



# tvONE CORIOmaster2 Commands

## Command-line Options

Document version 503.0.1

System API version 5.3.18315 or above

Firmware version G503

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## Constraints

Note that although the tvONE system supports connections via both serial (RS-232) and Ethernet protocols, at no point does it support both connections CONCURRENTLY. The unit must be connected to just one controlling PC at any given time.

### Default communications settings

#### *Serial connection (RS-232)*

Speed (baud) 115200

Data bits 8

Stop bits 1

Parity None

Flow control None

#### *Ethernet Connection*

IP Address 192.168.0.10

Port 10001

Subnet mask 255.255.255.0

IP Gateway 192.168.0.1

## Legend

Property Name	Syntax	Type	Example	Description
Name	Command	Type	Example	Description. Used for commands that are common across all CORIOmax products.

The table fields contain the following information:

Property Name the name of the command.

Syntax the full syntax structure of the command.

Type the type of the value for use with this command. Note that where the options are complex the possible values are described in the Custom Types section on page 182 below.

Example is an example of the command in use.

Description a brief description of the command.

## Top level Commands

### Methods

Command	Syntax	Type	Example	Description
Login	Login(<username>,<password>)	Void	login(admin,adminpw) !Info : User admin Logged In	Log on to the device with the supplied username and password. For more information on the usernames and passwords see the section System Security Commands on page 28 below.
Logout	Logout	Void	logout !Info : User system.security.Admin_Username Logged Out // logout	Log out the current user.
StartBatch	StartBatch	Void	StartBatch !Done StartBatch	Group a number of write commands together so that they will be operated on at the same time. The effect of the commands will not be processed until the EndBatch command is received. Note that read commands will always be processed immediately.
EndBatch	EndBatch	Void	EndBatch !Done EndBatch	Execute the commands entered since the last StartBatch command.

### Properties

Command	Syntax	Type	Example	Description
Namespaces	Namespaces	List	Namespaces  Aliases Slots	List the commands that may be omitted and the sub-command used directly.

			Routing.Canvases Routing.Windows Routing.Layouts Routing.MonitorViews Resources // Namespaces	For example, you may use either Slots.Slot1 or just Slot1.
Root	Root	List	Root CORIOmax System Test Aliases Resources Slots Routing !Done Root	List the root-level of commands. Each of these is the basis of a further group of commands, described in this document.



## CORIOmax Commands

### Properties

Property Name	Syntax	Type	Example	Description
CORIOmax	CORIOmax	List	<pre>coriomax.Model_Name = CORIOmaster2 coriomax.Model_Number = CM2-547 coriomax.Serial_Number = 221939... coriomax.Backplane_Number = 221961... coriomax.Software_Name = CORIOmaster2 coriomax.Software_Version = M500_00 CORIOmaster2 CM2-547 coriomax.Software_Date = Jun 25 2020 21:51:45 coriomax.Software_Update() coriomax.MediaCard_Update() !Done CORIOmax</pre>	List all the CORIOmax commands and display the values of the properties.
Model_Name	CORIOmax.Model_Name	String	<pre>CORIOmax.Model_Name = CORIOmaster !Done CORIOmax.Model_Name</pre>	Read-only. Get the model name for the device. e.g. CORIOmaster or CORIOmatrix mini
Model_Number	CORIOmax.Model_Number	String	<pre>CORIOmax.Model_Number = C3-540 !Done CORIOmax.Model_Number</pre>	Read-only. Get the model number for the device. e.g. CM2-547, C3-540, C3-310, ...
Serial_Number	CORIOmax.Serial_Number	Integer	<pre>CORIOmax.Serial_Number = 2218031... !Done CORIOmax.Serial_Number</pre>	Read-only. Get the serial number for the device
Backplane_Number	CORIOmax.Backplane_Number	Integer	<pre>CORIOmax.Backplane_Number = 00000000000000 !Done CORIOmax.Backplane_Number</pre>	Read-only. Get the serial number for the Backplane

Property Name	Syntax	Type	Example	Description
Software_Name	CORIOmax.Software_Name	String	CORIOmax.Software_Name = CORIOmaster !Done CORIOmax.Software_Name	Read-only. Get the name of the current firmware. e.g. CORIOmaster or CORIOmatrix
Software_Version	CORIOmax.Software_Version	String	CORIOmax.Software_Version = M500_00 CORIOmaster2 CM2-547 !Done CORIOmax.Software_Version	Read-only. Get the version of the current firmware
Software_Date	CORIOmax.Software_Date	String	CORIOmax.Software_Date = Apr 15 2015 15:22:10 !Done CORIOmax.Software_Date	Read-only. Shows the date the software was compiled.

