MVP Software User Manual
MVP Maestro II – Design Client
MVP System Configuration Tool

IMPORTANT SAFETY INSTRUCTIONS

⚡	The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of un-insulated, dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.
⚠	The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (i.e.: servicing) instructions in the literature accompanying the product.

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Don't use this apparatus near water.
- Clean only with a dry cloth.
- Don't block any ventilation openings.
- Install in accordance with the manufacturer's instructions.
- Don't install near any heat sources such as radiators, heat registers, stoves, or other apparatuses (including amplifiers) that produce heat.
- Don't defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than other. A grounding-type plug has two blades and a third grounding prong. The wide blade or third prong is provided for your safety. If the plug provided does not fit into your outlet, consult an electrician to replace the obsolete outlet.
- Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer
- Unplug this apparatus during lightning storms, or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as damage to the power-supply cord or plug, contact with liquid (or any object small enough to enter the apparatus), exposure to rain or moisture, drop damage, or upon experiencing any abnormal operation.

WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, **DO NOT** EXPOSE THIS APPARATUS TO RAIN OR MOISTURE

WARNING:
DO NOT EXPOSE THIS EQUIPMENT TO DRIPPING OR SPLASHING AND ENSURE THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, ARE PLACED ON THE EQUIPMENT

WARNING:
TO COMPLETELY DISCONNECT THIS EQUIPMENT FROM THE AC MAINS, DISCONNECT THE POWER SUPPLY CORD PLUG FROM THE AC RECEPTACLE

WARNING:
THE MAINS PLUG OF THE POWER SUPPLY CORD SHALL REMAIN READILY OPERABLE

WARNING

Never look directly into an optical fiber. Irreversible eye damage can occur in a matter of milliseconds.

INFORMATION FOR USERS IN EUROPE

This equipment with the CE marking complies with the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European standards:

- EN60065   Product Safety
- EN55103-1   Electromagnetic Interference Class A (Emission)
- EN55103-2   Electromagnetic Susceptibility (Immunity)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to the European Union EMC directive. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his/her own expense.

INFORMATION FOR USERS IN THE U.S.A.

FCC Class A Digital Device or Peripheral

This equipment has been tested and found to comply with the regulations for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his/her own expense.

WARNING

Changes or modifications not expressly approved by Evertz Microsystems Ltd. could void the user's authority to operate the equipment.

Use of unshielded plugs or cables may cause radiation interference. Properly shielded interface cables with the shield connected to the chassis ground of the device must be used.

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REVISION HISTORY

REVISION	DESCRIPTION	DATE
1.0	First draft – details functionality for Maestro II v.1.00.00.57, and MVP System Configuration Tool 1.0.0.5	Oct 04
1.1	Include embedded server setup instructions and PC based setup Instructions. Matched descriptions to Maestro v1.0.0.074 and SCT 1.0.0rc17.	Dec 04
1.3	Entire manual revised	Feb 06
1.4	Manual updated	May 06
1.5	Updated Maestro Shortcut Keys section. Cleaned up format.	Dec 08

1. MAESTRO SOFTWARE

This revision covers MVP Maestro version 2.2.1 and VIP Maestro 1.7.0. This chapter describes the operation and features of the Maestro graphical design client. The Maestro graphical design client is used for performing display layout for the MVP and VIP products.

1.1. MINIMUM PC REQUIREMENTS FOR MAESTRO

- Standard Pentium 4 class machine
- 512MB RAM
- 100Mb Ethernet Card, TCP/IP configured
- 8MB Video card
- 1024x768 screen resolution
- Windows NT4, 2000, XP, Server 2003 operating system
- CD-ROM drive

1.2. INSTALLATION INSTRUCTIONS

- Copy the Maestro Installation software to your PC
- Launch the installation by double-clicking the icon
- Follow the installation instructions detailed on the pop-up windows of the installer
- Upon completion, the desktop will show the "Maestro" icon

1.3. SYSTEM CONFIGURATION

Launch Maestro by double-clicking on the icon on the desktop. If this is the first use of this software, a dialogue window will appear indicating no systems have been defined. The following system creation dialogue will appear:

1.3.1. Setup for VIP

Figure 1-1: VIP System Setup Window

Upon entering a System Name and VIP module IP address (which must match the IP address entered initially through the card edge serial port of the VIP), and then identifying the type of VIP, the newly created system will be added to Maestro's "System Manager" page view.

If Maestro has already been used previously to create a system, or has recently been upgraded to a newer version, the systems will appear in the "System Manager" page view. System ID (used for identification by the Maestro software), IP address and VIP Type are displayed for every VIP system.
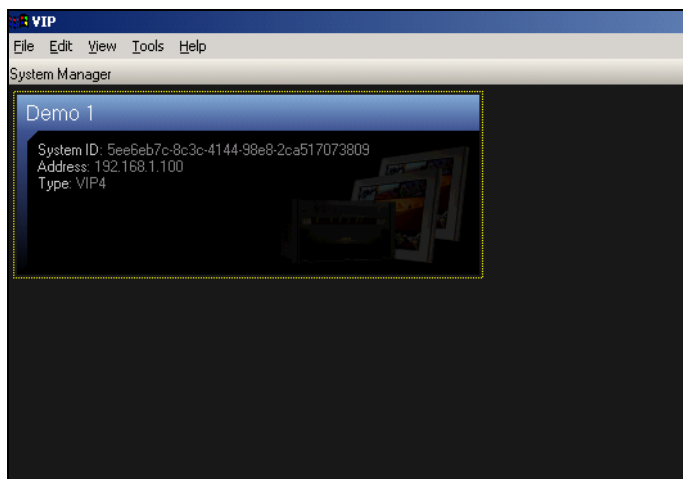
Figure 1-2: VIP Maestro System Manager Page View

1.3.2. Setup for MVP
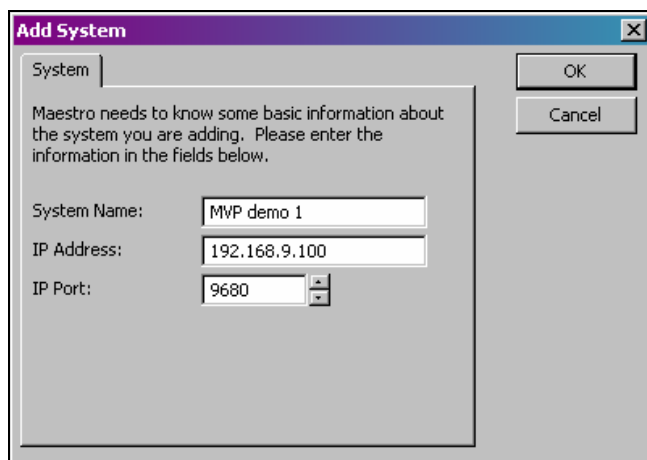
Figure 1-3: VIP System Setup Window

Upon entering a System Name and IP address of the MVP server (which must match the IP address entered initially through the card edge serial port of the display card running the MVP server or if running a PC based server the IP address of the PC) and port that matches the IP port defined for the server a System will be added to the "System Manager" page view.

If Maestro has already been used previously to create a system, or has recently been upgraded to a newer version, the systems will appear in the "System Manager" page view. System ID (used for identification by the Maestro software), IP address and Hardware Type are displayed for every system.

