value range 1 to 255
 - Kalypso: the range of values depends on the value entered in the "Level" field:
 - Level = 0, 1, 2, 3: range is 1-48
 - Level = 4: range is 1-127
- In the "Level" field, enter the level to associate with this Component. Valid values vary depending on the service used:
 - TSL: value can be any of 0, 1 or 2.
 - Andromeda: value range 0 to 14.
 - Encoda: not used



- **Kalypso:** Enter the number of the option you wish to use for text display (value from 1 to 4)
 - Level 0 to 3 implies that the "Text Address" represents a Kalypso device output. In that case the "Text Address" must range between 1 and 48.
 - 0: the label represents the initial background feed
 - 1: the label represents the initial and the previous background feed
 - 2: the label represents the previous background feed
 - 3: the label represents the current background feed
 - Level 4 implies that the "Text Address" represents a Kalypso device Source ID. In that case the "Text Address" must range between 1 and 128.
 - 4: the label represents the source id of the current background feed

The KEdit window will show the ID, Address and Level of the source text. The Monitor Wall output of the Kaleido will show the text originating at that source.

MultiData Text:

Click the selection button to select MultiData text. From the pulldown list, select a MultiData source.

• See MultiData Browser for a description of MultiData sources and their application in Kaleido.

Click New to open a blank MultiData Configuration panel to create a new MultiData source.

Click Edit to open the MultiData Configuration panel for the source selected in the pulldown list, in order to modify it or examine its contents.

Transparency:

Set the degree of transparency of the Text Label as displayed on the Monitor Wall output (Kaleido K2 only). The transparency is only seen when the Text

Label is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

Border:

Select the format of the border around the screen:

- None no border is shown.
- Lowered Bevel shows a border with a beveled profile.

Alarm Tab

Display Options:

For each of the four possible Alarm states, select the color of the text, the color of the background, and whether the Transparency feature is enabled. You can also specify if the background will flash for Error and Warning states.

Click on the down-arrow beside the Color Fill icon to open a color selection window to choose a different color.

Click on the down-arrow beside the Text Color icon to open a color selection window to choose a different font color.

Error Latching:

Use these controls to keep the Alarm on after the error has passed, to make detection of transient errors easier.

- No Latch do not latch the error.
- Latch hold the Alarm on indefinitely.
- Hold hold the Alarm on for the duration specified in the box.

The Latched status will be indicated by a colored outline surrounding the Text Label, while the background and text will continue to show the current status.

Assign Alarm Monitor:

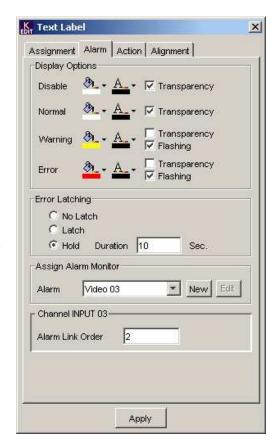
Select an Alarm Monitor to be assigned to this Text Label from the pull-down list of available Alarms.

New: open the <u>Alarm Monitor</u> panel to create a new alarm, which will be assigned to this Text Label when the Alarm Monitor panel is closed.

Edit: open the <u>Alarm Monitor</u> panel to edit the alarm selected in the pull-down list. Grayed-out if "none" is selected.

Channel:

If this text label is within a Monitor, the name of the assigned Channel will be shown, and the Alarm Link



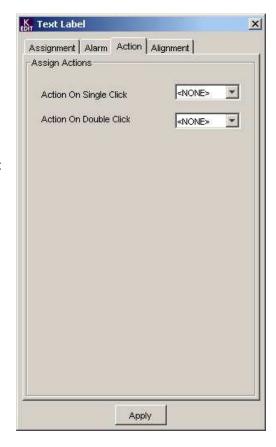
order box will be active. Enter the link order of the Alarm associated with the Text Label data within the Channel that this Text Label will display.

Action Tab

Assign Actions

Action on single click: from the pull-down box, select the Action that will be executed when this Text Label is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Text Label is double-clicked using the mouse attached to the Kaleido-K2.



Alignment Tab

Text Formatting

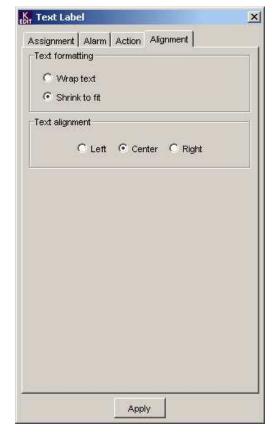
Use the radio buttons to select the text formatting option:

Wrap text: The text is wrapped within the text label, but if the text is too large to fit within the label, the text will be replaced by ". . ." (three dots)

Shrink to fit: The text will be reduced in size to fit within the text label.

Text alignment

Use the radio buttons to select whether the text will be left-aligned, centered, or right-aligned within the text label.



3.6.2.2 Online Panels (Kaleido-K2 only)

Assignment Tab

Label Static Text:

Click the selection button to select Static Text. The text typed into the Text window will appear in the onscreen window of both the Monitor Wall output and the KEdit representation [enter any alphanumeric characters].

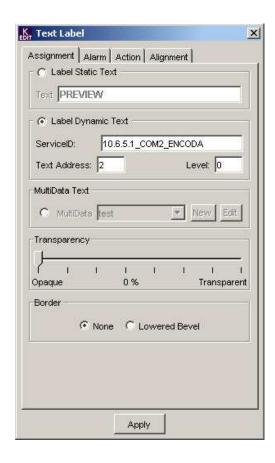
Label Dynamic Text:

Click the selection button to select Dynamic Text. The source for the text could be the Gateway, or a third-party service.

Gateway: Type *Gateway* in the ServiceID text box. Use the Gateway command setKDynamicText to send the text to this Text Label.

Third-party service: See <u>TSL</u>, <u>Andromeda</u>, <u>Encoda</u> <u>and Kalypso</u> for an explanation of the services to use to get dynamic inputs for this Component.

- In the "ServiceID" field, type the alias or the Long ID of the service used.
- In the "Text Address" field, enter the address to associate with this Component. Valid values vary depending on the service used:
 - **TSL**: value range 1 to 127.
 - Andromeda: value range 1 to 256.
 - Encoda: value range 1 to 255
 - Kalypso: the range of values depends on the value entered in the "Level" field:
 - Level = 0, 1, 2, 3: range is 1-48
 - Level = 4: range is 1-127
- In the "Level" field, enter the level to associate with this Component. Valid values vary depending on the service used:
 - TSL: value can be any of 0, 1 or 2.
 - Andromeda: value range 0 to 14.
 - Encoda: not used



- **Kalypso:** Enter the number of the option you wish to use for text display (value from 1 to 4)
 - Level 0 to 3 implies that the "Text Address" represents a Kalypso device output. In that case the "Text Address" must range between 1 and 48.
 - 0: the label represents the initial background feed
 - 1: the label represents the initial and the previous background feed
 - 2: the label represents the previous background feed
 - 3: the label represents the current background feed
 - Level 4 implies that the "Text Address" represents a Kalypso device Source ID. In that case the "Text Address" must range between 1 and 128.
 - 4: the label represents the source id of the current background feed

The KEdit window will show the ID, Address and Level of the source text. The Monitor Wall output of the Kaleido will show the text originating at that source.

MultiData Text:

Click the selection button to select MultiData text. From the pulldown list, select a MultiData source.

• See MultiData Browser for a description of MultiData sources and their application in Kaleido.

Click New to open a blank MultiData Configuration panel to create a new MultiData source.

Click Edit to open the MultiData Configuration panel for the source selected in the pulldown list, in order to modify it or examine its contents.

Transparency:

Set the degree of transparency of the Text Label as displayed on the Monitor Wall output. The transparency is only seen when the Text Label is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

Border:

Select the format of the border around the screen:

- None no border is shown.
- Lowered Bevel shows a border with a beveled profile.

Channel:

If this Text Label is within a Monitor, the name of the assigned Channel will be shown, and the Link order box will be active. Enter the link order of the Text data within the Channel that this Text Label will display.

Alarm Tab

Display Options:

For each of the four possible Alarm states, select the color of the text, the color of the background, and whether the Transparency feature is enabled. You can also specify if the background will flash for Error and Warning states.

Click on the down-arrow beside the Color Fill icon to open a color selection window to choose a different color.

Click on the down-arrow beside the Text Color icon to open a color selection window to choose a different font color.

Error Latching:

Use these controls to keep the Alarm on after the error has passed, to make detection of transient errors easier.

- No Latch do not latch the error.
- Latch hold the Alarm on indefinitely.
- Hold hold the Alarm on for the duration specified in the box.

The Latched status will be indicated by a colored outline surrounding the Text Label, while the background and text will continue to show the current status.

Assign Alarm Monitor:

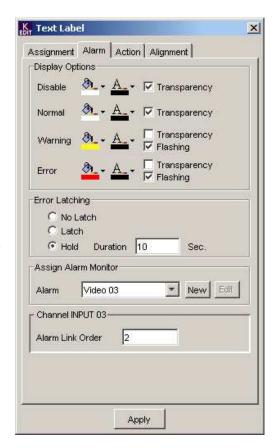
Select an Alarm Monitor to be assigned to this Text Label from the pull-down list of available Alarms.

New: open the <u>Alarm Monitor</u> panel to create a new alarm, which will be assigned to this Text Label when the Alarm Monitor panel is closed.

Edit: open the <u>Alarm Monitor</u> panel to edit the alarm selected in the pull-down list. Grayed-out if "none" is selected.

Channel:

If this Text Label is within a Monitor, the name of the assigned Channel will be shown, and the Alarm Link



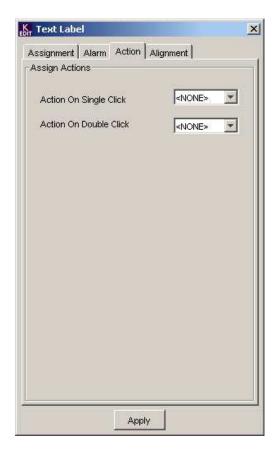
order box will be active. Enter the link order of the Alarm associated with the Text Label data within the Channel that this Text Label will display.

Action Tab

Assign Actions

Action on single click: from the pull-down box, select the Action that will be executed when this Text Label is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Text Label is double-clicked using the mouse attached to the Kaleido-K2.



Alignment Tab

Text Formatting

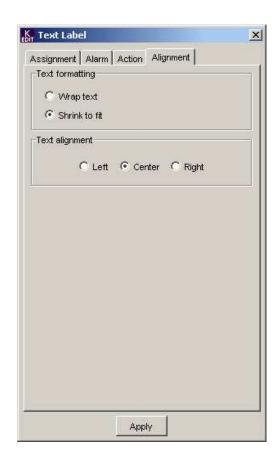
Use the radio buttons to select the text formatting option:

Wrap text: The text is wrapped within the text label, but if the text is too large to fit within the label, the text will be replaced by ". . ." (three dots)

Shrink to fit: The text will be reduced in size to fit within the text label.

Text alignment

Use the radio buttons to select whether the text will be left-aligned, centered, or right-aligned within the text label.



3.6.3 Operation

3.6.3.1 Fire an Action

Left-click on the Text Label in the Kaleido display using the mouse.

- Single-click fires the single-click Action configured for this Text Label in the Action pane of its Configuration Panel.
- Double-click fires the double-click Action configured for this Text Label in the Action pane of its Configuration Panel.

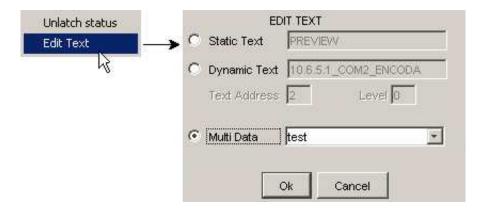
3.6.3.2 Unlatch Error Status

Right-click on the Text Label in the Kaleido display using the mouse, and select Unlatch Status. The Text Label's error detection will be unlatched



3.6.3.3 Define the text to be displayed

Right-click on the Text Label in the Kaleido display, and select Edit Text from the pop-up menu.



In the Edit Text dialog that appears, use the radio buttons to select the source of text that will appear in this Text Label:

Static Text:

The text typed into the Text window will appear in the on-screen Text Label of both the Monitor Wall output and the on-line KEdit representation [enter any alphanumeric characters].

Dynamic Text:

Click the selection button to select Dynamic Text. The source for the text could be the Gateway, or a third-party service.

Gateway: Type *Gateway* in the "Dynamic Text" text box. Use the Gateway command setKDynamicText to send the text to this UMD.

Third-party service: See <u>TSL</u>, <u>Andromeda</u>, <u>Encoda and Kalypso</u> for an explanation of the services to use to get dynamic inputs for this Component.

- In the "Dynamic Text" field, type the alias or the Long ID of the service used.
- In the "Text Address" field, enter the address to associate with this Component. Valid values vary depending on the service used:
 - TSL: value range 1 to 127.
 - Andromeda: value range 1 to 256.
 - Encoda: value range 1 to 255
 - Kalypso: the range of values depends on the value entered in the "Level" field:
 - Level = 0, 1, 2, 3: range is 1-48
 - Level = 4: range is 1-127
- In the "Level" field, enter the level to associate with this Component. Valid values vary depending on the service used:
 - TSL: value can be any of 0, 1 or 2.
 - Andromeda: value range 0 to 14.

- Encoda: not used
- Kalypso: Enter the number of the option you wish to use for text display (value from 1 to 4)
 - Level 0 to 3 implies that the "Text Address" represents a Kalypso device output. In that case the "Text Address" must range between 1 and 48.
 - 0: the label represents the initial background feed
 - 1: the label represents the initial and the previous background feed
 - 2: the label represents the previous background feed
 - 3: the label represents the current background feed
 - Level 4 implies that the "Text Address" represents a Kalypso device Source ID. In that
 case the "Text Address" must range between 1 and 128.
 - 4: the label represents the source id of the current background feed

The Monitor Wall output of the Kaleido will show the text originating at that source. The on-line KEdit window will show the ID, Address and Level of the source.

MultiData Text:

Click the selection button to select MultiData text. Enter the name of a MultiData source in the data box..

See MultiData Browser for a description of MultiData sources and their application in Kaleido.

3.7 Tally

3.7.1 Creation:

Use the Monitor Browser to add a Monitor containing one or more Tallies to the current Layout.

- 1. Open the Monitor Browser in KEdit in one of three ways:
 - Select its icon from the <u>KEdit toolbar</u>.
 - Select the Monitor Browser item in the View menu.
 - Push F6 on the keyboard.
- 2. Select an appropriate Monitor from the pull down list, using the Preview to see its appearance.
- 3. Click on the preview, and drag a copy of the Monitor onto the Layout.

Or add a Tally to an existing Monitor in the Layout:

- Unlock the Monitor in which the Tally is located, by right-clicking and selecting Unlock Monitor from the contextual menu. The Monitor's border will turn yellow, indicating it may be edited.
 You may also ALT-click anywhere in the Monitor, which will unlock the Monitor and select the item you clicked.
- Select the Tally tool in the <u>KEdit toolbar</u>. Use the pull down arrow to change the current default Tally selection if necessary.
- Click inside the Monitor, and drag to place a Tally of the desired size.

Note that if the new Tally extends beyond the Monitor boundary, then it will not be part of the Monitor.

Or add a Tally that is not part of a Monitor to the Layout:

- Select the Tally tool in the <u>KEdit toolbar</u>. Use the pull down arrow to change the current default Tally selection if necessary.
- Click at the appropriate place in the Layout, and drag to place a Tally of the desired size.

Or copy an existing Tally, inside or outside a Monitor:

- Select the Tally to be copied.
- Use the Copy (CTRL+C) and Paste (CTRL+V) commands to create a new Tally.
 - OR -
- While holding CTRL, click on the Tally to be copied, and drag to a new location. The original Tally will remain, and a copy will appear at the new location.

Note that if the new Tally extends beyond the Monitor boundary, then it will not be part of the Monitor.

3.7.2 Configuration:

The attributes of a Tally are adjustable using its Configuration Panel in KEdit. To access the panel for a Tally within a Monitor:

- 1. Select the Tally using one of these methods:
 - Unlock the Monitor in which the Tally is located, by right-clicking and selecting Unlock
 Monitor from the contextual menu (an UNLOCKED Monitor is identified by a YELLOW
 BORDER and YELLOW RESIZING HANDLES in its corners), and then click on the Tally
 to select it
 - ALT-click on the Tally. The monitor will unlock, and the Tally will be selected.

NOTE: at this point the Tally may be positioned (click on the Tally and drag) and scaled (click and drag a control point) within the Monitor. It cannot be moved outside the Monitor boundary.

2. Open the Configuration Panel for the Tally by pushing F5, or from the Configuration Panel item in the <u>View menu</u>

Two tabs are available to set different parameters for the Tally.

3.7.2.1 Offline Panels

Assignment Tab

Tally State Colors:

Click the *Select...* button beside each of the four states to select the Tally colors that will represent that state. A *Tally Colors* selection box will appear, offering eleven options (bright and dark versions of five colors, plus invisible. You can also specify if the Tally will flash for all states.

Tally Assignment:

The pull-down list includes all available options. These are:

- All of the available GPI inputs
- All of the defined Alarms
- None (i.e. unassigned)

To configure a dynamic Tally from TSL, Andromeda, Kalypso or other services, you must create an Alarm Monitor and assign the Alarm Monitor to the Tally. See the section Alarms and Alarm Monitors.

You can open the Alarm Monitor panel directly from this panel to create or edit alarms:

New: open the <u>Alarm Monitor</u> panel to create a new alarm, which will be assigned to this Tally when the Alarm Monitor panel is closed.

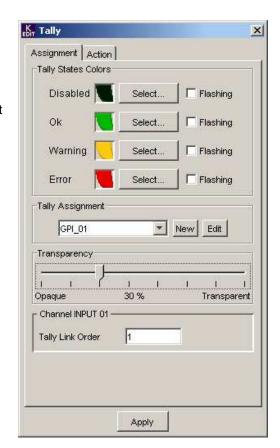
Edit: open the <u>Alarm Monitor</u> panel to edit the alarm selected in the pull-down list. Grayed-out if "none" is selected.

The shape of the icon in the tally color window reflects the type of tally being configured (Left Tally in the example here), as the same Configuration Panel opens for all four types (top, bottom, left and right).

Transparency:

Use the slider to select a transparency for the Tally. The transparency is only seen when the Tally is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

Channel:



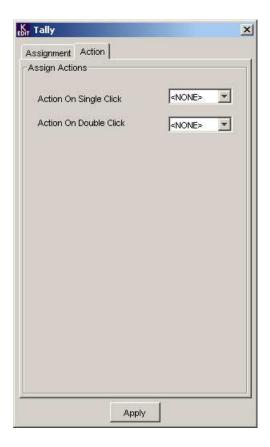


If this Tally is within a Monitor, the name of the assigned Channel will be shown, and the Link order box will be active. Enter the link order of the Tally data within the Channel that this Tally will display.

Assign Actions

Action on single click: from the pull-down box, select the Action that will be executed when this Tally is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Tally is double-clicked using the mouse attached to the Kaleido-K2.



3.7.2.2 Online Panels (Kaleido-K2 only)

Assignment Tab

Tally State Colors:

Click the *Select...* button beside each of the four states to select the Tally colors that will represent that state. A *Tally Colors* selection box will appear, offering eleven options (bright and dark versions of five colors, plus invisible. You can also specify if the Tally will flash for all states.

Tally Assignment:

The pull-down list includes all available options. These are:

- All of the available GPI inputs
- All of the defined alarms
- None (i.e. unassigned)

To configure a dynamic Tally from TSL, Andromeda, Kalypso or other services, you must create an Alarm Monitor and assign the Alarm Monitor to the Tally. See the section Alarms and Alarm Monitors.

You can open the Alarm Monitor panel directly from this panel to create or edit alarms:

New: open the <u>Alarm Monitor</u> panel to create a new alarm, which will be assigned to this Tally when the Alarm Monitor panel is closed.

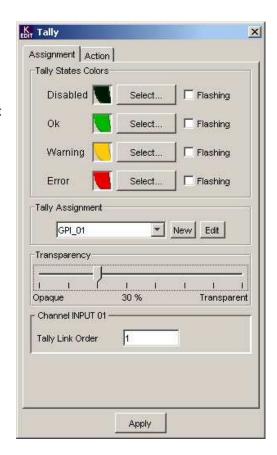
Edit: open the <u>Alarm Monitor</u> panel to edit the alarm selected in the pull-down list. Grayed-out if "none" is selected.

The shape of the icon in the tally color window reflects the type of Tally being configured (Left Tally in the example here), as the same configuration panel opens for all four types (top, bottom, left and right).

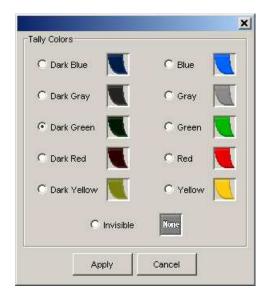
Transparency:

Use the slider to select a transparency for the Tally. The transparency is only seen when the Tally is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

Channel:



If this Tally is within a Monitor, the name of the assigned Channel will be shown, and the Link order box will be active. Enter the link order of the Tally data within the Channel that this Tally will display.

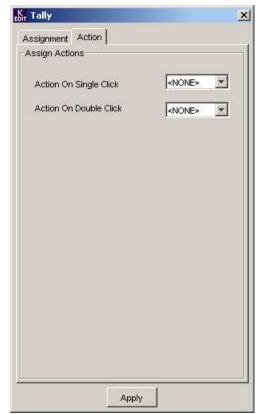


Action Tab

Assign Actions

Action on single click: from the pull-down box, select the Action that will be executed when this Tally is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Tally is double-clicked using the mouse attached to the Kaleido-K2.



3.7.3 Operation

3.7.3.1 Fire an Action

Left-click on the Tally in the Kaleido display using the mouse.

 Single-click fires the single-click Action configured for this Tally in the Action pane of its Configuration Panel Double-click fires the double-click Action configured for this Tally in the Action pane of its Configuration Panel

3.8 Analog Clock

3.8.1 Creation

An Analog Clock cannot be included in a Monitor.

To add an Analog Clock to a Layout:

- Select the Clock tool in the <u>KEdit toolbar</u>.
- Use the pull down arrow to change the current default Clock selection to Analog Clock if necessary (the available options are: analog clock, digital clock, and timer).
- Click at the appropriate place in the Layout, and drag to place an Analog Clock of the desired size.

3.8.2 Configuration:

The attributes of an Analog Clock are adjustable using its Configuration Panel in KEdit. To access the panel for an Analog Clock:

- 1. Click on the Analog Clock. Control points will appear at the corners and sides, showing it is selected.
 - NOTE: at this point the Analog Clock may be positioned (click on the Analog Clock and drag) and scaled (click and drag a control point) within the Layout.
- 2. Open the Configuration Panel for the Analog Clock by pushing F5, or from the Configuration Panel item in the View menu.

3.8.2.1 Offline Panels

Configuration Tab

Select Clock Reference:

Internal selects the Kaleido's internal processor Clock, which can be set through the Windows Time and Date control panel. The local time zone can be selected in the pull-down list.

External selects the time code input of the Kaleido.

The *LTC Calibration* button is not active in the offline mode of operation.

Select Time Offset:

Set up an on-screen Clock that is offset from the time reference selected above by a specified amount in either direction.



Appearance Tab

Change the clock color setting:

Background: select the background color on the Clock face. Click the arrow beside the icon to open a color selection window to choose a different color.

Scale: select the color of the hours/minutes scale around the circumference of the Clock and the associated numerals. Click the arrow beside the icon to open a color selection window to choose a different color.

Min/Hr Hands: select the color of the minute and hour hands on the Clock face.

Sec Hand: select the color of the second hand on the Clock face.

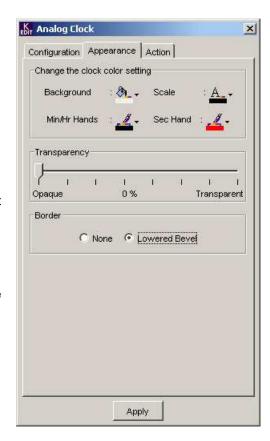
Transparency:

Use the slider to select a transparency for the Clock. The transparency is only seen when the Clock is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

Border:

Select whether the Clock displayed on the Kaleido monitor wall output will have no border, or a lowered bevel border:

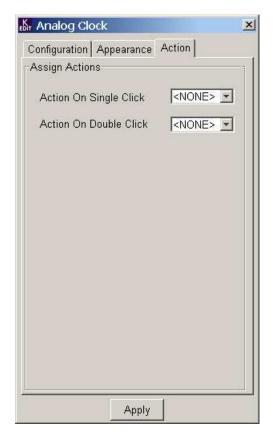
- None no border is shown.
- Lowered Bevel shows a border with a beveled profile.



Assign Actions

Action on single click: from the pull-down box, select the Action that will be executed when this Clock is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Clock is double-clicked using the mouse attached to the Kaleido-K2.



3.8.2.2 Online Panels (Kaleido-K2 only)

Configuration Tab

Select Clock Reference:

Internal selects the Kaleido's internal processor Clock, which can be set through the Windows Time and Date control panel. The local time zone can be selected in the pull-down list.

External selects the time code input of the Kaleido.

LTC Calibration:

Click the LTC Calibration button to open the LTC Delay Compensation control panel. This panel allows you to apply a correction to the time code to compensate for the delay it encounters while passing through the Kaleido system, so that the displayed LTC matches the incoming LTC.

The default delay is 5 frames.

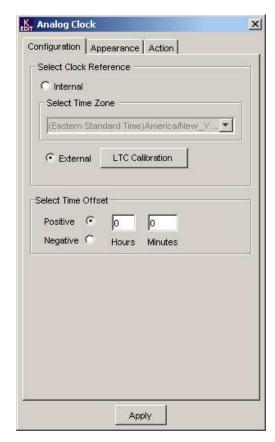
The Custom Delay could range between 0 and 15 frames

To set the appropriate value, display the incoming LTC on a time code reader, and visually compare it to the LTC displayed at the Kaleido output.

Note: this offset has an impact on the accuracy of a <u>Timer trigger action</u>

Select Time Offset:

Set up an on-screen Clock that is offset from the time reference selected above by a specified amount in either direction.





Appearance Tab

Change the Clock color setting:

Background: select the background color on the Clock face. Click the arrow beside the icon to open a color selection window to choose a different color.

Scale: select the color of the hours/minutes scale around the circumference of the Clock and the associated numerals. Click the arrow beside the icon to open a color selection window to choose a different color.

Min/Hr Hands: select the color of the minute and hour hands on the Clock face.

Sec Hand: select the color of the second hand on the Clock face.

Transparency:

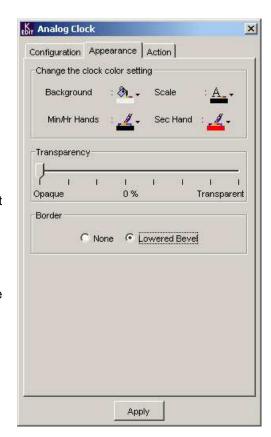
Use the slider to select a transparency for the Clock. The transparency is only seen when the Clock is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

Border:

Select whether the Clock displayed on the Kaleido monitor wall output will have no border, or a lowered bevel border:

Select the format of the border around the screen:

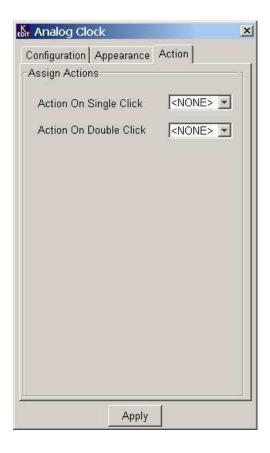
- None no border is shown.
- Lowered Bevel shows a border with a beveled profile.



Assign Actions

Action on single click: from the pull-down box, select the Action that will be executed when this Clock is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Clock is double-clicked using the mouse attached to the Kaleido-K2.



3.8.3 Operation

3.8.3.1 Fire an Action

Left-click on the Analog Clock in the Kaleido display using the mouse.

- Single-click fires the single-click Action configured for this Analog Clock in the Action pane of its Configuration Panel
- Double-click fires the double-click Action configured for this Analog Clock in the Action pane of its Configuration Panel

3.9 Digital Clock

3.9.1 Creation

A Digital Clock cannot be included in a Monitor.

To add a Digital Clock to a Layout:

- Select the Clock tool in the KEdit toolbar.
- Use the pull down arrow to change the current default Clock selection to Digital Clock if necessary (the available options are: analog clock, digital clock, and timer).

• Click at the appropriate place in the Layout, and drag to place a Clock of the desired size.

3.9.2 Configuration:

The attributes of a Digital Clock are adjustable using its Configuration Panel in KEdit. To access the panel for a Digital Clock:

- 1. Click on the Digital Clock. Control points will appear at the corners and sides, showing it is selected.
 - NOTE: at this point the Digital Clock may be positioned (click on the Digital Clock and drag) and scaled (click and drag a control point) within the Layout.
- 2. Open the Configuration Panel for the Digital Clock by pushing F5, or from the Configuration Panel item in the <u>View menu</u>

3.9.2.1 Offline Panels

Configuration Tab

Select Clock Reference:

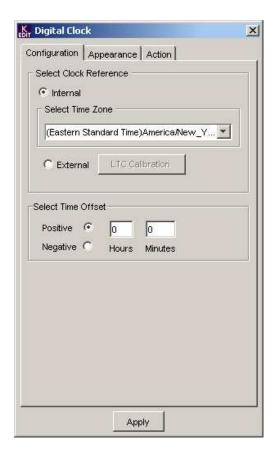
Internal selects the Kaleido's internal processor Clock, which can be set through the Windows Time and Date control panel. The local time zone can be selected in the pull-down list.

External selects the time code input of the Kaleido.

The *LTC Calibration* button is not active in the offline mode of operation.

Select Time Offset:

Set up an on-screen Clock that is offset from the time reference selected above by a specified amount in either direction.



Appearance Tab

Change the clock color setting:

Background: select the background color on the Clock face. Click the arrow beside the icon to open a color selection window to choose a different color.

Digits: select the color of the digits displayed by the Clock. Click the arrow beside the icon to open a color selection window to choose a different color.

Clock display:

Use the radio buttons to select the digital clock display format:

- 12 hour with AM/PM indicator
- 24 hour.

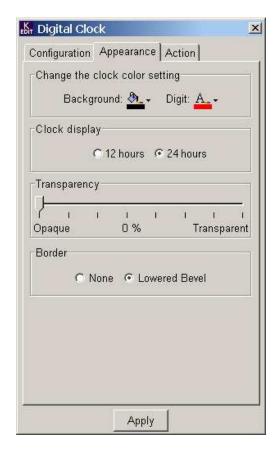
Transparency:

Use the slider to select a transparency for the Clock. The transparency is only seen when the clock is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

Border:

Select whether the Clock displayed on the Kaleido monitor wall output will have no border, or a lowered bevel border.

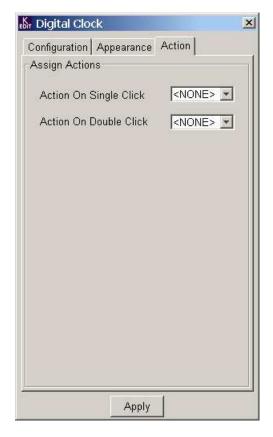
Note: the display font for this digital clock can be changed using the font selector pulldown in the <u>KEdit toolbar</u>. The font size is automatically scaled to fit the component, so the size pulldown is disabled.



Assign Actions

Action on single click: from the pull-down box, select the Action that will be executed when this Clock is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Clock is double-clicked using the mouse attached to the Kaleido-K2.



3.9.2.2 Online Panels (Kaleido-K2 only)

Configuration Tab

Select Clock Reference:

Internal selects the Kaleido's internal processor clock, which can be set through the Windows Time and Date control panel. The local time zone can be selected in the pull-down list.

External selects the time code input of the Kaleido.

LTC Calibration:

Click the LTC Calibration button to open the LTC Delay Compensation control panel. This panel allows you to apply a correction to the time code to compensate for the delay it encounters while passing through the Kaleido system, so that the displayed LTC matches the incoming LTC.

The default delay is 5 frames.

The Custom Delay could range between 0 and 15 frames

To set the appropriate value, display the incoming LTC on a time code reader, and visually compare it to the LTC displayed at the Kaleido output.

Note: this offset has an impact on the accuracy of a <u>Timer trigger action</u>

Select Time Offset:

Set up an on-screen clock that is offset from the time reference selected above by a specified amount in either direction.





Appearance Tab

Change the Clock color setting:

Background: select the background color on the Clock face. Click the arrow beside the icon to open a color selection window to choose a different color.

