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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:

Add System		×
System		ОК
Maestro needs to kno the system you are a information in the field	w some basic information about dding. Please enter the ds below.	Cancel
System Name:	VIP demo 1	
IP Address:	192.168.9.100	
Туре:	VIP8	

Figure 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.

₩ <mark>8</mark> ATЬ
<u>File Edit View Tools Help</u>
System Manager
Demo 1
System ID: 5ee6eb7c-8c3c-4144-98e8-2ca517073809 Address: 192.168.1.100 Type: VIP4

Figure 2: VIP Maestro System Manager Page View

1.3.2. Setup for MVP:

Add System		×
System		ОК
Maestro needs to kno the system you are a information in the fie	ow some basic information about Idding, Please enter the ds below.	Cancel
System Name:	MVP demo 1	
IP Address:	192.168.9.100	
IP Port:	9680	
		J

Figure 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.

1.3.1. 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 ...<u>C:\Program</u> 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

1.3.2. 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 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

1.3.3. VIP/MVP System Upgrade Through Maestro



Figure 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 competed the upgrade process, remember to re-start the hardware for the upgrade to take effect.
- 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 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

12 M	laestr	0							
File	Edit	View	Tools	Help					
6) 😗	Go Go	Back Home				l	Back Ctrl+Home	
Display Man Design					Ente	er			
Drag-	and dr	Cle	ar					Ctrl+N	
		Ful	l Screer	1					
		Rel	fresh					F5	
		An	ange Io	ons:					
Η		🖌 Lay	/out Mc	de				Shift+	-L
	4 Winc	Lay	/out Pro	perdies.			C	Ctrl+Shift+L	
	1280x	Re	set Lay	out		Ctrl+Shift+R		R	
	Monit	🗸 Glo	bal Pre	set Wind	low				
—		🗸 Sta	itus Cor	nsole					

following instructions can be used to modify the display 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
- Rest changes by selecting Reset Layout...

Figure 7: Display Manager Layout View

1.5. Menus/Tool bars

 Image: Sector 1
 Image: Sector 2
 Image: Sector 2
 Image: Sector 2

 Image: Sector 2
 Image: Sector 2
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The following figure depicts the typical Maestro design screen:

Figure 8: Design Canvas View

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

File	Edit	View	Tools	Help				
Logout								
Connect Ctrl+O								
Di	isconn	ect	Ctrl-	÷Τ				
Lo	oad	Ctrl-	Ctrl+L					
S	ave		Ctrl-	Ctrl+S				
Sa	ave As		F12	F12				
S	ave As	Script,	., Ctrl-	+F12				
E	xit							
F	igure	9: File I	Menu V	iew				

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

Edit	View	Tools	Help				
Ur	ndo			Ctrl+Z			
Re	edo			Ctrl+Y			
St	Status Console 🔹 🕨						
Ali	Align						
Pu	ısh			+			
Nu	udge			•			
C)	ру			Ctrl+C			
Pa	Paste			Ctrl+V			
De	elete			Del			
Du	plicate			Ctrl+D			
Du	plicate	(Keep S	Source)	Ctrl+Shift+D			
Fit	i.			Ctrl+F			
C	ear Sela	ection		Escape			
Se	elect Pre	evious		Shift+Tab			
Se	elect Ne	xt		Tab			
Se	elect All			Ctrl+A			
Cł	nange B	ackgrou	und				

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

Figure 10: Edit Menu View

Fit: option to take the selected window and best fit to the available canvas resolution **Clear Selection**: Un-select the current selection

input assigned

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

View Tools Help	
Go Back	Back
Go Home	Ctrl+Home
Interior Design	Enter
Zoom In	+
Zoom Out	-
Zoom to 100%	
Zoom to Fit	Shift+Z
Clear	Ctrl+N
Full Screen	
Full Screen Refresh	F5
Full Screen Refresh Arrange Sources By	F5
Full Screen Refresh Arrange Sources By Tool Windows	F5
Full Screen Refresh Arrange Sources By Tool Windows ✓ Grid Lines	F5 Ctrl+Shift+G
Full Screen Refresh Arrange Sources By Tool Windows ✓ Grid Lines ✓ Show Window Names	F5 Ctrl+Shift+G Ctrl+Shift+W

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 doubleclicking 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 Figure 11: View Menu View 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

Device Address: IP address of input card Device Address Device Name: Alphanumeric sort based on name of hardware **Device Type:** Hardware type sort Hardware Configuration: address and name sort Hardware Configuration Source Name: alphanumeric sort based on input labels Group Sources: group inputs based on above sort criteria Group Sources Show Source Input: view source input spigot alphanumberic Show Source Input Show Virtual Index: view source virtual number Show Virtual Index