1.3.3. VIP System Transfers

Occasionally, previously created VIP systems may need to be transferred from one PC to another. For convenience, data transfer is simplified without the need to re-create all the VIP systems by transferring the contents of the system folders using the following instructions:

1. Go to...C:\Program files\evertz\VIP\Maestro\systems (default VIP Maestro installation folder)
2. Find the System IDs that match those in your VIP Maestro configuration screen
3. Copy these folders over to your freshly installed VIP Maestro on the other computer - in the same sub-directory location
4. Go to ...C:\Program Files\evertz\VIP\Maestro (default VIP Maestro installation folder)
5. Find the file called "system.cfg"
6. Copy this file over to your freshly installed VIP Maestro on the other computer – in the same directory location
7. Upon launching VIP Maestro from the new PC, all previously created VIP systems will appear in the "System Manager" page view

1.3.4. System Configuration

On the "System Manager" page view, system changes/updates (as well as firmware upgrades) are possible by selecting a specific system then mouse right-clicking for additional menu options:
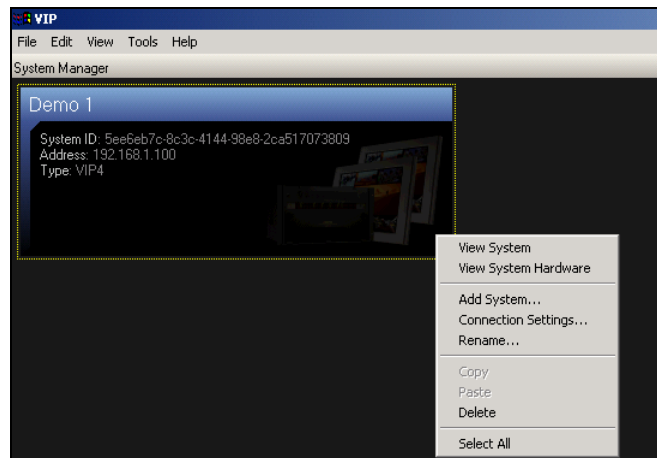
Figure 1-4: Maestro System Manger View

View System: Opens the selected system to the Display Manager Window.

View System Hardware: View the hardware that makes up the selected system, and provides the option to upgrade the firmware for the selected VIP or MVP modules.

Add System…:   Utility to add additional systems to configuration screen.

Connection Settings…: Sets/updates the IP address of the selected system.

Rename…: Provides a text field to change the name of the previously created system.

Delete: Remove the system from Maestro's System Manager page view.

Select All: Utility to select all previously created systems, then, view system hardware specifications.

1.3.5. VIP/MVP System Upgrade through Maestro
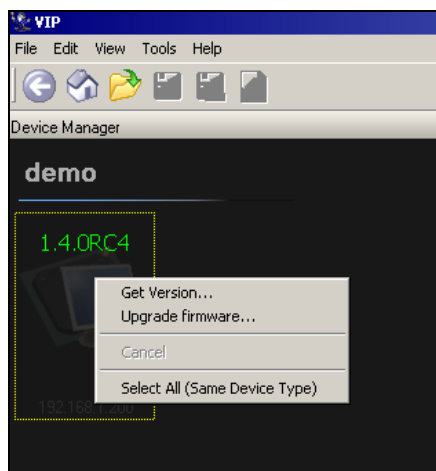
Figure 1-5: Hardware View

- Select a System

- Right click to show additional configuration menu items

- Select View System Hardware

- Select the hardware to upgrade, right click

- Select Upgrade firmware…

- Locate and select the correct firmware for the selected hardware

- Upgrade and follow progress directly in Maestro page view – when completed the upgrade process, remember to re-start the hardware for the upgrade to take effect. See MVP or hardware manual for further upgrade details.

- Use the "Get version" to display the current firmware version for the hardware

1.4.   DISPLAY MANAGER

Double clicking on a System opens the Display Manager Window**.** The display manager displays all of the logical displays in the system. If the system selected is a VIP then only a single display object will be visible, if the selected system is a MVP then several displays may be visible. Select a display and right click to access the following options:
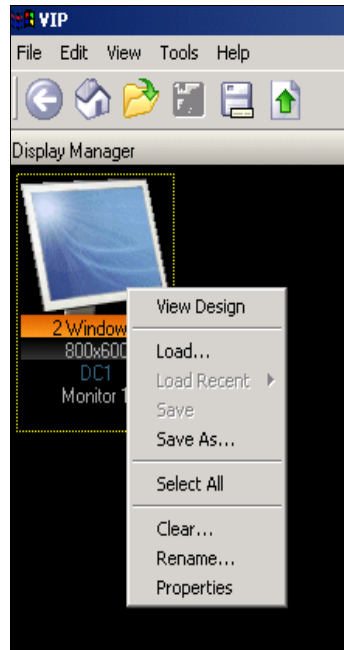
Figure 1-6: Display Manager View

View Design: Opens the selected display to a "canvas" view where the user can enter, create and resize window elements and on screen display graphics.

Load…: Option to load a previously created preset; this option opens a dialogue window from which a preset can be selected.

Load Recent: Option to load a recently used preset.

Save: Save the current preset under the current name (identifier).

Save As…: Save the current preset for future recall under the same or a new name (identifier).

Select All: Option to select more than 1 display, if present in this Window.

Clear…: Option to clear the output display of the selected display.

Rename…: Option to change the name of the display.

Properties: Menu to change the background appearance of the selected display.

Note: When loading a previously created preset, it must have been created for the VIP. It is not possible to use a reset created for the MVP system.

1.4.1. Modifying Display View

Maestro allows the user to define how the displays for a system are viewed. This includes the arrangement of these displays as well as the look of the displays (different display icons). The following instructions can be used to modify the display view:

Figure 1-7: Display Manager Layout View

- Select *Layout Mode* under *View* menu.

- Move display icons around canvas by dragging icon with mouse.

- Choose *Layout Properties*… under *View* menu change the background color or load a bitmap image to use a background.

- Right click on a display and select *Properties*, select *Options* tab, customize display properties.

- Reset changes by selecting *Reset Layout…*

1.5.   MENUS/TOOL BARS

Figure 1-8 depicts the typical Maestro design screen:
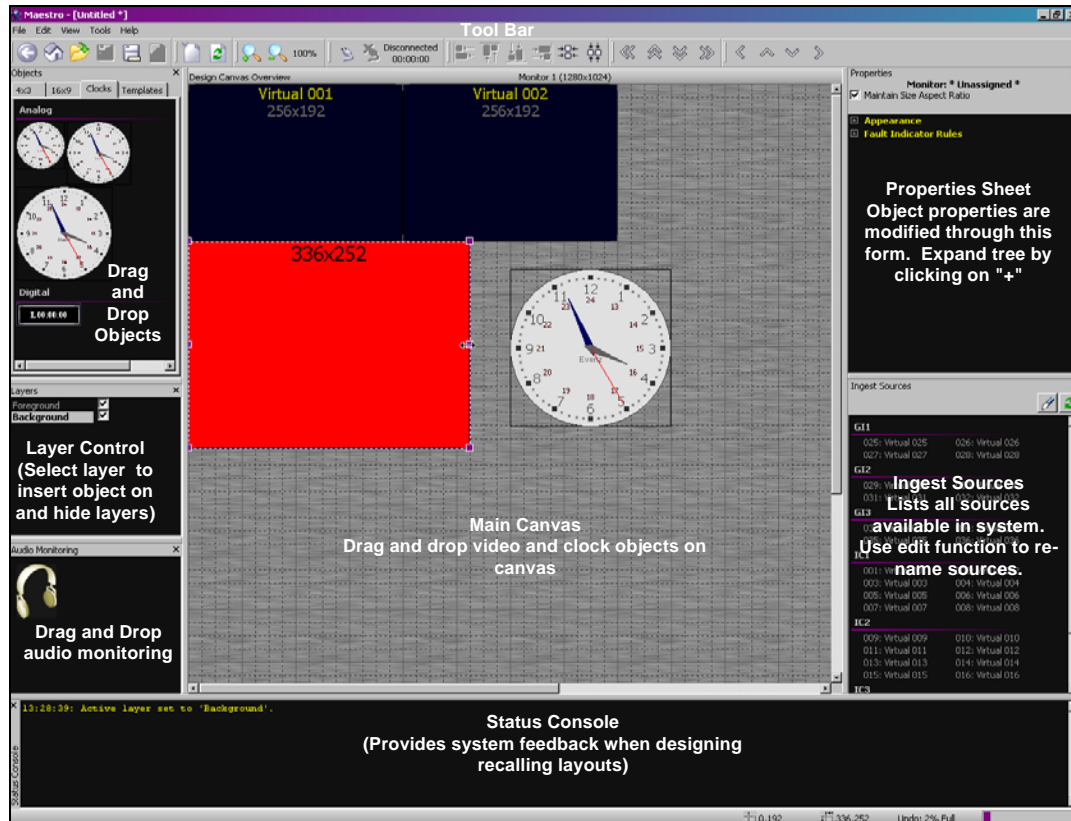
Figure 1-8: Design Canvas View

Tool Bar:	See section below for description of each icon.