## Methods

Method Name	Syntax	Type	Example	Description
Software_Update	CORIOmax.Software_Update()	Void	Software_Update() !Done Software_Update	Initiate the firmware update process. This command assumes that the new firmware package has been copied to the SD Card first.
MediaCard_Update	CORIOmax.MediaCard_Update() )	Void	CORIOmax.MediaCard_Update() // Starting Media Card Update ... please wait-> Slots.Slot1.Status ..... // Update package copied successfully. // Files copied successfully. !Info : Rebooting...	(streaming media and 4k playback input module only) Update CPU firmware on streaming media and 4k playback card, and reboot. This command assumes that the new CPU firmware package has been copied to the SD Card first. Note: Any USB drive must be disconnected.

## System Commands

### Properties

Command	Syntax	Type	Example	Description
System	System	List	System.Comms = <...> System.Constraints = <...> System.Temperature_Control = <...> System.Sensors = <...> System.Security = <...> System.Menus = <...> System.Reset() System.SaveAllSettings() System.SaveSystemSettings() System.SaveResources() System.SaveFrontPanel() System.SaveLiveConfig() System.RestoreAll() System.ClearSavedSettings() System.ClearLiveConfig() System.ClearSavedIPStreams() System.ClearSavedPlaylists() System.ConfigName = NULL System.BackupToSDCard() System.RestoreBackup() System.HDCPPrintTable() System.WPrstSeqNum = 0 System.HDCPClearKeyFile() System.HDCP_Status = R System.HDCP_Debug = Off System.Status = Serving System.ModuleUpdateStatus = Ready System.API_Version = 5.0.14429	List all the System commands and display the values of the properties

Command	Syntax	Type	Example	Description
			System.Unit_Description = System.Messages = <...> System.Synclock_Inhibit = Off System.Preset_Easing = On System.PhaseTrainTime = 15 System.StandbyMode = Off System.Time = <...> System.EdidUtils = <...> System.Clients = <...> System.Alerts = OK !Done System	
Comms	System.Comms	List	System.Comms.RS232 = <...> System.Comms.Ethernet = <...> System.Comms.USB = <...> !Done System.Comms	List all the communication properties. See System Communications Commands on page 19 below.
Constraints	System.Constraints	List	System.Constraints.MaxInputs = 18 System.Constraints.MaxOutputs = 20 System.Constraints.MaxWindows = 36 System.Constraints.MaxCanvases = 4 System.Constraints.MaxLayouts = 4 System.Constraints.MaxScalerPanels = 20 System.Constraints.MaxPVWindows = 16 !Done system.Constraints	List all the constraints of the device See System Constraints Commands on page 24 below.

Command	Syntax	Type	Example	Description
Temperature_Control	System.Temperature_Control	List	<pre> System.Temperature_Control System.Temperature_Control.FanSpeed = 66 System.Temperature_Control.Fan_Inlet0_RP M = 4246 System.Temperature_Control.Fan_Inlet1_RP M = 4204 System.Temperature_Control.Fan_Inlet2_RP M = 4157 System.Temperature_Control.Fan_Inlet3_RP M = 4189 System.Temperature_Control.Fan_FPGA_RP M = 3616 System.Temperature_Control.Fan_Exhaust0 _RPM = 4213 System.Temperature_Control.Fan_Exhaust1 _RPM = 4148 System.Temperature_Control.Fan_Exhaust2 _RPM = 4204 System.Temperature_Control.Fan_Exhaust3 _RPM = 4139!Done system.Temperature_Control </pre>	See System Temperature Control Commands below.