Digits: select the color of the digits displayed by the Clock. Click the arrow beside the icon to open a color selection window to choose a different color.

Clock display:

Use the radio buttons to select the digital clock display format:

- 12 hour with AM/PM indicator
- 24 hour.

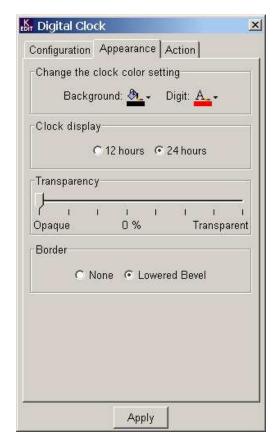
Transparency:

Use the slider to select a transparency for the Clock. The transparency is only seen when the Clock is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

Border:

Select whether the Clock displayed on the Kaleido monitor wall output will have no border, or a lowered bevel border.

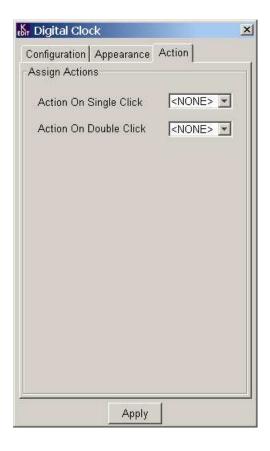
Note: the display font for this digital clock can be changed using the font selector pulldown in the <u>KEdit toolbar</u>. The font size is automatically scaled to fit the component, so the size pulldown is disabled.



Assign Actions

Action on single click: from the pull-down box, select the Action that will be executed when this Clock is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Clock is double-clicked using the mouse attached to the Kaleido-K2.



3.9.3 Operation (Digital clock)

3.9.3.1 Fire an Action

Left-click on the Digital Clock in the Kaleido display using the mouse.

- Single-click fires the single-click Action configured for this Digital Clock in the Action pane of its Configuration Panel
- Double-click fires the double-click Action configured for this Digital Clock in the Action pane of its Configuration Panel

3.10 Count Down Timer

3.10.1 Creation

A Count Down Timer cannot be included in a Monitor.

To add a Count Down Timer to a Layout:

- Select the Clock tool in the KEdit toolbar.
- Use the pull down arrow to change the current default Clock selection to Count Down Timer if necessary (the available options are: Analog Clock, Digital Clock, and Count Down Timer).

 Click at the appropriate place in the Layout, and drag to place a Count Down Timer of the desired size

3.10.2 Configuration:

The attributes of a Count Down Timer are adjustable using its Configuration Panel in <u>KEdit</u>. To access the panel for a Count Down Timer:

- 1. Click on the Count Down Timer. Control points will appear at the corners and sides, showing it is selected.
 - NOTE: at this point the Count Down Timer may be positioned (click on the Count Down Timer and drag) and scaled (click and drag a control point) within the Layout.
- 2. Open the Configuration Panel for the Count Down Timer by pushing F5, or from the Configuration Panel item in the View menu.

3.10.2.1 Offline Panels

Configuration Tab

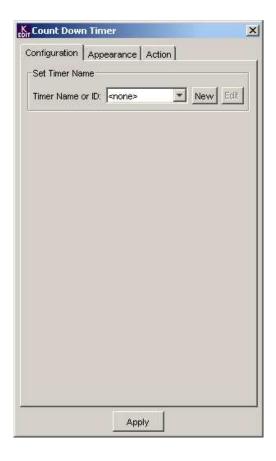
Set Timer Name:

From the pulldown list, select one of the available Timers as the source of data for this Count Down Timer.

- Click New to open the Timer Configuration panel to configure a new Timer.
- You may modify the selected Timer's configuration by clicking Edit to access its Configuration panel

Note that the Timer Configuration panel is also accessible from the Timer Browser via the View menu.

The selected Timer can be operated using Gateway commands for precision timing applications.



Appearance Tab

Change the Timer Color Setting

The color patch below the Background icon shows the current background color.

 Click on the arrow beside the Background icon to open a color selection palette to select a new color for the background. Click on the new color to select it and close the palette.

The color patch below the Digit icon shows the current color of the timer's numbers.

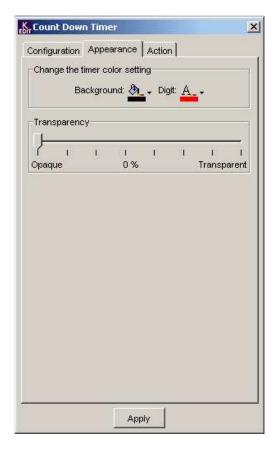
 Click on the arrow beside the Digit icon to open a color selection palette to select a new color for the numbers. Click on the new color to select it and close the palette.

Lick the Apply button at the bottom of the control panel to apply these selections to the timer.

Transparency:

Use the slider to select a transparency for the Count Down Timer. The transparency is only seen when the Count Down Timer is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

Note: the display font for this Count Down Timer can be changed using the font selector pulldown in the <u>KEdit toolbar</u>. The font size is automatically scaled to fit the component, so the size pulldown is disabled.



Assign Actions

Action on single click: from the pull-down box, select the Action that will be executed when this Count Down Timer is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Count Down Timer is double-clicked using the mouse attached to the Kaleido-K2.



3.10.2.2 Online Panels (Kaleido-K2 only)

Configuration Tab

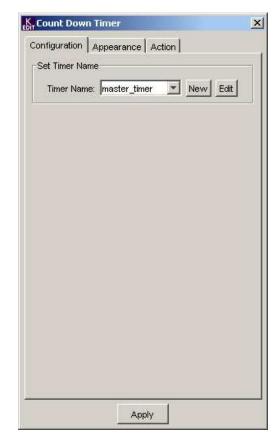
Set Timer Name:

From the pulldown list, select one of the available Timers as the source of data for this Count Down Timer.

 You may modify the selected Timer's configuration by clicking Edit

Click *New* to open the Timer Configuration panel to configure a new Timer. Note that the Timer Configuration panel is also accessible from the Timer Browser via the View menu.

The selected Timer can be operated using Gateway commands for precision timing applications.



Appearance Tab

Change the Timer Color Setting

The color patch below the Background icon shows the current background color.

 Click on the arrow beside the Background icon to open a color selection palette to select a new color for the background. Click on the new color to select it and close the palette.

The color patch below the Digit icon shows the current color of the timer's numbers.

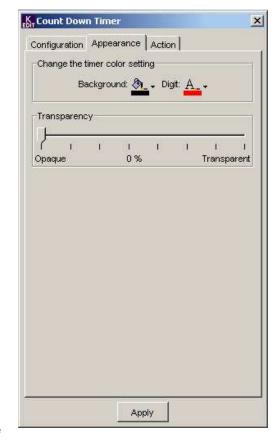
 Click on the arrow beside the Digit icon to open a color selection palette to select a new color for the numbers. Click on the new color to select it and close the palette.

Lick the Apply button at the bottom of the control panel to apply these selections to the timer.

Transparency:

Use the slider to select a transparency for the Count Down Timer. The transparency is only seen when the Count Down Timer is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

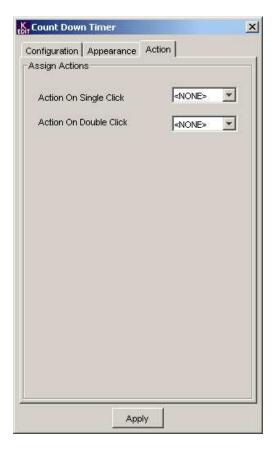
Note: the display font for this Count Down Timer can be changed using the font selector pulldown in the <u>KEdit toolbar</u>. The font size is automatically scaled to fit the component, so the size pulldown is disabled.



Assign Actions

Action on single click: from the pull-down box, select the Action that will be executed when this Count Down Timer is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Count Down Timer is double-clicked using the mouse attached to the Kaleido-K2.



3.10.3 Operation

3.10.3.1 Operation via the Gateway

Count Down Timers display the data originating from a Timer. A Timer should be operated using Gateway commands if precision timing is required. These commands can originate from an automation system. See the discussion under Timer Browser for a detailed description.

3.10.3.2 Fire an Action

Left-click on the Count Down Timer in the Kaleido display using the mouse.

- Single-click fires the single-click Action configured for this Count Down Timer in the Action pane of its Configuration Panel.
- Double-click fires the double-click Action configured for this Count Down Timer in the Action pane of its Configuration Panel

3.10.3.3 Time Set and Start

If the Count Down Timer has been configured with the Timer Set and Start Action as its singleclick or double-click Action, then left-clicking or left-double-clicking as appropriate will start the Count Down Timer with the preset value and count direction for which it was configured.

3.10.3.4 Timer Pause

If the Count Down Timer has been configured with the Timer Pause Action as its single-click or double-click Action, then left-clicking or left-double-clicking as appropriate will pause the Timer.

3.11 Video Time Code

3.11.1 Creation:

Use the Monitor Browser to add a Monitor containing one or more Video Time Code viewers to the current Layout.

- 1. Open the Monitor Browser in KEdit in one of three ways:
 - Select its icon from the KEdit toolbar.
 - Select the Monitor Browser item in the View menu.
 - Push F6 on the keyboard
- 2. Select an appropriate Monitor from the pull down list, using the Preview to see its appearance.
- 3. Click on the preview, and drag a copy of the Monitor onto the Layout.

Or add a Video Time Code viewer to an existing Monitor in the Layout:

- Unlock the Monitor in which the Video Time Code viewer will be located, by right-clicking and selecting Unlock Monitor from the contextual menu.. The Monitor's border will turn yellow, indicating it may be edited. You may also ALT-click anywhere in the Monitor, which will unlock the Monitor and select the item you clicked.
- Select the Video Time Code tool in the <u>KEdit toolbar</u>.
- Click inside the Monitor, and drag to place a Video Time Code viewer of the desired size.

Note that if the new Video Time Code viewer extends beyond the Monitor boundary, then it will not be part of the Monitor.

Or add a Video Time Code viewer that is not part of a Monitor to the Layout:

- Select the Video Time Code tool in the KEdit toolbar.
- Click at the appropriate place in the layout, and drag to place a Video Time Code viewer of the desired size.

Or copy an existing Video Time Code viewer, inside or outside a Monitor:

- Select the Video Time Code viewer to be copied.
- Use the Copy (CTRL+C) and Paste (CTRL+V) commands to create a new Video Time Code viewer.

 While holding CTRL, click on the Video Time Code viewer to be copied, and drag to a new location. The original Video Time Code viewer will remain, and a copy will appear at the new location.

Note that if the new Video time Code viewer extends beyond the Monitor boundary, then it will not be part of the Monitor.

3.11.2 Configuration:

The attributes of a Video Time Code viewer are adjustable using its Configuration Panel in KEdit. To access the panel for a Video Time Code viewer within a Monitor:

- 1. Select the Video Time Code viewer using one of these methods:
 - Unlock the Monitor in which the Video Time Code viewer is located, by right-clicking and selecting Unlock Monitor from the contextual menu (an UNLOCKED Monitor is identified by a YELLOW BORDER and YELLOW RESIZING HANDLES in its corners), and then click on the Video Time Code viewer to select it
 - ALT-click on the Video Time Code viewer. The monitor will unlock, and the viewer will be selected.

NOTE: at this point the Video Time Code viewer may be positioned (click on the Video Time Code viewer and drag) and scaled (click and drag a control point) within the Monitor. It cannot be moved outside the Monitor boundary.

2. Open the Configuration Panel for the Video Time Code viewer by pushing F5, or from the Configuration Panel item in the <u>View menu</u>.

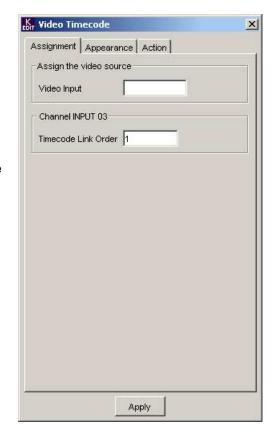
3.11.2.1 Offline Panels

Assignment Tab

Assign the video source:

Enter the number of the Kaleido video input that is carrying the embedded time code [enter a number between 1 and 32].

Channel: If this time code is within a Monitor, the name of the assigned Channel will be shown, and the Link order box will be active. Enter the link order of the time code data within the Channel that this Video Time Code will display.



Appearance Tab

Change the display settings:

Background: select the background color on the Time Code Viewer display. Click the arrow beside the icon to open a color selection window to choose a different color.

Digits: select the color of the digits displayed by the Time Code Viewer. Click the arrow beside the icon to open a color selection window to choose a different color.

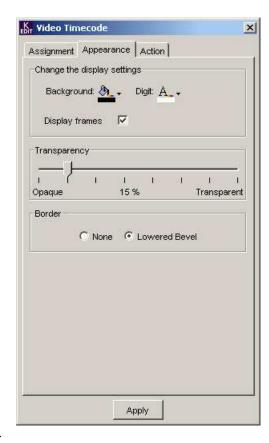
Transparency:

Use the slider to select a transparency for the Time Code Viewer. The transparency is only seen when the Time Code Viewer is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

Border:

Select whether the Time Code Viewer displayed on the Kaleido monitor wall output will have no border, or a lowered bevel border:

- None no border is shown.
- Lowered Bevel shows a border with a beveled profile.



Assign Actions

Action on single click: from the pull-down box, select the Action that will be executed when this Time Code Viewer is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Time Code Viewer is double-clicked using the mouse attached to the Kaleido-K2.



3.11.2.2 Online Panels (Kaleido-K2 only)

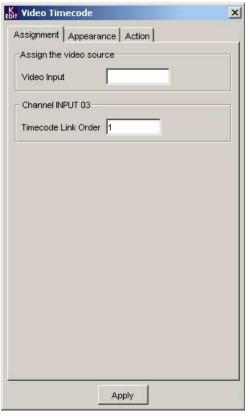
Assignment Tab

Assign the video source:

Enter the number of the Kaleido video input that is carrying the embedded time code [enter a number between 1 and 32].

Channel:

If this time code is within a Monitor, the name of the assigned channel will be shown, and the Link order box will be active. Enter the link order of the time code data within the Channel that this Video Time Code will display.



Appearance Tab

Change the display settings:

Background: select the background color on the Video Time Code display. Click the arrow beside the icon to open a color selection window to choose a different color.

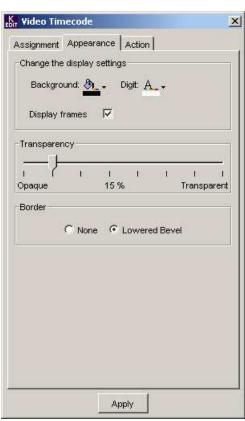
Digits: select the color of the digits displayed by the Video Time Code. Click the arrow beside the icon to open a color selection window to choose a different color.

Transparency:

Use the slider to select a transparency for the Video Time Code. The transparency is only seen when the Video Time Code is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

Border:

Select whether the Video Time Code displayed on the



Kaleido monitor wall output will have no border, or a lowered bevel border:

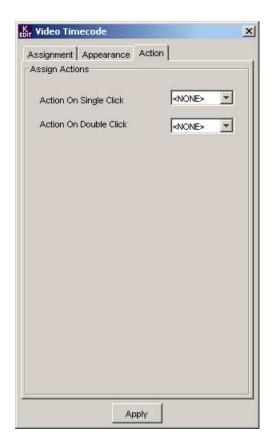
- None no border is shown.
- Lowered Bevel shows a border with a beveled profile.

Action Tab

Assign Actions

Action on single click: from the pull-down box, select the Action that will be executed when this Video Time Code is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Video Time Code is double-clicked using the mouse attached to the Kaleido-K2.



3.11.3 Operation

3.11.3.1 Fire an Action

Left-click on the Video Time Code viewer in the Kaleido display using the mouse.

- Single-click fires the single-click Action configured for this Video Time Code viewer in the Action pane of its Configuration Panel.
- Double-click fires the double-click Action configured for this Video Time Code viewer in the Action pane of its Configuration Panel.

3.12 Status Indicator

3.12.1 Creation:

Use the Monitor Browser to add a Monitor containing one or more Status Indicators to the current Layout.

- 1. Open the Monitor Browser in KEdit in one of three ways:
 - Select its icon from the KEdit toolbar.
 - Select the Monitor Browser item in the View menu.
 - Push F6 on the keyboard.
- 2. Select an appropriate Monitor from the pull down list, using the Preview to see its appearance.
- 3. Click on the preview, and drag a copy of the Monitor onto the Layout.

Or add a Status Indicator to an existing Monitor in the Layout:

- Unlock the Monitor by right-clicking it and selecting Unlock Monitor from the contextual menu. The Monitor's border will turn yellow, indicating it may be edited. You may also ALT-click anywhere in the Monitor, which will unlock the Monitor and select the item you clicked.
- Select the Status Indicator tool in the KEdit toolbar.
- Click inside the Monitor, and drag to place a Status Indicator of the desired size.

Note that if the new Status Indicator extends beyond the Monitor boundary, then it will not be part of the Monitor.

Or add a Status Indicator that is not part of a Monitor to the Layout:

- Select the Status Indicator tool in the <u>KEdit toolbar</u>.
- Click at the appropriate place in the layout, and drag to place a Status Indicator of the desired size

Or copy an existing Status Indicator, inside or outside a Monitor:

- Select the Status Indicator to be copied.
- Use the Copy (CTRL+C) and Paste (CTRL+V) commands to create a new Status Indicator.
 - OR -
- While holding CTRL, click on the Status Indicator to be copied, and drag to a new location. The original Status Indicator will remain, and a copy will appear at the new location.

Note that if the new Status Indicator extends beyond the Monitor boundary, then it will not be part of the Monitor.

3.12.2 Configuration:

The attributes of a Status Indicator are adjustable using its configuration panel in KEdit. To access the panel for a Status Indicator within a Monitor:

1. Select the Status Indicator using one of these methods:

- Unlock the Monitor in which the Status Indicator is located, by right-clicking and selecting
 Unlock Monitor from the contextual menu (an UNLOCKED Monitor is identified by a
 YELLOW BORDER and YELLOW RESIZING HANDLES in its corners), and then click on
 the Status Indicator to select it
- ALT-click on the Status Indicator. The monitor will unlock, and the Status Indicator will be selected.

NOTE: at this point the Status Indicator may be positioned (click on the Status Indicator and drag) and scaled (click and drag a control point) within the Monitor. The Status Indicator will maintain its proportions when scaled. It cannot be moved outside the Monitor boundary.

2. Open the configuration panel for the Status Indicator by pushing F5, or from the Configuration Panel item in the View menu.

3.12.2.1 Offline Panels

Alarm Tab

Icon Selection:

Four different icons can be selected for each status indicator, corresponding to Disable, Normal, Warning and Error conditions. The current selection is shown. Clicking on the *Select...* box opens a selection screen where a variety of possible icons are shown. Click on an appropriate icon to select it; the selection screen closes automatically.

The Status Indicator can be made to flash under Error and Warning conditions. Click on the *Flashing* checkbox to turn flashing mode on or off.

Assign Alarm Monitor:

Select one of the available Alarms from the pull-down list to assign it to this Status Indicator.

New: open the <u>Alarm Monitor</u> panel to create a new alarm, which will be assigned to this Status Indicator when the Alarm Monitor panel is closed.

Edit: open the <u>Alarm Monitor</u> panel to edit the alarm selected in the pull-down list. Grayed-out if "none" is selected.

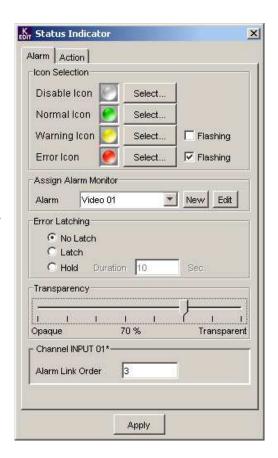
Error Latching:

- Use these controls to keep the Alarm on after the error has passed, to make detection of transient errors easier. No Latch – do not latch the error.
- Latch hold the Alarm on indefinitely.
- Hold hold the Alarm on for the duration specified in the box.

The latched status will be indicated by a colored border surrounding the Status Indicator, while the Indicator itself will continue to display the current status.

Transparency:

Use the slider to select a transparency for the Status Indicator. The transparency is only seen when the Status Indicator is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.



Channel:

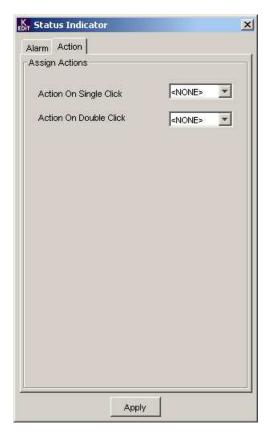
If this Status Indicator is within a Monitor, the name of the assigned Channel will be shown, and the Link order box will be active, showing the current link order of the Alarm within the Channel displayed by this Monitor. Enter a new value if desired.

Action Tab

Assign Actions

Action on single click: from the pull-down box, select the Action that will be executed when this Status Indicator is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Status Indicator is double-clicked using the mouse attached to the Kaleido-K2.



3.12.2.2 Online Panels (Kaleido-K2 only)

Alarm Tab

Icon Selection:

Four different icons can be selected for each Status Indicator, corresponding to Disable, Normal, Warning and Error conditions. The current selection is shown. Clicking on the *Select...* box opens a selection screen where a variety of possible icons are shown. Click on an appropriate icon to select it; the selection screen closes automatically.

The Status Indicator can be made to flash under Error and Warning conditions. Click on the *Flashing* checkbox to turn flashing mode on or off.

Assign Alarm Monitor:

Select one of the available Alarm Monitor from the pull-down list to assign it to this Status Indicator.

New: open the <u>Alarm Monitor</u> panel to create a new alarm, which will be assigned to this Status Indicator when the Alarm Monitor panel is closed.

Edit: open the <u>Alarm Monitor</u> panel to edit the alarm selected in the pull-down list. Grayed-out if "none" is selected.

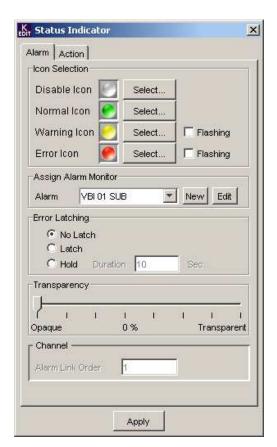
Error Latching:

- Use these controls to keep the Alarm on after the error has passed, to make detection of transient errors easier.
- No Latch do not latch the error.
- Latch hold the Alarm on indefinitely.
- Hold hold the Alarm on for the duration specified in the box.

The latched status will be indicated by a colored border surrounding the Status Indicator, while the Indicator itself will continue to display the current status.

Transparency:

Use the slider to select a transparency for the Status Indicator. The transparency is only seen when the Status Indicator is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85



and 100%.

Channel:

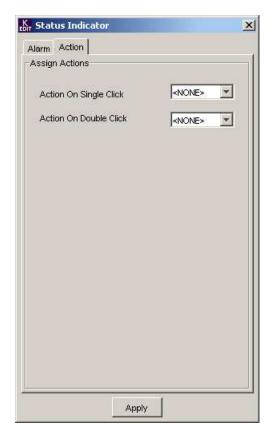
If this Status Indicator is within a Monitor, the name of the assigned Channel will be shown, and the Link order box will be active, showing the current link order of the Alarm within the Channel displayed by this Monitor. Enter a new value if desired.

Action Tab

Assign Actions

Action on single click: from the pull-down box, select the Action that will be executed when this Status Indicator is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Status Indicator is double-clicked using the mouse attached to the Kaleido-K2.



3.12.3 Operation

3.12.3.1 Fire an Action

Left-click on the Status Indicator in the Kaleido display using the mouse.

- Single-click fires the single-click Action configured for this Status Indicator in the Action pane
 of its Configuration Panel.
- Double-click fires the double-click Action configured for this Status Indicator in the Action pane of its Configuration Pane.

3.12.3.2 Unlatch Error Status

Right-click on the Status Indicator in the Kaleido display using the mouse, and select Unlatch Error Status. The Status Indicator's error detection will be unlatched.

3.13 Alarm Group Inhibit Button

3.13.1 Creation:

An Alarm Group Inhibit Button cannot be included in a Monitor.

To add an Alarm Group Inhibit Button to a Layout:

- Select the Alarm Group Inhibit Button tool in the KEdit toolbar.
- Click at the appropriate place in the Layout, and drag to place a Alarm Group Inhibit Button of the desired size.

3.13.2 Configuration:

The attributes of an Alarm Group Inhibit Button are adjustable using its configuration panel in KEdit. To access the panel for an Alarm Group Inhibit Button:

- 1. Click on the Alarm Group Inhibit Button. Control points will appear at the corners and the center of the long side, showing it is selected.
 - NOTE: at this point the Alarm Group Inhibit Button may be positioned (click on the Alarm Group Inhibit Button and drag) and scaled (click and drag a control point) within the Layout.
- 2. Open the Configuration Panel for the Alarm Group Inhibit Button by pushing F5, or from the Configuration Panel item in the <u>View menu</u>

3.13.2.1 Offline Panel

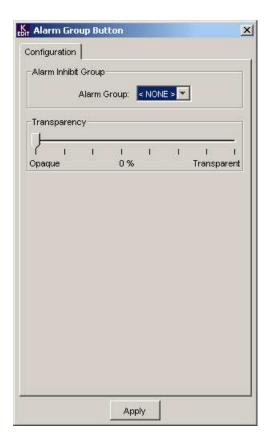
Configuration Tab

Alarm Inhibit Group

From the pull down list, select the Alarm Group that will be controlled by this button.

Transparency

Use the slider to select a transparency for the Alarm Group Inhibit Button. The transparency is only seen when the button is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.



3.13.2.2 Online Panel (Kaleido-K2 only)

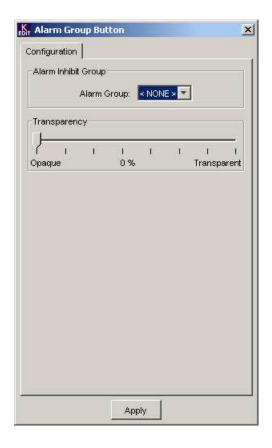
Configuration Tab

Alarm Inhibit Group

From the pull down list, select the Alarm Group that will be controlled by this button.

Transparency

Use the slider to select a transparency for the Alarm Group Inhibit Button. The transparency is only seen when the button is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.



3.13.3 Operation

3.13.3.1 Toggle the Alarm Group status

Left-click on the Alarm Group Inhibit Button in the Kaleido display using the mouse.

The Alarm Group Inhibit Button toggles the status of its associated Alarm Group between Enabled and Disabled modes. The current status is always indicated by the on-screen icon, which names the associated Alarm Group, and shows the status by the brightness of the "Button" within the icon:



The "Montréal" Alarm Group is ENABLED



The "Montréal" Alarm Group is DISABLED

3.14 MPEG Monitor

NOTE: No sources of information for this element are supported in the current release.

All references to the PixelMetrix DV Station refer to earlier versions of this software

3.14.1 Creation:

An MPEG Monitor cannot be included in a Monitor.

To add an MPEG Monitor to a Layout:

- Select the MPEG Monitor tool in the <u>KEdit toolbar</u>. Use the pull down arrow to change the
 current default MPEG Monitor type selection if necessary (select between stack chart, pie
 chart and bar graph).
- Click at the appropriate place in the layout, and drag to place an MPEG Monitor of the desired size.

Note: The MPEG data displayed by the MPEG Monitor originates on the PixelMetrix DV Station.

3.14.2 Configuration:

The attributes of an MPEG Monitor are adjustable using its configuration panel in <u>KEdit</u>. To access the panel for an MPEG Monitor:

- 1. Click on the MPEG Monitor. Control points will appear at the corners and the center of the long side, showing it is selected.
 - NOTE: at this point the MPEG Monitor may be positioned (click on the MPEG Monitor and drag) and scaled (click and drag a control point) within the Layout.
- 2. Open the Configuration Panel for the MPEG Monitor by pushing F5, or from the Configuration Panel item in the <u>View menu</u>.

3.14.2.1 Offline Panels

Assignment Tab

Assign Service ID

The service ID is the Miranda long ID of the PixelMetrix analyzer, or an alias, which has been installed in the file C:\iControl\ Startup\KG2Config.xml (see PixelMetrix MPEG Analyzer for details).

Chart Type

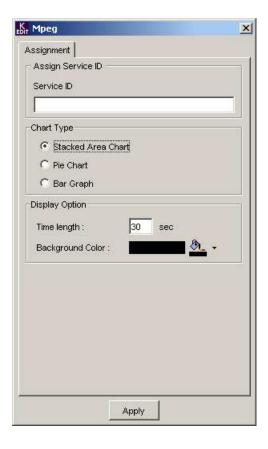
The PixelMetrix MPEG analyzer can display the analysis results in any of three formats. Click on the appropriate button to select the desired format.

Display Option

Time Length is enabled only for the Stacked Area Chart option, and defines the time period over which the results are calculated (i.e. the previous 30 seconds in the above sample chart).

Background Color selects the color of the chart background when it is displayed on the Kaleido monitor wall output.





Assignment Tab

Assign Service ID

The service ID is the Miranda long ID of the PixelMetrix analyzer, or an alias, which has been installed in the file C:\iControl\ Startup\KG2Config.xml (see PixelMetrix MPEG Analyzer for details).

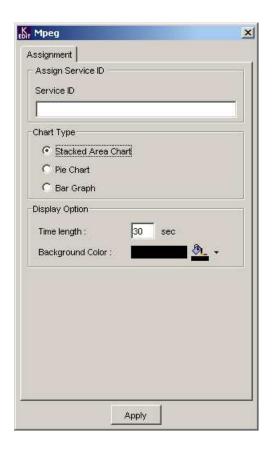
Chart Type

The PixelMetrix MPEG analyzer can display the analysis results in any of three formats. Click on the appropriate button to select the desired format.

Display Option

Time Length is enabled only for the Stacked Area Chart option, and defines the time period over which the results are calculated (i.e. the previous 30 seconds in the above sample chart).

Background Color selects the color of the chart background when it is displayed on the Kaleido monitor wall output.



3.14.3 Operation

There are no operational features that can be controlled on-line for an MPEG Monitor.

3.15 MPEG Service Info

NOTE: No sources of information for this element are supported in the current release.

All references to the PixelMetrix DV Station refer to earlier versions of this software

3.15.1 Creation:

Use the Monitor Browser to add a Monitor containing one or more MPEG Service Info viewers to the current Layout.

- 3. Open the Monitor Browser in KEdit in one of three ways:
 - Select its icon from the KEdit toolbar.
 - Select the Monitor Browser item in the View menu.
 - Push F6 on the keyboard.

- 4. Select an appropriate Monitor from the pull down list, using the Preview to see its appearance.
- 5. Click on the preview, and drag a copy of the Monitor onto the Layout.

Or add a MPEG Service Info viewer to an existing Monitor in the Layout:

- Unlock the Monitor by right-clicking it and selecting Unlock Monitor from the contextual menu.
 The Monitor's border will turn yellow, indicating it may be edited. You may also ALT-click anywhere in the Monitor, which will unlock the Monitor and select the item you clicked.
- Select the MPEG Service Info tool in the KEdit toolbar.
- Click inside the Monitor, and drag to place a MPEG Service Info viewer of the desired size.

Note that if the new MPEG Service Info viewer extends beyond the Monitor boundary, then it will not be part of the Monitor.

Or add a MPEG Service Info viewer that is not part of a Monitor to the Layout:

- Select the MPEG Service Info tool in the KEdit toolbar.
- Click at the appropriate place in the layout, and drag to place a MPEG Service Info viewer of the desired size.

Or copy an existing MPEG Service Info viewer, inside or outside a Monitor:

- Select the MPEG Service Info viewer to be copied.
- Use the Copy (CTRL+C) and Paste (CTRL+V) commands to create a new MPEG Service Info viewer.
 - OR -
- While holding CTRL, click on the MPEG Service Info viewer to be copied, and drag to a new location. The original MPEG Service Info viewer will remain, and a copy will appear at the new location.

Note that if the new MPEG Service Info viewer extends beyond the Monitor boundary, then it will not be part of the Monitor.

3.15.2 Configuration:

The attributes of an MPEG Service Info viewer are adjustable using its Configuration Panel in KEdit. To access the panel for an MPEG Service Info viewer within a Monitor:

- 1. Select the MPEG Service Info viewer using one of these methods:
 - Unlock the Monitor in which the MPEG Service Info viewer is located, by right-clicking and selecting Unlock Monitor from the contextual menu (an UNLOCKED Monitor is identified by a YELLOW BORDER and YELLOW RESIZING HANDLES in its corners), and then click on the MPEG Service Info viewer to select it

• ALT-click on the MPEG Service Info viewer. The monitor will unlock, and the MPEG Service Info viewer will be selected.