Tool Bar: See section below for description of each icon.

Drag and Drop: Video and clock objects.

Layer Control: Select layer to add objects to, use checkbox to select visibility of each layer.

Audio Monitoring: Drag and drop headphones used to select an input to monitor audio.

Status Console: Provides system feedback when designing layouts.

Property Sheet: Properties presented for objects on design canvas.

Ingest Sources: Lists all inputs in the system. Use the edit button to re-name input labels in Maestro.

1.5.1. File Drop-down Menu
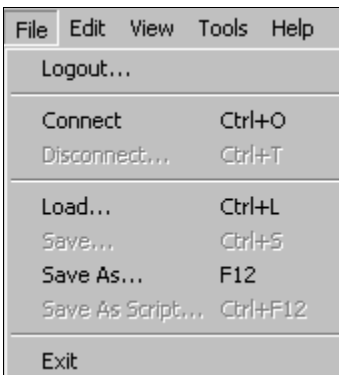
Figure 1-9: File Menu View

Load…:   Select a preset from the preset catalog and load it.

Save…:   Save the current layout to the preset catalogue.

Save as…:   Save the current design under a new name or directory.

Upload…:   Sends the configuration, as created on the design canvas to the module for display (this is only available for the VIP series product line, this option is not applicable for MVP).

Exit: Quits Maestro.

1.5.2. Edit Drop-down Menu
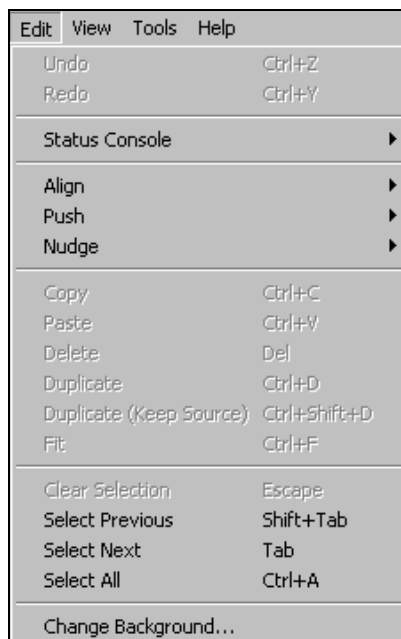
Figure 1-10: Edit Menu View

Undo: Undo an action performed on the design canvas.

Redo: If an action has been undone, it can be re-inserted.

Status Console: Adjust the level at which Maestro will send out status logs for the session.

> **Options include:**
> - Clear Console
> - Save Console to File…
> - Add Trace…
> - Delete Trace…
> - Reset…
> - Show Masks

Align: Align objects on the design canvas.

Push: Push objects on the design canvas.

Nudge: Move objects on design canvas in single increments.

Copy: Copies the selection to the clipboard.

Paste: Inserts the last copied clipboard contents at the insertion point.

Delete: Deletes the selection.

Duplicate: Copy and paste object combined.

Duplicate (Keep Source): Duplicate video object with input assigned.

Fit: Option to take the selected window and best fit to the available canvas resolution.

Clear Selection: Un-select the current selection.

Select Previous, **Select Next** and **Select All**: Object selection options.

Change Background: Option to change the appearance of the background display.

1.5.3. View Drop-down Menu

Figure 1-11: View Menu View

Go Back: Returns to the previous page (Back), Home page or Design view.

Go Home: Returns the user to the System Manager page view.

Interior Design: Upon selection of a window on the Design Canvas, this option forwards the user to the Interior Design page view. The same action is also possible by double-clicking the selected window in the Design Canvas page view.

Zoom In: Magnify the canvas view beyond 100%

Zoom Out: De-magnify the canvas view to fit the entire display's dimensions in the available canvas manager's boundary (< 100%).

Zoom to 100%: Reset the view to 100%

Zoom to Fit: Resize the Canvas page view to show the limits of the display resolution.

Clear…: Menu option to clear current display.

Full Screen: Expand Maestro to take up the entire available display surface.

Refresh: Refresh the screen view.

Arrange Sources By: Sort the ingest source list using selected categories.
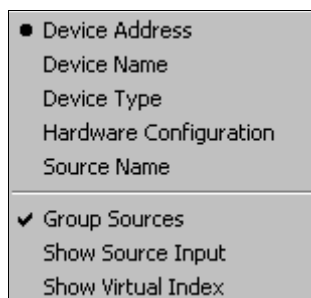
Figure 1-12: Arrange Sources View

Device Address: IP address of input card.

Device Name: Alphanumeric sort based on name of hardware.

Device Type: Hardware type sort.

Hardware Configuration: Address and name sort.

Source Name: Alphanumeric sort based on input labels.

Group Sources: Group inputs based on above sort criteria.

Show Source Input: View source input spigot alphanumeric.

Show Virtual Index: View source virtual number.

Tool Windows:

    Ingest Sources: Show/hide.

    Objects: Show/hide.

    Properties: Show/hide.

    Grid Lines: Show/hide grid lines on the canvas window.

    Show Window Names: Option to display window indicator labels.

    Status Console: Show/hide status console window.

1.5.4. Tools Drop-down Menu

Figure 1-13: Tools Menu View

Dynamic Sizing: Turns on/off dynamic sizing - allows for the video object to size at the same time as the monitor object. This item must be enabled for the ability to increase or decrease the scaling of a selected input window in the Canvas page view.

Access Control…   Add new users and user privileges to operate the Maestro software.

Auto Fit Design: Option to take all windows and best fit in the available canvas resolution.

Calculator: Quick access option to the Windows®-installed calculator.

Import Virtual Names: From an external text file, import user-configured names instead of "virtual 001", etc. as shown in the "Ingest Sources" window.

Save System Settings: Forces system settings to be stored to database plus forces hardware to save current settings to non-volatile memory.

System Configuration: Setup system configuration, see section below for more details.

Video Redirect Setup: Setup video route function.

Synchronize…:   Used with VIP hardware to pull back current layout from hardware and display in Maestro.

Reset System…:   Resets VIP/MVP systems displays back to factory default.

1.5.5. Help Drop-down Menu
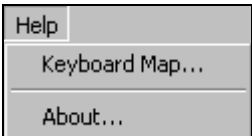
Figure 1-14: Help Menu View

Keyboard Map…:   Displays all keyboard commands (see section 4).

About…:   Displays the current version of Maestro.

USO RESTRITO

1.5.6. Title Block, Menu Bar and Icon Bar

Return to the previous page view.

Return to the System Manager page view.

Open preset catalog to load preset.

Preset Save and Save As options.

VIP: Upload configuration displayed on Canvas page view to VIP output.
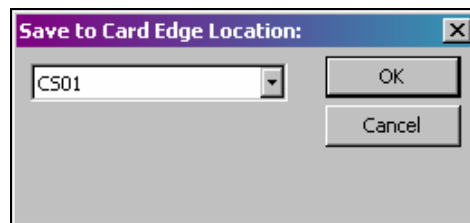
MVP: Save layout as a script (scripts are used for preset recall by 3000DCP or GPI, VGPI).

Clear display canvas.
Refresh layout.

Zoom In (+) or Zoom Out (-): increases/decreases the Main Canvas display size from 10% to 150%.