Command	Syntax	Type	Example	Description
Sensors	System.Sensors	List	<pre>System.Sensors.BP_0v9_mA = 9234 System.Sensors.BP_0v9_mV = 897 System.Sensors.BP_0v9_degC = 48 System.Sensors.BP_1v03_mV = 1029 System.Sensors.BP_1v8_mV = 1804 System.Sensors.BP_3v0_mV = 2995 System.Sensors.BP_3v3_mV = 3277 System.Sensors.BP_5v0_mV = 4979 System.Sensors.BP_FPGACore_degC = 63 System.Sensors.BP_AboveFPGA_degC = 43 System.Sensors.BP_InletMid_degC = 32 System.Sensors.BP_ExhaustHigh_degC = 33 System.Sensors.BP_ExhaustMid_degC = 35 System.Sensors.BP_CenterLow_degC = 38 System.Sensors.BP_ExhaustLow_degC = 34 System.Sensors.PSU1_mA = 8281 System.Sensors.PSU1_mV = 11953 System.Sensors.PSU1_degC = 49 System.Sensors.PSU1_Fan_RPM = 3300 System.Sensors.PSU2_mA = 0 System.Sensors.PSU2_mV = 0 System.Sensors.PSU2_degC = &lt;faulty sensor&gt; System.Sensors.PSU2_Fan_RPM = 0 !Done System.Sensors</pre>	<p>See System Sensors Commands below.</p>
Security	System.Security	List	<pre>System.Security.User1_Username = user1 System.Security.User1_Password = &lt;Restricted&gt; System.Security.User1_Timeout = 300 System.Security.User1_Role = PowerUser System.Security.User2_Username = user2</pre>	<p>List all the security settings of the device.</p> <p>See System Security Commands on page 28 below.</p>

Command	Syntax	Type	Example	Description
			<pre> System.Security.User2_Password = &lt;Restricted&gt; System.Security.User2_Timeout = 300 System.Security.User2_Role = User System.Security.User3_Username = user3 System.Security.User3_Password = &lt;Restricted&gt; System.Security.User3_Timeout = 300 System.Security.User3_Role = User System.Security.User4_Username = user4 System.Security.User4_Password = &lt;Restricted&gt; System.Security.User4_Timeout = 300 System.Security.User4_Role = User System.Security.Admin_Username = admin System.Security.Admin_Password = &lt;Restricted&gt; System.Security.Admin_Timeout = 300 System.Security.Admin_Role = Administrator System.Security.Test_Username = test System.Security.Test_Password = &lt;Restricted&gt; System.Security.Test_Timeout = 14400 System.Security.Test_Role = Test !Done System.Security </pre>	
Menus	System.Menus	List	<pre> System.Menus.Titles() System.Menus.XML() System.Menus.Details() !Done System.Menus </pre>	Serialise the menu out as text.

Command	Syntax	Type	Example	Description
ConfigName	System.ConfigName	String	System.ConfigName = Configuration !Done System.ConfigName	Get or set the configuration name of the live system (the configuration name is a string of up to 32 characters currently without spaces). See Resources Configuration Commands on page 46 below.
WPrstSeqNum	System.WPrstSeqNum	Integer	System.WPrstSeqNum = 0 !Done System.WPrstSeqNum	Read only. Number of Routing.Preset.RestoreRead() commands executed since power on.
HDCP_Debug	System.HDCP_Debug	Boolean	System.HDCP_Debug = Off !Done System.HDCP_Debug	Enable the diagnostics for the HDCP system. The output is to be captured and submitted to Tech Support for diagnosis.
Status	System.Status	SystemStatus	System.Status = Serving !Done System.Status	Read only. Get the status of the device.
ModuleUpdateStatus	System.ModuleUpdateStatus	Enum	System.ModuleUpdateStatus = Ready !Done System.ModuleUpdateStatus	Display the module update status. Valid values are "Booting", "Updating", "Ready", "UpdateFailed".
API_Version	System.API_Version	String	System.API_Version = 3.1.4386 !Done System.API_Version	Read only. The version number of this API.
Unit_Description	System.Unit_Description	String	System.Unit_Description = "My CORIOmaster" !Done System.Unit_Description	Get or set the Device Name. The device name may be no more than 32 characters in length but may contain any ASCII Extended characters including spaces (as long as string is in quotes). The value is always returned in quotes. It may be set empty by providing no characters after the "=".