NOTE: at this point the MPEG Service Info viewer may be positioned (click on the MPEG Service Info viewer and drag) and scaled (click and drag a control point) within the Monitor. It cannot be moved outside the Monitor boundary.

2. Open the Configuration Panel for the MPEG Service Info viewer by pushing F5, or from the Configuration Panel item in the View menu.

3.15.2.1 Offline Panels

Assignment Tab

Assign Service ID:

The service ID is the Miranda long ID of the PixelMetrix analyzer, or its alias, in the file C:\iControl\ Startup\KG2Config.xml (see PixelMetrix MPEG Analyzer).

Assign Logical Service Name:

Enter the name assigned on the PixelMetrix analyzer to the service you wish to monitor. See the PixelMetrix manual for details.

Display Options:

Select any number of these three display options.

- Show Logical Service Info: Shows the name of the program e.g. the PID and the bandwidth.
- Show Bandwidth Usage in Percentage: if this box is checked, the bandwidth used by this particular MPEG stream will be shown as a percentage of the total available bandwidth.

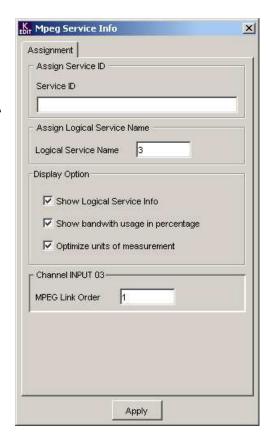
If the box is unchecked, the actual bandwidth used by this MPEG stream will be shown, nominally in Mbits/sec.

 Optimize Units of Measurement: If the actual bandwidth is being shown (i.e. the above box is unchecked), then checking this box will adjust the units of the displayed value to produce a more readable display, e.g. instead of .00434 MB/s, it will show 4.34 KB/s.

Channel:

If this MPEG Service Info indicator is within a Monitor, the name of the assigned Channel will be shown, and the Link order box will be active, showing the current link order of the MPEG service within the Channel displayed by this Monitor. Enter a new value if desired.

3.15.2.2 Online Panels (Kaleido-K2 only)



Assignment Tab

Assign Service ID:

The service ID is the Miranda long ID of the PixelMetrix analyzer, or its alias, in the file C:\iControl\ Startup\KG2Config.xml (see PixelMetrix MPEG Analyzer).

Assign Logical Service Name:

Enter the name assigned on the PixelMetrix analyzer to the service you wish to monitor. See the PixelMetrix manual for details.

Display Options:

Select any number of these three display options:

- Show Logical Service Info: Shows the name of the program e.g. the PID and the bandwidth.
- Show Bandwidth Usage in Percentage: if this box is checked, the bandwidth used by this particular MPEG stream will be shown as a percentage of the total available bandwidth.

If the box is unchecked, the actual bandwidth used by this MPEG stream will be shown, nominally in Mbits/sec.

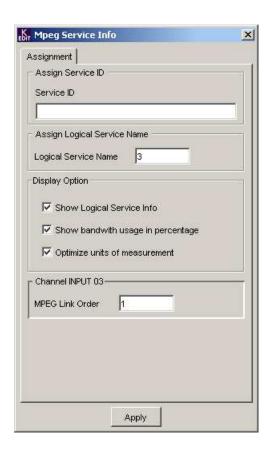
 Optimize Units of Measurement: If the actual bandwidth is being shown (i.e. the above box is unchecked), then checking this box will adjust the units of the displayed value to produce a more readable display, e.g. instead of .00434 MB/s, it will show 4.34 KB/s.

Channel:

If this MPEG Service Info indicator is within a Monitor, the name of the assigned Channel will be shown, and the Link order box will be active, showing the current link order of the MPEG service within the Channel displayed by this Monitor. Enter a new value if desired.

3.15.3 Operation

There are no operational features that can be controlled on-line for an MPEG Service Info display.



3.16 Streaming Viewer

3.16.1 Creation:

A Streaming Viewer cannot be included in a Monitor.

To add a Streaming Viewer to a Layout:

- Select the Streaming Viewer tool in the KEdit toolbar.
- Click at the appropriate place in the Layout, and drag to place a Streaming Viewer of the desired size.

3.16.2 Configuration:

The attributes of a Streaming Viewer are adjustable using its Configuration Panel in <u>KEdit</u>. To access the panel for a Streaming Viewer:

- 1. Click on the Streaming Viewer. Control points will appear at the corners and the center of the long side, showing it is selected.
 - NOTE: at this point the Streaming Viewer may be positioned (click on the Streaming Viewer and drag) and scaled (click and drag a control point) within the Layout.
- 2. Open the Configuration Panel for the Streaming Viewer by pushing F5, or from the Configuration Panel item in the <u>View menu</u>.

3.16.2.1 Offline Panels

Assignment Tab

RTP:

The streaming video source may be an Allegro1 Encoder, or an encoder embodied in a Miranda Densité Probe producing thumbnail images of the signal it is monitoring. Kaleido accesses the source using an address of the form RTSP://ip address/feedid.

In this panel, enter the two components of the address separately.

IP Address: Specify the IP address of the streaming video source.

 If the source is an Allegro1 encoder, the IP address is that of the encoder itself.

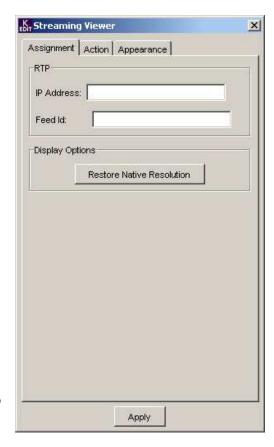
If the source is a Densité probe, the IP address is that of the Miranda Application Server that is controlling the Densité frame.

Feed ID: Identify which of several possible feeds is to be displayed

- If the source is an Allegro1 encoder, give the number of the channel in the data stream, in the format C1, C2, etc.
- If the source is a Densité probe, give the LongID of the Densité frame and card (see <u>How To Display thumbnails or streaming video on the Kaleido-K2?</u>).

Display Options:

Clicking the *Restore Native Resolution* button will change the size of the Streaming Viewer to be of the native size (pixels) of the current stream. If no stream is available, this has no effect.

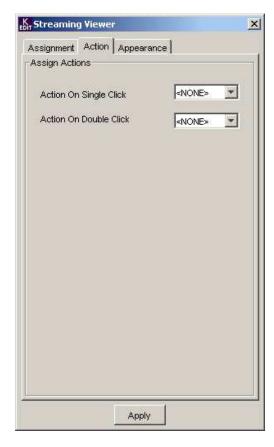


Action Tab

Assign Actions

Action on single click: from the pull-down box, select the Action that will be executed when this Streaming Viewer is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Streaming Viewer is double-clicked using the mouse attached to the Kaleido-K2.



Appearance Tab

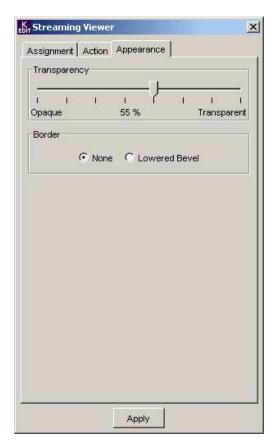
Transparency

Use the slider to select a transparency for the Streaming Viewer. The transparency is only seen when the Streaming Viewer is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

Border

The appearance of the Streaming Viewer at the Kaleido-K2 output can be enhanced by adding a frame, which creates the appearance of depth. This frame does not appear in the KEdit rendition of the Layout. Select the format of the frame around the screen:

- None no frame is shown.
- Lowered Bevel shows a frame with a beveled profile as a graphic effect at the Kaleido-K2 output.



3.16.2.2 Online Panels (Kaleido-K2 only)

Assignment Tab

RTP:

The streaming video source may be an Allegro1 Encoder, or an encoder embodied in a Miranda Densité Probe producing thumbnail images of the signal it is monitoring. Kaleido accesses the source using an address of the form RTSP://ip_address/feedid.

In this panel, enter the two components of the address separately.

IP Address: Specify the IP address of the streaming video source.

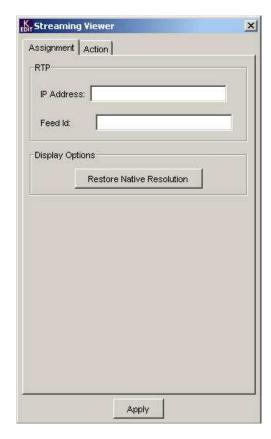
- If the source is an Allegro1 encoder, the IP address is that of the encoder itself.
- If the source is a Densité probe, the IP address is that of the Miranda Application Server that is controlling the Densité frame.

Feed ID: Identify which of several possible feeds is to be displayed.

- If the source is an Allegro1 encoder, give the number of the channel in the data stream, in the format C1, C2, etc.
- If the source is a Densité probe, give the LongID of the Densité frame and card (see <u>How To Display thumbnails or streaming video on the Kaleido-K2?</u>).

Display Options:

Clicking the *Restore Native Resolution* button will change the size of the Streaming Viewer to be of the native size (pixels) of the current stream. If no stream is available, this has no effect.

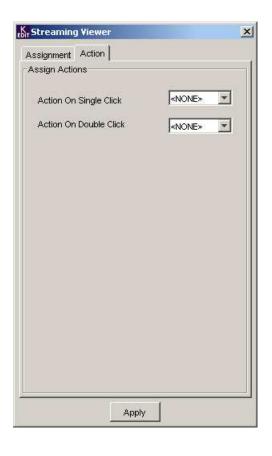


Action Tab

Assign Actions

Action on single click: from the pull-down box, select the Action that will be executed when this Streaming Viewer is single-clicked using the mouse attached to the Kaleido-K2.

Action on double click: from the pull-down box, select the Action that will be executed when this Streaming Viewer is double-clicked using the mouse attached to the Kaleido-K2.



3.16.3 Operation

3.16.3.1 Fire an Action

Left-click on the Streaming Viewer in the Kaleido display using the mouse.

- Single-click fires the single-click Action configured for this Streaming Viewer in the Action pane of its Configuration Panel
- Double-click fires the double-click Action configured for this Streaming Viewer in the Action pane of its Configuration Panel

3.17 Close Caption Status Indicator

3.17.1 Creation:

Use the Monitor Browser to add a Monitor containing one or more Close Caption Status Indicators to the current Layout.

- 1. Open the Monitor Browser in KEdit in one of three ways:
 - Select its icon from the <u>KEdit toolbar</u>.
 - Select the Monitor Browser item in the View menu

- Push F6 on the keyboard
- 2. Select an appropriate Monitor from the pull down list, using the Preview to see its appearance.
- 3. Click on the preview, and drag a copy of the Monitor onto the Layout.

Or add a Close Caption Status Indicator to an existing Monitor in the Layout:

- Unlock the Monitor by right-clicking and selecting Unlock Monitor from the contextual menu.
 The Monitor's border will turn yellow, indicating it may be edited. You may also ALT-click anywhere in the Monitor, which will unlock the Monitor and select the item you clicked.
- Select the Close Caption Status Indicator tool in the <u>KEdit toolbar</u>.
- Click inside the Monitor, and drag to place a Close Caption Status Indicator of the desired size.

Note that if the new Close Caption Status Indicator extends beyond the Monitor boundary, then it will not be part of the Monitor.

Or add a Close Caption Status Indicator that is not part of a Monitor to the Layout:

- Select the Close Caption Status Indicator tool in the KEdit toolbar.
- Click at the appropriate place in the Layout, and drag to place a Close Caption Status Indicator of the desired size.

Or copy an existing Close Caption Status Indicator, inside or outside a Monitor:

- Select the Close Caption Status Indicator to be copied.
- Use the Copy (CTRL+C) and Paste (CTRL+V) commands to create a new Close Caption Status Indicator
 - OR -
- While holding CTRL, click on the Close Caption Status Indicator to be copied, and drag to a new location. The original Close Caption Status Indicator will remain, and a copy will appear at the new location.

Note that if the new Close Caption Status Indicator extends beyond the Monitor boundary, then it will not be part of the Monitor.

3.17.2 Configuration:

The attributes of a Close Caption Status Indicator are adjustable using its Configuration Panel in KEdit. To access the panel for a Close Caption Status Indicator within a Monitor:

- 4. Select the Close Caption Status Indicator using one of these methods:
 - Unlock the Monitor in which the Close Caption Status Indicator is located, by right-clicking and selecting Unlock Monitor from the contextual menu (an UNLOCKED Monitor is

identified by a YELLOW BORDER and YELLOW RESIZING HANDLES in its corners), and then click on the Close Caption Status Indicator to select it

 ALT-click on the Close Caption Status Indicator. The monitor will unlock, and the Close Caption Status Indicator will be selected.

NOTE: at this point the Close Caption Status Indicator may be positioned (click on the Close Caption Status Indicator and drag) and scaled (click and drag a control point) within the Monitor. It will retain its proportions when scaled. It cannot be moved outside the Monitor boundary

5. Open the Configuration Panel for the Close Caption Status Indicator by pushing F5, or from the Configuration Panel item in the View menu

3.17.2.1 Offline Panel

Assignment Tab

Icon Selection:

Four different icons can be selected for each Close Caption status Indicator, corresponding to Disable, Normal, Warning and Error conditions. The current selection is shown. Clicking on the *Select...* box opens a selection screen where a variety of possible icons are shown. Click on an appropriate icon to select it; the selection screen closes automatically.

The Close Caption Status Indicator can be made to flash under Error and Warning conditions. Click on the *Flashing* checkbox to turn flashing mode on or off.

Assign Service ID:

In the current Kaleido software version the provider of the VBI information can be the Kaleido K2 frame itself, or a Densité probe (e.g. VCP-1021).

The service ID is the Miranda long ID of the Densité probe, or its alias in the file C:\iControl\ Startup\KG2Config.xml (see How To Display thumbnails or streaming video on the Kaleido-K2?), or the alias of the Kaleido K2 (typically A).

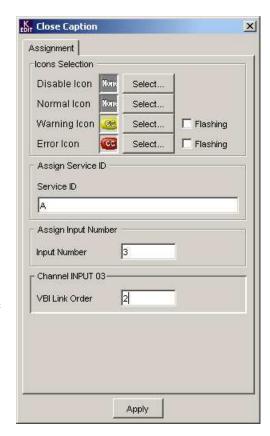
Assign Input Number:

Reflects the video input number. It should be 1 in the case of a Miranda VCP-1021 probe, or the video input for the Kaleido-K2 [between 1 and 32].

Channel:

If this Closed Caption status indicator is within a Monitor, the name of the assigned Channel will be shown, and the Link order box will be active, showing the current link order of the Close Caption Status Indicator within the Channel displayed by this Monitor. Enter a new value if desired.

3.17.2.2 Online Panel (Kaleido-K2 only)



Assignment Tab

Icon Selection:

Four different icons can be selected for each Close Caption Status Indicator, corresponding to Disable, Normal, Warning and Error conditions. The current selection is shown. Clicking on the *Select...* box opens a selection screen where a variety of possible icons are shown. Click on an appropriate icon to select it; the selection screen closes automatically.

The Close Caption Status Indicator can be made to flash under Error and Warning conditions. Click on the *Flashing* checkbox to turn flashing mode on or off

Assign Service ID:

In the current Kaleido software version the provider of the VBI information can be the Kaleido K2 frame itself, or a Densité probe (e.g. VCP-1021).

The service ID is the Miranda long ID of the Densité probe, or its alias in the file C:\iControl\
Startup\KG2Config.xml (see How To Display thumbnails or streaming video on the Kaleido-K2?), or the alias of the Kaleido K2 (typically A).

Assign Input Number:

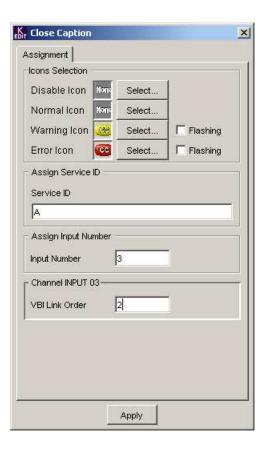
Reflects the video input number. It should be 1 in the case of a Miranda VCP-1021 probe, or the video input for the Kaleido-K2 [between 1 and 32].

Channel:

If this Closed Caption Status Indicator is within a Monitor, the name of the assigned Channel will be shown, and the Link order box will be active, showing the current link order of the Close Caption Status Indicator within the Channel displayed by this Monitor. Enter a new value if desired.

3.17.3 Operation

There are no operational features that can be controlled on-line for a Closed Caption Status Indicator.



3.18 Close Caption Text

3.18.1 Creation:

Use the Monitor Browser to add a Monitor containing one or more Close Caption Text Boxes to the current Layout.

- 6. Open the Monitor Browser in KEdit in one of three ways:
 - Select its icon from the KEdit toolbar.
 - Select the Monitor Browser item in the <u>View menu</u>.
 - Push F6 on the keyboard
- 7. Select an appropriate Monitor from the pull down list, using the Preview to see its appearance.
- 8. Click on the preview, and drag a copy of the Monitor onto the Layout.

Or add a Close Caption Text box to an existing Monitor in the Layout:

- Unlock the Monitor by right-clicking and selecting Unlock Monitor from the contextual menu.
 The Monitor's border will turn yellow, indicating it may be edited. You may also ALT-click anywhere in the Monitor, which will unlock the Monitor and select the item you clicked.
- Select the Close Caption Text tool in the KEdit toolbar.
- Click inside the Monitor, and drag to place a Close Caption Text Box of the desired size.

Note that if the new Close Caption Text Box extends beyond the Monitor boundary, then it will not be part of the Monitor.

Or add a Close Caption Text Box that is not part of a Monitor to the Layout:

- Select the Close Caption Text tool in the KEdit toolbar.
- Click at the appropriate place in the Layout, and drag to place a Close Caption Text Box of the desired size.

Or copy an existing Close Caption Text box, inside or outside a Monitor:

- Select the Close Caption Text Box to be copied.
- Use the Copy (CTRL+C) and Paste (CTRL+V) commands to create a new Close Caption Text box.
 - OR -
- While holding CTRL, click on the Close Caption Text Box to be copied, and drag to a new location. The original Close Caption Text box will remain, and a copy will appear at the new location.

Note that if the new Close Caption Text Box extends beyond the Monitor boundary, then it will not be part of the Monitor.

3.18.2 Configuration:

The attributes of a Close Caption Text Box are adjustable using its Configuration Panel in <u>KEdit</u>. To access the panel for a Close Caption Text box within a Monitor:

- 9. Select the Close Caption Text Box using one of these methods:
 - Unlock the Monitor in which the Close Caption Text Box is located, by right-clicking and selecting Unlock Monitor from the contextual menu (an UNLOCKED Monitor is identified by a YELLOW BORDER and YELLOW RESIZING HANDLES in its corners), and then click on the Close Caption Text Box to select it
 - ALT-click on the Close Caption Text Box. The monitor will unlock, and the Close Caption Text Box will be selected.

NOTE: at this point the Close Caption Text Box may be positioned (click on the Close Caption Text box and drag) and scaled (click and drag a control point) within the Monitor. It cannot be moved outside the Monitor boundary.

10. Open the Configuration Panel for the Close Caption Text Box by pushing F5, or from the Configuration Panel item in the View menu

3.18.2.1 Offline Panel

Assignment Tab

Add a Background:

Click on the box to add a background behind the Closed Caption text.

Assign Service ID:

In the current Kaleido software version the provider of the VBI information can be the Kaleido K2 frame itself, or a Densité probe (e.g. VCP-1021).

The service ID is the Miranda long ID of the Densité probe, or its alias in the file C:\iControl\Startup\KG2Config.xml (see How To Display thumbnails or streaming video on the Kaleido-K2?), or the alias of the Kaleido K2 (typically A).

Assign Input Number:

Reflects the video input number. It should be 1 in the case of a Miranda VCP-1021 probe, or the video input for the Kaleido K2 [between 1 and 32].

Assign Number of Lines:

Number of CC lines to be displayed on the Kaleido monitor wall.

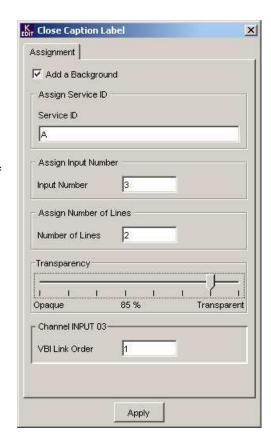
Transparency:

Use the slider to select a transparency for the Closed Caption text. The transparency is only seen when the Closed Caption text is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

Channel:

If this Closed Caption text is within a Monitor, the name of the assigned Channel will be shown, and the Link order box will be active, showing the current link order of the VBI within the Channel displayed by this Monitor. Enter a new value if desired.

3.18.2.2 Online Panel (Kaleido-K2 only)



Assignment Tab

Add a Background:

Click on the box to add a background behind the Closed Caption text.

Assign Service ID:

In the current Kaleido software version the provider of the VBI information can be the Kaleido K2 frame itself, or a Densité probe (e.g. VCP-1021).

The service ID is the Miranda long ID of the Densité probe, or its alias in the file C:\iControl\Startup\KG2Config.xml (see How To Display thumbnails or streaming video on the Kaleido-K2?), or the alias of the Kaleido K2 (typically A).

Assign Input Number:

Reflects the video input number. It should be 1 in the case of a Miranda VCP-1021 probe, or the video input for the Kaleido K2 [between 1 and 32].

Assign Number of Lines:

Number of CC lines to be displayed on the Kaleido monitor wall.

Transparency

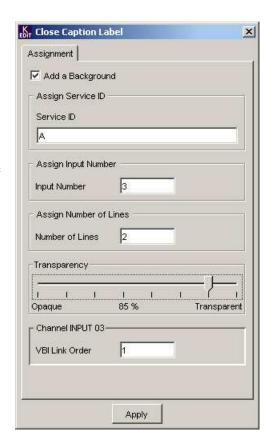
Use the slider to select a transparency for the Closed Caption text. The transparency is only seen when the Closed Caption text is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

Channel:

If this Closed Caption text is within a Monitor, the name of the assigned Channel will be shown, and the Link order box will be active, showing the current link order of the VBI within the Channel displayed by this Monitor. Enter a new value if desired.

3.18.3 Operation

There are no operational features that can be controlled on-line for Closed Caption text.



3.19 V-Chip Status Indicator

3.19.1 Creation:

Use the Monitor Browser to add a Monitor containing one or more V-Chip Status Indicators to the current Layout.

- 1. Open the Monitor Browser in KEdit in one of three ways:
 - Select its icon from the KEdit toolbar.
 - Select the Monitor Browser item in the <u>View menu</u>
 - Push F6 on the keyboard
- 2. Select an appropriate Monitor from the pull down list, using the Preview to see its appearance.
- 3. Click on the preview, and drag a copy of the Monitor onto the Layout.

Or add a V-Chip Status Indicator to an existing Monitor in the Layout:

- Unlock the Monitor by right-clicking and selecting Unlock Monitor from the contextual menu. The Monitor's border will turn yellow, indicating it may be edited. You may also ALT-click anywhere in the Monitor, which will unlock the Monitor and select the item you clicked.
- Select the V-Chip Status Indicator tool in the <u>KEdit toolbar</u>.
- Click inside the Monitor, and drag to place a V-Chip Status Indicator of the desired size.

Note that if the new V-Chip Status Indicator extends beyond the Monitor boundary, then it will not be part of the Monitor.

Or add a V-Chip Status Indicator that is not part of a Monitor to the Layout:

- Select the V-Chip Status Indicator tool in the KEdit toolbar.
- Click at the appropriate place in the layout, and drag to place a V-Chip Status Indicator of the desired size.

Or copy an existing V-Chip Status Indicator, inside or outside a Monitor:

- Select the V-Chip Status Indicator to be copied.
- Use the Copy (CTRL+C) and Paste (CTRL+V) commands to create a new V-Chip Status Indicator.
 - OR -
- While holding CTRL, click on the V-Chip Status Indicator to be copied, and drag to a new location. The original V-Chip Status Indicator will remain, and a copy will appear at the new location.

Note that if the new V-Chip Status Indicator extends beyond the Monitor boundary, then it will not be part of the Monitor.

3.19.2 Configuration:

The attributes of a V-Chip Status Indicator are adjustable using its Configuration Panel in <u>KEdit</u>. To access the panel for a V-Chip Status Indicator within a Monitor:

- 1. Select the V-Chip Status Indicator using one of these methods:
 - Unlock the Monitor in which the V-Chip Status Indicator is located, by right-clicking and selecting Unlock Monitor from the contextual menu (an UNLOCKED Monitor is identified by a YELLOW BORDER and YELLOW RESIZING HANDLES in its corners), and then click on the V-Chip Status Indicator to select it
 - ALT-click on the V-Chip Status Indicator. The monitor will unlock, and the V-Chip Status Indicator will be selected.

NOTE: at this point the V-Chip Status Indicator may be positioned (click on the V-Chip Status Indicator and drag) and scaled (click and drag a control point) within the Monitor. It will retain its proportions when scaled. It cannot be moved outside the Monitor boundary.

2. Open the Configuration Panel for the V-Chip Status Indicator by pushing F5, or from the Configuration Panel item in the View menu.

3.19.2.1 Offline Panel

Assignment Tab

Assign Service ID:

In the current Kaleido software version the provider of the VBI information is the Kaleido K2 frame or a Densité VCP-1021 probe.

The service ID is the Miranda long ID of the Densité probe, or its alias in the file C:\iControl\Startup\KG2Config.xml (see How To Display thumbnails or streaming video on the Kaleido-K2?), or the alias of the Kaleido K2 (typically A).

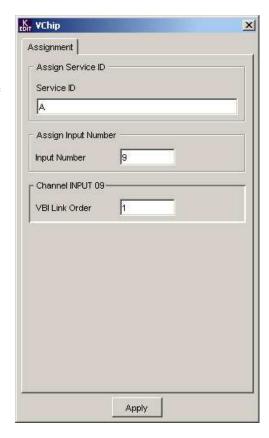
Assign Input Number:

Reflects the video input number. It should be 1 in the case of a Miranda VCP-1021 probe, or the video input for the KaleidoK2 [between 1 and 32].

Channel:

If this V-Chip Status Indicator is within a Monitor, the name of the assigned Channel will be shown, and the Link order box will be active, showing the current link order of the VChip within the Channel displayed by this Monitor. Enter a new value if desired.

3.19.2.2 Online Panel (Kaleido-K2 only)



Assignment Tab

Assign Service ID:

In the current Kaleido software version the provider of the VBI information is the Kaleido K2 frame or a Densité VCP-1021 probe.

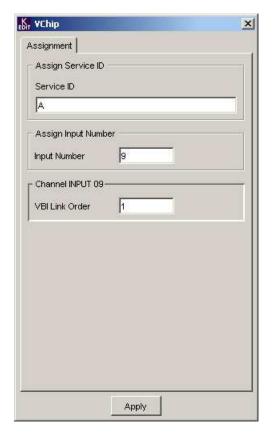
The service ID is the Miranda long ID of the Densité probe, or its alias in the file C:\iControl\Startup\KG2Config.xml (see How To Display thumbnails or streaming video on the Kaleido-K2?), or the alias of the Kaleido K2 (typically A).

Assign Input Number:

Reflects the video input number. It should be 1 in the case of a Miranda VCP-1021 probe, or the video input for the KaleidoK2 [between 1 and 32].

Channel:

If this V-Chip Status Indicator is within a Monitor, the name of the assigned Channel will be shown, and the Link order box will be active, showing the current link order of the VChip within the Channel displayed by this Monitor. Enter a new value if desired.



3.19.3 Operation

There are no operational features that can be controlled on-line for a VChip Status Indicator.

3.20 Logo

3.20.1 Creation:

A Logo cannot be included in a Monitor.

To add a Logo to a Layout:

- Select the Logo tool in the <u>KEdit toolbar</u>.
- Click at the appropriate place in the Layout, and drag to place a Logo of the desired size

3.20.2 Configuration:

The attributes of a Logo are adjustable using its configuration panel in <u>KEdit</u>. To access the panel for a Logo:

- 1. Click on the Logo. Control points will appear at the corners and the center of the long side, showing it is selected.
 - NOTE: at this point the Logo may be positioned (click on the Logo and drag) and scaled (click and drag a control point) within the Layout.
- 2. Open the configuration panel for the Logo by pushing F5, or from the Configuration Panel item in the <u>View menu</u>

3.20.2.1 Offline Panel

Appearance Tab

Select the Logo Image:

The selection window shows a list of all logos currently available on the KEdit's computer. Select one by clicking on it; a preview of the selected image is shown at the top of the panel.

To add a new image:

- Click on the Browse button located to the right of the selection window.
- In the Add Logo Picture dialog, browse the computer to find the desired image, and click to select it
- Click Open to add the image.

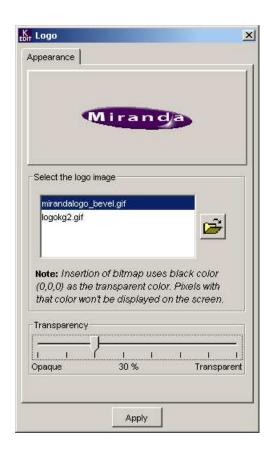
Transparency:

Use the slider to select a transparency for the logo. The transparency is only seen when the Logo is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

NOTE: Any pixel in a logo image that has RGB values of 0,0,0 will be considered as transparent, and will be invisible in the monitor-wall display. This permits "see-through" sections in the Logo. This is separate from the *Transparency* set by the slider in this panel, which sets a degree of transparency for all other pixels in the logo.

Downloading: When a Layout containing new Logo images that was created offline is downloaded to an online Kaleido, the images can be downloaded to the Kaleido-K2 along with the Layout. Click the *Images* checkbox in the *Apply Layout Online* dialog (see File Menu).

3.20.2.2 Online Panel (Kaleido-K2 only)



Appearance Tab

Select the Logo Image:

The selection window shows a list of all logos currently available on the Kaleido-K2. Select one by clicking on it; a preview of the selected image is shown at the top of the panel.

To add a new image:

- Click on the Browse button located to the right of the selection window.
- In the Add Logo Picture dialog, browse the computer to find the desired image, and click to select it.
- Click Open to add the image.

Transparency:

Use the slider to select a transparency for the Logo. The transparency is only seen when the Logo is overlaid on a Video Screen. The selected value is shown as a percentage beneath the slider. Possible values are 0, 15, 30, 45, 55, 70, 85 and 100%.

NOTE: Any pixel in a logo image that has RGB values of 0,0,0 will be considered as transparent, and will be invisible in the monitor-wall display. This permits "see-through" sections in the Logo. This is separate from the *Transparency* set by the slider in this panel, which sets a degree of transparency for all other pixels in the logo.

3.20.3 Operation

There are no operational features that can be controlled on-line for a Logo.

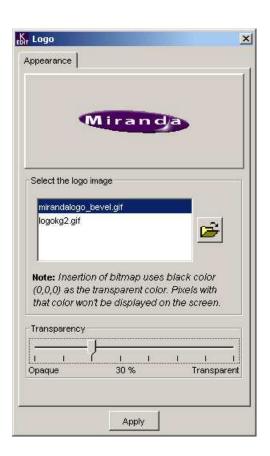
3.21 Background

3.21.1 Creation:

The Background is integral to every Layout, and is created by default.

3.21.2 Configuration:

The attributes of the Background are adjustable using its Configuration Panel in <u>KEdit</u>. To access the panel for the background of a Layout:



- 1. Click anywhere on the background.
- 2. Open the Configuration Panel for the Background by pushing F5, or from the Configuration Panel item in the <u>View menu</u>

3.21.2.1 Offline Panel

Appearance Tab

Select the background picture or color:

Select a picture or a solid color as the Layout background.

The selection window shows a list of all images currently available on the machine running KEdit. Select one by clicking on it; a preview of the selected image is shown at the top of the panel.

To add a new image:

- Click on the Browse button located to the right of the selection window.
- In the Add Background Picture dialog, browse the computer to find the desired image, and click on its name or icon to select it.
- Click Open to add the image.

Image Selection Considerations

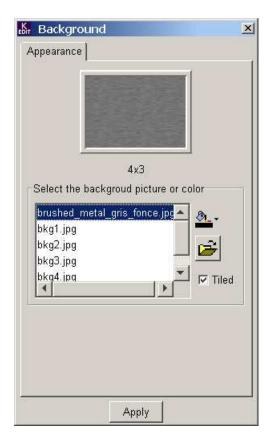
The background image should not be too large, or it may cause processing problems. Background images should respect these guidelines:

- No larger than 1920 W and 1080 H for single-head systems
- No larger than 2048 W and 2048 H for dual-head systems
- The size of the image file should not be greater than 300K.