Align: when a window has been selected on the main canvas, it can be horizontal/vertical-aligned center aligned. When multiple objects are selected on the main canvas, align left/right/top/bottom can be performed using these icons.

Push: when a window has been selected on the main canvas, it can be positioned to various boundaries using these arrowed icons (Extreme positioning).

⟨ ∧ ∨ ⟩

Nudge: when a window has been selected on the main canvas, it can be moved to various locations within the boundaries using these arrowed icons (Incremental positioning)

1.5.7. System Configuration Setup

Use the *System Configuration Setup* dialog box to setup the MVP/VIP display properties, which include GPO assignments (MVP only), resolution, and severity control. The *System Configuration* can be selected under the *Tools* file menu. Each device in the list can be selected and given a unique configuration in the system.
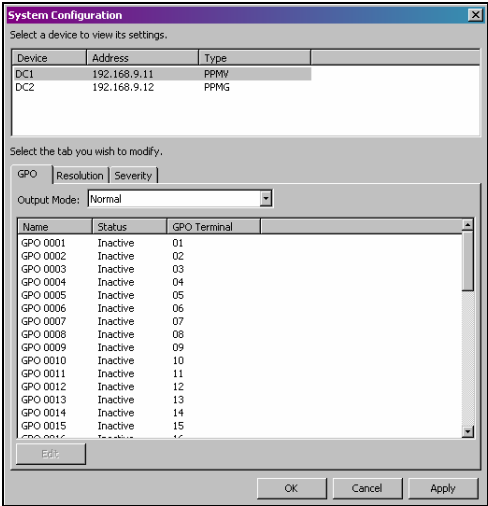
Figure 1-15: System Configuration Window GPO View

1.5.7.1. GPO Configuration Tab

Output Mode:

Normal: When GPI trigger is applied GPO output will be active until trigger is removed.

Exclusive: The next GPI will release any previous triggers and apply trigger to the most recent.

Latching: When a GPI is applied the GPO will latch in an active state after the GPI trigger has been removed.

Both: This setting applies both a latch and exclusive behavior
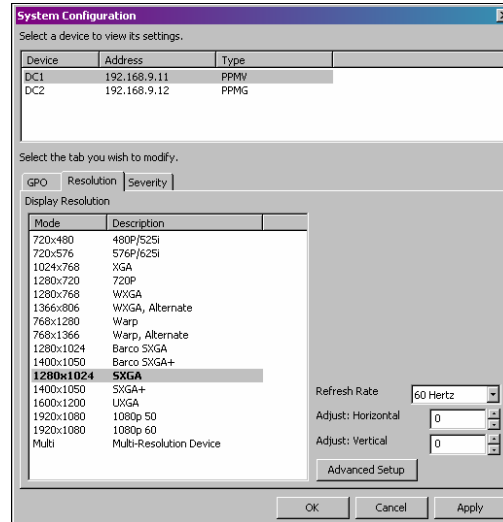
Figure 1-16: System Configuration Window Resolution View

1.5.7.2. Resolution Tab

Use the resolution tab to setup the output resolution of the selected display card from the device list.

Refresh Rate: Choose between 50Hz and 60Hz output refresh rate.

> **Note: the output refresh rate should match the input frame rate. If using a mix input format solution (50 and 60Hz) then choose the output refresh rate that matches the majority of inputs.**

Adjust Horizontal: Adjust horizontal offset of the active picture on the output, increment pixel based.

Adjust Vertical: Adjust vertical offset of the active picture on the output, increment line based.

Advanced Setup: See figure below.

1.5.7.3. Advanced Property

The advanced setup property is for enabling MVP+ features of the MVP. This property is only applicable when using quad output cards (PPMV, PPMG).
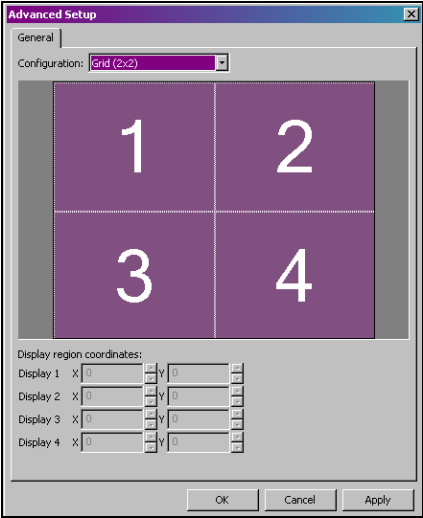
Figure 1-17: Resolution View - Advanced Setup

Configuration: Set the logical assignment of the 4 outputs to create a single "virtual wall".

- 1x4 display mode
- 4x1 display mode
- 2x2 display mode

Display Region Coordinates: Setup display overlap.

1.5.7.4. Severity Tab

Use the severity tab to configure the visual properties for window based alarms/tally triggers.
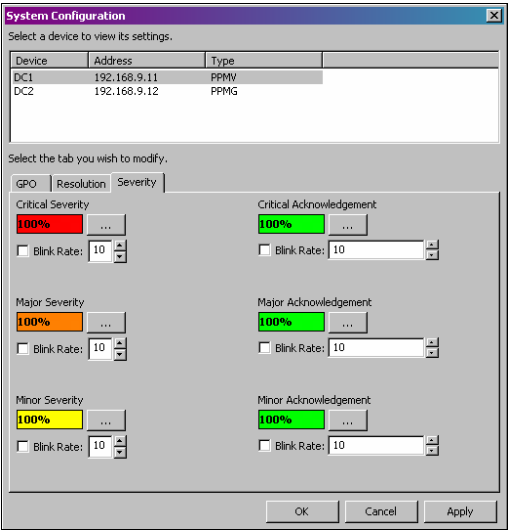
Figure 1-18: System Configuration Window (Severity View)

Colour: Choose the active colour for Critical, Major, and Minor.

Blink Rate: Activate blink and set rate.

Acknowledgement: Set the acknowledge property for faults that have been acknowledged via VLPRO.

1.5.8. Drag-and-drop Objects
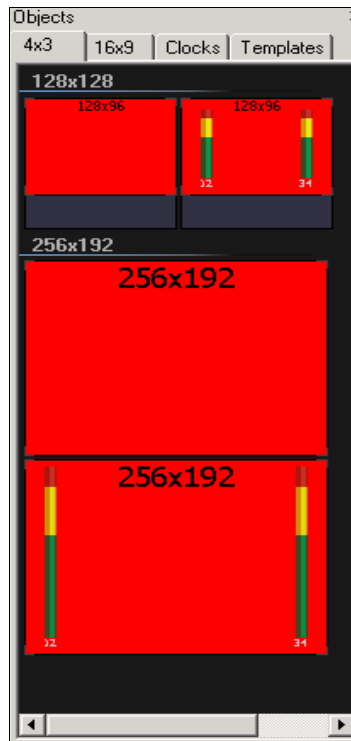
Figure 1-19: Objects Form (4:3 Templates)

Creating an Object: From the Objects window, create a new 4:3 or 16:9 aspect ratio window by selecting the appropriate tab. Then select one of the factory default windows from the list and drag-and-drop it onto the Design Canvas Window. The video object will appear as a red rectangle on the canvas and will not appear on the output display, until a video source has been assigned. This can be done by either dragging a source from the Ingest Sources Window and dropping it over the video window container or by typing in the source input number directly from the keyboard.

Deleting an Object: To delete an object after it has been created, select the object to be deleted and press the delete key on the keyboard, or mouse right-click and select "Delete" from the menu.

Templates: After saving a custom video object layout as a template, the templates will be stored under the Templates tab and can be recalled in future window designs.