Command	Syntax	Type	Example	Description
Messages	System.Messages	List	System.Messages.First_Boot = No !Done System.Messages	<b>CORIOgrapher only.</b> Read only.
Messages.First_Boot	System.Messages.First_Boot	Boolean	System.Messages.First_Boot = No !Done System.Messages.First_Boot	Used by CORIOgrapher software to determine whether to return first-boot UI features. Defaults to "Yes" until System.SaveAllSettings() has been used the first time; then returns "No".
Synclock_Inhibit	System.Synclock_Inhibit	Boolean	System.Synclock_Inhibit = Off !Done System.Synclock_Inhibit = Off	Disables the Synclock automatic display synchronisation.
Preset_Easing	System.Preset_Easing	Boolean	System.Preset_Easing = On !Done System.Preset_Easing	Enables key frame easing. Valid values are "Off", "On".
Alerts	System.Alerts	SystemAlerts	System.Alerts System.Alerts = OK !Done System.Alerts	Get any system alerts. Returns OK if no problems detected. Values: OK   Critical_PF   Critical_BF   Critical_MCF   Error_FF   Error_OTF   Critical_FF   Critical_FSRead   Critical_DMA READ ONLY

## Methods

Method Name	Syntax	Type	Example	Description
Reset	System.Reset()	Void	!Info: Rebooting...	Reboot the device.
SaveAllSettings	System.SaveAllSettings()	Void	//Saving settings ... //Settings saved !Done System.SaveAllSettings()	Save the current configuration to persistent memory. The device will keep these settings after a reboot.
SaveSystemSettings	System.SaveSystemSettings()	Void	!Done System.SaveSystemSettings()	Save the current "CORIOmax", "System" configuration.

Method Name	Syntax	Type	Example	Description
SaveResources	System.SaveResources()	Void	!Done System.SaveResources()	Save the current "Resources.TPG", "Resources.Resolutions", "Resources.IP_Streams" configuration.
SaveFrontPanel	System. SaveFrontPanel()	Void	//Saving settings ... //Settings saved !Done System.SaveFrontPanel()	Save the settings related to front panel only. Includes OLED display, and backlight settings
SaveLiveConfig	System.SaveLiveConfig()	Void	!Done System.SaveLiveConfig()	Save the current "System.ConfigName", "System.Messages.SavedAPI", "Aliases", "Routing", "Slots" configuration.
RestoreAll	System.RestoreAll()	Void	//Loading settings ... //Settings loaded !Done System.RestoreAll()	Restore all settings Note that this command is only available from Administrator account.
ClearSavedSettings	System.ClearSavedSettings()	Void	!Done System.ClearSavedSettings()	Clear all saved settings Note that this command is only available from the Administrator account.
ClearLiveConfig	System.ClearLiveConfig()	Void	!Done System.ClearLiveConfig()	Clear settings saved by "SaveLiveConfig".
ClearSavedIPStreams	System.ClearSavedIPStreams() ( )	Void	!Done System.ClearSavedIPStreams()	Clear "Resources.IP_Streams" settings.
ClearSavedPlaylists	System.ClearSavedPlaylists()	Void	!Done System.ClearSavedPlaylists()	Clear all saved playlists.
BackupToSDCard	System.BackupToSDCard()	Void	//Backup: File delete: .... .... //Backup: File copy:... ... //Backup: Complete !Done System.backupToSDCard()	Backup settings (including presets) to SD card.

Method Name	Syntax	Type	Example	Description
RestoreBackup	System.RestoreBackup()	Void	// Restore: File delete: ... ... // Restore: File copy: ... ... //Restore: Complete !Done System.RestoreBackup()	Restore settings from SD card Note that this command is only available from the Administrator account.
HDCPPrintTable	System.HDCPPrintTable()	Table	system.HDCPPrintTable() [nn] Bksv   cn   sl   ch   age   dp   ip flags [00]89 38 AE 0D ED   Y   0F   01   01   00   00000000 00000000 00000000 00000000 !Done system.HDCPPrintTable()	For diagnostic use. Prints the cache of HDCP keys.
HDCPClearKeyFile	System.HDCPClearKeyFile()	Void	!Done System.HDCPClearKeyFile()	Clears the internal cache of HDCP keys.