Figure 12: Arrange Sources View Tool Windows:

Device Name

Device Type

Source Name

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

Tools	Help				
Dyn	Dynamic Sizing				
Acc	Access Control				
Aut	Auto Fit Design Ctrl+Shift+F				
Calo	tulator	Ctrl+Alt+C			
Imp	Import Virtual Names Ctrl+I				
Save System Settings					
Synchronize System					
Sys	tem Configuration	Ctrl+Y			
Vide	eo Redirect Setup				
Syn	chronize	Ctrl+Shift+S			
Res	et System	Ctrl+R			

Figure 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 14: Help Menu View

Keyboard Map...: displays all keyboard commands (see Appendix A)

About...: displays the current version of Maestro



1.5.6. Title Block, Menu Bar and Icon Bar

🕞 🅎 🔁 🗄 🚹	1 2 S 4 60% S 50 Online 日本 平 盐 动 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
	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



 $\ensuremath{\text{MVP}}$: 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)

everlz



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.

GPO configuration:

stem Config	guration				×
elect a device	to view its setting	s.			
Device	Address	Туре			
DC1	192.168.9.11	PPMV			
DC2	192.168.9.12	PPMG			
elect the tab y	ou wish to modify				
GPO Reso	lution Severity				
Output Mode:	Normal		•		
Name	Status	GPO Terminal			-
GPO 0001	Inactive	01			
GPO 0002	Inactive	02			
GPO 0003	Inactive	03			
GPO 0004	Inactive	04			
GPO 0005	Inactive	05			
GPO 0006	Inactive	06			
GPO 0007	Inactive	07			
GPO 0008	Inactive	08			
GPO 0009	Inactive	09			
GPO 0010	Inactive	10			
GPO 0011	Inactive	11			
GPO 0012	Inactive	12			
GPO 0013	Inactive	13			
GPO 0014	Inactive	14			
GPO 0015	Inactive	15			-
	To a shire	~			
	-				
			OK	Cance	noly

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 15: System Configuration Window (GPO View)

Resolution:

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

stem Config	juration		×
elect a device	to view its settings.		
Device	Address	Туре	
DC1	192.168.9.11	PPMV	
0C2	192.168.9.12	PPMG	
elect the tab y	ou wish to modify.		
GPO Resol	ution Severity		
Display Resolu	tion		
Mode	Description		
720w490	Apop/sps;		
720×400	400P/5251		
1024-769	370F/023I		
1220-720	7200		
1200,720	720F		
1266-006	WYCA Alternate		
768×1280	Warp		
768×1366	Warp Alternate		
1280×1024	Barco SYGA		
1400×1050	Barco SXGA+		
1280×1024	SXGA		
1400×1050	SXGA+		Refresh Rate
1600×1200	UXGA		60 Hertz
1920×1080	1080p 50		Adjust: Horizontal
1920×1080	1080p 60		· ·
Multi	Multi-Resolution Dev	/ice	Adjust: Vertical 0
1			Advanced Setup
			OK Canad Analy
			OK Cancel Apply

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.

Figure 16: System Configuration Window (Resolution View)

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).



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.

Figure 17: Resolution View (Advanced View)

Severity:

Use the severity tab to configure the visual properties for window based alarms/tally triggers.

System Conf	iguration		×
Select a device	e to view its settings.		
Device	Address	Туре	
DC1	192.168.9.11	PPMV	
0.2	192.100.9.12	FFING	
Select the tab	you wish to modify.		
GPO Res	olution Severity		
Critical Sever	rity		Critical Acknowledgement
100%			100%
🗖 Blink Rate	e: 10 🔺		Blink Rate: 10
Major Severi	ty		Major Acknowledgement
100%			100%
🗖 Blink Rate	e: 10 ÷		Blink Rate: 10
Minor Severil	tv		Minor Acknowledgement
100%			100%
Blink Rati			Blink Bate: 10
, Jan Krede			
			OK Cancel Apply

Figure 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



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 ad 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 19: Objects form (4:3 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)

Figure 20: Objects form (Clock templates)





1.5.9. Window Parameter Right-click Menu Options

Go Back	When selecting a window from the Canvas page view, then
Promote (Bring Forward)	options:
Demote (Send Back)	
Auto Fit Design	Go Back : Returns to the Display Manager page view
Chapter Background	Promote (Bring Forward): move video object from
Change Display	MVP only)
	Demote (Send Back): move video object from top
Create Design Template	layer to bottom layer (allows for window overlap
Send Video To	MVP only)
Set As Video Redirect Target	Auto-fit Design: automatically resizes on screen
Crop	display elements to fit the Canvas' resolution
Fit	Change Background: Option to change the
Upaccian Video	background of the display
	Change Display: switch from current display to an
Fit Video Using Current Aspect	alternate display
Fit Video Using 4x3 Aspect	Create Design Template: Create a template from
Fit Video Using 16x9 Aspect	the selected window that is then stored in the
	reused in future
Сору	Sond Video To: used in video re direct feature to
Paste	send input video to target display (MVP only)
Delete	Save As Video Redirect Target: setup for video re-
Select All	direct feature (MVP only)
BOILT HI	Figure 21: Monitor Object right click menu

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 placed on a single display card.