✍ **After creating a video object on the Canvas page view, additional on screen display graphics may be added. See the next section for "window dressing" options.**
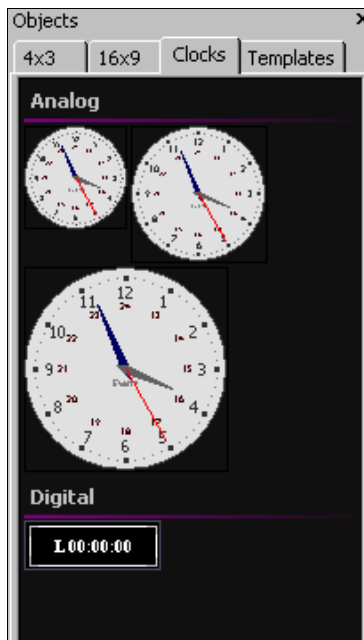
Figure 1-20: Objects Form (Clock Templates)

Add a clock by selecting the *Clocks* tab from the *Objects* form and dragging one of the clocks on to the design canvas. (Analog clocks are only available for the MVP).

1.5.9. Window Parameter Right-click Menu Options

When selecting a window from the *Canvas* page view, then right clicking, the menu to the left appears with the following options as illustrated in Figure 1-21:

Go Back
Promote (Bring Forward)
Demote (Send Back)
Auto Fit Design
Change Background…
Change Display ▶
Create Design Template…
Send Video To ▶
Set As Video Redirect Target
Crop
Fit
Unassign Video…
Fit Video Using Current Aspect
Fit Video Using 4x3 Aspect
Fit Video Using 16x9 Aspect
Copy
Paste
Delete
Select All
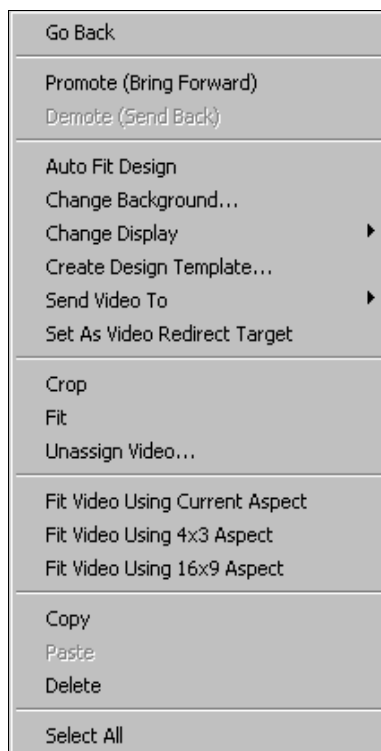
Figure 1-21: Monitor Object Right Click Menu

Go Back: Returns to the *Display Manager* page view.

Promote (Bring Forward): Move video object from bottom layer to top layer (allows for window overlap, MVP only).

Demote (Send Back):   Move video object from top layer to bottom layer (allows for window overlap, MVP only).

Auto-fit Design: Automatically resizes on screen display elements to fit the Canvas' resolution.

Change Background…:   Option to change the background of the display.

Change Display: Switch from current display to an alternate display.

Create Design Template: Create a template from the selected window that is then stored in the *Templates* tab of the *Object* window, and can be reused in future.

Send Video To: Used in video re-direct feature to send input video to target display (MVP only).

Save As Video Redirect Target: Setup for video re-direct feature (MVP only).

Crop: Crop monitor dimension to match interior object (video monitor, clock object, etc.).

Fit: Option to take the selected window and best fit to the available canvas resolution.

Fit Video Using Current Aspect: Sizes the active picture to fit within window and maintain irregular aspect ratio.

Fit Video Using 4x3 Aspect: Sizes the active picture to fit within window and force the aspect to 4:3.

Fit Video Using 16x9 Aspect: Sizes the active picture to fit within window and force the aspect to 16:9.

Copy, Paste Delete: Options to copy, paste, and/or delete the selected window.

Select All: Option to select all window elements in the Design Canvas page view.

1.6.   CUSTOMIZING OBJECTS ON DESIGN CANVAS

1.6.1. Monitor Object Properties

Drag and drop the monitor object from the *Objects* form on to the design canvas. Up to 120 video objects can be viewed per display card (MVP only).

Monitor object background (via Design Canvas)
Monitor object border (via Design Canvas)
Video object (via Interior Design View)
Video object border (via Interior Design View)
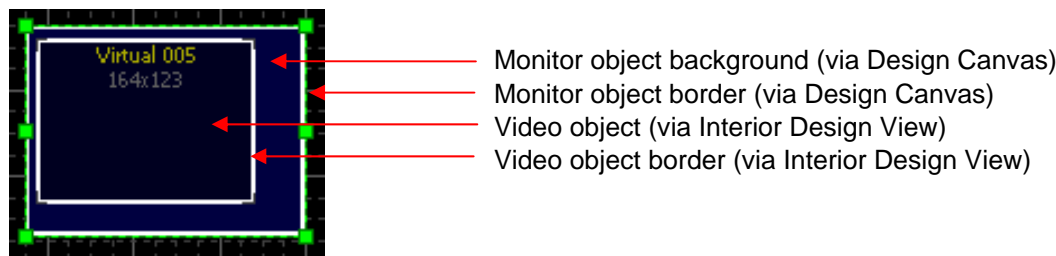
Figure 1-22: Monitor Object / Video Object

Select a video object from the design canvas; view the properties for the selected object by viewing the properties window.

Figure 1-23: Monitor Object Property Window

Maintain Size Aspect Ratio: Enable aspect ratio to lock aspect ratio when size property modified.

Appearance:
    Background Colour: Change background colour of monitor object.
    Border Colour: Change border colour of monitor object.

Border Style (MVP only):
    Edge Type: Select border perspective effect.
    Edge Style: Select the border effect.

Border Thickness: Set border width.

Size: Set window width and height.

Auxiliary OSD (MVP only):   Display caption/subtitle.

Window Name: Change default window name.

Fault Indicator Rules: Setup window based fault/tally triggers.

Visual Effect: Select how the fault/tally will be displayed, using background or border or both.

1.6.2. Monitor Object Properties General

Double click the monitor object on the canvas to view the interior of the object. From this view you can add audio level bars, fault messages, UMDs, etc.
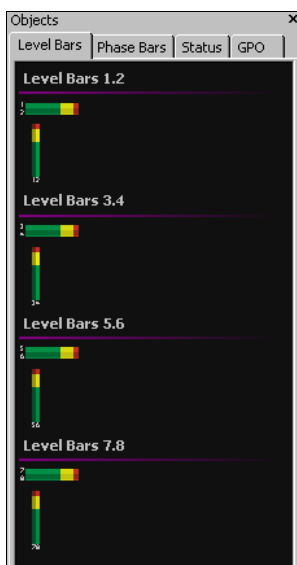
Figure 1-24: Monitor Objects Components (Audio Level Bars)

Audio Level Bars 1/2, 3/4, 5/6, 7/8: Add audio level bars to video object to view audio level for assigned video input.

Use the *Properties* window to configure the size, colour, turn scales on and off and set orientation of level bar.

Figure 1-25: Monitor Objects Components (Phase Bars)

Phase Bars 1/2, 3/4, 5/6, 7/8: Add phase bars to video object to view phase for assigned video input (MVP only).

Use *Properties* window to configure the size, colour, and turn scales on and off.

Figure 1-26: Monitor Objects Components (Status Options)

Fault: Add a fault message to video object.

Use *Properties* window to configure the fault trigger settings and visual properties.

Status:

   P Rating: Status window that displays XDS program rating for input.

   Video Std: Status window that displays video standard of input.

   E/AC3(x-y) (MVP only):   Status window that displays the format of encoded audio for input.

   User Text: User-defined label.

   WSS/AFD1-3 (MVP only):   Status window that displays ARC data.