## System Communications Commands

### Properties

Command	Syntax	Type	Example	Description
Comms	System.Comms	List	System.Comms.RS232 = <...> System.Comms.Ethernet = <...> System.Comms.USB = <...> !Done System.Comms	List all the communication properties
RS232	System.Comms.RS232	List	System.Comms.RS232.Baudrate = 115200 System.Comms.RS232.RS422_Mode = Off !Done System.Comms.RS232	List the current RS232 settings
RS232.Baudrate	System.Comms.RS232.Baudrate	Integer	System.Comms.RS232.Baudrate = 115200 !Done System.Comms.RS232.Baudrate	Get or set the baud rate to use. <b>Warning changing this setting may result in loss of communication to the device!</b>
RS232.RS422_Mode	System.Comms.RS232.RS422_Mode	Boolean	System.Comms.RS232.RS422_Mode = Off !Done System.Comms.RS232.RS422_Mode	Get or set RS422 mode.

Command	Syntax	Type	Example	Description
Ethernet	System.Comms.Ethernet	List	<pre>System.Comms.Ethernet.Enabled = On System.Comms.Ethernet.MAC_Address = 00:16:9e:d7:00:10 System.Comms.Ethernet.DHCP = &lt;...&gt; System.Comms.Ethernet.IP_Address = 172.16.1.100 System.Comms.Ethernet.IP_Subnet_Mask = 255.255.255.0 System.Comms.Ethernet.IP_Gateway = 172.16.0.1 System.Comms.Ethernet.Command_Port = 10001 System.Comms.Ethernet.RestartEthernet() System.Comms.Ethernet.Webserver_Enabl ed = On !Done System.Comms.Ethernet</pre>	<p>List the current Ethernet settings. Note that any changes will not take effect until the Ethernet is restarted (either with the command <code>System.Comms.Ethernet.RestartEthernet()</code> or by saving the settings and restarting the device.</p> <p><b>Warning: changing the settings may result in a loss of communication with the device.</b></p>
Ethernet.Enabled	System.Comms.Ethernet.Enabled	Boolean	<pre>System.Comms.Ethernet.Enabled = On !Done System.Comms.Ethernet.Enabled</pre>	<p>Get or set if Ethernet communications are enabled. This setting will only take effect after restarting the Ethernet or saving the settings and rebooting.</p> <p><b>Warning: turning the Ethernet Off when connected via the Ethernet will result in a loss of communication with the device!</b></p>
Ethernet.MAC_Address	System.Comms.Ethernet.MAC_Address	String	<pre>System.Comms.Ethernet.MAC_Address = 00:16:9e:d7:00:10 !Done System.Comms.Ethernet.MAC_Address</pre>	<p>Read-only. Get the current Ethernet MAC address.</p>

Command	Syntax	Type	Example	Description
Ethernet.DHCP	System.Comms.Ethernet.DHCP	List	System.Comms.Ethernet.DHCP.Enabled = On System.Comms.Ethernet.DHCP.IP_Address = 172.16.1.100 System.Comms.Ethernet.DHCP.IP_Subnet_Mask = 255.255.255.0 System.Comms.Ethernet.DHCP.IP_Gateway = 172.16.0.1	List the current Ethernet DHCP settings.
Ethernet.DHCP.Enabled	System.Comms.Ethernet.DHCP.Enabled	Boolean	System.Comms.Ethernet.DHCP.Enabled = On !Done System.Comms.Ethernet.DHCP.Enabled	Get or set if DHCP mode is to be used for the Ethernet settings. Note that when enabled the settings in System.Comms.Ethernet.IP_Address, System.Comms.Ethernet.IP_Subnet_Mask and System.Comms.Ethernet.IP_Gateway are ignored.
Ethernet.DHCP.IP_Address	System.Comms.Ethernet.DHCP.IP_Address	String	System.Comms.Ethernet.DHCP.IP_Address = 172.16.1.100	Read only. Get the current Ethernet Address.
Ethernet.DHCP.IP_Subnet_Mask	System.Comms.Ethernet.DHCP.IP_Subnet_Mask	String	System.Comms.Ethernet.DHCP.IP_Subnet_Mask = 255.255.255.0 !Done System.Comms.Ethernet.DHCP.IP_Subnet_Mask	Read only. Get the current Subnet mask.
Ethernet.DHCP.IP_Gateway	System.Comms.Ethernet.DHCP.IP_Gateway	String	System.Comms.Ethernet.DHCP.IP_Gateway = 172.16.0.1 !Done System.Comms.Ethernet.DHCP.IP_Gateway	Read only. Get the current Ethernet gateway.