Virtual 005 164x123	 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 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.

Prope	Properties				
Monitor: Virtual 001					
м 🗹	aintain Size Aspect Ratio				
	ppearance				
Ba	ackground Color	100%			
B(order Color	100%			
B	order Style	Normal			
	Edge Type	Normal			
	Edge Style	Angled			
Bo	order Thickness	1			
🗆 Si	ze	412x231			
	Width	412			
	Height	231			
A	uxiliary OSD?				
W	'indow Name	Window.002			
	ault Indicator Rules				
D	efine critical	None			
D	efine major	None			
D	efine minor	None			
Vi	sual effect	Border			

Figure 23: Monitor Object Property Sheet

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.



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 property sheet to configure the size, colour, turn scales on and off and set orientation of level bar.

Figure 24: Monitor Objects components (audio level bars)



Phase Bars 1/2, 3/4, 5/6, 7/8: add phase bars to video object to view phase for assigned video input.

Use property sheet to configure the size, colour, and turn scales on and off.

Figure 25: Monitor Objects components (Phase Bars)

Objects ×				
Level Bars Ph	ase Bars Stat	us GPO		
Fault				
Error	Drag ani	d drop object or		
Status				
P.Rating	Video Std.			
E/AC3(1-2)	E/AC3(3-4)			
E/AC3(5-6)	E/AC3(5-6) E/AC3(7-8)			
User Text	WSS/AFD1			
WSS/AFD2 WSS/AFD3				
Tally				
Under Monitor Display				
Umd				

Fault: add a fault message to video object.
Use property sheet 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 26: Monitor Objects components (Status options)

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Objects				
Level Bars	Phase Bars	Status	GPO	
Generic P	urpose Out	puts		
GPO 1	GPO	2		
GPO 3	GPO	4		
GPO 5	GPO	6		
GPO 7	GPO	8		
GPO 9	GPO	10		
GPO 11	GPO	12		
GPO 13	GPO	14		
GPO 15	GPO	16		
GPO 17	GPO	18		
GPO 19	GPO	20		
GPO 21	GPO	22		
GPO 23	GPO	24		
GPO 25	GPO	26		
GPO 27	GPO	28		
GPO 29	GPO	30		
GPO 31	GPO	32		
GPO 33	GPO	34		
GPO 35	GPO	36		
GPO 37	GPO	38		
GPO 39	GPO	40		
GPO 41	GPO	42		
GPO 43	GPO	44		
GPO 45	GPO	46		
GPO 47	GPO	48		

GPO: add a GPO to a specific input that can be triggered based on the fault condition for the assigned input.

To configure the trigger settings for the GPO

Figure 27: Monitor Objects components (GPO)



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 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.



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 29: Fault Object property sheet

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

 Trigger Mode:
 Avv stride option (OR)

 AND =

 be disp

 Group A
 Image: Control option (OR)

 * Ch. 1, Audio Loss

 * Ch. 2, Audio Loss

 * Ch. 3, Audio Loss

 * Ch. 4, Audio Loss

 * Ch. 1, Audio Too Lod

 * Ch. 1, Audio Too Quelt

 * Ch. 1, Audio Too Quelt

 * Ch. 1, Audio Too Quelt

 * Ch. 1, 2, Compressed Audio Loss

 * Ch. 1, 2, Compressed Audio Loss

Figure 30: Define Fault message Trigger Form

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.



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)

Figure 31: UMD property sheet

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.

Pro	operties	×
_	^{ال} Ta	lly
	Maintain Size Aspect Ratio	
	Anno-11-11-1	
	Appearance	Contoxy Contox
	Alighmenic Background Color	Center; Center
	Background Color Border Color	50%
F	Border Style	Normal
	Border Thickness	1
Ŧ	Size	204~48
	Text Color	50%
	Text Size	16
	Text	
	Active Tally State 1	
	Define trigger	None
	Active Color	100%
	Active Border Color	100%
	Active Text Color	100%
	Active Text	
	Active Tally State 2	
	Define trigger	None
	Active Color	100%
	Active Border Color	100%
	Active Text Color	100%
	Active Text	
	Active Tally State 3	
	Define trigger	None
	Active Color	100%
	Active Border Color	100%
	Active Text Color	100%
	Active Text	
	Mode Settings	
	Mode	Static
	Function	Static
	Active Protocol Id	0