   Tally: Tally object.
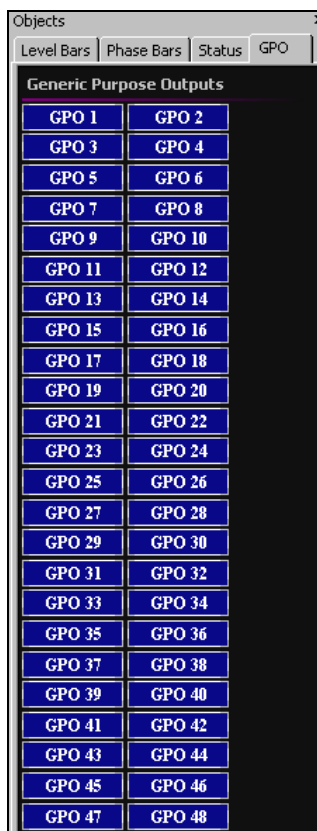
Figure 1-27: Monitor Objects Components (GPO)

GPO: Add a GPO to a specific input that can be triggered based on the fault condition for the assigned input. There are a total of 44 GPOs available per MVP display card, only 8 GPOs available per VIP module.

1.6.3. Fault, UMD and Tally Object Properties

Add a fault, tally or UMD to the selected window through the Status tab (left). After adding the status item click on the object to reveal available configurations in the Properties Window.
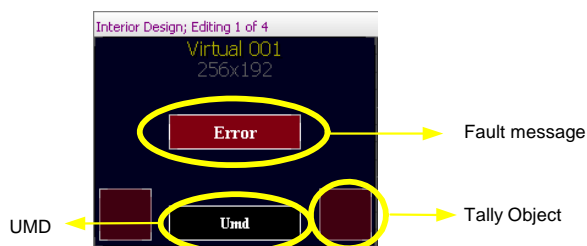
Figure 1-28: Monitor Objects components diagram

1.6.3.1. Fault Object Properties

Add a fault message to the monitor object by selecting the *Status* tab from the *Objects* form and dragging and dropping the *Fault Message* icon onto the object. A maximum of 8 fault messages can be displayed in one object.

Figure 1-29: Fault Object Property Sheet

Alignment: Set the alignment for the text message on the fault indicator.

Background Color: Set the color and opacity of the fault indicator.

Border Style (MVP only): Define border effect.

Border Thickness: Set the thickness of the selected fault message's border.

Text color: Set the color and opacity of the text used in the fault message.

Text: Enter a fault message to be displayed when the fault is triggered.

Define trigger: Option sets the trigger for this fault, see figure below for details.
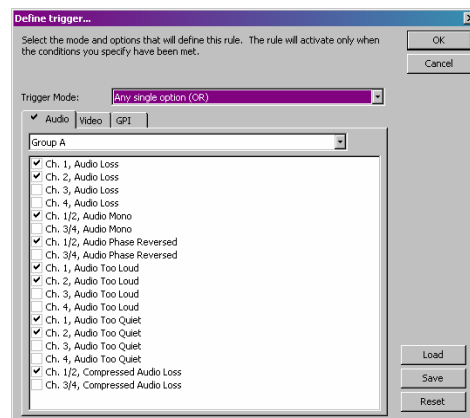
Figure 1-30: Define Fault Message Trigger Form

Trigger Mode: Choose the trigger logic to be applied for triggering fault message.

AND: All triggers select must be true for fault message to be displayed.

OR: Any of the triggers can be true for fault message to be displayed.

Dynamic Trigger 1/2/3: This is allows for a dynamic GPI (GPI assigned to input) to trigger fault message.

Audio: Place a check next to audio fault to be used to trigger fault message.

Video: Place a check next to video fault to be used to trigger fault message.

GPI: Place a check next to a GPI used to trigger fault message.

> **Note: Use the save button at bottom right of form to save fault trigger setup. Use the load button to recall previously saved fault triggers. The reset button un-selects all selected triggers.**

1.6.3.2. UMD Object Properties

Add a UMD object to the monitor object by selecting the status tab from the *Objects* form and dragging and dropping the UMD icon onto the object. A maximum of 4 UMDs for VIP and 8 UMDs for the MVP can be displayed in one object.

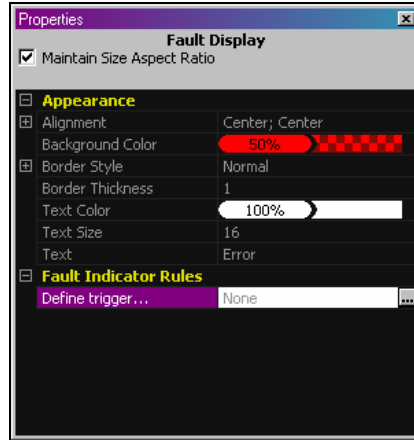**Figure 1-31: UMD Property Sheet**

Alignment: Set the alignment for the text message on the UMD.

Background color: Set the color and opacity of the UMD.

Border Style (MVP only): Define border effect.

Border Thickness: Set the border thickness around UMD.

Size: Set the size of the UMD messages using the size property form.

Text color: Set the color and opacity of the text used on the UMD message.

Text: Enter a UMD message to be displayed.

Function: Select a mode of operation for the UMD.

Timer: Use UMD to perform simple up/down count.

Dynamic Protocol: Use protocol based source labels retrieve protocol id from assigned input.

Protocol Id: Use protocol based source label.

MVPid: Use source label assigned via SNMP (VLPRO).

Source Id: Use decoded source id from VANC data.

Static: User defined using property sheet.

VITC: Use decoded VITC from VANC data.

Active Protocol Id: Assign protocol id for UMD (not dynamic)

Active MVPid: Assign MVPid numeric vaule for UMD.

Protocol Options: Define Image Video UMD properties for UMD including trigger and text colour.

Timer Source: Choose timer clock reference.

Timer Settings: Define trigger setup for UMD.

Start Time: Set timer start time.

Stop Time: Set timer stop time.

Start Trigger: Define trigger for starting timer.

Stop Trigger: Define trigger for stopping timer.

Reset Trigger: Define trigger for resetting timer.

> **Note: protocol options for the MVP and VIP offer a simple way to provide labels to inputs sourced directly from routers using common protocol interfaces like Image Video and TSL. Protocol ids are used by these systems to reference a specific destination on the router and send the source label based on cross-point configurations of the router. The interface to the MVP and VIP for these protocols is supported using either RS-232/422 or Ethernet.**

1.6.3.3. Properties Window – 4 State Tally

Add a *Tally* object to the monitor object by selecting the *Status* tab from the *Objects* form and dragging and dropping the *Tally* icon onto the object. A maximum of 2 UMDs for VIP and 2 UMDs for the MVP can be displayed in one object.

Figure 1-32: Tally Object Property Sheet

Alignment: Set the alignment for the text message on the tally indicator.

Background Color: Set the color of the tally indicator.

Border Color: Set the color of the tally's border.

Border Style (MVP only): Define border effect.

Border Thickness: Set the thickness of the tally's border.

Size: Set the size of the tally.

Text color: Set the color and opacity of the inactive text used on the tally message.

Text: Enter a tally message to be displayed when the tally is not activated.

Define Trigger: Option sets the trigger (fault, GPI or Virtual GPI) for this on-screen indicator.

Active Color: Set the color and opacity for the active tally indicator.

Active Text Color: Set the color and opacity of the active text.

Active Text: Enter an optional message to be displayed on the tally object when triggered.

Mode: Select static or dynamic mode. This supports Image Video protocol and TSL protocol.

> **Note: the tally object supports 4 operational states on the MVP. This allows for three separate triggers with three different display characteristics.**

1.6.4. Clock Object Properties

From the *Clocks* tab in the *Objects* window, select the clock, drag and drop it onto the Canvas page. Up to 20 clock objects can be displayed on a display card at the same time.

1.6.4.1. Digital Clock

Figure 1-33: Clock Object Container

Drag and drop the digital clock from the *Object* form onto the *Design Canvas*, move the clock to appropriate area of display by dragging and dropping or by using the alignment and movement utilities.
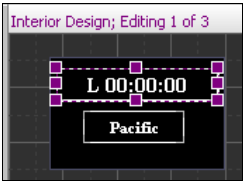
Figure 1-34: Interior View of Clock

Double click on the clock container to enter interior design mode for the clock. Add a label to the clock by dragging the label object from the *Objects* form onto the clock container.