Command	Syntax	Type	Example	Description
Ethernet.IP_Address	System.Comms.Ethernet.IP_Address	String	System.Comms.Ethernet.IP_Address = 172.16.1.100 !Done System.Comms.Ethernet.IP_Address	Get or set the current Ethernet address. This setting will only take effect after restarting the Ethernet or saving the settings and rebooting. Note that if DHCP is enabled this is overridden by the settings in System.Comms.Ethernet.DHCP. <b>Warning changing this setting may result in a loss of communication with the device.</b>
Ethernet.IP_Subnet_Mask	System.Comms.Ethernet.IP_Subnet_Mask	String	System.Comms.Ethernet.IP_Subnet_Mask = 255.255.255.0 !Done System.Comms.Ethernet.IP_Subnet_Mask	Get or set the current Subnet mask. This setting will only take effect after restarting the Ethernet or saving the settings and rebooting. Note that if DHCP is enabled this is overridden by the settings in System.Comms.Ethernet.DHCP. <b>Warning changing this setting may result in a loss of communication with the device.</b>
Ethernet.IP_Gateway	System.Comms.Ethernet.IP_Gateway	String	System.Comms.Ethernet.IP_Gateway = 172.16.0.1 !Done System.Comms.Ethernet.IP_Gateway	Get or set the current Ethernet gateway. This setting will only take effect after restarting the Ethernet or saving the settings and rebooting. Note that if DHCP is enabled this is overridden by the settings in System.Comms.Ethernet.DHCP.

Command	Syntax	Type	Example	Description
Ethernet.Command_Port	System.Comms.Ethernet.Command_Port	Integer	System.Comms.Ethernet.Command_Port = 10001 !Done System.Comms.Ethernet.Command_Port	Get or set the current Ethernet port. This setting will only take effect after restarting the Ethernet or saving the settings and rebooting.
USB.MSD_Enabled	System.Comms.USB.MSD_Enabled	Boolean	System.Comms.USB.MSD_Enabled = On !Done System.Comms.USB.MSD_Enabled	Get or set if the USB Mass Storage Device is enabled. The USB MSD is used when a PC connects to the device with a USB cable. This setting will only take effect after saving the settings and rebooting.

## Methods

Method Name	Syntax	Type	Example	Description
Ethernet.RestartEthernet	System.Comms.Ethernet.RestartEthernet()	Void	System.Comms.Ethernet.RestartEthernet() !Done System.Comms.Ethernet.RestartEthernet()	Updates the Ethernet to use the current settings. <b>Warning: changing the Ethernet settings may result in a loss of communication with the device!</b>



## System Constraints Commands

### Properties

Command	Syntax	Type	Example	Description
MaxInputs	System.Constraints.MaxInputs	Integer	System.Constraints.MaxInputs = 34 !Done System.Constraints.MaxInputs	Read only. Get the maximum number of input channels supported by the device.
MaxOutputs	System.Constraints.MaxOutputs	Integer	System.Constraints.MaxOutputs System.Constraints.MaxOutputs = 34	Read only. Get the maximum number of output channels supported by the device.
MaxWindows	System.Constraints.MaxWindows	Integer	System.Constraints.MaxWindows = 128 !Done System.Constraints.MaxWindows	Read only. Get the maximum number of windows supported by the device.
MaxCanvases	System.Constraints.MaxCanvases	Integer	System.Constraints.MaxCanvases = 3 !Done System.Constraints.MaxCanvases	Read only. Get the maximum number of canvases supported by the device.
MaxLayouts	System.Constraints.MaxLayouts	Integer	System.Constraints.MaxLayouts = 3 !Done System.Constraints.MaxLayouts	Read only. Get the maximum number of layouts supported by the device.
MaxScalerPanels	System.constraints.MaxScalerPanels	Integer	System.constraints.MaxScalerPanels System.constraints.MaxScalerPanels = 128	Read only. Get the maximum number of scaler panels available.
MaxPVWindows	System.Constraints.MaxPVWindows	Integer	System.Constraints.MaxPVWindows = 0 !Done System.Constraints.MaxPVWindows	Read only. Get the maximum number of preview quality windows supported by the device.