Clicking on the *Tiled* checkbox enables the tiling feature, where copies of the picture are laid out in a grid pattern to fill the background.

Clicking the down arrow beside the *Color Selection* icon opens the Color Palette window. Select a color using one of the three optional methods, and then click the *Apply* button while the Color Palette window is still open to make a solid-color background.

Downloading: When a Layout that was created offline containing new Background images is downloaded to an online Kaleido-K2, the images can be downloaded to the Kaleido-K2 along with the Layout. Click the *Images*



checkbox in the Apply Layout Online dialog (see File Menu).

3.21.2.2 Online Panel (Kaleido-K2 only)

Appearance Tab

Select the background picture or color:

Select a picture or a solid color as the Kaleido Monitor Wall output background.

The selection window shows a list of all images currently available on the Kaleido.

Select one by clicking on it; a preview of the selected image is shown at the top of the panel.

To add a new image:

- Click on the Browse button located to the right of the selection window.
- In the Add Background Picture dialog, browse the computer to find the desired image, and click on its name or icon to select it.
- Click Open to add the image.

Image Selection Considerations

The background image should not be too large, or it may cause processing problems. Background images should respect these guidelines:

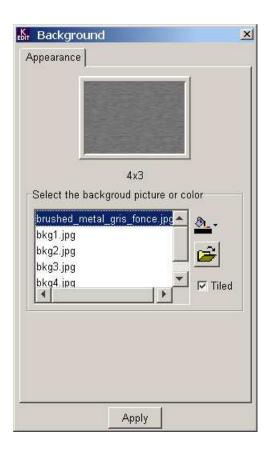
- No larger than 1920 W and 1080 H for single-head systems
- No larger than 2048 W and 2048 H for dual-head systems
- The size of the image file should not be greater than 300K.

Clicking on the *Tiled* checkbox enables the tiling feature, where copies of the picture are laid out in a grid pattern.

Clicking the down arrow beside the *Color Selection* icon opens the Color Palette window. Select a color using one of the three optional methods, and then click the *Apply* button while the Color Palette window is still open to make a solid-color background.

3.21.3 Operation

There are no operational features that can be controlled on-line for the Background.



3.22 Group Box

3.22.1 Creation:

A Group Box cannot be included in a Monitor.

To add a Group Box to a Layout:

- Select the Group Box tool in the KEdit toolbar.
- Click at the appropriate place in the Layout, and drag to place a Group Box of the desired size

3.22.2 Configuration:

The only attributes of a Group Box that are adjustable are size and location. To modify them:

- 1. Click on the Group Box. Control points will appear at the corners and the center of the long side, showing it is selected.
- 2. Adjust the position (click on the Group Box and drag) and size (click and drag a control point) of the Group Box as desired.

There is no Configuration Panel for a Group Box.

3.22.3 Operation

There are no operational features that can be controlled on-line for a Group Box.

4 Alarms and Alarm Monitors

4.1 Alarm Browser

Access Kaleido-K2's alarm resources by opening the Alarm Browser from the <u>View menu</u>, or by using F7. The browser shows a list of existing Alarm Monitors, and the Alarm Inhibition group to which each Alarm Monitor is associated, if any. Click on the header of either column to sort the table in ascending order according to that column.

New: Click New to add a new Alarm Monitor to this list. A blank Alarm Monitor control panel will open.

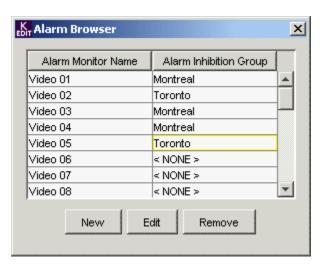
Edit: Click on an existing Alarm Monitor to select it, then click Edit (or, double–click on the existing alarm monitor) to modify it. The Alarm Monitor control panel will open, containing the current definition of the selected Alarm Monitor.

Remove: Click on an existing Alarm Monitor to select it, then click Remove to delete it

Alarm Inhibition Group assignment: you can reassign an alarm monitor to a different Alarm Inhibition Group by:

- Using the drop-down list to select an existing alarm group
- Typing directly into the box to create a new group

This can also be done from the Alarm Monitor; click on an Alarm Monitor name and click Edit to open it.



4.2 Alarm Monitor

The Alarm Monitor control panel provides all the necessary resources to create and manage Alarms on the Kaleido-K2.

Alarm Monitor Name: Type a name for this Alarm Monitor in the box.

Alarm Group: The pull-down list includes all existing Alarm Group names. Click on one to select it. This Alarm Monitor will be associated with that group once the changes have been saved.

Create a new group by typing a new name directly into the box. It will be added to the list of groups once the new or revised Alarm Monitor has been saved.

Use Alarm Groups to enable and disable many Alarms at once using Actions which work on Alarm Groups, or using the Alarm Group Inhibit Button component in a layout.

When a new alarm group is created, two Actions are also created:

- Enable_alarmgroupname_alarms
- Disable_alarmgroupname_alarms

These actions are deleted when the alarm group is removed.

Alarms List: This table shows all of the individual alarms which are included in this Alarm Monitor.

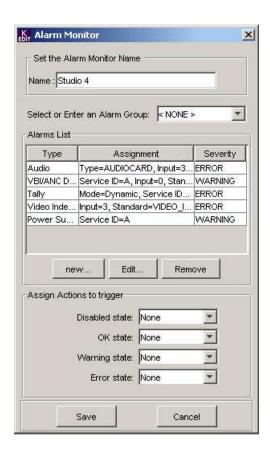
A detailed explanation of how to use this list follows.

Assign Actions to trigger: The Alarm Monitor will be in one of four states, depending on the status of its individual alarms. An Action can be assigned to each of these. The Action will be triggered when the status of the Alarm Monitor changes to that state from another state. The Alarm Monitor is active only when assigned in the current layout.

Select the appropriate Action for each state from the pull-down box. The pull-down shows all actions which are currently defined for this Kaleido-K2

The state of the Alarm Monitor is defined to be the highest-priority severity reported by any of its constituent alarms, where the priority of severities, from highest to lowest, is:

- Error
- Warning
- Disabled



Normal

4.2.1 Alarm Types

The Alarms List in the Alarm Monitor control panel shows all of the individual Alarms which are included in the Alarm Monitor. Each is identified by Type and Assignment.

Type: Click on the entry in the Type column to see a pull-down list of all available types of Alarms. Select one by clicking on it. An Alarm Setting dialog box will open, allowing the necessary information to be entered for the Alarm type selected.

Hint: it is preferable to select and open existing Alarms by clicking on the alarm in the Assignment column and pushing Edit, or by double-clicking on the Alarm in the Assignment column. Clicking on the alarm in the Type column will open the pull-down list and may result in the alarm type being inadvertently changed.

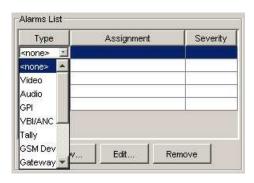
Assignment: Once the data has been entered and saved, the Assignment column will show a summary of the data.

Severity: Assign a degree of severity to this alarm. Click in the severity box beside any alarm, and select either ERROR or WARNING from the pulldown.

alarm monitor when it is triggered.

The alarm will report the assigned severity to this

Here is a list of all types of Alarms, and a description of their associated Alarm Setting dialogs.



Video Alarm

Video: Enter the number of the Video input to the Kaleido-K2 [enter a number between 1 and 32]. This Alarm is generated internally by the Kaleido-K2.

Video Error: Use the checkboxes to select which of the available error types are to be associated with this Alarm.

Calibration: Click the calibration button to open the Video Detection Calibration dialog, allowing the settings for Luma Too High, Black Detection and Freeze Detection to be customized.

Use the selection buttons at the left of the Video Detection Calibration dialog to select the error detection settings to be adjusted.

Note that the Calibration is only available when in online mode.

Luma Too High

Select **Default** to use the factory settings.

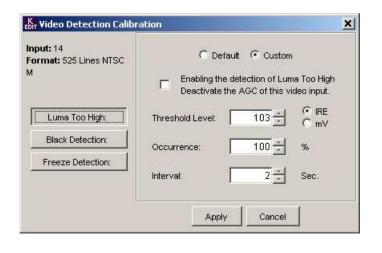
Select **Custom** to enable the three parameter controls.

If the input is analog video, you must disable the AGC at the Kaleido input in order to detect high input luminance.

Threshold Level: Define the level above which Luma Too High will be reported. Choose IRE for NTSC and or mV for PAL input signals.

Occurrence and Interval: an error will not be flagged unless it is present for at least the percentage shown in the Occurrence window of the time shown in the Interval window. For example, if Occurrence is 15% and Interval is 2 seconds, the error will not be flagged unless it has been detected during 15% of the previous 2 seconds, i.e. 0.3 seconds total.





Black Detection

Select **Default** to use the factory settings.

Select **Custom** to enable the three parameter controls.

Threshold Level: Define the level below which Black Detection will be reported. Choose IRE for NTSC and or mV for PAL input signals.

Occurrence and Interval: an error will not be flagged unless it is present for at least the percentage shown in the Occurrence window of the time shown in the Interval window. For example, if Occurrence is 15% and Interval is 2 seconds, the error will not be flagged unless it has been detected during 15% of the previous 2 seconds, i.e. 0.3 seconds total.

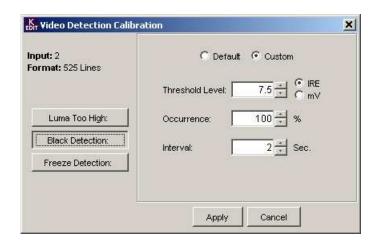
Freeze Detection

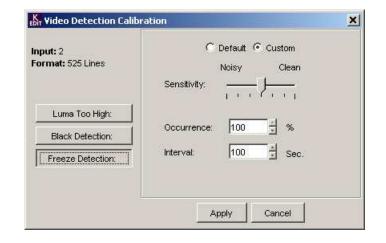
Select **Default** to use the factory settings.

Select **Custom** to enable the three parameter controls.

Sensitivity: Freeze detection is done by comparing successive frames. Noise in the signal could disrupt this process, so filtering is added to remove it. Adjust the sensitivity to suit the signal being monitored, using the slider.

Occurrence and Interval: an error will not be flagged unless it is present for at least the percentage shown in the Occurrence window of the time shown in the Interval window. For example, if Occurrence is 100% and Interval is 100 seconds, the error will not be flagged unless it has been continuously detected for the previous 100 seconds.





Audio Alarm

The Audio Input:

Format: select Embedded (audio embedded in a digital video signal) or Audio Card (audio from one of the Kaleido's audio input cards). If Embedded is selected, you need to specify the Video Input [any number between 1 and 32] and Group [between 1 and 4] so that the audio can be identified.

Alarms are not supported for streaming sources.

In the AES/Stereo window, select which of the available signals is to be used. Embedded audio can include one or two, while an audio card can include up to 48.

Click the appropriate button to determine whether the Alarm will report errors on both channels (stereo), left-channel only or right-channel only.

Audio Error: Use the checkboxes to select which of the available error types are to be reported by this Alarm.

Calibration: Click the calibration button to open the Audio Detection Calibration dialog, allowing the settings for Audio Silence, Overload, Out of Phase and Mono Detected to be customized.

Use the selection buttons at the left to select the error detection settings to be adjusted.

Note that the Calibration is only available when in online mode.

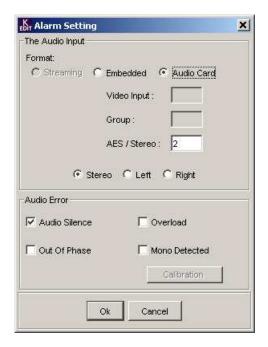
Audio Silence

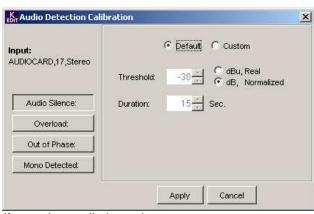
Select **Default** to use predefined settings:

- The default Threshold value is 30dB below the Audio Operation Level set on the Audio Meter Calibration tab (for both analog and digital inputs).
- The default Duration is 15 seconds

Select **Custom** to enable the two parameter data entry controls.

Threshold: Select the level below which audio will be considered silent.

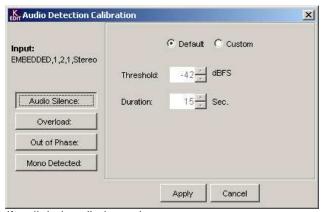




(for analog audio inputs)

- For analog sources, the Threshold value may be Real (in dBU), for comparison with the audio input signal, or Normalized (in dB) for comparison with the input that has been scaled by the Audio Operation Level setting on the Audio Meter Calibration tab
- For digital sources, the Threshold value (in dBFS) is compared to the input signal

Duration: Select the time period (in seconds) for which audio must be continuously silent before the Audio Silence error is flagged.



(for digital audio inputs)

Overload

Select **Default** to use predefined settings.

The default threshold value is:

12dB above the Audio Operation Level set on the Audio Meter Calibration tab for **analog** audio inputs

9dB above the Audio Operation Level set on the Audio Meter Calibration tab for **digital** audio inputs

The default duration is 2 seconds

Select **Custom** to enable the two parameter controls.

Threshold: Select the level above which audio will be considered overloaded.

- For analog sources, the Threshold value may be Real (in dBU), for comparison with the audio input signal, or Normalized (in dB) for comparison with the input that has been scaled by the Audio Operation Level setting on the Audio Meter Calibration tab
- For digital sources, the Threshold value (in dBFS) is compared to the input signal

Duration: Select the time period (in seconds) for which audio must be continuously overloaded before the Overload error is flagged.

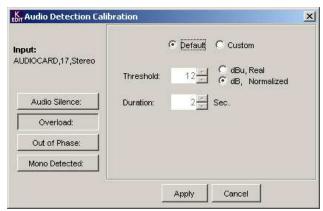
Out of Phase

Select **Default** to use the factory settings.

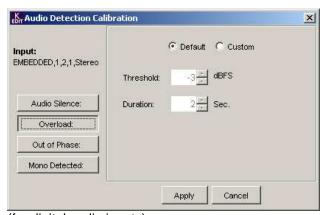
Select **Custom** to enable the two parameter controls.

Sensitivity: Select the level above which audio will be considered out of phase. The sensitivity is between –1 and +1, where –1 means completely out of phase and +1 means perfectly in-phase.

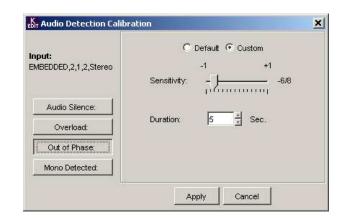
Duration: Select the time period for which audio must be continuously out.



(for analog audio inputs)



(for digital audio inputs)

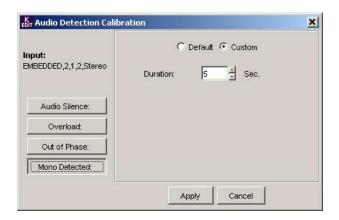


Mono Detected

Select **Default** to use the factory settings.

Select **Custom** to enable the single parameter control.

Duration: Set the time period for which the signal must continuously be determined as Mono before the Mono Detected error is flagged.



GPI Alarm

Enter the number of the GPI input on the Kaleido-K2 that will trigger this Alarm [any number between 1 and 66].

VBI/ANC Data Alarm

Service ID: Enter either the Miranda LongID or the Alias for the source of the VBI/ANC data. If the data is found on a video stream entering this Kaleido-K2, enter its alias A in the service ID box. If the data is coming from a remote source, enter its Miranda LongID or alias in the service ID box.

Video Input Number: If the source of the VBI/ANC data is an input to this Kaleido, enter the input number [between 1 and 32], otherwise enter 1.

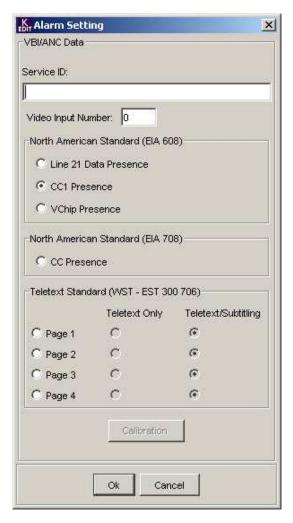
North American Standard (EIA 608): Use the radio buttons to assign this Alarm to monitor Line 21 Data Presence, CC1 Presence or VChip Presence according to this standard.

North American Standard (EIA 708): Use the radio button to assign this Alarm to monitor CC Presence according to this standard.

Teletext Standard (WST – EST 300 706): Use the radio buttons to assign this Alarm to monitor one of the four available pages. For the selected page, use the radio buttons to choose whether to monitor Teletext only or Teletext and Subtitling.

Note: In order to work correctly, you need to ensure your system is configured to detect Teletext or Closed Captioning accordingly. See section <u>View</u> menu.





Calibration: Push this button to open the VBI/ANC Detection Calibration dialog, allowing the settings for CC Text Presence, VChip Presence, and Subtitling/Teletext Presence to be customized.

Use the selection buttons at the left to select the error detection settings to be adjusted.

CC Text Presence

Select **Default** to use the factory settings.

Select **Custom** to enable the single parameter control.

Duration: Select the time period for which CC Text must be continuously absent before the CC Text Presence error is flagged.

VChip Presence

Select **Default** to use the factory settings.

Select **Custom** to enable the single parameter control.

Duration: Select the time period for which VChip data must be continuously absent before the VChip Presence error is flagged.

Subtitling/Teletext Presence

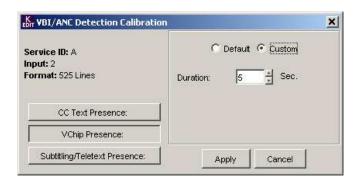
Select **Default** to use the factory settings.

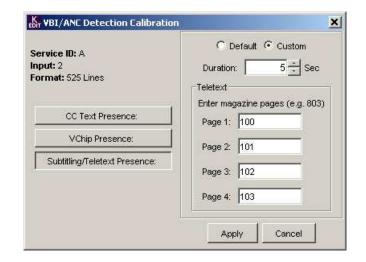
Select **Custom** to enable the parameter controls.

Duration: Select the time period for which Subtitling/Teletext data must be continuously absent before the Subtitling/Teletext Presence error is flagged.

Teletext: The Kaleido is able to detect the presence of 4 pages of Teletext simultaneously. In the four fields, enter the pages you want to monitor [between 100 and 899].







Tally Alarm

Service ID: Enter either the Miranda LongID or the Alias for the TSL, Andromeda or Kalypso service whose Tallies will be monitored by this Alarm.

Text Address: Enter the address of the dynamic data. For a TSL, the address is between 1 and 127, for an Andromeda, the address is between 1 and 255 and for a Kalypso it is between 1 and 128..

Level: Enter the level of the dynamic data.

For a Kalypso, this field is not used.

For an Andromeda, the level can be between 0 and 15.

For a *TSL*, the level can be 0, 1 or 2. In case of a TSL, the level has a particular meaning. The TSL box has 4 Tallies per address, but the Kaleido is able to treat only 2 Tallies per address (one left and one right), so here is the rule followed to retrieve the Tally left and Tally right status:

Level	0	1	2
UMD meaning	16 chars	First 8 chars	Last 8 chars
Tally Left	T1 or T3	T1	Т3
Tally Right	T2 or T4	T2	T4



GSM Device Alarm

Service ID: Enter either the Miranda LongID or the Alias for the iControl GSM server that is monitored by this Alarm.

NOTE: this alarm replaces the *iControl Device Alarm* that was included in previous releases of this software. If you have layouts created in previous versions that include these *iControl Device alarms*, be aware that they will not work in this release, and should be manually converted to GSM Device Alarms.

Gateway Alarm

Gateway status Message input: Enter any text here. This will be the same as in the Gateway command used to set the status.

MPEG Alarm

Service ID: Enter either the Miranda LongID or the Alias for the PixelMetrix analyzer that is monitored by this Alarm.

Power Supply Alarm

Service ID: Enter the Alias of the Kaleido-K2 whose power supply is monitored by this Alarm.

Use the alias A to refer to this Kaleido-K2.

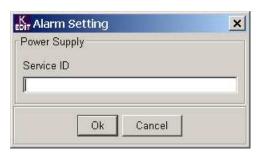
Reference Input Alarm

Service ID:











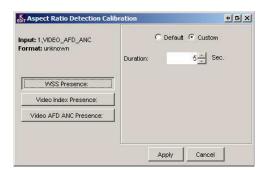
WSS Presence Alarm

The Video input: enter the number of the Kaleido video input whose WSS presence will be monitored by this alarm

Aspect Ratio source error: Click the Calibration button to open the Aspect Ratio Detection Calibration panel. WSS Presence is pre-selected, but this panel also gives access to the Video Index Presence and Video AFD ANC Presence calibration. Use the radio buttons to select the Default or a Custom duration. The WSS will be considered as "Present" if it is continuously detected for the duration selected on this panel.

Note that the Aspect Ratio Detection Calibration panel is only available in an online layout, so the calibration button will be grayed-out in the offline mode

WSS The Video Input 17 Aspect Ratio source Error Calibration Ok Cancel

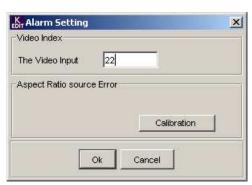


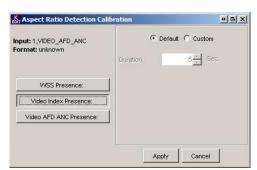
Video Index Presence Alarm

The Video input: enter the number of the Kaleido video input whose Video Index presence will be monitored by this alarm

Aspect Ratio source error: Click the Calibration button to open the Aspect Ratio Detection Calibration panel. Video Index Presence is pre-selected, but this panel also gives access to the WSS Presence and Video AFD ANC Presence calibration. Use the radio buttons to select the Default or a Custom duration. The Video Index will be considered as "Present" if it is continuously detected for the duration selected on this panel.

Note that the Aspect Ratio Detection Calibration panel is only available in an online layout, so the calibration button will be grayed-out in the offline mode





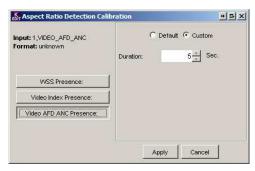
Video AFD ANC Alarm

The Video input: enter the number of the Kaleido video input whose Video AFD ANC presence will be monitored by this alarm

Aspect Ratio source error: Click the Calibration button to open the Aspect Ratio Detection Calibration panel. Video AFD ANC presence is pre-selected, but this panel also gives access to the WSS Presence and Video Index Presence calibration. Use the radio buttons to select the Default or a Custom duration. The Video Index will be considered as "Present" if it is continuously detected for the duration selected on this panel.

Note that the Aspect Ratio Detection Calibration panel is only available in an online layout, so the calibration button will be grayed-out in the offline mode





4.3 Transfer of Alarms when applying a Layout Online

The Alarms which appear in the pull-down lists of various dialogs depend on the operating mode:

- When working offline, the available Alarms are those found on the machine running KEdit.
- When working online, the available Alarms are those found on the Kaleido.

When a Layout is transferred from <u>KEdit</u> to the Kaleido-K2 by applying the Layout online, you should elect to transfer any newly-defined Alarms along with the Layout.

 Tick the Alarm Monitors checkbox in the Exporting data from KEdit section.

Note that you will overwrite any Alarm with the same name that is already saved on the Kaleido-K2.

Note also that, if your layout contains any alarms that are not currently defined on the KEdit machine, e.g. left over from a previous layout, or alarms that were subsequently deleted, then KEdit cannot transfer them to the K2, and the on-line layout will show <none> in all alarm selection dialogs where that alarm was referenced. A pop-up will appear during the export process listing all referenced

Kaleidostudio2	6
More Informati	on
IP Address:	10:6:5:2
Kaleido ID:	6
☐ Images ☐ Sounds Note: Exporte	from KEdit Alarm Monitors Actions Audio Scales MultiData ed files named similarly in the be overwritten automatically.

alarms that could not be found.

5 Actions and Triggers

An Action is the execution of a predefined series of individual Action Elements in response to a Trigger.

Here is the list of available Action Elements and Triggers.

Action Elements

- Alarm Group
- Alto Monitoring
- Audio Monitoring
- Full screen
- GPI out
- Load layout
- Play Sound
- Previous Layout
- Router cross point
- Stop Sound
- Subtitling
- Timer
- Timer Stop
- Unlatch Alarms

Triggers

- Mouse click or double click
- GPI in
- Alarm Monitor
- XML Messages over the Gateway
- Schedule entry
- End of count from a timer

5.1 Action creation/destruction

Actions are created, edited and removed using the *Action Browser* panel accessible in <u>KEdit</u>. The Action Browser panel can be opened from the <u>View menu</u>, or by using the F9 key.

The window contains a scrollable list of all currently defined Actions.

Click **New** to create a new action.

Click on an existing Action to select it, and then click:

- **Edit** to modify it.
- Remove to delete it.

When you select *New* or *Edit*, the Action Configuration panel opens. It will be blank if you have selected *New*, and will contain the definition of the selected action if you have selected *Edit*



5.2 Action configuration

The configuration of Actions is done using the Action Configuration panel, which is available through KEdit via the Action Browser.

An Action includes one or more Action Elements that will be sequentially executed. Here is the list of the supported Action Element types:

- Alarm Group
- Alto Monitoring
- Audio Monitoring
- Full screen
- GPI out
- Load layout
- Play Sound
- Previous Layout
- Router cross point
- Stop Sound
- Subtitling

- Timer
- Timer Stop
- Unlatch Alarms

Set the Action Name:

The *Name* edit box allows the user to name the Action.

Action List:

The Action Element list contains the sequence of elements that make up the Action, listed in order of execution.

Click **New** to add an element to the list – it will appear with the text <none> under both Type and Assignment.

Select an existing element (hint: click the item under *Assignment*, because if you click under *Type* the pulldown list will open) and click **Edit** to modify it.

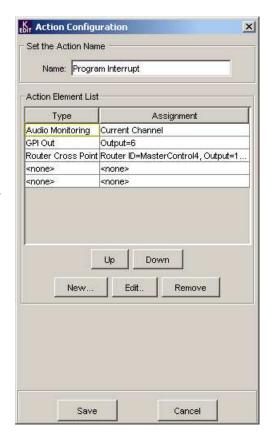
Select an existing item and click **Remove** to delete it from the list.

Click a selected item under Type, and a pull-down scrolling list will show all possible Action Element types that are available (see the list above). Click on one to select it. A dialog box will open which is specific to that type (see Action Elements
Configuration). Enter all the indicated information, and click on Ok. The box will close, and the information you entered will be shown in the Assignment column.

The user can change the order of the Action Elements in the list by selecting an item and using the **Up** and **Down** buttons to move it up or down the list. The order is significant because the Action Elements are executed in order of their position in the list

Use the Save button to save the Action to disk.

5.3 Action Elements Configuration



5.3.1 Alarm Group

Executing this Action Element will enable or disable a group of Alarms.

Select an Alarm Group from the pull-down list.

Select the radio button to set whether executing this Action Element will enable or disable that Alarm Group.

Click OK to confirm the selection and return to the Action Configuration panel.

5.3.2 Audio Monitoring

Executing this Action Element will select an audio to be monitored at the output.

Select the desired audio: Choose between Audio inside the selected Channel by link order, and Specific Audio.

When the Audio inside Selected Channel by link order is selected, the user will hear the audio with link order 1 the first time the action is fired, the audio with link order 2 on the second firing, etc. until all audio signals have been heard. On the next firing, the audio monitoring will be muted.

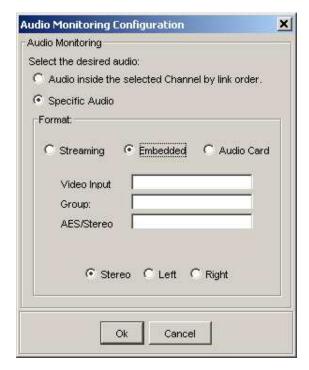
When the *Specific Audio* is selected, the audio source has to be specified. Choose between Streaming, Embedded and Audio Card, and then fill the fields as done for an Audio Meter Component (see Audio Meter).

When selected for monitoring, the Audio Meter will display an orange border.

N.B. any other Audio Meters configured to monitor the same signal as that selected for monitoring will also display an orange border.

Note: if this Action Element is configured to be executed with the Selected Channel and it is assigned to a Component that is not part of a Monitor, *nothing* will be executed.





5.3.3 Full screen

Executing this Action Element will load the Full screen Layout for the specified Channel.

Channel: Select the Channel to be displayed Full Screen, using the pull-down box to select an existing Channel or Selected Channel. When Selected Channel is used, the Action will take the Channel from the selected Monitor (i.e. the Monitor containing a Component clicked by the user). If the Action is triggered without such information (e.g. the user clicked on a Component that is not part of a Monitor), then the Action is just ignored. By default, the Selected Channel will be selected.

Click OK to confirm the selection and return to the Action Configuration panel.

5.3.4 **GPI** out

Executing this Action Element will trigger a GPI Out.

Action Type: Enter the GPI output to be addressed when this Action Element is executed [between 1 and 36].

Select the Action to be performed on the GPI output when this Action Element is executed. The GPI output can be turned ON, turned OFF or toggled between the two states.

GPI Properties: When ON or OFF is selected, the GPI properties options are activated. Select pulse and enter an appropriate duration, or choose to latch the GPI output in the selected state.

Click OK to confirm the selection and return to the Action Configuration panel.





5.3.5 Internal Router

Executing this action selects video on the internal router of a Kaleido Alto or Quad. It has no effect on a Kaleido K2.

Select the desired Video: use the radio buttons to choose between the current channel, or a specific numbered video input.

Click OK to confirm the selection and return to the Action Configuration panel.

5.3.6 Load layout

Executing this Action Element will load the specified Layout on the Kaleido-K2.

Select a Layout to load from the pull-down list:

- Offline: the list includes the preset Layouts (10 presets and the Full Screen Layout).
- Online: the list includes all available Layouts on the Kaleido-K2.

At any time, you can directly enter the name of the Layout into the box.

Click Ok to confirm the selection and return to the Action Configuration panel.

5.3.7 Play Sound

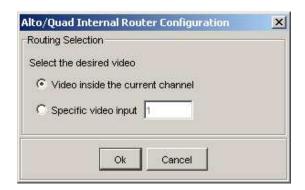
Executing this Action Element will cause a selected sound file to be played on the Kaleido's audio monitors, interrupting the current audio program.

The pulldown lists sound files currently stored in the Kaleido's database.

Click on the *Load Sound from File* icon to open a search window to locate other sound files.

5.3.8 Previous layout

There is no configuration panel for the *Previous Layout* action type. When triggered, the "current layout" will be loaded. Note that







this Action Element will be executed only if the Kaleido-K2 is in Full Screen mode, and is used to restore the Kaleido-K2 to its previous Layout when exiting Full Screen mode.

5.3.9 Router cross point

Executing this Action Element will change a cross point on a specific Router.

Router ID: Identify the Router [enter its alias or its LongID].

Router Output: Enter the output of the Router [between 1 and the number of outputs on the router].

Router Level: Enter the level of the Router where the cross point is to be changed [between 0 and the number of levels configured for your router].

Router Input: Enter the input of the Router [between 1 and the number of inputs on the router].

Click OK to confirm the selection and return to the Action Configuration panel.

5.3.10 Stop Sound

Executing this Action Element will stop the playing of a sound file initiated by the Play Sound action element. There is no configuration panel for this action.

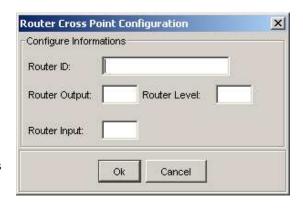
5.3.11 Subtitling

Executing this Action Element will change the subtitling page associated with the specified video input (NB: 625-line systems only).

Video input: specify a video input by number

Subtitling page: specify the subtitling page that is to be extracted from the specified video input for display.

Click Ok to confirm the selection and return to the Action Configuration panel.





5.3.12 Timer

Executing this Action Element will start the selected timer with the indicated count preset and count direction.

- Select a timer, using its ID number.
- Enter the desired preset value (HH:MM:SS).
- Select whether it will count up or down.

Click Ok to confirm the selection and return to the Action Configuration panel.

5.3.13 Timer Stop

Executing this Action Element will cause the selected timer to stop counting.

Select a Count Down Timer, using its ID number.

Click OK to confirm the selection and return to the Action Configuration panel.

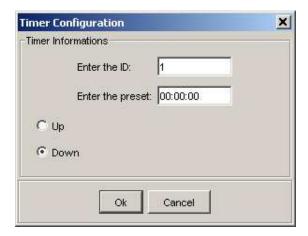
5.3.14 Unlatch Alarms

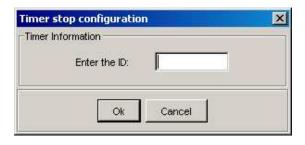
Executing this Action Element will unlatch Alarms.