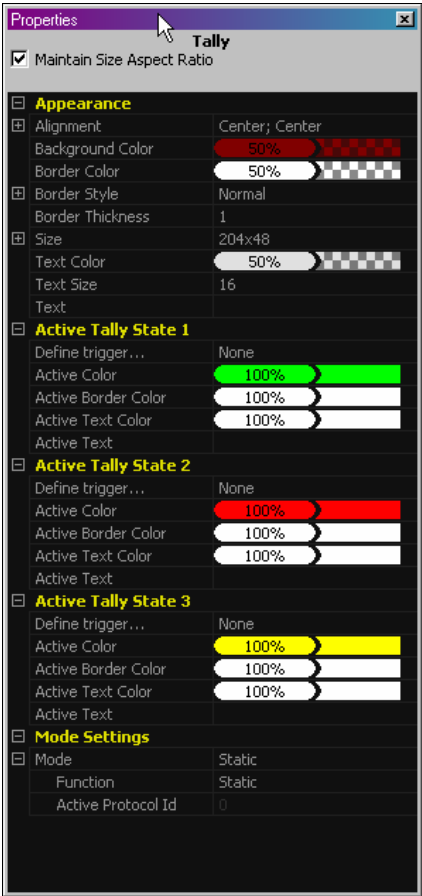Select the clock object to change the clock properties:
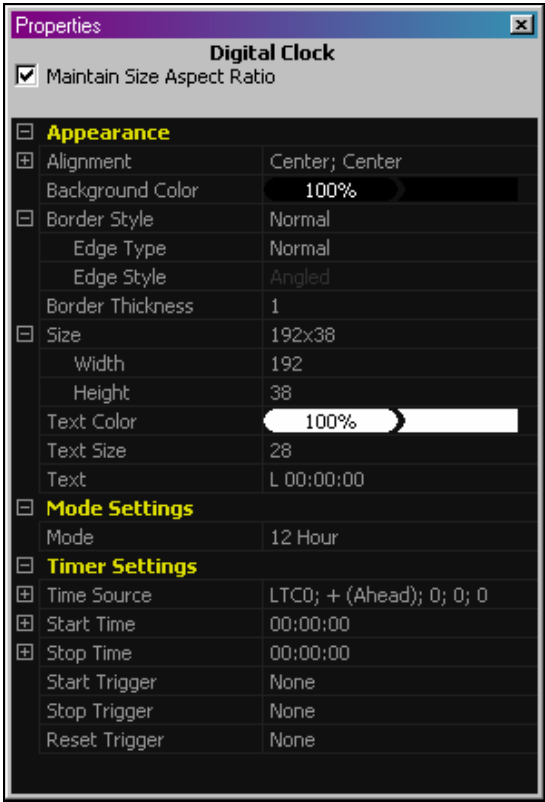
Figure 1-35: Digital Clock Object Property Sheet

Alignment: Set the alignment for the text message on the tally indicator.

Background Color: Set the color of the tally indicator.

Border Color: Set the color of the tally's border.

Border Style (MVP only): Define border effect.

Border Thickness: Set the thickness of the tally's border.

Size: Set the size of the tally.

Text color: Set the color and opacity of text.

Mode Setting: 12 hour, 24 hour, up/down timer.

Time Source: Select the time reference for the clock.

Start Time: In up/down timer mode set start time for count.

Stop Time: In up/down timer mode set stop time for count.

Start Trigger: Option sets the trigger (fault, GPI or Virtual GPI) to trigger the start of timer.

Stop Trigger: Option sets the trigger (fault, GPI or Virtual GPI) to trigger the stop of timer.

Reset Trigger: Option sets the trigger (fault, GPI or Virtual GPI) to trigger the reset of timer.

> **Note: Always use LTC time for time of day reference, the system clock reference is not a valid source of accurate time and can not be used if recalling layouts from DCP or GPI, etc.**
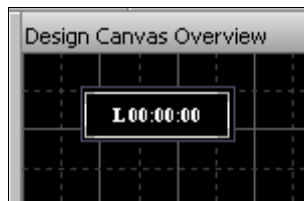
1.6.4.2. Analog Clock (MVP only)

Figure 1-36: Analog Clock Object

Drag and drop the analog clock from the *Object* form onto the *Design Canvas*, move the clock to appropriate area of display by dragging and dropping or by using the alignment and movement utilities.

The analog clock shares similar properties as the digital clock. Refer to section 1.6.4.1 for specific details.

2.   SPECIALTY FEATURES

2.1.   GLOBAL PRESETS (MVP ONLY)

Global Presets can be used to load presets to all of the displays in the system at the same time with a single click. Global presets are saved to the *Global Presets* form located in the display manger view. A Global Preset load is a feature similar to a macro which allows you to make several specific display preset loads under a single double click.

Figure 2-1: Global Preset Form

- The *Global Presets* form displays all of the previously constructed Global Presets in the Preset Catalog.

- To create a new Global Preset click on the "Create Global Preset…" button on the form.
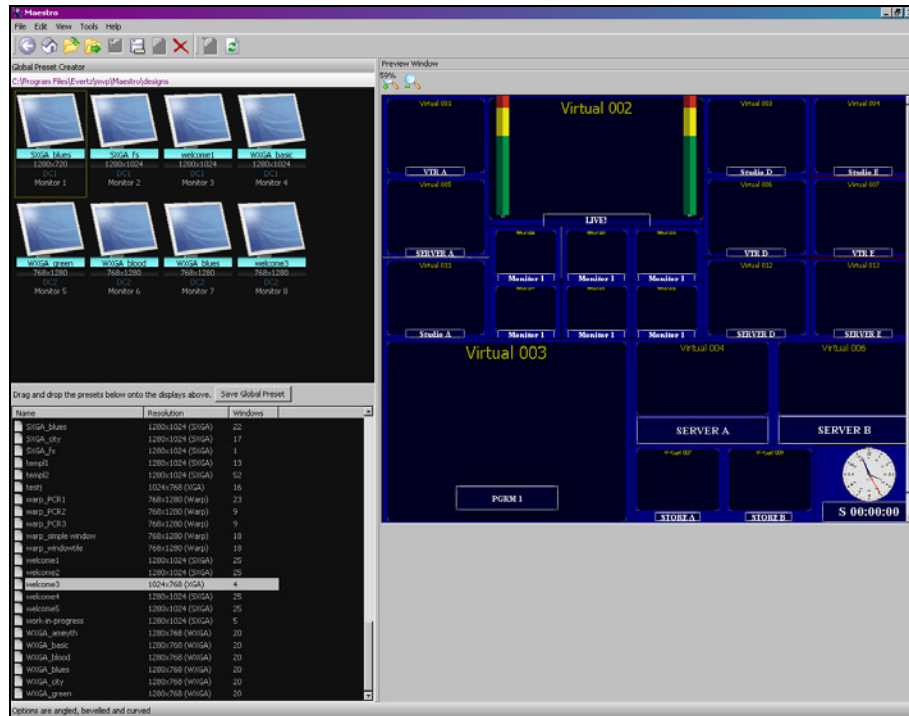
Figure 2-2: Global Preset Setup Form

- After clicking the "Create Global Preset…" button the above page will be appear.

- The upper left window displays the output displays in the system.

- The lower left window displays the single presets available in the preset catalog.

- The window to the right previews the selected preset from the preset catalog.

- Drag and drop a preset from the preset catalog onto one of the displays.

- Continue to drag presets on to the displays that you wish to assign for a global preset recall.

- Click on the "Save Global Preset" button and provide a name to save the Global Preset.

- Click the back button to go back to the *Display Manager* view.