## System Temperature Control Commands

### Properties

Command	Syntax	Type	Example	Description
FanSpeed	System.Temperature_Control. FanSpeed	Integer	System.Temperature_Control.FanSpeed = 70	Set the speed of the system cooling fans to a speed as a percentage. Range: 0 to 100%
Fan_Inlet0_RPM	System.Temperature_Control. Fan_Inlet0_RPM	Integer		Read only. Information on current fans speeds (RPM) for all fans within the chassis
Fan_Inlet1_RPM	System.Temperature_Control. Fan_Inlet1_RPM	Integer		
Fan_Inlet2_RPM	System.Temperature_Control. Fan_Inlet2_RPM	Integer		
Fan_Inlet3_RPM	System.Temperature_Control. Fan_Inlet3_RPM	Integer		
Fan_FPGA_RPM	System.Temperature_Control. Fan_FPGA_RPM	Integer		
Fan_Exhaust0_RPM	System.Temperature_Control. Fan_Exhaust0_RPM	Integer		
Fan_Exhaust1_RPM	System.Temperature_Control. Fan_Exhaust1_RPM	Integer		
Fan_Exhaust2_RPM	System.Temperature_Control. Fan_Exhaust2_RPM	Integer		
Fan_Exhaust3_RPM	System.Temperature_Control. Fan_Exhaust3_RPM	Integer		

## System Sensors Commands

### Properties

Command	Syntax	Type	Example	Description
BP_0v9_mA	System.Sensors.BP_0v9_mA	Integer		Read only. Status information for various system components.
BP_0v9_mV	System.Sensors.BP_0v9_mV			
BP_0v9_degC	System.Sensors.BP_0v9_degC			
BP_1v03_mV	System.Sensors.BP_1v03_mV			
BP_1v8_mV	System.Sensors.BP_1v8_mV			
BP_3v0_mV	System.Sensors.BP_3v0_mV			
BP_3v3_mV	System.Sensors.BP_3v3_mV			
BP_5v0_mV	System.Sensors.BP_5v0_mV			
BP_FPGACore_degC	System.Sensors.BP_FPGACore_degC			
BP_AboveFPGA_degC	System.Sensors.BP_AboveFPGA_degC			
BP_InletMid_degC	System.Sensors.BP_InletMid_degC			
BP_ExhaustHigh_degC	System.Sensors.BP_ExhaustHigh_degC			
BP_ExhaustMid_degC	System.Sensors.BP_ExhaustMid_degC			
BP_CenterLow_degC	System.Sensors.BP_CenterLow_degC			
BP_ExhaustLow_degC	System.Sensors.BP_ExhaustLow_degC			
PSU1_mA	System.Sensors.PSU1_mA			
PSU1_mV	System.Sensors.PSU1_mV			
PSU1_degC	System.Sensors.PSU1_degC			
PSU1_Fan_RPM	System.Sensors.PSU1_Fan_RPM			

Command	Syntax	Type	Example	Description
PSU2_mA	System.Sensors.PSU2_mA			
PSU2_mV	System.Sensors.PSU2_mV			
PSU2_degC	System.Sensors.PSU2_degC			
PSU2_Fan_RPM	System.Sensors.PSU2_Fan_RPM			

## System Security Commands

### Properties

Command	Syntax	Type	Example	Description
User1_Username	System.Security.User1_Username	String	System.Security.User1_Username = user1 !Done System.Security.User1_Username	Get or set the account username. The default is <b>"user1"</b> . Note that a PowerUser may change their own account Username while an Administrator may change other account Usernames.
User1_Password	System.Security.User1_Password	String	System.Security.User1_Password = user1pw System.Security.User1_Password= <Restricted> !Done System.Security.User1_Password = user1pw	Write only. Set the account password. The default is <b>"user1pw"</b> . Note that a PowerUser may change their own account password while an Administrator may change the passwords for other accounts.
User1_Timeout	System.Security.User1_Timeout	Integer	System.Security.User1_Timeout = 300 !Done System.Security.User1_Timeout	Get or set the account timeout in seconds. The account will be automatically logged out when the timeout expires. The default is 300 (5 minutes). Setting the timeout to 0 disables the timeout (infinite). <b>Warning it is possible to set the timeout value so low that the system is unusable, it is recommended that values between 60 and 300 are not used.</b>