Figure 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

Design Canvas Overview				
	L 00:00	:00		

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 33: Clock object container



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:

Ciauro '	24.1	Intorior	10.00	~f	alaak
riuure .	34.	menor	view	UI.	CIUCK

Pro	Properties 🛛 💌			
_	Digital Clock			
	Maintain Size Aspect Rati	io		
	A			
	Appearance	Castan Castan		
Ξ		Center; Center		
	Background Color	100%		
	Border Style	Normal		
	Edge Type	Normal		
	Edge Style	Angled		
	Border Thickness	1		
\Box	Size	192x38		
	Width	192		
	Height	38		
	Text Color	100%		
	Text Size	28		
	Text	L 00:00:00		
	Mode Settings			
	Mode	12 Hour		
	Timer Settings			
Ð	Time Source	LTC0; + (Ahead); 0; 0; 0		
Ð	Start Time	00:00:00		
Ð	Stop Time	00:00:00		
	Start Trigger	None		
	Stop Trigger	None		
	Reset Trigger	None		

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. Figure 35: Digital clock object property sheet



**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 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, see section above 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.



- 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 37: Global Preset Form



Figure 38: 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

everlz

Video Re-direct can be used to select an input from a layout and send that input to a target display. This feature will effect 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:



- 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, then select "Set as video redirect target".
- Save the redirect target preset. (File / Save As)
- Using the Tools menu, select "Video redirect setup..."

Figure 39: Example Redirect layout

- 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.



Figure 40: Define Trigger Form



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 theaPC. This is typically the case in systems where there is greater than 2 displaycards.

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 (ex. Camera 1)

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



4. Maestro Shortcut keys

Common Key Bindings

<RIGHT MOUSE>: Show context menu
<SCROLL WHEEL>: Window scroll
Backspace : Go to previous screen
CTRL + <LEFT MOUSE> : Drag selection mode
CTRL + A : Select all
CTRL + C : Copy selection
CTRL + Home : Go to system level
CTRL + SHIFT + C : Clear console
CTRL + V : Paste copied selection
Del : Delete selection where applicable
Esc : Clears selection
F5 : Refresh

System Manager

CTRL + H : View selected system's hardware Enter : View selected system SHIFT + Tab : Selects previous system Tab : Selects next system

Device Manager

CTRL + L : Load upgrade file SHIFT + Tab : Selects previous device Tab : Selects next device

Display Manager

ALT + Enter : Change selected display properties CTRL + F12 : Save as script CTRL + L: Load a preset on selected display CTRL + N: Clear contents on selected display CTRL + O: Connect CTRL + R: Reset the system CTRL + S : Save display preset CTRL + SHIFT + L : Layout properties CTRL + SHIFT + R: Reset layout CTRL + T : Disconnect CTRL + Y : System configuration CTRL+SHIFT+R : Rename Display Enter : Go to selected display's design F12 : Save display preset as Left Arrow : Select previous display Right Arrow : Select next display SHIFT + L : Layout mode SHIFT + Tab : Selects previous display Tab : Selects next display

Preset Catalog

CTRL + L : Load a preset Down Arrow : Select next preset



Enter : Load selected preset onto display Up Arrow : Select previous preset

Design Studio

+ : Zoom out 0-9 : Zoom in ALT+<LEFT MOUSE> (on object sizer) : Disable dynamic sizing CTRL + ALT + C: Calculator CTRL + D: Fit CTRL + Down Arrow : Upload CTRL + F : Import virtual names CTRL + F12: Load a preset CTRL + I : Clear CTRL + L : Reset system CTRL + Left Arrow : Save display preset CTRL + N: View grid lines CTRL + R : View window names CTRL + Right Arrow : Window scroll down CTRL + S: Window scroll left CTRL + SHIFT + D: Window scroll up CTRL + SHIFT + G : Window scroll right CTRL + SHIFT + W : System configuration CTRL + Up Arrow : Nudge down CTRL + Y : Interior Design Down Arrow : Save display preset as Enter : Nudge left F12 : Window page down Left Arrow : Window page up Page Down : Nudge right Page Up : Push selected object to bottom edge Right Arrow : Push selected object to left edge SHIFT + Down Arrow : Push selected object to right edge SHIFT + Left Arrow : Selects previous display SHIFT + Right Arrow : Push selected object to top edge SHIFT + Tab : Zoom to fit SHIFT + Up Arrow : Selects next display SHIFT + Z: Nudge up Tab : Selects next display Up Arrow : Nudge selected object up