Double click on the *Global Preset* icon to recall the presets for the assigned displays.

> **Note: If a preset that is used by the global preset is modified or deleted it will affect the global preset.**

2.2. VIDEO RE-DIRECT (MVP ONLY)

Video Re-direct can be used to select an input from a layout and send that input to a target display. This feature will affect the physical output of the MVP, it can be used to choose a window from a mosaic view and send it to a QC position for full screen analysis. To setup the video redirect use the following instructions:
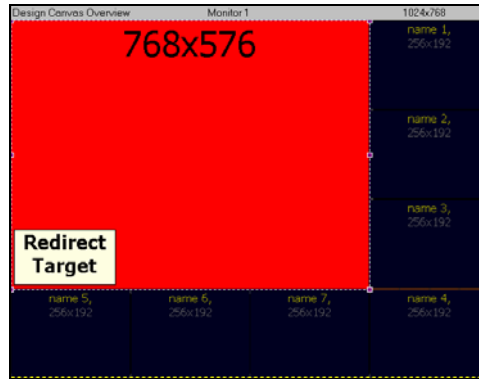
Figure 2-3: Example Redirect Layout

- Create a layout that you intend to use as a re-direct target. The layout below is an example of what the layout might look like.

- Right click on the video object you wish to designate as the re-direct target, and then select "Set as video redirect target".

- Save the redirect target preset. (File / Save As).

- Using the Tools menu, select "Video redirect setup…"
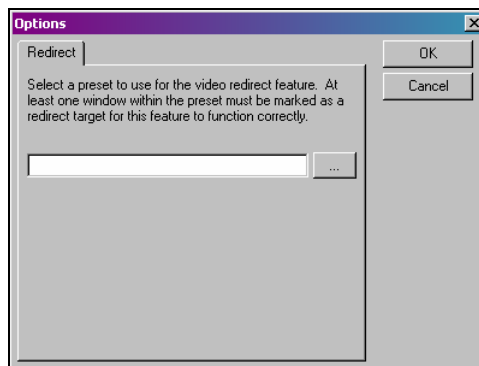
Figure 2-4: Define Trigger Form

- Use the browse button to select the re-direct preset created. Click OK when complete.

- Load display 1, for example with a preset containing several video windows.

- Right click on any of the windows on display 1, and select "Send Video to….."

- Select a display to use for the re-direct display. The display can be the same display that you are using, or any other display that is available in the system.

- After selecting the display to send the video to, you will see the re-direct preset loaded with the video selected on the target display.

3. GLOSSARY

Auxiliary On-Screen Display (OSD):   Renamed from closed captioning.

Desktop Control Panel (DCP):   Remote device that via Ethernet connection allows control over the MVP system.

General Purpose Input (GPI):   An external stimulus applied to the 3000BHP-AUX/7767BHP-AUX break out panel that can trigger an event inside the MVP/VIP system

General Purpose Output (GPO):   An event inside MVP system that can trigger an external stimulus from the 3000BHP-AUX/7767BHP-AUX

LTC (LTC0):   Linear time code, time code generated by a master clock and connected to the display card via the 3000BHP-AUX/7767BHP-AUX break out panel

On board Server: The MVP on-board server refers to a server that runs on the master display card in the MVP frame. This is typically the case in systems where there are only 1 or 2 display cards (1 to 8 displays).

OV (Octal Video):   Video input module with eight inputs

PC server (Stand alone server)   The MVP stand alone server refers to a server that runs on the a PC. This is typically the case in systems where there is greater than 2 display cards.

PPV, PPMV: Video output modules

Under Monitor Display (UMD):   Historical term used in video industry to denote a text display directly underneath a video source. Used to label a video source (i.e. Camera 1)

Vertical Interval Time Code (VITC):   Time reference that is embedded in a video stream

4. MAESTRO SHORTCUT KEYS

4.1. COMMON KEY BINDINGS

Description	Shortcut Keys
Clear Console	CTRL + SHIFT + C
Clear Selection	ESC
Copy Selection	CTRL + C
Delete Selection Where Applicable	DEL
Drag Selected Mode	CTRL + <LEFT MOUSE>
Exit Application	ALT + F4
Go to System Level	CTRL + HOME
Paste Copied Selection	CTRL + V
Previous Screen	BACKSPACE
Refresh	F5
Scroll Window	<SCROLL WHEEL>
Select All	CTRL + A
Select Next	TAB
Show Context Menu	<RIGHT MOUSE>

Table 4-1: Common Key Bindings Shortcut Keys

4.2. SYSTEM MANAGER

Description	Shortcut Keys
Select Next System	TAB
Select Previous System	SHIFT + TAB
View Selected System	ENTER
View Selected System's Hardware	CTRL + H

Table 4-2: System Manager Shortcut Keys

4.3. DEVICE MANAGER

Description	Shortcut Keys
Get Version	CTRL + G
Load Upgrade File	CTRL + L
Select Next Device	TAB
Select Previous Device	SHIFT + TAB
Upgrade Firmware	CTRL + U

Table 4-3: Device Manager Shortcut Keys

4.4. DISPLAY MANAGER

Description	Shortcut Keys
Change Selected Display Properties	ALT + ENTER
Clear Contents on Selected Display	CTRL + N
Connect	CTRL + O
Disconnect	CTRL + T
Layout Mode (Toggle)	SHIFT + L
Layout Mode Properties	CTRL + SHIFT + L
Reset Layout	SHIFT + R
Load Preset on Selected Display	CTRL + L
Rename Display	CTRL + SHIFT + R
Reset System	CTRL + R
Save Display Preset	CTRL + S
Save Display Preset as…	CTRL + SHIFT + S
Select Next Display	TAB
Select Previous Display	SHIFT + TAB
System Configuration	CTRL + Y
Upload	CTRL + F12
Go to Selected Display's Design	ENTER

Table 4-4: Display Manager Shortcut Keys

4.5. PRESET CATALOG

Description	Shortcut Keys
Load Preset	CTRL + L
Load Selected Preset Onto Display	ENTER
Select Next Preset	DOWN ARROW
Select Previous Preset	UP ARROW

Table 4-5: Preset Catalog Shortcut Keys

4.6.   DESIGN STUDIO

Description	Shortcut Keys
Auto Fit Design	CTRL + SHIFT + F
Calculator	CTRL + ALT + C
Clear	CTRL + N
Connect	CTRL + O
Disconnect	CTRL + T
Duplicate	CTRL + D
Duplicate (Keep Source)	CTRL + SHIFT + D
Fit	CTRL + F
Interior Design	ENTER
Keyed Virtual Assignment (Monitor Object Only)	0-9
Load a Preset	CTRL + L
Nudge Down	DOWN ARROW
Nudge Left	LEFT ARROW
Nudge Right	RIGHT ARROW
Nudge Up	UP ARROW
Push Selected Object to Bottom Edge	SHIFT + DOWN ARROW
Push Selected Object to Left Edge	SHIFT + LEFT ARROW
Push Selected Object to Right Edge	SHIFT + RIGHT ARROW
Push Selected Object to Up Edge	SHIFT + UP ARROW
Redo	CTRL + Y
Save Display Preset	CTRL + S
Save Display Preset as…	CTRL + SHIFT + S
Select Next Object	TAB
Select Previous Object	SHIFT + TAB
Undo	CTRL + Z
Upload	CTRL + F12
View Grid Lines (Toggle)	CTRL + SHIFT + G
View Window Names (Toggle)	CTRL + SHIFT + W
Window Page Down	PAGE DOWN
Window Page Up	PAGE UP
Window Scroll Down	CTRL + DOWN ARROW
Window Scroll Left	CTRL + LEFT ARROW
Window Scroll Right	CTRL + RIGHT ARROW
Window Scroll Up	CTRL + UP ARROW
Zoom In	+
Zoom Out	-
Zoom to Fit	SHIFT + Z

Design Studio Shortcut Keys

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