Select between unlatching all Alarms in the current Layout, or only those associated with the selected Monitor.

Click OK to confirm the selection and return to the Action Configuration panel

Note: if this Action Element is configured to be executed with the Selected Monitor and it is assigned to a Component that is not part of a Monitor, nothing will be executed.

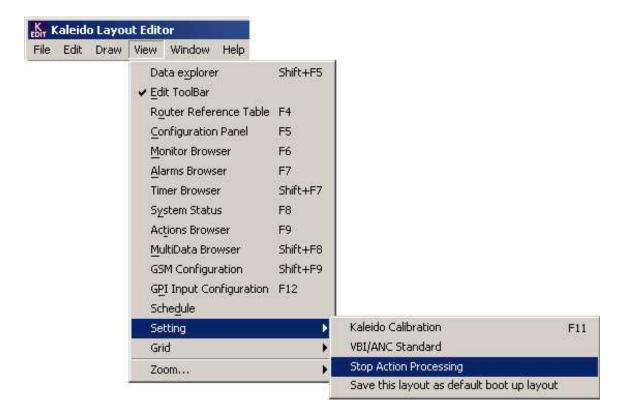






5.4 Action Emergency Stop

Under the <u>View</u>-Setting menu a *Stop Action Processing* option is available. Selecting this item (a check mark will appear beside it in the menu when it is selected) inhibits the operation of all Actions. It is useful when concurrent Actions are running making the Kaleido-K2 inoperable.



5.5 Transfer of Actions when applying a Layout Online

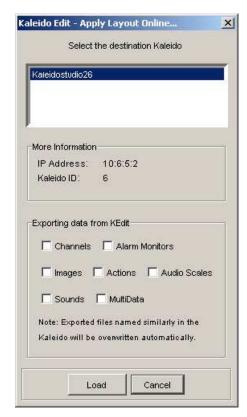
The Actions which appear in the pull-down lists of various dialogs depend on the operating mode:

- When working offline, the available Actions are those found on the machine running <u>KEdit</u>.
- When working online, the available Actions are those found on the Kaleido.

When a Layout is transferred from KEdit to the Kaleido-K2 by applying the Layout online, you should elect to transfer any newly-defined Actions along with the Layout.

 Tick the Actions checkbox in the Exporting data from KEdit section.

Note that you will overwrite any Action with the same name that is already saved on the Kaleido-K2.



6 Video Output Calibration

Kaleido-K2 provides these outputs:

- Two RGBHV analog outputs to feed its display screen directly (outputs 1 and 2)
- Two independent SDI outputs driven by cards located in slots 1 (Output A) and 10 (Output B) of the Kaleido's internal mezzanine.

The SDI outputs are optional. The Kaleido will support 0, 1 or 2 SDI cards.

Two types of SDI output cards are supported, with outputs as shown in the table:

Card type	MWO-SDM	MWO-HDM	
Output formats	• 525	• 525	
(default in bold)	• 525 (Mode 16x9)	• 525 (Mode 16x9)	
	• 625	• 625	
	• 625 (Mode 16x9)	• 625 (Mode 16x9)	
		• 1280x720@59p	
		• 1280x720@60p	
		• 1920x1080@30i	
		• 1920x1080@29i	
		• 1920x1080@25i	

These video outputs can be calibrated from KEdit when the Kaleido-K2 is connected in the online mode.

Select **View–Settings–Kaleido Calibration** from the pulldown menu (or use the shortcut F11) to open the Output Configuration panel..

Resolution

Select the output resolution on the RGBHV outputs from the pulldown list.

You should restart the Kaleido after changing the resolution.

RGB Outputs

Set the output voltage on RGBHV outputs 1 and 2

• Select between 0.7 Vp-p and 1.0 Vp-p

Set the cable equalization on output 1 only

· Select between low, medium and high.

SDI Outputs

There is a tab in the panel for each of the two available SDI outputs. If a card is mounted in the indicated slot, the settings will be active; otherwise they will be grayed out.

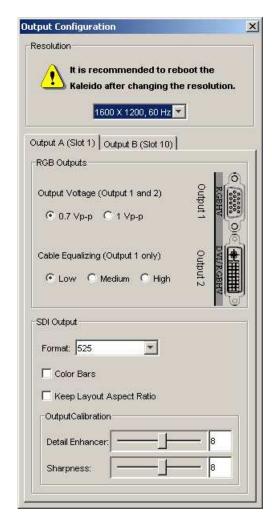
Format: select the output from one of those available on the card (see the table above for the list of formats for each card type)

Color Bar: Check this box to set the output to 100% Color Bars in place of the Kaleido DVI output.

Keep Layout Aspect Ratio. If it is checked, black bars will be added to the output signal to maintain the layout aspect ratio; if not, the layout will scale to fill the available display space..

Output Calibration

- Detail enhancer from 0 to 15 Nominal = 8
- Sharpness from 0 to 15 Nominal = 8



7 GPI Input Configuration

Kaleido-K2 has 66 GPI inputs on its rear panel connector. Kaleido-K2 uses Actions to respond to changes in the state of these GPI inputs. Two Actions can be assigned to each GPI input, one associated with each of the two possible changes of state, i.e. OFF→ ON and ON→OFF.

The GPI inputs are configured from KEdit, which must be in Online mode.

Open the *GPI Input Action Assignment* panel, by selecting GPI Input Configuration from the <u>View menu</u>, or by pressing F12.

The panel shows a list of existing GPI Input Action Assignments.

- To add a new Action Assignment to the list, click New.
- To edit an existing Action Assignment, click on it to select it, and then click Edit.
- To delete an existing Action Assignment, click on it to select it, and then click Remove.



If you click New or Edit, the GPI In On/Off State Actions dialog opens.

Configure the GPI Input Actions as follows:

- **GPI Input**: type the number of the GPI input to be configured [between 1 and 66].
- On State Action: from the pull-down list of all Actions currently defined on this Kaleido-K2, select the action to be fired when the state of this GPI input transitions from OFF to ON.
- Off State Action: from the pull-down list of all Actions currently defined on this Kaleido-K2, select the action to be fired when the state of this GPI input transitions from ON to OFF.

Click OK to accept the Action Assignments and return to the GPI Input Action Assignment panel. Click Cancel to abandon these changes and return to the GPI Input Action Assignment panel.



8 Schedule

Kaleido can create a Schedule of events, each of which results in the execution of an Action. Events may be one-time-only (specific date execution) or repeated at some regular time period (recurrent executions), which are defined by days of the week between start and stop dates.

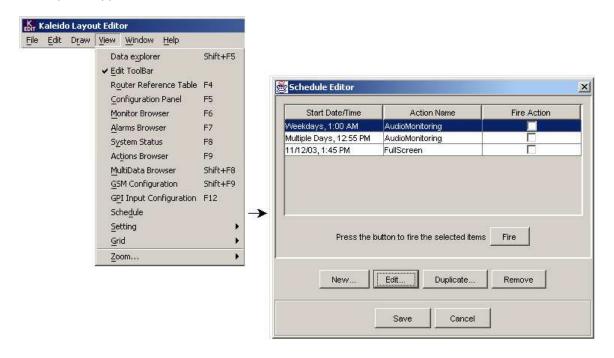
Note: Schedules created in version 5.0 and earlier of Kaleido-K2 cannot be used with the current software version.

The Schedule is unique for each Kaleido-K2 and can be edited online only.

The schedule uses the Kaleido-K2's internal time, and does not make any use of the external LTC input.

8.1 Schedule Editor

The Schedule is accessed from the KEdit <u>view menu</u>. When *Schedule* is selected, the Schedule Editor panel appears.



The Schedule Editor shows a list of all currently-defined Schedule Entries for the Kaleido:

 Start Date/Time: Shows a short-form summary of the Schedule Event details, so the time when the event will be triggered can be identified.

 Action Name: Gives the name of the Action that will be fired at the scheduled time.

Fire Action:

All Actions whose boxes are checked in this column will be

available when the Fire button immediately below the list in

executed when the **Fire** button immediately below the list is clicked. This can be useful to reset some items if Kaleido has

been restarted.

The following options are available:

New: Opens a blank Schedule Entry panel.

Edit: Opens the Schedule Entry panel for the selected entry.

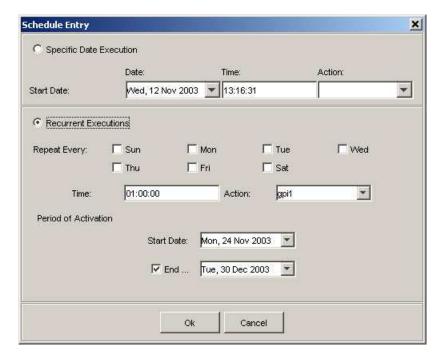
• Duplicate: Creates a copy of the selected entry, and opens its Schedule Entry

panel.

Remove: Deletes the selected entry.

8.2 Schedule Entry Panel

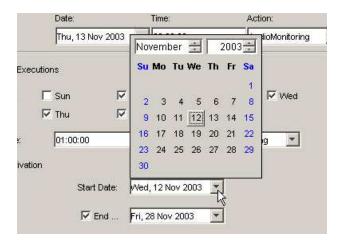
The Schedule Entry panel is used to define the occurrence of events, and the Actions that result.



Specific Date Execution:

Define a single event, using three parameters:

 Date: Select the date on which this event will occur. Click on the arrow to open a popup calendar. Then use the arrows to change the month and the year, and double-click on the day to select the date.



- Time: Enter the time of day at which the event will occur:
 - Click in the box to the right of the last number.
 - Type the numbers in sequence, ignoring the semicolon delimiters.
 - The entered numbers will fill the data box from right to left.
 - To remove the last digit entered, press backspace.
 - To clear the time data, press the space bar.
- Action: Select the Action that will be triggered at the selected date and time from the list of available actions in the pull-down box.

Note that if the Kaleido-K2 is not operational at the instant identified by the schedule, the Action will not be fired.

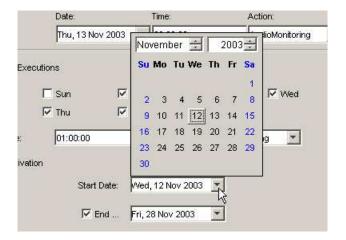
Recurrent Executions:

Define an event which will recur at a specific time on specific days of the week, commencing on a given start date, and optionally ending at a given end date.

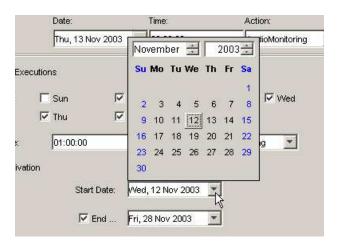
- Repeat Every: Use the check boxes to identify the days of the week on which the event will occur.
- Time: Enter the time of day at which the event will occur:
 - Click in the box to the right of the last number.
 - Type the numbers in sequence, ignoring the semicolon delimiters.
 - The entered numbers will fill the data box from right to left.
 - To remove the last digit entered, press backspace.
 - To clear the time data, press the space bar.

 Action: Select the Action that will be triggered at the selected date and time from the list of available actions in the pull-down box.

 Start Date: Select the first date on which this event can occur. Click on the arrow to open a pop-up calendar. Then use the arrows to change the month and the year, and double-click on the day to select the date.



- End (checkbox): Check this box if an End date is applicable. If the box is not checked, any
 date appearing in the End Date window will be ignored, and the Action will
 be scheduled for ever.
- End Date: Select the last date on which this event can occur. Click on the arrow to open a pop-up calendar. Then use the arrows to change the month and the year, and double-click on the day to select the date.



Click OK to confirm the data in the panel and return to the Schedule Editor panel. Click Cancel to return to the Schedule Editor without any changes.

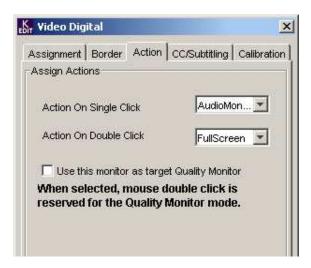
9 Quality Monitor

The Quality Control concept allows the user to select one or more Monitors within the Kaleido Layout to display any of the desired available sources by a simple mouse click. To use this feature you need to have configured your Kaleido-K2 to control a router (see section Control of an External Router by Kaleido for more details).

The Quality Control mode is available only in normal layout operation, not in Full Screen mode.

9.1 Configuration

 The Monitor must be pre-configured for quality control by checking the Use this monitor as target Quality Monitor check box on the Action tab of its Video component's Configuration panel. When the box is checked, the line for Action on Double Click will be grayed out, since double-click on this Monitor is now reserved for the Quality Control function.



 The target Quality Monitor, and all of the other Monitors in the Layout whose signal the Quality Monitor can display, must be fed at the Kaleido input through a Router, and must be configured in the Router Reference Table.

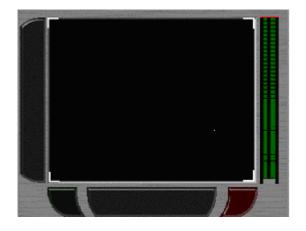
9.2 Operation

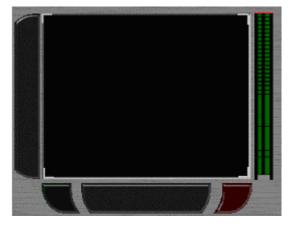
9.2.1 Identification of Quality Monitors

All Monitors in a Layout that have been configured for Quality Control are identified by the presence of markers in the four corners of the screen ($_{\Gamma}$, $_{\Box}$, $_{\Box}$ and $_{\Box}$).

The appearance of the corner markers indicates whether the Monitor is currently selected for Quality Control use:

- WHITE corner markers: The Monitor is currently selected for Quality Control.
- GRAY corner markers: The Monitor is not currently selected for Quality Control.





Selected QC Monitor

Non-selected QC Monitor

9.2.2 Selecting/Deselecting a Monitor for Quality Control

When a Monitor has been configured for Quality Control, the double-click is used for selecting and deselecting its Quality Control functionality. Note that only one Monitor can be selected for Quality Control, although more than one can be configured.

The following are the results of double-clicking reserved Quality Control Monitors in a Layout:

Double-click on		Result
•	Non-Selected QC Monitor:	The double-clicked QC Monitor is selected
		Any previously-selected QC Monitor is deselected
•	Selected QC Monitor:	The double-clicked QC Monitor is deselected.
		Normal operation mode is restored.

9.2.3 Operation in Quality Control Mode

Once a Monitor configured for Quality Control has been selected by a double click, then single-clicking on any other Monitor in the Layout that has been configured in the Router Reference table will send its video to the Quality Control Monitor.

Note that:

- The normal single-click action function of these other Monitors has been pre-empted. The double-click action function remains available.
- A non-selected Quality Control Monitor acts like any other Monitor. It displays the signal for which it was configured, and its signal can be routed to the selected Quality Control Monitor by a single click.

10 The Kaleido-RCP Remote Control Panel

The Kaleido-RCP is designed specifically to operate Kaleido. It may be used to control, singly or together, multiple Kaleidos. See the <u>Kaleido Hardware manual</u> for installation instructions. The panel layout is shown here.

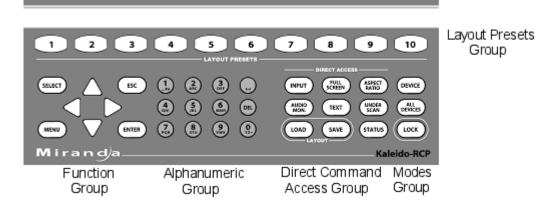


Figure 10-1 Kaleido-RCP Functions

The use of these controls for operational adjustment of the Kaleido is detailed in the following section.

Layout Presets Group

In a production environment, display layouts need to be accessed quickly and easily. The Kaleido-RCP allows the user to access stored layouts through Layout Presets buttons 1 through 10. Push one of these buttons and the Kaleido instantly updates the layout being displayed. Above the buttons is a paper strip that can be used to identify these customized layouts.

You can also store the current layout in a Preset. Just hold the Preset for at least 6 seconds, and the current layout will be saved at that Preset.

Functions Group

The up, down, left and right arrow buttons are used for moving the selection pointer when adjusting the monitor-wall output.

- The Select button enables monitors to be accessed on-screen for adjustment.
- The Enter button is used to add monitors to the selection group.
- The Esc button allows the user to escape an action without changes.
- The Menu button is inactive for this version of the software.

Alphanumeric Group

The alphanumeric buttons are used to enter ID numbers when selecting a Kaleido to control. The DELETE key is included in this group.

Direct Command Access Group

This group is used to control certain on-screen effects directly.

Input invokes the input list to assign a Channel to a selected Monitor.

Full Screen applies to the most recently selected Monitor and enlarges it until it fills up the display area. You can cycle through all monitors having Channel assignments using the Right and Left buttons. Press Full Screen again to return to the multi-screen mode.

The Full Screen window's appearance does not necessarily match that shown in the Layout. All Full Screen presentations are identical. A default Layout is present, but may be modified by the user (see How to change the default Full Screen Layout?). If you push and hold the Full Screen button for at least 6 seconds, the current Layout is saved as the Full Screen Layout.

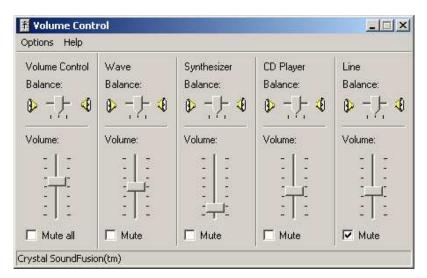
Aspect Ratio toggles a window's aspect ratio between 16:9 and 4:3.

Underscan toggles a window's scan mode between Underscan/Normal and Overscan, allowing the user to select whether the vertical and horizontal blanking areas are seen in the Video Screen.

Audio Mon activates audio monitoring for the selected window. Audio volume may be controlled by the Up and Down buttons; depressing the Left button will mute the audio output and depressing the Right button will attenuate the level by 20 dB. When multiple meters are active for the selected window, depressing Audio Mon again will cycle audio monitoring among the available pairs of audio inputs.

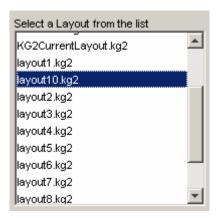
Note: if the audio originates in a .WAV file, its volume must be adjusted using the Kaleido's Windows volume control, as the signal is not processed through the Kaleido's hardware. You must connect a keyboard and mouse to the Kaleido to do this.

Display the Windows task bar on the Kaleido screen (CTRL+ESC or Windows Logo key) and click the Volume icon on the taskbar. Adjust the Volume Control in the window until the appropriate volume is heard on the audio monitor, then close the window.



Load allows the user to change the current layout. Push the Load button to open a dialog listing layouts currently saved on the Kaleido [Note: This dialog lists the names of Layouts located in

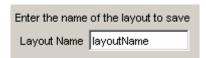
the "c:\iControl\Startup\KALEIDO_LAYOUTS" folder – layouts saved at other locations are not available through this dialog].



The top layout will be highlighted.

- Use the up and down arrow keys on the Kaleido-RCP (see figure 9-1) to move through the list
- When the desired layout is highlighted, push the ENTER button to load it
- Push the ESCAPE button to exit the process without changing the layout.

Save allows the user to save the currently-displayed layout, under its present name, or with a new name. Pushing the Save button opens the following dialog, showing the current name:



To save the layout under the current name, push the Enter button

If the name already exists, the user will be asked whether to continue and overwrite the existing layout with the new one (push ENTER to select "yes"), or to cancel the save process (push ESC to select "no").

The file "layout1.kg2" already exists.

Press <Enter> key to replace the file
or press <Esc> key to change the name.

If you select to cancel the save process by pushing ESC, the previous dialog will reappear. You may push ESC again to close the dialog, or change the name in the Layout Name window as follows.

 To enter a new name, use the alphanumeric keypad on the Kaleido RCP as shown in the following table:

KEY	PRESSED						
	ONCE	TWICE	3 TIMES	4 TIMES	5 TIMES	6 TIMES	7 TIMES
1	ı	#	*	1	ı	#	*

2	а	b	С	А	В	С	2
3	d	е	f	D	E	F	3
4	g	h	·	G	Н	I	4
5	j	k	_	J	K	L	5
6	Э	n	0	М	N	0	6
7	р	q	r	Р	Q	R	7
8	s	t	u	S	Т	U	8
9	٧	W	х	٧	W	X	9
0	у	Z	•	Y	Z	-	0
DEL	Deletes the character before the cursor position						

If you press more than seven times, you cycle through the list of options again; e.g. eighth press brings you back to the "Pressed Once" option.

Use the right-arrow key to move to the next character once one has been entered.

When the full name has been entered, push ENTER to accept the name, or push ESC to cancel the operation.

NOTE: The case of letters used in the name will be preserved, but the software does not distinguish between cases when interpreting the name, so "LayOut" and "LAYOUT" will be considered as the same name.

Status: not used in this software version

Text: not used in this software version

Modes Group

The Kaleido-RCP has 4 modes of operation: Standby, Device, All Devices and Lock.

In Standby mode, the unit is waiting for an instruction to enter one of the 3 other modes. Standby is the default mode upon startup.

Device or All Devices modes let the user control a selected Kaleido frame or all Kaleido frames, respectively. In Device mode, the user is required to enter the ID number of the desired Kaleido. In All Devices mode, all Kaleido frames will be controlled at the same time (only the loading of Layouts can be controlled in ALL_DEVICES mode).

Lock mode effectively disables all but the Layout Presets buttons, preventing any change in the configuration of the Kaleido frames. Additionally, it can be used to restrain access to a selected Kaleido.

10.1 Keyboard Equivalents of Kaleido-RCP Keys

If you are using a keyboard connected directly to the Kaleido instead of the Kaleido-RCP, here are the matching keys:

KALEIDO-RCP KEY	KEYBOARD KEY
LOAD	L
SAVE	S
UP arrow	↑ (key up)
DOWN arrow	↓ (key down)
ESC	Esc
ENTER	Enter
Digits	Character or digit keys directly.
DEL	Backspace

10.2 Enabling / disabling RCP Support

Kaleido's RCP support may be enabled and disabled by editing the *Kaleido-K2.properties* file. Here is how to do it:

- From your Kaleido-K2's desktop, double click on the icon "My Computer".
- Navigate to "C:\iControl\Startup\" and open the file "KaleidoK2.properties" using the Notepad (right click on the "KaleidoK2.properties" file and select "Notepad" from the "Open With" menu).
- Search the file for either of the following lines:

KaleidoRCP=ON

KaleidoRCP=OFF

- If KaleidoRCP is ON, turn it OFF by replacing ON with OFF in this line
- If KaleidoRCP is OFF, turn it ON by replacing OFF with ON in this line
- Save your changes using the Save item in the File menu.
- Close the Notepad editor.
- Restart the Kaleido.

11 Mouse Across Multiple Screens

For installations of several Kaleidos where the screens are situated side-by-side, it may be convenient to control the Kaleidos with a single mouse and keyboard.

This facility is provided by *Synergy*, third-party software which can be installed on multiple Kaleidos.

- One Kaleido is designated as the server, and must be equipped with a keyboard and mouse
- Multiple other Kaleidos can be configured as Clients. These require a keyboard and mouse when the software is being installed, but not while the system is operating.

Once the system is installed and operating, the mouse will move seamlessly across the boundary between screens, and the keyboard controls the Kaleido whose screen shows the cursor.

See the How-to for detailed instructions on installing and configuring Synergy.

12 Gateway

Kaleido-K2 can execute commands received via a Gateway, allowing third-party developers and individual users remote access to some Kaleido functions. This section describes the Gateway functionality, and defines the commands that are available.

12.1 Gateway Options

Two Gateways are available for use with Kaleido-K2:

- The Internal gateway is implemented within the Kaleido software
- The MT-Gateway runs as a Windows service on the Kaleido's operating system

NOTE: The Internal Gateway is the preferred gateway, and Miranda strongly recommends that it be used instead of the MT-Gateway, as it is more robust. The MT-Gateway might be used for legacy applications (the Internal gateway was not available in early versions of the software) or in specific situations based on design considerations, but its use is deprecated.

It is important to note that **only one gateway can be operating at a time**, and the user must manage the gateway resources to ensure that this is the case.

12.1.1 Internal Gateway

The internal gateway is implemented in the Kaleido software itself, and is therefore internal to and exclusively functional with a specific Kaleido.

The internal gateway is configured through the Kaleido Properties File, and is turned on or off by editing that file. Here is how to do it:

- From your Kaleido-K2's desktop, double click on the icon "My Computer".
- Navigate to "C:\iControl\Startup\" and open the file "Kaleido.properties" using the Notepad (right click on the "Kaleido.properties" file and select "Notepad" from the "Open With" menu).
- Search the file for either of the following lines:

```
activateInternalGateway=TRUE
```

activateInternalGateway=FALSE

- If activateInternalGateway is TRUE, the internal gateway is ON by default at startup. Disable the internal gateway at startup by replacing TRUE with FALSE in this line.
- If activateInternalGateway is FALSE, the internal gateway is OFF by default at startup. Enable the internal gateway at startup by replacing FALSE with TRUE in this line.
- Save your changes using the Save item in the File menu.
- Close the Notepad editor.

Restart the Kaleido-K2.

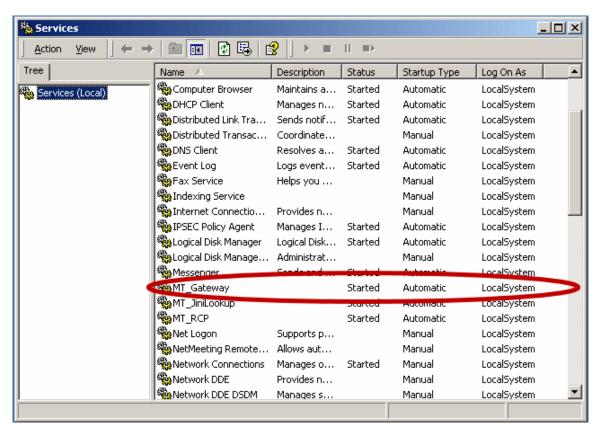
The internal gateway supports all Kaleido/Gateway commands when connected via port 13000, and supports only the stnodes\> command when connected via port 10001.

12.1.2 MT-Gateway

The MT-Gateway is shipped with current versions of the Kaleido-K2 in support of legacy applications, but its use is not recommended.

As the MT-Gateway must not be running when you are using the internal gateway, verify that it is turned off as follows:

- On the Kaleido-K2 machine, display the desktop (use the desktop icon on the menu bar).
- Double click on the "Services" icon. A dialog containing the services will appear. You can see if the MT-Gateway service is running, and whether it is configured to start automatically when the Kaleido-K2 is booted.



- Right-click on MT_Gateway and choose Properties
- Choose Manual as the Startup type, and click on OK.
- Click the "Stop Service" icon on the toolbar to turn the gateway off

12.2 Remote Operation of the Kaleido-K2 via the Gateway

Kaleido-K2 can execute XML commands received via the either the internal gateway (preferred) or the MT-gateway (deprecated). In an environment containing many Kaleido-K2s, there is a Gateway running on each Kaleido-K2. Remember that in such an environment you should configure your system to have at the most two lookups running (please refer to the "How to configure the Kaleido-K2 in systems including more than two units and application servers?" section of the documentation).

Commands are sent to the Gateway via TCP/IP (Transmission Control Protocol/Internet Protocol), so you can use a Terminal Emulation (telnet) program or create your own application using the language of your choice (C++, Visual Basic, Java, ...). A small application is provided as an example. In this section, the use of "HyperTerminal" software will be described. "Hyperterminal" is a Windows application that is typically installed on every Windows computer, you will find it under the "Program" - "Accessories" - "Communications" menu. This program will communicate with the machine on which the Gateway is running using communications port 13000.

NOTE – each XML command sent to a Kaleido-K2 must be followed by either of these two characters:

- \n (line feed)
- \r (carriage return)

12.3 Remote Operation the Kaleido-Alto/Quad

For remote operation, the ethernet port of the Kaleido Alto/Quad is continuously available to communicate with a remote computer. The functionality is similar to the Internal Gateway on the Kaleido-K2, but the Kaleido-Alto/Quad port is always "ON" and no configuration is required.

Kaleido Alto/Quad can execute XML commands received via TCP/IP (Transmission Control Protocol/Internet Protocol). To send commands, you can use a Terminal Emulation (telnet) program or create your own application using the language of your choice (C++, Visual Basic, Java, ...). In Section 3 below, the use of "Hyper Terminal" software will be described. Hyper Terminal is a Windows application that is typically installed on every Windows computer, you will find it under the *Program - Accessories - Communications* menu. This program will communicate with the Kaleido-Alto/Quad using communication port 13000.

12.4 Gateway Commands

Kaleido supports the following commands through the Gateway access. Most of these apply to K2 and Alto/Quad, but some only apply to one platform, as indicated in the list. Furthermore, there may be differences in the use or syntax of some commands depending on the platform being used. All of these points are clarified in the list below, and in the detailed description of each command that follows.

In particular, note that all commands sent to a Kaleido-K2 must end with \n (line feed) or \r (carriage return). Kaleido Alto/Quad does not require these to be sent, and will ignore them if present..

Command	Applies to		Description		
<u>openID</u>	K2	AQ	Opens a session with the specified Kaleido		
closeID	K2	AQ	Closes a previously opened session.		
getKCurrentLayout	K2	AQ	Gets the name of the current layout		
<u>setKCurrentLayout</u>	K2	AQ	Loads a specific Layout.		
<u>getKLayoutList</u>	K2	AQ	Gets the list of available Layouts.		
<u>setKStatusMessage</u>	K2	AQ	Sets a Gateway Alarm to the specified state.		
<u>setKChannel</u>	K2	AQ	Associates a Channel to the specified Monitor.		
<u>setKDynamicText</u>	K2	AQ	Configures the text to display for a Dynamic Text.		
<u>setKTimer</u>	K2	AQ	Configures the specified Count Down Timer.		
setKTimer2	K2	AQ	Configures the specified Timer.		
<u>setKTimerTrigger</u>	K2	AQ	Starts, stops or resets a Count Down Timer.		
setKFireAction	K2	AQ	Fires the specified Action.		
<u>setKEnableAlarmGroup</u>	K2		Enables the Alarm Group.		
<u>setKDisableAlarmGroup</u>	K2		Disables the Alarm Group.		
<u>setKSaveLayout</u>	K2	AQ	Saves the current layout		
<u>getKAudioOut</u>	K2	AQ	Gets the identity of the current audio output		
<u>setKAudioOut</u>	K2	AQ	Selects the audio to be monitored		
<u>getKAudioOutVolume</u>	K2	AQ	Get the current audio monitoring output volume		
<u>setKAudioOutVolume</u>	K2	AQ	Set the volume of the audio monitoring output		
<u>getKAudioOutMode</u>	K2	AQ	Get the current audio monitoring output mode		
<u>setKAudioOutMode</u>	K2	AQ	Set the audio monitoring output mode		
<u>setKVerticalOffset</u>		AQ	Offset the graphic from display		
<u>setKlcontrolMode</u>		AQ	Enable/Disable mouse color keying over video		
<u>setKMouseColorA</u>		AQ	Mouse color to be keyed over video		
<u>setKMouseColorB</u>		AQ	Mouse color to be keyed over video		
<u>setKMouseColorC</u>		AQ	Mouse color to be keyed over video		

12.4.1 Command description

Please note that:

- the syntax must be exactly replicated when sending a command
- every command sent to a Kaleido-K2 *must* end with a line feed (\n) or Carriage return (\r)
 – these are *not shown* in the descriptions below
- Kaleido Alto/Quad does not require the line feed or carriage return, and will ignore it if it is present

openID K2 AQ

This command opens a session with the specified Kaleido .

Please note that it is not necessary to open a session every time you want to send a command to the Gateway. Since opening a session takes a few seconds, it is recommended that you keep a session open as long as commands need to be sent.

<openID>IP_ADDRESS_0_4_0_0

Where:

• IP_ADDRESS is the IP address of your destination Kaleido-K2.

Gateway response:

- <nack/>: the Gateway was not able to recognize the command.
- <ack/>: the command was recognized by the Gateway.

closeID K2 AQ

This command closes a session with the specified Kaleido-K2

<closeID>IP ADDRESS 0 4 0 0</closeID>

Where:

• IP_ADDRESS is the IP address of the Kaleido-K2.

Gateway response:

- <nack/>: the Gateway was not able to recognize the command.
- <ack/>: the command was recognized by the Gateway.

Note that this command closes the current connection to the client via port 13000, so this connection must be re-established before another session can be opened. If you are using Hyperterminal, it will automatically re-establish the previous connection if you begin typing new commands, but other clients may require you to manually reconnect.

This command retrieves the name of the current layout.

<getKCurrentLayout/>

Gateway response:

- <nack/>: the Gateway was not able to recognize the command.
- <kCurrentLayout>CurrentLayout.kg2 </kCurrentLayout>

where *CurrentLayout.kg2* is the name of the Layout currently in use by the Kaleido-K2. For Kaleido-Alto/Quad, the layout suffix is .xml instead of .kg2

setKCurrentLayout K2 AQ

This command loads the specified layout.

<setKCurrentLayout>set LayoutToLoad.kg2</setKCurrentLayout>

Where:

LayoutToLoad is the name of the Layout to load. This Layout must have been
exported to the Kaleido-K2 prior to executing this command. Note that you can use
the getKLayoutList command to retrieve the available layouts before sending this
command. For Kaleido-Alto/Quad, the layout suffix is .xml instead of .kg2

Gateway response:

- <nack/>: the Gateway was not able to recognize the command.
- <ack/>: the command was recognized by the Gateway.

getKLayoutList K2 AQ

This command returns the list of Layouts that can be used on the Kaleido-K2.

<getKLayoutList/>

Gateway response:

- <nack/>: the Gateway was not able to recognize the command.
- <kLayoutList> Layout1.kg2 Layout2.kg2 ... AnAvailableLayout.kg2</kLayoutList>

Where:

 Layout1, Layout2 and AnAvailableLayout are the name of the Layouts that are available on the Kaleido-K2. For Kaleido-Alto/Quad, the layout suffix is .xml instead of .kg2 setKStatusMessage K2 AQ

This command associates an Alarm state with an id. The Kaleido-K2 can be configured to listen to this id using an Alarm Monitor, and thus report the state. This is a convenient way of reporting Alarms to the Kaleido-K2.

<setKStatusMessage>set id="AnId" status="STATUS"
message="TheMessage"

Where:

- AnId is the identifier that will receive the new state.
- Note: Kaleido-Alto/Quad will only accept numeric vales for this parameter, in the range 0 to 1024
- Status is any of the available statuses (OK, DISABLE, WARNING OF ERROR).
- TheMessage is reserved for future use, and will be ignored.

Gateway response:

- <nack/>: the Gateway was not able to recognize the command.
- <ack/>: the command was recognized by the Gateway.

setKChannel K2 AQ

This command is used to assign a Channel to the specified Monitor in the current Layout.

<setKChannel>set channelname="ChannelName" monitor="MonitorNumber"
</setKChannel>

Where:

- ChannelName is the name of the Channel to assign to the specified Monitor.
- MonitorNumber is the identifier of the Monitor to which the Channel must be assigned.

Note: to get the identifier of Monitors of your current Layout press the TAB key of the Kaleido-K2's keyboard or the SELECT key of the RCP.

Gateway response:

- <nack/>: the Gateway was not able to recognize the command.
- <ack/>: the command was recognized by the Gateway.

setKDynamicText K2 AQ

This command is used to set the text of a UMD or Text Label Component that is configured to use Dynamic Text. Note that the Service ID for this component must be set to "Gateway" when the layout is created in KEdit in order for this command to work.

<setKDynamicText>set address="Address" text="NewText" </setKDynamicText>

Where:

- Address is the configured Text Address of the UMD or Text Label Component.
- Note: Kaleido-Alto/Quad requires a numeric value in the range 0-1024
- *NewText* is the text to display.

Gateway response:

- <nack/>: the Gateway was not able to recognize the command.
- <ack/>: the command was recognized by the Gateway.

setKTimer K2 AQ

This command is used to configure the specified Count Down Timer Component.

<setKTimer>set id="TimerID" preset="HH:MM:SS" direction="Direction" loop="Loop"
</setKTimer>

Where:

- *TimerID* is the id or name of the Count Down Timer Component to modify.
- HH:MM:SS is the preset to associate to the Count Down Timer Component.
- Direction is the direction to count, this value can be **UP** or **DOWN**.
- Loop indicates if the counter must count continuously. This value can be either ON or OFF.

Gateway response:

- <nack/>: the Gateway was not able to recognize the command.
- <ack/>: the command was recognized by the Gateway.

setKTimer2 K2 AQ

This command is used to configure a Timer in the Kaleido system

<setKTimer2>set TimerName="NAME" StartTime="HH:MM:SS:FF"
PresetTime="HH:MM:SS:FF" TimerMode="UP" EndMode="STOP" </setKTimer2>

Where:

 NAME is the name assigned to the Timer in the Timer Configuration panel accessed from the Timer Browser.

- StartTime may be one of the following:
 - HH:MM:SS:FF time in hours:minutes:seconds:frames at which this Timer will start its count, depending on its configuration and presence of triggers. Note that if the HOURS is 00, the start time is deemed to be the previous midnight, whereas if HOURS is 24, it is considered to be the next midnight. This allows the timer to decide whether it should be counting or waiting to start when it compares the start time to the current time. (Note: the present implementation allows the user to send "Frames" information, but it is not used by the timer, which will start on the exact second)
 - NOW the Timer will start counting immediately upon receiving the command
 - WAIT the Timer will not start until it receives a setKTimerTrigger gateway command with the argument START
- PresetTime may be one of the following:
 - Count duration (hours:minutes:seconds:frames) for Count Up and Count Down modes,
 - End time (hours:minutes:seconds:frames) for the Remaining Time mode.
 - Note: the present implementation allows the user to send "Frames" information, but it is not used by the timer, which will use count durations or end times based on seconds.
- Time Mode is the operating mode of the timer. Possible values are: UP, DOWN, REMAINING
- EndMode defines what is to happen when the Timer reaches the end of its count.
 Possible vales are: LOOP, STOP, OVERRUN

Gateway response:

- <nack/>: the Gateway was not able to recognize the command.
- <ack/>: the command was recognized by the Gateway.

setKTimerTrigger K2 AQ

This command is used to control the specified Count Down Timer Component. The Count Down Timer can be started, stopped or reset.

<setKTimerTrigger>set id="TimerID" trigger="Trigger"</setKTimerTrigger>

Where:

- *TimerID* is the id of the Count Down Timer Component to control.
- Trigger is the action that the Count Down Timer must do. This value can either be START, STOP or RESET.

Gateway response:

- <nack/>: the Gateway was not able to recognize the command.
- <ack/>: the command was recognized by the Gateway.

setKFireAction K2 AQ

This command is used to fire the specified Action.

<setKFireAction>set name="NameOfTheActionToFire"</setKFireAction>

Where:

• NameOfTheActionToFire is the name of the Action to be executed. The Action must have been exported to the Kaleido-K2 in order to be executed.

Gateway response:

- <nack/>: the Gateway was not able to recognize the command.
- <ack/>: the command was recognized by the Gateway.

setKEnableAlarmGroup

K2

Note: this command is not supported by Kaleido-Alto/Quad

This command enables the specified Alarm Group.

<setKEnableAlarmGroup>set
name="NameOfTheGroupToEnable"</setKEnableAlarmGroup>

Where:

• NameOfTheGroupToEnable is the name of the Alarm Group to enable.

Gateway response:

- <nack/>: the Gateway was not able to recognize the command.
- <ack/>: the command was recognized by the Gateway.

setKDisableAlarmGroup

K2

Note: this command is not supported by Kaleido-Alto/Quad

This command is used to disable the specified Alarm Group.

<setKDisableAlarmGroup>set
name="NameOfTheGroupToDisable"</setKDisableAlarmGroup>

Where:

• NameOfTheGroupToDisable is the name of the Alarm Group to disable.

Gateway response:

- <nack/>: the Gateway was not able to recognize the command.
- <ack/>: the command was recognized by the Gateway.

setKSaveLayout K2 AQ

This command allows the user to save the currently displayed layout to a file.

<setKSaveLayout>set name="FileName"</setKSaveLayout>

Where:

• FileName is the name of the file that will contain the Layout.

NOTE: do not specify an extension to the file name, as the file extension "kg2" is hardcoded for the Kaleido-K2 Layouts.

Gateway response:

- <ack/>
 The command was correctly interpreted and executed.
- <nack/>
 The command wasn't executed.

getKAudioOut K2 AQ

This command allows the user to get the selected Audio Monitoring Output

<getKAudioOut/>

Returned value can be any of:

- <nack/>
 The command was not executed (bad spelling).
- <kAudioOut>DETAILS</kAudioOut> The command was executed

DETAILS will vary depending on the type of audio output detected.

When no audio output is currently being monitored:

• <kAudioOut>Type="NONE"</kAudioOut>.

When the format is STREAMING, the returned value indicates the IP address and the Feed ID of the source using the following syntax:

<kAudioOut>Type="STREAMING" IP="999.999.999.999" FeedID="XX"</kAudioOut>

Where:

999.999.999 is the IP of the machine from where the stream occurs.

XX is the identifier of the feed to use.

When the format is an AUDIO CARD, the returned value indicates which audio card input is being monitored:

<kAudioOut> Type="AUDIOCARD" Input="999"</kAudioOut>

Where:

999 indicates the input from the card.

When the format is EMBEDDED, the returned value will contain the video input, the group and the AES used. The syntax will be:

<kAudioOut>Type="EMBEDDED" Input="AAA" Group="BB" AES="X"</kAudioOut>

Where:

AAA indicates the video input.

BB indicates the group. Valid values range from 1 to 4.

X indicates the AES. Valid value can be either 1 or 2.

setKAudioOut K2 AQ

The user can select the audio to be monitored by using this Gateway command. The syntax of the command will differ if the user indicates to monitor audio coming from a stream (*Note – streaming sources are not supported by Kaleido Alto/Quad*), from an audio card, from an embedded source or no audio at all. In general, you can select any audio source to be monitored, even if this source is not represented in an audiometer on the current layout.

<setKAudioOut>DETAILS</setKAudioOut>

DETAILS will differ depending on the type of audio source being selected for monitoring, as shown below.

Gateway response:

- <ack/>
 The command was correctly interpreted.
- <nack/> The command was not executed (spelling error or invalid audio source).

DETAILS:

To select a STREAMING source (Kaleido-K2 only), format the command as follows:

 <setKAudioOut>set Type="STREAMING" IP="999.999.999" FeedID="XX"</setKAudioOut>

Where:

999.999.999 is the IP of the machine from where the stream occurs.

XX is the identifier of the feed to use.

To select an AUDIO CARD source, format the command as follows:

<setKAudioOut>set Type="AUDIOCARD" Input="999"</setKAudioOut>

Where:

999 indicates the input from the card.

To select an EMBEDDED source, format the command as follows:

 <setKAudioOut>set Type="EMBEDDED" Input="AAA" Group="BB" AES="X"</setKAudioOut>

Where:

AAA indicates the video input.

BB indicates the group. Valid values range from 1 to 4.

X indicates the AES. Valid value can be either 1 or 2.

To STOP audio monitoring and MUTE the audio output:

<setKAudioOut>set Type="NONE"</setKAudioOut>

You may select any audio for monitoring, independent of whether it is being metered in the current Layout, with the exception that STREAMING sources must be part of the current layout.

- If the source is included in the layout, the meter assigned to it will be highlighted.
- If the source is not included in the layout, the sound will be routed to the audio monitors, but there will be no indication in the layout of the source.

getKAudioOutVolume

K2 AQ

This command retrieves the Audio Monitoring Volume currently used:

<getKAudioOutVolume/>

The returned value will have the form:

<kAudioOutVolume>volume="XX" </kAudioOutVolume>

Where:

XX The value, expressed in dB, at which the Audio Monitoring volume is set. This value ranges between -90dB and 0.

<nack/> will be returned if the command was misspelt.

setKAudioOutVolume K2 AQ

This command sets the Audio Monitoring Volume:

<setKAudioOutVolume>set volume="XX"</setKAudioOutVolume>

Where:

XX Value expressed in dB at which the volume will be set.

Valid values range from -90dB to 0dB.

Returned value will be one of:

- <ack/>
 The command was correctly interpreted. Volume was set to its new value.
- <nack/> The command was not executed, due to bad spelling or invalid parameter. The volume remains unchanged.

Note that if the audio is muted, then it shall be un-muted after this command.

getKAudioOutMode K2 AQ

This command retrieves the Audio Monitoring Mode currently used:

<getKAudioOutMode/>

Returned value will have the form:

<kAudioOutMode>mode="XXXXXX"</kAudioOutMode>

Where: XXXXX is the mode, which can be any of NORMAL, MUTE or -20dB.

<nack/>
 The command was misspelled. In this case the Audio Monitoring Mode remains unchanged.

setKAudioOutMode K2 AQ

To set the Audio Monitoring Mode the following command will be used:

<setKAudioOutMode>set mode="XXXXXX"</setKAudioOutMode>

Where:

XXXXX is the value at which the mode must be set. Valid values are NORMAL, MUTE and –20dB.

Returned value will be any of:

•	<ack></ack>	The command was correctly interpreted. The Audio Monitoring Mode
		was set to the specified value.

<nack/>
 The command was not executed, due to bad spelling or invalid parameter. The Audio Monitoring Mode remains unchanged.

setKVerticalOffset AQ

This command is used to offset the graphic vertically on the display

<setKVerticalOffset>set offset="88"</setKVerticalOffset>

Where offset is the number of lines to offset, 0 to 175.

setKlcontrolMode AQ

This command is used to enable the Alto/Quad to key the detected mouse colors on video.

<setKlcontrolMode>set mode="0"</setKlcontrolMode>

Where:

Mode = 0, Color not keyed, Mode = 1, color key enabled.

setKMouseColorA AQ

This command is used to set a color to key.

<setKMouseColorA>set mouseColorA= FF00FF00"</setKMouseColorA>

mouseColorA is defined as FFBBGGRR

BB: the blue component.

GG: the green component.

RR: the red component.

setKMouseColorB AQ

This command is used to set a color to key.

<setKMouseColorB>set mouseColorB= FF00FF00"</setKMouseColorB>

mouseColorB is defined as FFBBGGRR

BB: the blue component.

GG: the green component.

RR: the red component.

setKMouseColorC AQ

This command is used to set a color to key.

<setKMouseColorC>set mouseColorC= FF00FF00"</setKMouseColorC>

mouseColorC is defined as FFBBGGRR

BB: the blue component.

GG: the green component.

RR: the red component.

13 A typical session

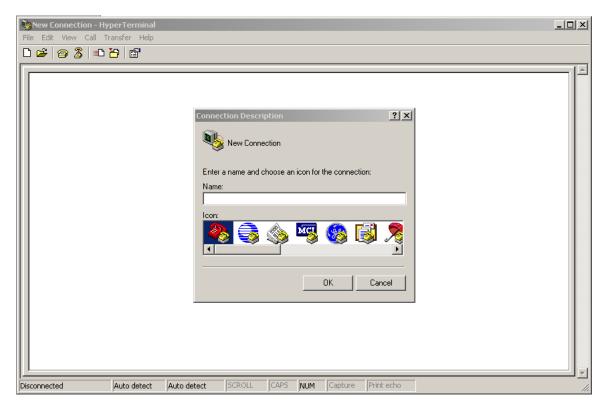
Here is a description of how to open and close a typical session during which you will use these commands to operate a Kaleido. You can open sessions with multiple Kaleidos simultaneously; each session will have its own window on your desktop.

- If you are using a Kaleido-K2, make sure the internal gateway is turned ON, and the MTgateway is turned OFF (see section 1.2)
- If your environment includes a Miranda iControl Application Server, see the Application Server's manual for a discussion of appropriate network configurations.

Open the HyperTerminal software on another computer.

• From the "Program" menu choose "Accessories", "Communications" and "HyperTerminal".

A dialog will appear, asking you to enter a name for the connection and to select an icon.

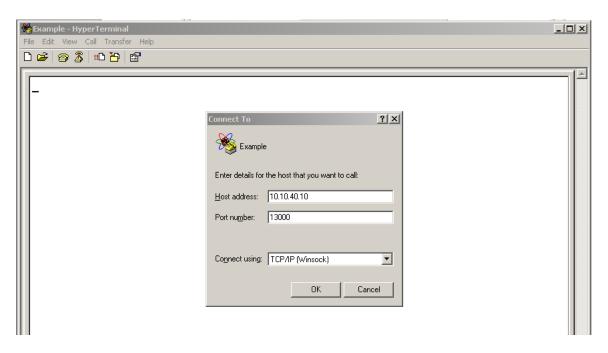


A second dialog, "Connect To", will appear.

• In the "Connect using" dropdown field choose "TCP/IP (Winsock)".

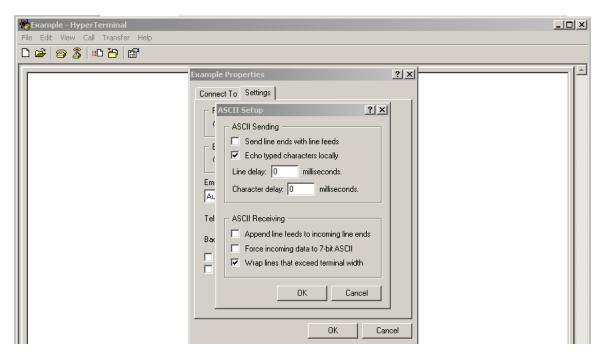
Two new fields will appear.

- In the "Host address" field enter the IP address of your Kaleido
- In the "Port number" field enter "13000". This indicates that connection to the Kaleido will be established via the port 13000.
- Click on the "OK" button.



To be able to see the typed characters:

- Select "Properties" from the "File" menu, the "Properties" dialog box appears.
- Go to the "Settings" tab, click on the "ASCII Setup..." button located at the bottom of the dialog.
- Select "Echo typed characters locally".



• Click on the "OK" button and click again on the "OK" button from the "Properties" dialog.

The typed characters will appear in the console.

Commands can be sent to the Gateway while a session is open. There is no maximum number of commands that can be sent in a session, and it is recommended to keep a session open as long as there are commands to send, since opening a session takes a few seconds. Here is a simplified example of a session:

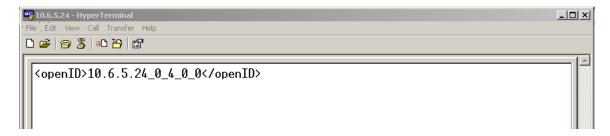
Open a session

send command send command ... send command

Close the session.

Remember that all commands sent to a Kaleido-K2 must end with a line feed (\n) or carriage return (\r). These are not required by a Kaleido Alto/Quad and will be ignored if present.

To open a session enter the openID command using the IP address of the Kaleido with which the connection has to be established.



If the Gateway receives the command and recognizes it, it will respond with the following:

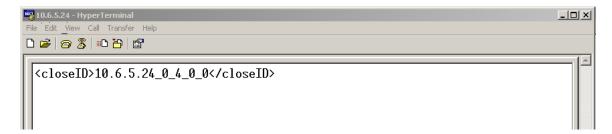


If the command cannot be recognized the following message will appear:

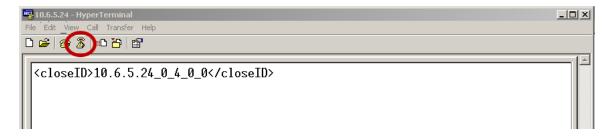


The Kaleido is now ready to receive commands.

When no more commands need to be sent to the Kaleido , close the link to the Kaleido using the closeID command.



To end the communication session, select the "Disconnect" icon from the toolbar.



14 SNMP Traps

The Kaleido K2 can send 5 categories of traps. The categories are Video, Audio, GPI, VBI and System. They are discussed individually in sections 14.2 to 14.6 below.

14.1 Enabling SNMP Agents - Trap Reporting and Polling

In order to reduce network activity, by default the Kaleido-K2 SNMP agent is disabled. To enable SNMP traps reporting and polling, the Kaleidok2.properties file must be modified. Here is how it's done:

- From your Kaleido-K2's desktop, double click on the icon "My Computer".
- Navigate to "C:\iControl\Startup\" and open the file "Kaleidok2.properties" using the Notepad (right click on the "Kaleidok2.properties" file and select "Notepad" from the "Open With" menu).
- At the end of the file, you have the following lines:

```
#Enable SNMP traps for VIDEO status, audio status (card and embedded), gpi in.
```

Entry must be separated by ','.

#Possible values--> NULL => The system will not send any traps.

--> any combination of VIDEO, AUDIO, GPI, VBI or SYSTEM

SnmpEnabledTraps=NULL

#Snmp manager IP addresses is the list of managers that should receive the Kaleido SNMP traps. IPs must be separated by ',' ex: 192.168.103.2,192.168.105.6.

#possible values--> any valid IP address.

--> default value is the broadcast IP : 255.255.255.255

IPAddresses=255.255.255.255.

- After the SnmpEnabledTraps replace "NULL" with the category of traps you want to send. You have the choice between VIDEO, AUDIO, GPI, VBI or SYSTEM. You can put any of these separated by a comma (,), being careful that no blank spaces are included..
- After the IPAddresses replace the broadcast IP with the SNMP manager's IP address.
 You can enter several managers; just separate the IP addresses by a comma (,). Note
 that if you are sending error messages to a GSM server using traps, the GSM server's IP
 address must be included here.
- Save your changes using the Save item in the File menu.
- Close the Notepad editor.
- Restart the Kaleido.

The statuses reported by the Kaleido system use the Miranda and Kaleido's SNMP MIB.

All Kaleido MIBs start with 1.3.6.1.4.1.3872.9, a concatenation of the Miranda OID (1.3.6.1.4.1.3872) and the Kaleido-K2 OID (9).

14.2 Video MIB (Trap type = 1)

All Kaleido Video Status Oids start with the VideoOidPrefix:

VideoOidPrefix = KaleidoK2MIB.VideoStatusTable.VideoStatusEntry.VideoStatus

= 1.3.6.1.4.1.3872.9.1.1.3

The Video Status Oid is a concatenation of *VideoOidPrefix*, *VideoChannelIndex*, *ErrorType* and *ErrorValue*.

VideoChannelIndex:

Represents the video input reported by this status [between 1 and 32].

ErrorType:

Represents the type of the error reported. Four errors can be reported by the Kaleido-K2 for a Video input:

Loss of Video	2
Luma Too High	3
Freeze Detection	5
Black Detection	6

ErrorValue (Integer):

Represents the status itself.

Disable	0
Ok	1
Warning	2
Error	3

So the Video Status Oid will have the following form:

1.3.6.1.4.1.3872.9.1.1.3.(1 to 32).(2,3,5 or 6):INTEGER:(0,1,2 or 3)

For example, if the Kaleido reports that the Video input 3 is no longer detected (loss of video), then you should receive this trap:

1.3.6.1.4.1.3872.9.1.1.3.**3.2**:INTEGER:**3**

14.3 Audio MIB (Trap type = 2)

All Kaleido Audio Status Oids start with the AudioOidPrefix:

AudioOidPrefix = KaleidoK2MIB.AudioStatusTable.AudioStatusEntry.AudioStatus

= 1.3.6.1.4.1.3872.9.2.1.7

The Audio Status Oid is a concatenation of AudioOidPrefix, SourceType, Channel, Group, AES, Side, ErrorType and ErrorValue

SourceType:

Represents the type of the audio source.

Audio Card 1

Embedded 2

Channel:

In case of Embedded audio, it represents the video input [between 1 and 32].

In case of an Audio Card input, it represents the audio input [between 1 and 48].

Group:

In case of Embedded audio, it represents the group [between 1 and 4].

In case of an Audio Card input, it will always be 0.

AES:

In case of Embedded audio, it represents the AES [1 or 2].

In case of an Audio Card input, it will always be 0.

Side:

Indicates if the error reported concerns the left channel only, the right channel only or both channels (stereo).

Left 1

Right 2

Stereo 3

ErrorType:

Represents the type of the error reported. Four errors can be reported by the Kaleido-K2 for an audio input:

Audio Silence 2

Overload	3
Mono Detected	4
Out Of Phase	5

ErrorValue (Integer):

Represents the status itself.

Disable	0
Ok	1
Warning	2
Error	3

So the Audio Status Oid will have the following form:

Embedded:

```
1.3.6.1.4.1.3872.9.2.1.7.2.(1 to 32).(1 to 4).(1 or 2).(0,1 or 2).(2 to 5):INTEGER:(0,1,2 or 3)
```

For example, if the Kaleido reports that the audio extracted from Video input 3, group 2, AES 1, Stereo is out of phase, then you should receive this trap:

Audio card:

```
1.3.6.1.4.1.3872.9.2.1.7.1.(1 to 48).0.0.(0,1 or 2).(2 to 5):INTEGER:(0,1,2 or 3)
```

For example, if the Kaleido reports that audio input 36 right is in silence, then you should receive this trap:

1.3.6.1.4.1.3872.9.2.1.7.**1.36.0.0.1.2**:INTEGER:**3**

14.4 GPI Input MIB (Trap type = 3)

All Kaleido GPI Input Status Oids start with GpilnOidPrefix:

GpilnOidPrefix = KaleidoK2MIB.GpiStatusTable.GpiStatusEntry.GpiStatus

= 1.3.6.1.4.1.3872.9.3.1.2

The GPI Input Status Oid is a concatenation of GpilnOidPrefix, GpilnIndex, and State.

GpilnIndex:

Represents the GPI Input [between 1 and 66].

State (Integer):

Represents the state of the GPI Input.

Off **0**On **1**

So the GPI Input Status Oid will have the following form:

1.3.6.1.4.1.3872.9.3.1.2.(1 to 66):INTEGER:(0 or 1)

For example, if the Kaleido reports that GPI Input 18 is on, then you should receive this trap:

1.3.6.1.4.1.3872.9.3.1.2.18:INTEGER:1

14.5 VBI/ANC MIB (Trap type = 4)

All Kaleido VBI/ANC Status Oids start with VBIANCOidPrefix:

VBIANCOidPrefix = KaleidoK2MIB.VBIANCStatusTable.VBIANCStatusEntry.VBIANCStatus

= 1.3.6.1.4.1.3872.9.4.1.4

The VBI/ANC Status Oid is a concatenation of VBIANCOidPrefix, IndexType, VideoInput, ErrorType and Value.

IndexType:

Represents the type of error reported.

CC1 Presence 1

VCHIP Presence 9

Teletext Page 1 10

Teletext Page 2 11

Teletext Page 3 12

Teletext Page 4 13

VideoInput:

Represents the Video Input affected by this error [between 1 and 32].

ErrorType

In case of CC1 or VCHIP, it will always be 1.

In case of a Page of Teletext, the Kaleido can report 2 errors:

Presence of the page 1

Presence of Subtitling 2

Value (Integer):

Represents the status itself.

Disable **0**

Ok 1

Warning 2

Error 3

So the VBI/ANC Status Oid will have the following form:

For example, if the Kaleido reports the presence of subtitling in the third extracted page of Teletext on Video input 7, then you should receive this trap:

1.3.6.1.4.1.3872.9.4.1.4.12.7.2:INTEGER:1

14.6 System Power Supply MIB (Trap type = 5)

The Kaleido System Power Supply Status Oid starts with the SystemOidPrefix:

SystemOidPrefix = KaleidoK2MIB.SystemStatusTable.SystemStatusEntry

The System Power Supply Status Oid is a concatenation of SystemOidPrefix and Value.

Value (Integer):

Ok 1
Error 3

So the system Power Supply Status Oid will have the following form:

For example, if the Kaleido reports that its Power Supply has a problem, then you should receive this trap:

1.3.6.1.4.1.3872.9.5.1:INTEGER:3

15 TSL, Andromeda, Encoda and Kalypso

TSL, Andromeda, Encoda and Kalypso are third-party devices that supply Kaleido with tally information and dynamic text for UMDs, Text Labels and Tallies.

The interface between Kaleido and third-party devices is managed using Miranda's iControl system. Each such device is addressed by Kaleido using its MirandaLongID, which is an address within the iControl protocol. This address must be installed manually on the Kaleido by the user.

The address can be found using the iNavigator application, which is part of iControl, once the device is installed on the network.

All components in a Kaleido layout that obtain information from a third-party device require the Service ID of that device to be entered at their configuration panel. The Service ID is either the Miranda LongID, or an alias that points to the LongID. An alias is a user-selected term that is easier to remember and enter than the LongID.

To install a device's LongID (and preferably an alias) on the Kaleido-K2, proceed as follows:

- 1. First, get the service's Long ID:
 - From your Kaleido-K2's desktop, double click on the icon "My Computer".
 - Navigate to "C:\iControl\Startup\" and open the file "Kaleido.log" using the Notepad (right click on the "Kaleido.log" file and select "Notepad" from the "Open With" menu).
 - Within Notepad, press "Ctrl-F" or select "Find..." from the Edit menu and in the "Find What" section enter "serviceAdded called for ID.".

Each entry found will give you the Miranda Long ID of an iControl service found on the network. Continue looking through the file until you find the Long ID of your TSL, Andromeda or Encoda.

The Long ID of a TSL should have the following form:

10.9.8.7 COM1 TSL

The Long ID of an Andromeda should have the following form:

10.9.8.7_COM1_UMD_00_SLOTXX_MODULEIDXXXX

The Long ID of an Encoda should have the following form:

10.9.8.7 COM1 ENCODA

The Long ID of a Kalypso should have the following form:

10.9.8.7_COM1_KALYPSO

2. Find the file C:\Icontrol\Startup\KG2Config.xml on the Kaleido frame and open it in Notepad. The service for the third-party device will be added in the section <OtherServices>, which will look like this:

<OtherServices>

- <!-- Use the same syntax as above to find services other than Kaleido Services -->
- <!-- AlphaNumeric Label is permitted here, example below:-->
 - <Service ServiceLabel="service1" id="xxx.xxx.xxx.xxx" /> -->
- </OtherServices>
- Supported third-party devices will then be added into this section as per the indicated format.
 See the Installation Guide for more detailed instructions on installing and connecting to third-party devices.

TSL (supplies dynamic text for UMDs and Text Labels, and Tally statuses)

```
<Service ServiceLabel="TSL" id="192.168.1.2_COMX_TSL" />
```

Where:

- TSL (within the quotes) is the alias (and could be any user-selected name);
- 192.168.1.2 is the IP address of the TSL (as found using iNavigator);
- X in COMX_TSL is the COM port number assigned to the TSL service during the installation.

Andromeda (Phillips) (supplies dynamic text for UMDs and Text Labels, and Tally statuses).

```
<Service ServiceLabel="PHIL" id="10.3.4.9_COM1_UMD_00_SLOTXX_MODULEIDXXXX"
/>
```

Where:

- PHIL (within the quotes) is the alias (and could be any user-selected name);
- 10.3.4.9 is the IP address of the Kaleido (use the actual IP address of your Kaleido),
- COM1 must be replaced by COM2 if you have configured the system to use the COM2 port,
- The remainder of the text is exactly as shown

Encoda (supplies dynamic text for UMDs and Text Labels)

```
<Service ServiceLabel="ENC" id="192.145.10.2_COMX_ENCODA" />
```

Where:

- **ENC** (within the quotes) is the alias (and could be any user-selected name);
- 192.145.10.2 is the IP address of the Encoda (as found using iNavigator);
- X in COMX_ENCODA is the COM port number assigned to the Encoda service during the installation.

Kalypso (supplies dynamic text for UMDs and Text Labels, and Tally statuses).

```
<Service ServiceLabel="KAL" id="10.5.4.8_COM1_KALYPSO" />
```

Where:

- KAL (within the quotes) is the alias (and could be any user-selected name);
- **10.5.4.8** is the IP address of the Kalypso (as found using iNavigator);
- COM1 must be replaced by COM2 if you have configured the system to use the COM2 port,
- The remainder of the text is exactly as shown

If all four of these services are installed (as an example), the "Other Services" section becomes:

<OtherServices>

```
<!-- Use the same syntax as above to find services other than Kaleido Services -->
```

```
<!-- AlphaNumeric Label is permitted here, example below:-->
```

```
<Service ServiceLabel="service1" id="xxx.xxx.xxx.xxx" /> -->
```

```
<Service ServiceLabel="TSL" id="192.168.1.2 COM4 TSL" />
```

```
<Service ServiceLabel="PHIL"
id="10.3.4.9_COM1_UMD_00_SLOTXX_MODULEIDXXXX" />
```

```
<Service ServiceLabel="ENC" id="192.145.10.2 COMX ENCODA" />
```

```
<Service ServiceLabel="KAL" id="10.5.4.8_COM1_KALYPSO" />
```

</OtherServices>

Now, you may enter the alias **TSL**, **PHIL**, **ENC** or **KAL** as the ServiceID in configuration panels for UMDs and Text Labels to identify one of these third-party devices as the source of their dynamic text.

You may choose any convenient name for the alias; for example, the Phillips alias could be Dyn:

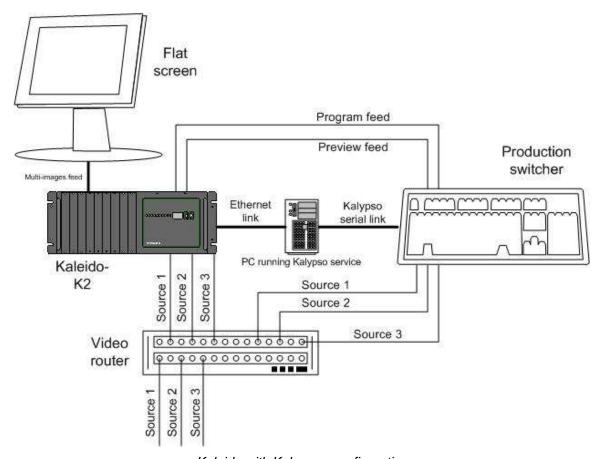
```
<Service ServiceLabel="Dyn" id="10.3.4.9_COM1_UMD_00_SLOTXX_MODULEIDXXXX" />
```

16 Kalypso

Kalypso is a service that conveys information about a production switcher's configuration to other devices via an IP connection. Kaleido can use the Kalypso service to provide this information to the user via the UMD, Text Label and Tally components in a layout. The switcher must conform to the Kalypso protocol.

16.1 Kalypso configuration

The following figure shows a typical production switcher environment, with Kaleido connected to the production switcher inputs and outputs. Kaleido reads the Kalypso data from the PC running the Kalypso service, and presents the information to the user.



Kaleido with Kalypso - configuration

16.2 Setting up Kaleido to use Kalypso

There must reside on Kaleido a Kalypso.properties file that defines two aspects of the service:

The port specification for communication with the switcher

The identification of the production switcher outputs carrying the Program and Preview feeds.

Here is an example:

```
#Com port definition for the service.

ComPort=COM1

BaudRate=38400

DataBits=7

StopBits=1

Parity=EVEN

#Program-Preview feed output information

ProgramFeed=4

PreviewFeed=5
```

16.3 Using a UMD to indicate the Production Switcher configuration

The Kalypso data includes a text component that describes the switcher configuration in terms of the source that appears at the output. Kaleido can decode this text component and display it on a UMD.

Here is a sample configuration, showing the mix/effects busses, that can be used to illustrate the type of information available, and the options available to the user.

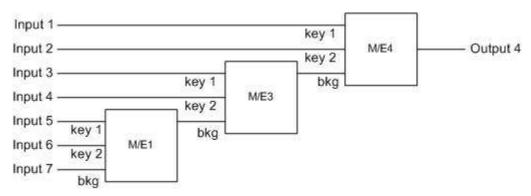


Figure 2 - M/E configuration

The user has four display options available:

Option 1

Show the number of the router input that is used as the background to the output.

In the above example, Kaleido K2 UMD associated with Output 4 of the switcher will display:

Input 7

Option 2

Show the direct background input source for the signal seen on output 4

In the above example, Kaleido K2 UMD associated with Output 4 of the switcher will display:

M/E3

Option 3

Show the combined data of options 1 and 2:

In the above example, Kaleido K2 UMD associated with Output 4 of the switcher will display::

M/E3 > Input 7

Option 4

Show the Source ID of the current background feed.:

16.3.1 Configuring the UMD to show Kalypso data

In the UMD configuration panel, select the radio button for UMD Dynamic Text.

In the ServiceID text box, enter the LongID or the alias for the computer running the Kalypso service.

In the *Text Address* text box, enter the number of the routing switcher physical output (value from 1 to 48) for options 1-3, or enter the address of the switcher (range 1-128) for option 4.

In the *Level* text box, enter the number of the option you wish to use for text display (value from 1 to 4)

16.4 Using Tallies to identify Preview/Program sources

The Tallies in a Monitor within a Kaleido layout displaying a video source can be used to show whether that source is included in the video signal appearing at the Preview and Program outputs of the production switcher. The necessary information is found in the Kalypso data.

To use the Kalypso data for this purpose, it is necessary to create a Tally Alarm in the Alarm Browser, and then associate that alarm with the Tallies in the Monitor. When creating the Alarm, use the following settings:

In the **ServiceID** text box, enter the LongID or the alias of the computer running the Kalypso service.

In the *Text Address* text box, enter the number of the Production switcher input whose presence at the Preview or Production output will be signaled by the tallies (value from 1 to 128)

Leave the Level text box empty.



16.4.1 Information display

The Tallies in the monitor will display the information in the following manner:

- Both Tallies OFF represent a source which is not used inside either the Preview output or the Program output
- Both Tallies ON represent a source which is used inside both the Preview output and the Program output
- Left Tally ON represent a source which is used only inside the Program output
- Right Tally ON represent a source which is used only inside the Preview output

17 PixelMetrix MPEG Analyzer

NOTE:

The PixelMetrix DV Station MPEG Analyser is not supported in the current release of this software. The following material is included in this manual for historical reference only.

PixelMetrix is an MPEG analyzer which provides data stream identification and bandwidth usage analysis.

The interface between Kaleido and third-party devices is managed using Miranda's iControl system. Each such device is addressed by Kaleido using its MirandaLongID, which is an address within the iControl protocol. This address must be installed manually on the Kaleido by the user.

The address can be found using the iNavigator application, which is part of iControl, once the device is installed on the network.

All visual elements in a Kaleido Layout that obtain information from a third-party device require the Service ID of that device to be entered at their configuration panel. The Service ID is either the Miranda LongID, or an alias that points to the LongID. An alias is a user-selected term that is easier to remember and enter than the LongID.

To install a device's LongID (and preferably an alias) on the Kaleido, proceed as follows:

- 1. Use iNavigator to locate the device on the network, and note its address (see the iNavigator manual for more details).
- Find the file C:\lcontrol\Startup\KG2Config.xml on the Kaleido frame and open it in Notepad.
 The service for the third-party device will be added in the section <OtherServices>, which will look like this:

<OtherServices>

- <!-- Use the same syntax as above to find services other than Kaleido Services -->
- <!-- AlphaNumeric Label is permitted here, example below:-->
 - <Service ServiceLabel="service1" id="xxx.xxx.xxx.xxx" /> -->

</OtherServices>

Supported third-party devices will then be added into this section as per the indicated format.
 See the Quick Start Guide for more detailed instructions on installing and connecting to third-party devices.

PixelMetrix MPEG Analyzer (identification and bandwidth usage analysis)

```
<Service ServiceLabel="PXL" id="10.3.4.10__DVStation_10.3.1.249_slot_4_TSP" />
```

Where:

PXL (within the quotes) is the alias (and could be any user-selected name);

- 10.3.4.10 is the IP address of the service (as found using iNavigator);
- _DVStation_ identifies this as a PixelMetrix analyzer;
- 10.3.1.249 is the IP address of the PixelMetrix frame
- SLOT4 identifies the slot in the PixelMetrix frame where the analyzer is installed;
- The remainder is always _TSP

If this service is installed (as an example), the "Other Services" section becomes:

<OtherServices>

- <!-- Use the same syntax as above to find services other than Kaleido Services -->
- <!-- AlphaNumeric Label is permitted here, example below:-->
- <Service ServiceLabel="service1" id="xxx.xxx.xxx.xxx" /> -->
- <Service ServiceLabel="PXL" id="10.3.4.10__DVStation_10.3.1.249_slot_4_TSP" />

</OtherServices>

Now, you may enter the **PXL** in MPEG Monitor and MPEG Service Info configuration panels that receive their information from this PixelMetrix analyzer.

You may choose any convenient name for the alias; for example, the PixelMetrix alias could be MPG:

<Service ServiceLabel="MPG" id="10.3.4.10__DVStation_10.3.1.249_slot_4_TSP" />

18 Control of an External Router by Kaleido-K2

Kaleido-K2 can remotely control a router connected to its inputs, allowing access to many more sources for its Layouts than could be provided on-chassis. The router must be installed as a service accessible though IP for control purposes. It will have a Miranda LongID, and preferably an Alias, which can be used to identify it when configuring its operation.

There are three basic aspects to the user interface to the router:

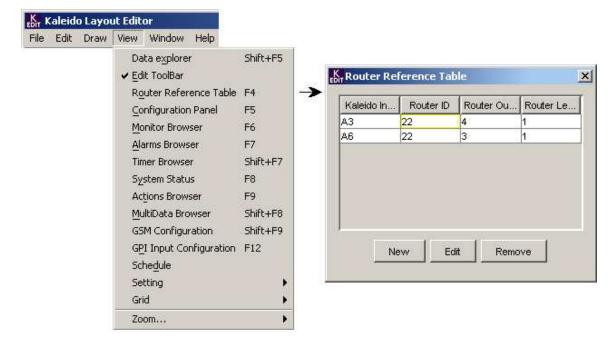
- The user creates a Router Reference Table which identifies which output of which router is connected to a specific Kaleido-K2 input, and the level of that router in Miranda's virtual router hierarchy.
- In a component control panel, the user who specifies a Kaleido-K2 input that is connected to a Router must also identify the Router input that is to be routed through to the Kaleido-K2.
- On the Kaleido-K2 output display, the user can right-click on a component that has an assigned Router input, and directly select which router input to display.

All of these are explained in more detail in the following sections.

18.1 Router Reference Table

The Router Reference Table identifies the relationship between the Kaleido-K2 inputs and the Router. For each Kaleido-K2 input that is connected to a Router, it gives the name of the router (Miranda LongID or alias), the router output number, and the level of the router in Miranda's virtual router hierarchy. The router input will be selected either from the Video Component Configuration panel or from the on-screen Kaleido-K2 output (see Router Input Selection)

The Router Reference Table is accessible via KEdit from the view menu or using F4. This table is available only in online mode.

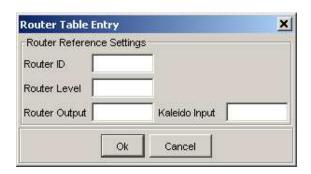


To create a new reference, click on the *new* button. To modify an existing router reference, select it and click on the *Edit* button. In either case, the following panel will appear: It will be empty if *New* was selected. It will contain the existing data if *Edit* was selected.

- Router ID is the Miranda LongID or the alias of the Router
- Router level is the level of the router output that is connected to the Kaleido-K2 input. Level number starts at 0. Note that you can put several levels here separating them by a comma. Doing this will enable you to switch the same cross point on more than one level.
- Router Output is the output of the router that is connected to the Kaleido-K2 Input. [enter a number between 1 and the number of the outputs on the router].
- Kaleido Input is the input of the Kaleido-K2 you want to configure [enter a number between 1 and 32].

Click OK to accept the changes and return to the Router Reference Table.

Click Cancel to exit this dialog and revert to the previous settings.



18.2 Router input selection through a video component

The video input to a Monitor is selected on the Video Screen component Assignment tab of its Configuration Panel in KEdit. If the selected input is connected to a Router, then it is also necessary to specify the router input. This is done on the same panel tab, as shown in the following figure:

Router Control:

This section is active only if the selected Kaleido-K2 input (as specified in the Assign Video Input portion of this panel) is connected to a router output (as defined in the Router Reference Table).

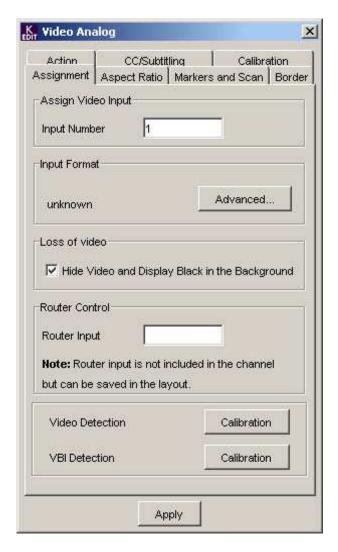
Working offline:

Router Control is not available.

Working online:

The Router Input data entry box will dynamically display the current input assigned at the corresponding router output. The user can change the input selection from the box by typing in a new Router Input number (a numeral, 1 or higher).

The router input selection is not part of the Channel information, as it is external to the Kaleido-K2. It will be saved as part of the Layout. Therefore, when a Layout is loaded, all the information identifying Monitor containing router inputs will be sent to the router.



19 Configuring the Interface to iControl GSM

Kaleido supports the Generic Status Message (GSM) protocol of Miranda's iControl system. The protocol allows status messages to be sent and received by devices connected to an iControl network through an iControl application server running the GSM service.

You must identify the GSM server that will be used to send and receive status messages in two different places:

- Kaleido reports errors to a specified GSM server using SNMP traps. You must specify the IP address of the GSM server in the <u>SNMP servers</u> portion of the Kaleido properties file in order to activate this functionality.
- You must specify the GSM server from which status messages will be received. This can be done from KEdit in the online mode only.

From the View menu, select GSM Configuration, or use the shortcut **Shift+F9**. The GSM Configuration panel opens

GSM Serve IP:

Use the pull-down list to select a GSM server from those available on the Kaleido's network.

Alias:

Enter an Alias by which this server will be known to Kaleido.

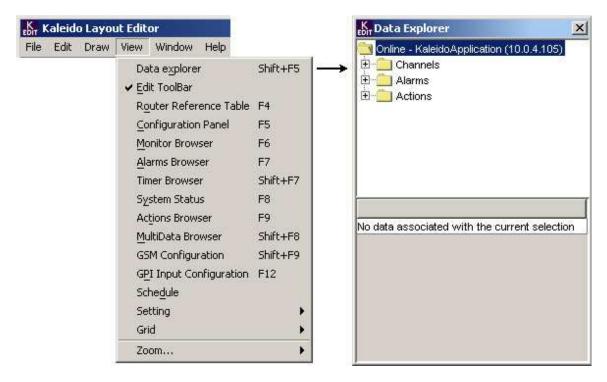
NOTE: it is obligatory to enter an alias.

Set up an <u>iControl GSM Device Alarm</u> to use the incoming status messages in the Kaleido layout.



20 Data Explorer

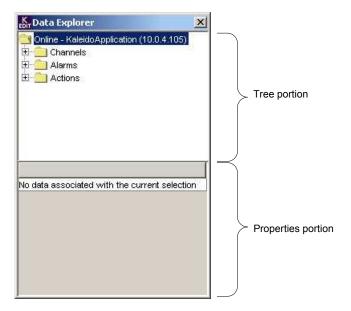
The Data Explorer is a window that can be opened in KEdit from the View Menu:



or by using the shortcut Shift+F5.

The Data Explorer gives the user access to information about certain categories of information created and stored in KEdit. In some cases the data can be modified via the Data Explorer, rather than by going back to the creation point in KEdit.

The Data Explorer window is divided into two sections, as shown in the figure:

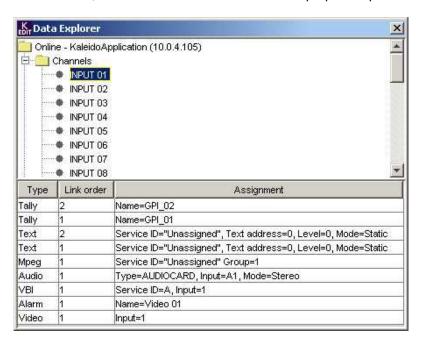


The **Tree portion** of the window shows the categories of data that can be accessed through the Data Explorer, and allows the user to expand the tree to find specific instances of those data types.

The **Properties portion** of the window shows the details of the data instance selected in the Tree portion, in a format appropriate to the data type.

20.1 Channels in the Data Explorer

Expand the *Channels* item in the Tree to find a channel of interest. The Data Explorer shows all Channels defined in the Kaleido, independent of whether they are associated with the current layout. Click on the Channel to display its details in the Properties portion. Note that you can drag the Data Explorer window boundaries to change its size, and drag the column headers to change column width, in order to see all the details in the properties portion.

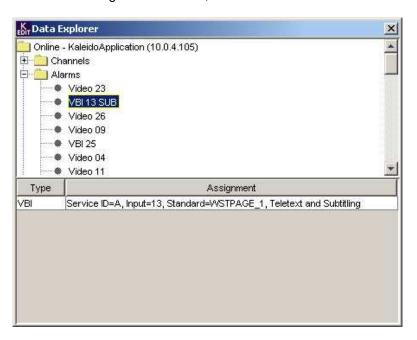


The channel properties are shown just as they would appear in the Monitor Configuration panel for a monitor to which this channel is assigned.

20.2 Alarms in the Data Explorer

The Tree portion of the Data explorer lists all existing Alarm groups (e.g. Montreal group). Within each Alarm group are listed all related alarms. Alarms not part of any group are listed at the same level in the tree hierarchy as Alarm groups.

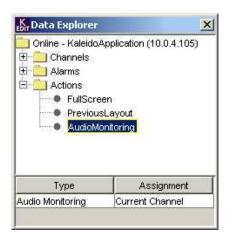
Expand the *Alarms* item in the Tree to find an Alarm of interest. The Data Explorer shows all Alarms defined in the Kaleido, independent of whether they are associated with the current layout. Click on the Alarm to display its details in the Properties portion of the Data Explorer. Note that you can drag the Data Explorer window boundaries to change its size, and drag the column headers to change column width, in order to see all the details in the properties portion.



The Alarm properties are shown just as they would appear in the Alarm Browser.

20.3 Actions in the Data Explorer

Expand the *Actions* item in the Tree to find an Action of interest. The Data Explorer shows all Actions defined in the Kaleido, independent of whether they are associated with the current layout. Click on the Action to display its details in the Properties portion. Note that you can drag the Data Explorer window boundaries to change its size, and drag the column headers to change column width, in order to see all the details in the properties portion.



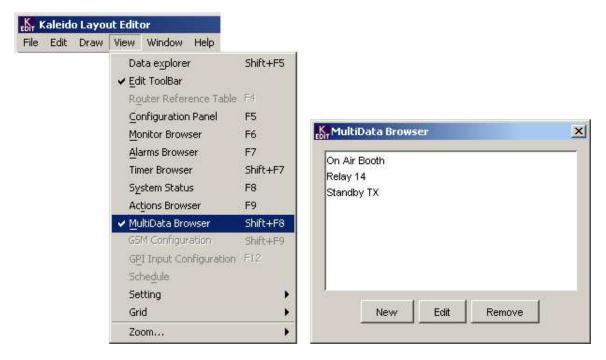
The Action properties are shown just as they would appear in the Action Configuration panel.

20.4 Key and Mouse Operations in the Data Explorer

KEY, MOUSE ACTION AND COMBINATIONS	ACTION
Click on a specific item	Put the focus on that specific item and displays its details in the lower part of the Data explorer window.
Click on a specific item + ↑ or ↓ keys	Put the focus on the specific item, then move up or down through the list while changing the focus item.
Click on the '+' sign beside an item	Expands the list of related items
Click on the '-' sign beside an item	Collapse the list of related items
Click on a specific channel + Delete key	Only supported for <i>Channels</i> : Delete the selected channels from the existing channel list. A popup window will ask for confirmation.
Click on a specific channel + CTRL-D	Same as Click on Channel + Press Delete key
Press CTRL while clicking on multiple items	Select all the clicked items. The operations available for a single item (i.e. Delete key, right-clicking, CTRL-D) are valid for a multiple selections.
Press SHIFT while clicking on multiple items	Select the clicked items, plus all items between the clicked items

21 MultiData Browser

The MultiData Browser is a window that can be opened in KEdit from the View Menu:



or by using the shortcut Shift+F8:

MultiData in Kaleido refers to combinations of different sources whose data can be displayed in a single text window. MultiData is one of the options for selecting the source of text for a Text Label in a Kaleido layout.

In the MultiData Browser window,

- · Click New to open a blank MultiData Configuration panel
- Click Edit to open the MultiData Configuration panel for the previously-defined MultiData source selected in the window
- Click Remove to delete the previously-defined MultiData source selected in the window

21.1 MultiData Configuration panel

The MultiData Configuration Panel appears as shown here.

Set the MultiData Source Name

Enter a name for the MultiData Source that will be defined in this configuration panel.

MultiData Element List

This window includes a line for each element that makes up this MultiData source. The two columns show:

MultiData Type: Click on the entry in this column to see a pulldown list of all available types. The choices are:

- <none MD>
- Dolby E Data
- Video Data
- XDS

Assignment: This entry shows the source of the data to be reported for this MultiData element. The assignment is made in the Display Information selection panels described below, and cannot be changed directly from this panel.

Element List management controls

Five pushbuttons are located below the MultiData element list window:

Up: move the selected element towards the top of the list

Down: move the selected element towards the bottom of the list

New...: adds a new blank element to the list. This element will have the <no type> attribute.

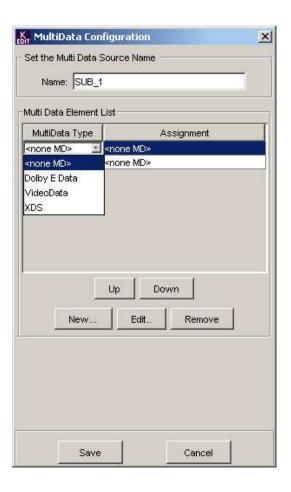
Edit...: opens the Display Information selection panel for this element (if the type is not <no type>)

Remove: delete this element from the list

21.2 Display Information panels

The Display Information panel is used to assign an input to a MultiData element, and to define the specific information that will be displayed when the MultiData source is selected as the source of text in a text label.

The Display Information panels can be opened in two ways:



- When a new type is assigned using the pulldown list in the MultiData Element List window of the MultiData Configuration panel
- When the Edit button on the MultiData Configuration panel is pushed with an element of type Video Data, XDS Data or Dolby E Data selected

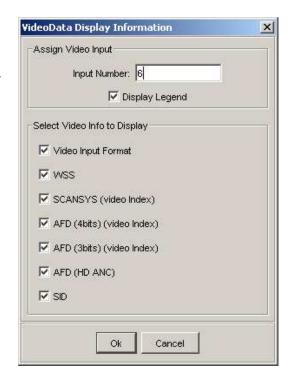
VideoData Display Information

Assign Video Input: enter the number of the Kaleido video input that this element will report.

Display Legend: click this checkbox to show text identifying the data as well as the data itself.

Select Video Info to Display: click the checkboxes to select the information that will be displayed for this element:

- Video input format
- o WSS
- SCANSYS (Video Index)
- AFD (4 bits) (Video Index)
- AFD (3 bits) (Video Index)
- o AFD (HD ANC)
- o SID

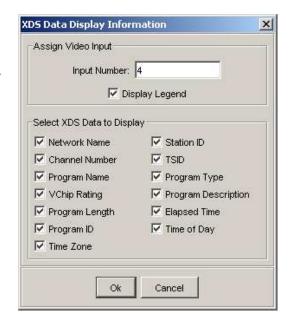


XDS Data Display Information

Assign Video Input: enter the number of the Kaleido video input that this element will report. Click the *Display Legend* checkbox to show text identifying the data as well as the data itself

Select XDS Data to Display: click the checkboxes to select the information that will be displayed for this element:

- Network Name
- Channel Number
- o Program Name
- VChip Rating
- o Program Length
- o Program ID
- Time Zone
- o Station ID
- o TSID



- Program Type
- o Program Description
- Elapsed Time
- o Time of Day

Dolby Display Information

Assign Video Input:

Specify the input that is to be used. Note that this must be an HD input to an HDX card.

Display Legend: click this checkbox to show text identifying the data as well as the data itself

Select Dolby-E Info to Display:

Use the checkboxes to select whether to display:

Program Configuration – a short-form description of the channel configuration

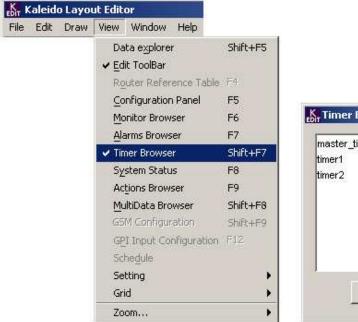
Program1 Dialogue Loudness Normalization level – reported in dB.



22 Timer Browser

A Timer is an entity within the Kaleido system that counts time. The most useful feature of a Timer is its ability to respond to Gateway commands sent from an automation system, and to synchronize to Kaleido's external LTC time code in order to create precise count-up and count-down sequences. The information generated by the Timer is presented in the Kaleido display by a Count Down Timer component. The Timer can fire an action at the End of Count.

The Timer Browser provides the access point for creating and configuring Timers. It can be opened in KEdit from the View Menu:





or by using the shortcut Shift+F7

22.1 Creating a Timer

In the Timer Browser window:

- click New to create a new timer
- click an existing timer in the list to select it and then:
 - click Edit to modify its configuration
 - click Remove to delete it from the list.

If you have clicked New or Edit, the Timer Configuration window will open.

Timer Information:

If this is a new Timer, enter a name or number in the Timer Name or ID box.

 NB: if you expect to export a layout using this timer to Kaleido Alto or Kaleido-Quad, use a number in the Name or ID box, as Alto/Quad does not accept text strings for names.

The information reported below the Timer Name or ID box shows the current status. The information is entered via the Gateway, and cannot be modified using this panel.

End Count Action:

From the pull-down list of available actions, select one to be fired when the timer count ends.

Select Sync Source:

Click the checkbox to synchronize this timer with the LTC external source identified in the adjacent text box.

Kaleido-K2 is always identified as A

Timer information

The following information describes the current status of a Timer:

Timer Preset: This is the count duration for *Count Up* and *Count Down* modes, and the End time for the *Remaining Time* mode

Start Time: This is the time at which the Timer is to start counting There are three options:



Format: HH:MM:SS

Time in HH:MM:SS: start counting when the LTC input equals this time. If no time is entered, the count will start immediately upon receipt of the command.

Note that the HH field allows the distinction to be made between previous and next day. If HH is 00, the time is presumed to be the previous midnight, while if it is 24, the next midnight is assumed. As an example, if you enter a start time of 00:12:00, and the current time is 00:12:15 when you trigger a Timer with a Preset Time of 00:01:00, the timer will begin to run immediately, and will adjust it's count to end at 00:13:00. On the other hand, if the start

time is 24:12:00, the timer will not start until the next day.

NOW: start counting immediately

WAIT: start counting when a Gateway <setKTimerTrigger> command is received with START as the trigger action.

Count Mode: There are three options:

UP: Count Up from zero (or an intermediate time if it can be calculated) to the Preset Time

DOWN: Count Down from the preset time (or an intermediate time if it can be calculated) to zero.

REMAINING: Calculates the time difference between the Preset time and NOW, and then counts down to reach zero at the preset time. In this case, the Preset Time is treated as a time of day, and not a duration.

End Mode: what happens when the timer reaches its end of count. There are three options:

LOOP: restart the timer and repeat it's cycle (N/A for the Remaining Time mode)

STOP: stop the timer

OVERRUN: count through the end point, and continue to count away from the end point. Note that the Count Down Timer display at the Kaleido output will change to show that the Timer is in the Overrun mode (a + appears along with the arrow icon), and it will display the elapsed time since the end of count was reached.



22.2 Exporting a Timer

If a Timer is created in KEdit in the offline mode, it's details must be sent to the destination Kaleido-K2 when the Layout is applied online in order for it to function properly.

• In the **File - Apply Layout Online** panel, check the Timer checkbox to send details of the timer to the destination Kaleido-K2 when the layout is applied online.

Timers are included in the data when a layout is exported to a Kaleido Alto/Quad, but be aware that timers must have numeric names to be recognized by an Alto or Quad.

22.3 Using Gateway Commands to operate a Timer

The most effective way to use a timer for precise timing applications is to configure and trigger it via the Gateway. An automation system can send the requisite commands, thereby integrating the Kaleido's on-screen timers into the system.

A single gateway command is used to control timers:

<setKTimer2>set TimerName="timername1" StartTime="HH:MM:SS:FF"
PresetTime="HH:MM:SS:FF" TimerMode="MODE" EndMode="ENDMODE" </setKTimer2>

Where:

- NAME is the name assigned to the Timer in the Timer Configuration panel accessed from the Timer Browser.
- StartTime may be one of the following:
 - HH:MM:SS:FF time in hours:minutes:seconds:frames at which this Timer will start its count, depending on its configuration and presence of triggers. Note that if the HOURS is 00, the start time is deemed to be the previous midnight, whereas if HOURS is 24, it is considered to be the next midnight. This allows the timer to decide whether it should be counting or waiting to start when it compares the start time to the current time. (Note: the present implementation allows the user to send "Frames" information, but it is not used by the timer, which will start on the exact second)
 - NOW the Timer will start counting immediately upon receiving the command
 - WAIT the Timer will not start until it receives a setKTimerTrigger gateway command with the argument START
- PresetTime may be one of the following:
 - Count duration (hours:minutes:seconds:frames) for Count Up and Count Down modes.
 - End time (hours:minutes:seconds:frames) for the Remaining Time mode.
 - Note: the present implementation allows the user to send "Frames" information, but it is not used by the timer, which will use count durations or end times based on seconds.
- Time Mode is the operating mode of the timer. Possible values are: UP, DOWN, REMAINING
- EndMode defines what is to happen when the Timer reaches the end of its count.
 Possible vales are: LOOP, STOP, OVERRUN

23 Using CSV Files to Import and Export Channels

There may be circumstances where it is convenient to create Channels offline and import them into Kaleido, or export Channels from Kaleido for offline storage or transfer.

To support this functionality, Kaleido Edit can import and export channel definition files in .csv format. This allows the use of programs such as Microsoft Excel to create and edit channel files.

23.1 Definition of the file format

The format of the .csv files that are used to import and export files from Kaleido is shown in a table for simplicity. If you are creating the file in a spreadsheet program such as Excel, then it will have this appearance. Save it using the type "CSV (comma delimited)"

NOTE: only COMMA [,] or SEMICOLON [;] are accepted by Kaleido as delimiters in a CSV file. Kaleido cannot interpret CSV files using other delimiters such as period [. [, slash [/] or backslash [\]. Be sure the program that generates the CSV file uses one of the acceptable delimiters.

Note that a line starting with a blank cell is interpreted as a COMMENT line, and will be ignored.

	Line that	Starts with	A blank	Cell is a comment	Line, and so	Will be	ignored	
	The	Following	Lines	Describe the	Channel	definition		
	Channel	Туре	Link Order	Address fields				
Channel	Input 01	Video	1	A1				
Channel	Input 01	Audio	1	EMBEDDED	1	1	1	Stereo
Channel	Input 01	Audio	2	EMBEDDED	1	1	2	Stereo
Channel	Input 01	Audio	3	EMBEDDED	1	2	1	Stereo
Channel	Input 01	Audio	4	EMBEDDED	1	2	2	Stereo
Channel	Input 01	Audio	5	EMBEDDED	1	3	1	Stereo
Channel	Input 01	Audio	6	EMBEDDED	1	3	2	Stereo
Channel	Input 01	Audio	7	EMBEDDED	1	4	1	Stereo
Channel	Input 01	Audio	8	EMBEDDED	1	4	2	Stereo
Channel	Input 01	Audio	9	AUDIOCARD	15	Stereo		
Channel	Input 01	Audio	10	STREAMING	10.6.7.8	c1	Monitoring	Stereo
Channel	Input 01	Text	1	Static	VTR Room 1			
Channel	Input 01	Text	2	Dynamic	TSL	1	1	
Channel	Input 01	Alarm	1	Freeze - Video 01				
Channel	Input 01	Tally	1	GPI_01				
Channel	Input 01	Timecode	1	1				
Channel	Input 01	VBI	1	А	1			

The table contains 9 columns. The contents of columns 1 to 4 are strictly defined:

Column 1: data type

- If blank, the following eight cells in the row contain comments
- If CHANNEL, the remainder of the row is formatted according to the following description

Column 2: the name of the channel

Column 3: the type of address that will be defined in this row

Column 4: the Link Order of the address defined in this row

Columns 5 to 9 contain the details of the address of this component within the channel. The contents vary with type (as given in column 3), as outlined in the following description.

- Video column 5: the Input Number (including the system name if needed).
- Audio column 5: EMBEDDED, AUDIOCARD or STREAMING

In case of EMBEDDED, we have:

- column 6: the video input (from 1 to 32).
- column 7: the group index (from 1 to 4)
- column 8: The AES (1 or 2)
- column 9: one of STEREO, LEFT or RIGHT

In case of AUDIOCARD, we have:

- column 6: the audio input.
- · column 7: one of STEREO, LEFT or RIGHT

In case of STREAMING, we have:

- column 6: the IP Address
- column 7: the Feed Id
- column 8: the Usage either MONITORING or METERING
- column 9: one of STEREO, LEFT or RIGHT
- Text column 5: Static or Dynamic

In case of Static, we have:

column 6: the Text

In case of Dynamic, we have:

- column 6: the Service ID
- column 7: the Text Address
- column 8: the Level.
- Alarm column 5: the name of the alarm.
- Tally column 5: the name of the tally alarm.
- Timecode column 5: the Video Input (between 1 and 32)
- VBI column 5: the Service ID (or its alias)
 - column 6: the Input Number.

The actual csv file corresponding to the above table will have the following appearance. Note that all data entries must be present on a line, so each table cell that is blank must be represented by a delimiter

(comma or semicolon) in the .csv formatted file. In this example the fields are separated using *semicolons*, but using *commas* is equally valid. No other delimiters are accepted.

```
;Line that;Starts with;A blank;Cell is a comment;Line, and so;Will be;ignored;
;The;Following;Lines;Describe the;Channel;definition;;
;Channel;Type;Link Order;Address fields;;;;
Channel; Input 01; Video; 1; A1;;;;
Channel; Input 01; Audio; 1; EMBEDDED; 1; 1; 1; Stereo
Channel; Input 01; Audio; 2; EMBEDDED; 1; 1; 2; Stereo
Channel; Input 01; Audio; 3; EMBEDDED; 1; 2; 1; Stereo
Channel; Input 01; Audio; 4; EMBEDDED; 1; 2; 2; Stereo
Channel; Input 01; Audio; 5; EMBEDDED; 1; 3; 1; Stereo
Channel; Input 01; Audio; 6; EMBEDDED; 1; 3; 2; Stereo
Channel; Input 01; Audio; 7; EMBEDDED; 1; 4; 1; Stereo
Channel; Input 01; Audio; 8; EMBEDDED; 1; 4; 2; Stereo
Channel; Input 01; Audio; 9; AUDIOCARD; 15; Stereo; ;
Channel; Input 01; Audio; 10; STREAMING; 10.6.7.8; c1; Monitoring; Stereo
Channel; Input 01; Text; 1; Static; VTR Room 1;;;
Channel; Input 01; Text; 2; Dynamic; TSL; 1; 1;
Channel; Input 01; Alarm; 1; Freeze - Video 01;;;;
Channel; Input 01; Tally; 1; GPI_01;;;
Channel; Input 01; Timecode; 1; 1; ; ; ;
Channel;Input 01;VBI;1;A;1;;;
```

Note:

- The content of the file is not case sensitive.
- Any line containing an error will be ignored, but the file won't be ignored.

23.2 Importing csv files to and exporting csv files from KEdit

The Data Explorer provides the access point to .csv file import and export functions.

- Open the Data Explorer from the View menu via View→Data Explorer, or use the shortcut Shift+F5
- Right-click on a Kaleido in the Tree portion of the Data Explorer to open its contextual menu, then click to select either the import or the export option, and follow the on-screen instructions.

Please see the *How To* for complete and detailed instructions on importing and exporting channel definition files in .csv format.

24 Using the Kaleido Layout Editor software

Kaleido Layout Editor (KEdit) is used to create layouts and configure the Kaleido-K2. When the computer running KEdit is connected to the Kaleido-K2 through a TCP/IP network, KEdit can export the Layouts to the Kaleido-K2. It can also open the Kaleido-K2's current layout, and manipulate it in real time, so that changes made to the layout in KEdit appear immediately at the Kaleido-K2 monitor wall output. The modified Layout can then be saved in the Kaleido-K2's database.

The menu and toolbar area of the KEdit screen appears as follows:



- 1 The Kaleido Layout Editor window header
- 2 Pull-down menus.
- 3 The Edit Toolbar.
- 4 The Component toolbar, with tools used to insert components into the on-screen layout.
- **5** The title bar for the active window identifies the layout being displayed.
- **6** The active layout area
- 7 The Data Display Window, showing data and status for certain items.

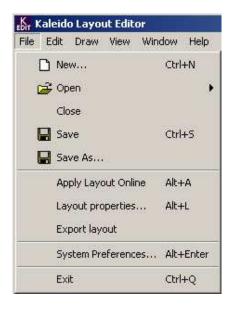
Each of these is discussed and described in detail in the following sections.

In addition to the icons in the toolbars, many of the menu commands have keyboard shortcuts. These are indicated in the menus themselves, and are all either CRTL+(letter) commands, ALT+(letter), or Function keys (F#, where # is an integer between 1 and 12) corresponding to the 12 function keys at the top of the keyboard. Thus in many cases there are three different ways to access a specific command or control panel.

24.1 Pull-Down Menus

The six pull-down menus operate as standard Windows menus

24.1.1 File Menu



File–New (Ctrl+N): Opens the New Layout Format dialog box.

Five items must be specified:

Display Ratio: Select one of three standard ratios (4:3, 16:9 and 5:4) from a pull-down box, or specify a non-standard ratio. The selected value should match the ratio of the display that will be connected to the output of the Kaleido.

Configuration: Select single-head or dualhead. The Dual-head option permits the Kaleido-K2 layout to occupy two displays. At present, only side-by-side positioning of the two displays (horizontal tiling) is supported. Note that you need to have the Dual-Head option installed for this to work.

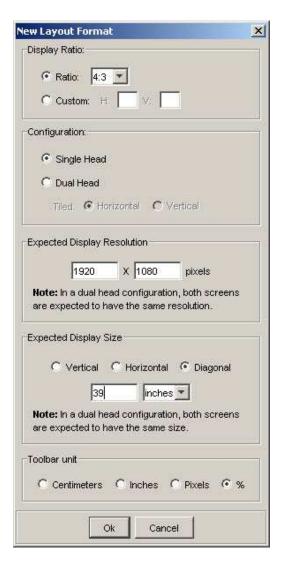
Expected Display Resolution: Enter the vertical and horizontal resolution (in pixels) of the monitor wall display that will be used to display this layout

Expected Display Size: Enter either the vertical, horizontal or diagonal size of the monitor wall display that will be used to display this layout. Select the units from the pulldown (cm or inches)

Toolbar unit: Click the radio button to select the units that will be used to display component size and position in the Data Display Window at the bottom of the layout window.

The default values for Expected Display Resolution and Expected Display Size are 0. If new values are not entered, the only unit enabled in the Toolbar Unit section of this panel, and on the pulldowns in Size/Position tab of the Monitor Configuration panel will be %

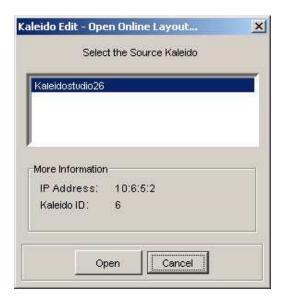
- If Expected Display Resolution is set to something other than 0x0, then the "pixels" unit will be available in both the Size/Position tab and the Toolbar Unit selection area.
- If Expected Display Size is set to something other than 0, then "cm" and "inches" units will be available in both the Size/Position tab and the Toolbar Unit selection area.



File-Open: Presents a subsidiary menu with two elements:

File-Open-File (Ctrl+F): presents a standard Windows Open File dialog box, where the user can search the computer for files of type .kg2, which are Kaleido layouts. Once a file is selected, it can be opened by clicking the open box, or by double clicking it in the list. The window associated with that file will be displayed on the screen in the offline mode.

File-Open-Online (Ctrl+O): opens a dialog box with a scrollable list, titled "Select the source Kaleido", of all online Kaleido-K2s. Selecting one of these and clicking Open, or double-clicking one of these in the list, will open the Layout currently loaded in that Kaleido-K2 on the local screen, in the on-line mode. In this mode, changes made to the screen in KEdit will immediately be reflected in the output of the selected Kaleido-K2. The revised layout can be saved in one of the Kaleido-K2's presets using the local keyboard or Kaleido-RCP. The window also shows the selected Kaleido-K2's IP address and ID number.



File-Close: Closes the current Layout

File-Save (Ctrl+S): Saves the current layout under its existing name

File–Save As..: Opens the Save File dialog box, allowing the current layout to be saved on the local computer. The layout must be given a name, and may be saved in any desired location. The *Files of Type* pulldown offers the user two options:

Select this option	to do this
Kaleido and Alto Layout (.kg2, xml)	Save two copies of the layout file: - one in .kg2 format for use on the Kaleido-K2, - one in .xml format for use on the Kaleido Alto or Quad
Kaleido KG2 Layout (.kg2)	Save the layout in .kg2 format, for use on the Kaleido-K2

_

File–Apply Layout Online... (Alt+A): Calls up a subsidiary box containing a scrollable window titled "Select the destination Kaleido" in which are listed all the Kaleido-K2s currently on-line on the network, identified by name. Selecting one shows its IP address and Kaleido ID in the *More Information* box.

You should also select additional data to be exported, including Channels, Alarm Monitors, images, Actions, Audio Scales, Sounds, MultiData source definitions and Timer definitions.

There are two buttons at the bottom of the box - Load and Cancel.

- Clicking LOAD sends the current layout and selected data to the selected Kaleido-K2 and updates its output. The layout can be saved in one of the Kaleido-K2's presets using the local keyboard or Kaleido-RCP.
- Clicking CANCEL closes the box without applying changes.

File-Layout properties...: Opens a dialog for setting the properties of the current layout. This panel duplicates the lower part of the New Layout Format dialog box.

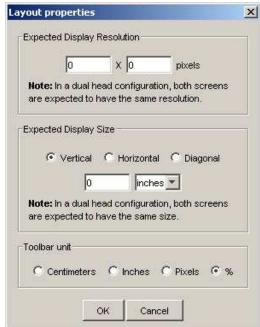
The following parameters can be set:

Expected Display Resolution: Enter the vertical and horizontal resolution (in pixels) of the monitor wall display that will be used to display this layout

Expected Display Size: Enter either the vertical, horizontal or diagonal size of the monitor wall display that will be used to display this layout. Select the units from the pulldown (cm or inches)

Toolbar unit: Click the radio button to select the units that will be used to display component size and position in the Data Display Window at the bottom of the layout window.





The default values for Expected Display Resolution and Expected Display Size are 0. If new values are not entered, the only unit enabled in the Toolbar Unit section of this panel, and on the pulldowns in Size/Position tab of the Monitor Configuration panel will be %

- If Expected Display Resolution is set to something other than 0x0, then the "pixels" unit will be available in both the Size/Position tab and the Toolbar Unit selection area.
- If Expected Display Size is set to something other than 0, then "cm" and "inches" units will be available in both the Size/Position tab and the Toolbar Unit selection area.

File–Export Layout: Opens a dialog for exporting the current Layout to a Kaleido Alto or Quad.

Enter the IP address of the Alto frame in the *Alto Frame Ip Address* combo-box. Note that clicking on the arrow will show the most recent IP addresses used.

Enter the name the layout will have on the destination Kaleido Alto.

Select the data types you want to export with the Layout, using the checkboxes:

- Alarms all alarms associated with the current layout
- Channels the channels associated with the current layout
- Actions the actions associated with the current layout
- Images background images and logos associated with the current layout
- Audio scales audio meter scales associated with the current layout
- Timers are automatically included in the exported data, but Alto and Quad will not correctly identify these timers unless they have been given a <u>numeric name</u> using the Timer Browser.



Note that data files with the same name that already exist on the Alto or Quad will be overwritten by the new data.

Click Export to export the layout and the selected data to the destination Kaleido Alto

 An error message will appear if the data files cannot be found

Click Cancel to close the dialog without exporting the layout.

File–System Preferences... (Alt+Enter): Opens the Preferences dialog for setting these functions:

Kaleido Discovery Mode:

- Unicast (KEdit will ask the Lookup at the specific IP address to find Kaleido-K2s)
- Multicast (KEdit will ask the first lookup found on the network to find Kaleidos)

Saving Channels:

- Prompt to save channels when exiting monitor edit mode
- Save channels without prompting when exiting monitor edit mode

Saving default boot up layout

- Auto Save boot up default layout will automatically save the new layout as the default layout for boot up anytime the layout is changed
- Manual Save boot up default layout disables the auto-save feature. The current layout can be saved as the default boot up layout at any time from the View menu by selecting View— Setting—Save this layout as default boot up layout



24.1.2 Edit Menu

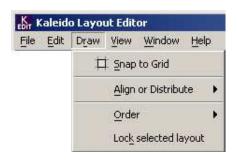
This is a standard Windows format Edit menu, allowing the user to modify the contents of the current window. The menu has eight elements:



Undo	(Ctrl+Z)	Undo the previous action
Redo	(Ctrl+Y)	Redo the last undone action.
Cut	(Ctrl+X)	Removes the selected object(s) from the display and saves them to the clipboard.
Сору	(Ctrl+C)	Makes a copy of the selected object(s) in the display and saves them to the clipboard.
Paste	(Ctrl+V)	Inserts the contents of the clipboard into the on-screen layout.
Select All	(Ctrl+A)	Select all objects in the layout.
Duplicate	(Ctrl+D)	Makes a copy of the current selection and inserts it into the screen to the right and below, and in front of the original.
Delete		Deletes the selected object from the layout.

24.1.3 Draw Menu

This menu allows the user to organize the presentation of objects in the Layout. There are four elements in this menu:



Draw–Snap to grid: Limits the movement objects to an invisible grid structure underlying the Layout, facilitating the visual alignment of objects in the display. Turn this on and off by selecting the menu item. When Snap to Grid is on, a tick mark appears next to it in the menu. See also the **Shortcut toolbar** – the icon shows whether Snap-to-Grid is on or off.

Draw-Align or Distribute: presents a subsidiary menu with eight elements:

•	Align Lefts	aligns the left sides of all selected objects with the left side of the first-selected object.
•	Align Centers	aligns the centers of all selected objects with the center of the first-selected object.
•	Align Rights	aligns the right sides of all selected objects with the right side of the first-selected object.
•	Align Tops	aligns the tops of all selected objects with the top of the first-selected object.
•	Align Middles	aligns the middles of all selected objects with the middle of the first-selected object.
•	Align Bottoms	aligns the bottoms of all selected objects with the bottom of the first-selected object.
•	Distribute Horizontally	spaces the selected objects evenly between the left-most and right-most objects.
•	Distribute vertically	spaces the selected objects evenly between the top and bottom objects.

Draw–Order presents a subsidiary menu with two elements:

Send to Back sends the selected object(s) to the rear of the Layout

Bring to Front brings the selected object(s) to the front of the Layout

These terms refer to the appearance of the Layout. Objects in front mask objects behind them from view.

Draw–Lock selected layout locks or unlocks the current layout. The menu shows a checkmark beside the item when the layout is locked, and no checkmark when it is unlocked. The function is also available from an Edit Toolbar button, whose icon shows the current status..

- When the layout is LOCKED, the position and size of components and Monitors within the Layout is frozen
- The components and Monitors can still be CONFIGURED within a LOCKED layout.
- Monitors within the layout can be Locked or Unlocked independently of the Layout's lock status.

24.1.4 View menu

This menu allows the user to call up dialog boxes that relate to on-screen objects and system parameters.



The menu has fifteen elements:

View-Data Explorer: Opens the Data Explorer window.

View–Edit Toolbar: Shows and Hides the Edit toolbar. The menu item has a checkmark when the Edit Toolbar is shown.

View–Router Reference Table (F4): Opens the Router Reference Table.

View–Configuration Panel (F5): Opens the Configuration Panel for the selected component. The Configuration Panel provides access to all available set-ups and adjustments for that component. For example, if the selected object is a Video Screen, the Configuration Panel will allow the selection of the video source that will appear in that Video Screen, provide proc. amp. functions for the input, allow Alarms to be set to monitor that source, etc.

View–Monitor Browser (F6): Opens the Monitor Browser, which lists all the available Monitors. The Monitor Browser panel provides an interface at which the user can place Monitors in the Layout, and save copies of Monitors for future use.

- To create a Monitor in a Layout, drag the preview from the Monitor Browser onto the Layout.
- To save a Monitor you have created in a Layout, press the Ctrl key and drag the Monitor from the Layout to the list of Monitors.

View–Alarms Browser (F7): Opens the Alarms Browser, a panel listing all currently-defined Alarm Monitors and providing the access point for Alarm creation and management.

View–Timer Browser (Shift+F7): Opens the Timer Browser, a panel listing all currently-defined Timers and providing the access point for Timer configuration.

View–System Status (F8): Presents a window summarizing the current status of the Kaleido-K2 system connected to KEdit through the File→Open→Online menu.

View–Actions Browser (F9): Opens the Actions Browser, a panel listing all currently-defined Actions and providing the access point for Action creation and management

View–MultiData Browser (Shift+F8): Opens the MultiData Browser, a panel listing all currently-defined MultiData sources, and providing the access point for creating and editing MultiData sources.

View-GSM Configuration (Shift+F9): Opens the Generic Status Message Configuration Panel, where the user can enter the IP address and alias of the iControl Application Server running the GSM service with which the Kaleido can receive and publish GSM status messages. This is only available in online mode.

View–GPI Input Configuration (F12): Opens the GPI Input Configuration, a panel that helps you configure Actions triggered by GPI Input events.

View–Schedule: Opens the Schedule Editor, a panel listing all currently-defined Schedule Elements and providing the access point for Schedule Element creation and management

View–Setting This opens a sub-menu with four choices:

View–Setting–Output Configuration (F11): If you are in the Online mode, selecting this opens a window titled "Video Output Calibration", allowing output parameters such as screen resolution, output level and equalization to be configured.

View–Setting–VBI/ANC Standard: If you are in the Online mode, selecting this opens a window titled "VBI/ANC Data Standard Selection", allowing configuration of the decoding capability of the system.



View–Setting–Stop Action Processing: Select this to stop all Actions from executing on an online Kaleido-K2. A checkmark will appear beside this item when it is selected. No Action can be executed until this option is deselected. Deselect by accessing it again from the menu and clicking. The checkmark will disappear.

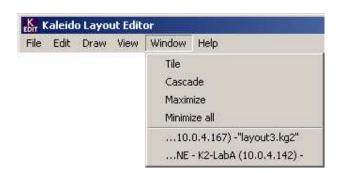
View–Setting–Save this layout as default boot up layout: Select and click this item to save the current layout of an online Kaleido-K2 as its default boot up layout. The Kaleido-K2 will display this Layout during the boot-up of the system. Note that if you have selected *Auto Save default boot up layout* on the System Preferences panel accessible from the File Menu (File – System Preferences), then every time a new layout is loaded it will be saved as the default boot up layout.

View-Grid: This presents a subsidiary menu with two items, which control an on-screen grid displayed on the KEdit screen. This is useful for creating uniform Layouts. The grid does not appear on the Kaleido Monitor wall output when the Layout is displayed. The first menu item toggles between Show and Hide when the item is selected in the menu or F2 is pushed. The second menu item, Setting... opens a formatting box where the number of rows and columns in the displayed grid can be chosen.

Note that this is not the same grid used in the Draw-Snap to Grid function

View–Zoom: The pull-down list of available zoom levels affects the appearance of the KEdit display only, allowing the layout to be refined more easily.

24.1.5 Window Menu



Tile: fill the edit space with all open layouts, scaled to fit the available space.

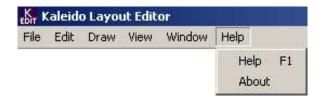
Cascade: position the open layouts in the edit window so all their title bars are displayed.

Minimize: minimize the current layout

Minimize All: minimize all opened layouts

(list of open layouts): a list all currently-open layouts, by name. Move the cursor over a contracted name to see the full name. Select one from the list by clicking on the name; the selected layout will move to the front of the edit window.

24.1.6 Help Menu



Help-Help (F1): Opens the on-line User Manual.

Help-About: Displays information about the version of KEdit in use.

24.2 Edit Toolbar

The Edit toolbar on the Kaleido Layout Editor screen contains shortcuts to various commands. All but two of these are accessible through the menus, and some are also available through keyboard shortcuts. The following figure illustrates these icons:

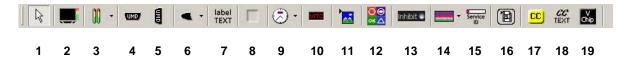


#	Keybd Equiv.	Menu Access	Description of Function
1	CTRL+N	File-New	Opens the New Layout Format dialog to create a new layout.
2	CTRL+F	File-Open-File	Opens a saved offline Layout.
3	CTRL+S	File–Save (Save as)	Saves the current Layout (opens the Save file dialog box for a new file).
4	CTRL+X	Edit-Cut	Remove the selected element from the Layout and store it in the clipboard.
5	CTRL+C	Edit-Copy	Make a copy of the selected element and store it in the clipboard.
6	CTRL+V	Edit-Paste	Paste the copy of the clipboard contents into the layout.
7	CTRL-Z	Edit-Undo	Undo last action.
8	CTRL-Y	Edit-Redo	Redo an undone action.
9		Draw-Snap to Grid	Toggles the Snap-to-Grid feature. The appearance of the icon indicates the current status: ON OFF
10		Draw–Align or Distribute– Lefts	Align the left sides of all selected elements to the left side of the first-selected element.
11		Draw–Align or Distribute– Centers	Align the centers of all selected elements to the center of the first-selected element.

	T		
12		Draw–Align or Distribute– Rights	Align the right sides of all selected elements to the right side of the first-selected element.
13		Draw–Align or Distribute– Tops	Align the tops of all selected elements to the top of the first-selected element.
14		Draw–Align or Distribute– Middles	Align the middles of all selected elements to the middle of the first-selected element.
15		Draw–Align or Distribute– Bottoms	Align the bottoms of all selected elements to the bottom of the first-selected element.
16		Draw–Align or Distribute– Distribute Horizontally	Distribute the selected items horizontally.
17		Draw–Align or Distribute– Distribute Vertically	Distribute the selected items vertically.
18		Draw-Order-Send to Back	Move the selected element to the back of the layout. It will be hidden by any other element.
19		Draw-Order-Bring to Front	Move the selected element to the front of the layout. It will hide any other element.
20			Change the fill color of the current object to the fill color shown beneath the icon. Click on the down-arrow beside the icon to open a window to select other colors. Applies only to Text Labels and Background.
21			Change the text color of the current component to the text color shown beneath the icon. Click on the down-arrow beside the icon to open a window to select other colors. Applies only to Text Labels, UMD text and Alarm Group Inhibit buttons.
22			Change the font of the current component for on- screen text displays, digital clocks and count- down timers. The selected font can include Unicode characters for support of Japanese, Chinese and other international languages.
23			Set the font size for a selected element
24		View-Zoom	Select the view magnification for the Kaleido Layout. Applies only to the layout as viewed on KEdit.
25		Draw–Lock selected layout	Lock or unlock the current layout (Monitors and Components cannot be moved or resized in a locked Layout). The appearance of the icon indicates the current status:
			LOCKED UNLOCKED

24.3 Component Toolbar

The Component toolbar shows a series of icons representing tools with which the user can insert visual elements into the Layout, and change their size and position.



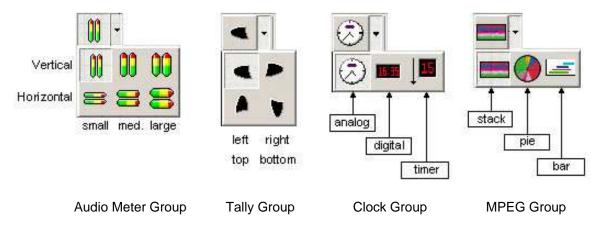
- 1. Selection tool: use this tool to select items, to drag them around the Layout, and to grab edge and corner points to resize objects
- 2. Opens the Monitor Browser control panel, allowing Monitors to be added to the Layout.

The remaining tools are all used to insert components into the Layout. The tool name and icon indicate the component type. The cursor changes to a cross (+) when any of these tools are selected. The tool name is displayed in a pane at the bottom of the Layout. Click in the Layout and drag to insert a component of the desired size.

- 3. Audio meter group (see below)
- 4. Horizontal UMD
- 5. Vertical UMD
- 6. Tally group (see below)
- 7. Text label
- 8. Group box
- 9. Clock group (see below)
- 10. Video Timecode viewer
- 11. Logo
- 12. General Status indicator
- 13. Alarm Group Inhibit button
- 14. MPEG monitor (see below)
- 15. Service ID indicator
- 16. Streaming viewer
- 17. Closed-caption status indicator
- 18. Closed-captioning text
- 19. V-Chip status indicator

Note: This version of the software does not provide a tool to insert a video screen into the layout. All of the Monitors available in the Monitor Browser include a video screen, and provide the convenience of source assignment using Channels, and the use of the full screen mode for video. A custom Monitor containing only a video screen could be created if it is needed, by editing an existing Monitor.

Where there are similar or related tools, they are grouped together to prevent tool bar clutter. Such a group can be identified by the arrow icon to the right of the tool icon. Clicking the tool icon selects that tool directly. Clicking the arrow opens the group and shows all the available options. Clicking on one selects it. When the tool is used, or if the group is closed by selecting another tool or clicking elsewhere in the window, the selected tool becomes the default tool for that group.



24.4 Title Bar

The title bar identifies the current layout, with this format:

Location \ name – (changed) | aspect ratio (note)

Location: identifies the path to the current layout. Implicit in this is the identification of the layout as:

- Offline: located on the local hard drive the path will show as C:\MyLayouts\ etc.
- Online: located on the Kaleido the path will show as KaleidoApplication (XXX.XXX.XXX) where the bracketed value is the IP address of the Kaleido.

Name: the name given to this layout when it was saved. The type is always .kg2

(changed): The presence of an asterisk (*) following the name of the layout indicates that the current layout has been modified and is not the same as the named layout that was loaded.

Aspect ratio: the aspect ratio of the current layout, either 4x3 or 16x9

Note: additional information. For example, if the layout is intended to be used with the dual head feature, the note may read: "(horizontal dual head)"

Examples:

An offline layout in 16x9 format:

C:\My_Layouts\layout 2.kg2 | 16x9

 An online layout in 16x9 format, changed from the loaded value, and intended for a horizontal dual head configuration:

KaleidoApplication (10.6.5.8) – layout1.kg2 * | 16x9 (Horizontal Dual Head)

24.5 Data Display Window

At the very bottom of the Layout display in KEdit is the Data Display Window. This is a single-line text window in which are shown various messages related to the current functionality of KEdit. The following message types are displayed:

Position and Size: the window shows the position in the display of the top left corner of the currently-selected component, and it's size (Horizontal, Vertical and Diagonal), all expressed in the units selected in the File-Layout Properties dialog (cm, inches, pixels or %)



Note: if the component is a Monitor, its position and size can be set directly through the Size/Position tab in its configuration panel.

Current tool selected: the window shows the current tool, useful when placing components in a layout, as the cursor is generic. The window also shows the name of the tool over which the selection tool is placed on the component toolbar.



24.6 Summary of Mouse-Key Actions in a Layout

Here is a summary of all combinations of Key-Mouse operations that can be used in a layout.

KEY, MOUSE ACTION AND COMBINATIONS	ACTION
Single click on a Component	Component gets the focus. If the Configuration Panel is opened, it is modified to display the Component's properties. If the component is part of a monitor, this only works if the monitor is in unlocked mode.
Double click on a Component	Configuration Panel is opened with the corresponding component's properties. The focus is on the Configuration panel. If the component is part of a monitor,

	this only works if the monitor is in unlocked mode.
Single click on a Monitor	Monitor gets the focus. If the Configuration Panel is opened, it is modified to display the Monitor's properties. This only works if the monitor is in locked mode.
Single click outside a Monitor	It the corresponding monitor was in unlocked mode, then it goes back to its default locked mode.
Double click on a Monitor	Configuration Panel is opened with the corresponding monitor's properties. The focus is on the Configuration panel. This only works if the monitor is in locked mode.
Right click on a Component	A contextual menu is displayed (see section 24.8.2). If the component is part of a monitor, this only works if the monitor is in unlocked mode.
Right click on a Monitor	A contextual menu is displayed (see section 24.8.1). This only works if the monitor is in locked mode.
Alt-click on a Component part of a Monitor	Same as Single click on a Component except it also unlock the corresponding Monitor if it is locked.
Alt-click on a Component not part of a Monitor	Same as Single-click on a Component.
Ctrl-click on a Component or a Monitor	Same as Single-click on a Component.
Shift-click on a Component or a Monitor	Includes - or excludes if already included – the Monitor or the Component inside the multiple selection.
Ctrl-click + drag on a Component or a Monitor	Duplicates the selected object(s).

24.7 Using Keys to Navigate in a Layout

Use the keyboard of your KEdit workstation to navigate through the layout as follows:

KEY OR COMBINATION OF KEYS	NAVIGATION
Tab	In a dialog, will navigate from one field to the next using a predictive order.
	If all Monitors are locked then the focus will go from one item to the next using the 'Z' order of the items. By item, we mean either Monitors or Components not part of a Monitor.
	If one Monitor is unlocked then the focus will go from one component to the next using the 'Z' order of the components. By component, we mean only those parts of

	the unlocked Monitor.
Shift + Tab	Same as <i>Tab</i> except the order is reversed.
\leftarrow , \uparrow , \rightarrow , \downarrow	Moves the selected Monitor or Component of 1 pixel in the selected direction.
	Moving a Monitor or a Component not part of a Monitor is only possible if the Layout is in unlocked mode. Moving Components inside a Monitor is only possible if the corresponding Monitor is in unlocked mode.
Shift+ \leftarrow , Shift+ \uparrow , Shift+ \rightarrow , Shift+ \downarrow	Same as \leftarrow , \uparrow , \rightarrow , \downarrow , except movement is 5 pixels.
Shift + mouse drag	Moves the selected Monitor or Component only horizontally or vertically.
	Moving a Monitor or a Component not part of a Monitor is only possible if the Layout is in unlocked mode. Moving Components inside a Monitor is only possible if the corresponding Monitor is in unlocked mode.

24.8 Contextual (Right-click) Menus in a Layout

Contextual Menus appear when a component or monitor is right-clicked in a layout. The items in the menu can then be clicked (right or left) to open or execute them, just as in a regular pull-down menu. The menu is called "contextual" because the contents of the menu are determined by the component that was right-clicked; i.e. by the context of the right-click.

Here is a summary of the contextual menus that appear in a Kaleido layout when various items are right-clicked.

24.8.1 Monitor Contextual menu (Right-click)

The contextual menu for a Monitor shows the following options, in order:

OPTION	DESCRIPTION
Cut	The Monitor is removed from the Layout and kept in memory to be pasted.
Сору	The Monitor is copied and kept in memory to be pasted.
Paste	The Monitor saved in memory is displayed at the selected position of the Layout.
Duplicate	A copy of the Monitor is made and shown on the Layout positioned just over the selected Monitor. It is possible to use "Ctrl-D" to add more

	copies of the same Monitor as many times as desired, the new copies will be positioned relatively one from the others. It is possible to create a first duplicated object and position it so the subsequent duplicated objects will be positioned relatively using the desired positioning. See "Microsoft Power Point" help under the "Make multiple duplicates that are evenly spaced" topic.	
Unlock Monitor	The selected Monitor is unlocked.	
Configuration Panel	Configuration Panel is displayed with the Monitor's properties. Focus is transferred to the Configuration Panel. It's in this menu that a Channel can be assigned to the Monitor.	

24.8.2 Component Contextual menu (Right-click)

The contextual menu for a Component shows the following options, in order:

OPTION	DESCRIPTION
Cut	The Component is removed from the Layout and kept in memory to be pasted.
Сору	A copy of the Component is kept in memory to be used when "Paste" will be selected.
Paste	Displays the Component saved in memory at the selected position of the Layout.
Duplicate	A copy of the Component is made and showed positioned just over the duplicated Component. It is possible to use "Ctrl-D" to add copies of the Component as many times as desired, the new copies will be positioned relatively one from the others. It is possible to create a first duplicated object and position it so the subsequent duplicated objects added will be positioned relatively using the desired positioning. See the "Microsoft Power Point" help at the "Make multiple duplicates that are evenly spaced" topic.
Lock Monitor	The corresponding Monitor is locked. This item is only available for components inside unlocked monitors, and is grayed out for components outside Monitors.
Configuration Panel	The Configuration Panel is displayed with the Component's properties. Focus is transferred to the Configuration Panel. If the Component is a UMD or a Text Label the text contained in the "Text" field is already selected.

24.8.3 Multiple Selection Contextual menu

A selection represents a group of several monitors and/or components that are not part of a monitor. Right clicking on a selection will open a contextual menu listing operations that can be done on the group. This contextual menu will show the following options, in order:

OPTION	DESCRIPTION
Cut	The Selection is removed from the Layout and kept in memory to be pasted.
Сору	The Selection is copied and kept in memory to be pasted.
Paste	The Selection saved in memory is displayed at the selected position of the Layout.
Duplicate	A copy of the Selection is made and shown on the Layout positioned just over the selected Selection. It is possible to use "Ctrl-D" to add more copies of the same Selection as many times as desired, the new copies will be positioned relatively one from the others. It is possible to create a first duplicated object and position it so the subsequent duplicated objects will be positioned relatively using the desired positioning. See "Microsoft Power Point" help under the "Make multiple duplicates that are evenly spaced" topic.