Command	Syntax	Type	Example	Description
User1_Role	System.Security.User1_Role	Role	System.Security.User1_Role = PowerUser !Done System.Security.User1_Role	Get or set the account role. The default is <b>"PowerUser"</b> . Note that the role may only be changed by an Administrator.
User2_Username	System.Security.User2_Username	String	System.Security.User2_Username = user2 !Done System.Security.User2_Username	Get or set the account username. The default is <b>"User"</b> . Note that a PowerUser may change their own account Username while an Administrator may change other account Usernames.
User2_Password	System.Security.User2_Password	String	System.Security.User2_Password = user2pw System.Security.User2_Password = <Restricted> !Done System.Security.User2_Password = user2pw	Write only. Set the account password. The default password is <b>"user2pw"</b> . Note that a PowerUser may change their own account password while an Administrator may change the passwords for other accounts.
User2_Timeout	System.Security.User2_Timeout	Integer	System.Security.User2_Timeout = 300 !Done System.Security.User2_Timeout	Get or set the account timeout in seconds. The account will be automatically logged out when the timeout expires. The default timeout is 300 seconds (5 minutes). Setting the timeout to 0 disables the timeout (infinite). <b>Warning it is possible to set the timeout value so low that the system is unusable, it is recommended that values between 1 and 300 are not used.</b>

Command	Syntax	Type	Example	Description
User2_Role	System.Security.User2_Role	Role	System.Security.User2_Role = User !Done System.Security.User2_Role	Get or set the account role. The default role is <b>"User"</b> . Note that the role may only be changed by an Administrator.
User3_Username	System.Security.User3_Username	String	System.Security.User3_Username = user3 !Done System.Security.User3_Username	Get or set the account username. The default is <b>"User"</b> . Note that a PowerUser may change their own account Username while an Administrator may change other account Usernames.
User3_Password	System.Security.User3_Password	String	System.Security.User3_Password = user3pw System.Security.User3_Password = <Restricted> !Done System.Security.User3_Password = user3pw	Write only. Set the account password. The default password is <b>"user3pw"</b> . Note that a PowerUser may change their own account password while an Administrator may change the passwords for other accounts.
User3_Timeout	System.Security.User3_Timeout	Integer	System.Security.User3_Timeout = 300 !Done System.Security.User3_Timeout	Get or set the account timeout in seconds. The account will be automatically logged out when the timeout expires. The default timeout is 300 seconds (5 minutes). Setting the timeout to 0 disables the timeout (infinite). <b>Warning it is possible to set the timeout value so low that the system is unusable, it is recommended that values between 1 and 300 are not used.</b>

Command	Syntax	Type	Example	Description
User3_Role	System.Security.User3_Role	Role	System.Security.User3_Role = User !Done System.Security.User3_Role	Get or set the account role. The default role is <b>"User"</b> . Note that the role may only be changed by an Administrator.
User4_Username	System.Security.User4_Username	String	System.Security.User4_Username = user4 !Done System.Security.User4_Username	Get or set the account username. The default is <b>"User"</b> . Note that a PowerUser may change their own account Username while an Administrator may change other account Usernames.
User4_Password	System.Security.User4_Password	String	System.Security.User4_Password = user4pw System.Security.User4_Password = <Restricted> !Done System.Security.User4_Password = user3pw	Write only. Set the account password. The default password is <b>"user4pw"</b> . Note that a PowerUser may change their own account password while an Administrator may change the passwords for other accounts.
User4_Timeout	System.Security.User4_Timeout	Integer	System.Security.User3_Timeout = 300 !Done System.Security.User3_Timeout	Get or set the account timeout in seconds. The account will be automatically logged out when the timeout expires. The default timeout is 300 seconds (5 minutes). Setting the timeout to 0 disables the timeout (infinite). <b>Warning it is possible to set the timeout value so low that the system is unusable, it is recommended that values between 1 and 300 are not used.</b>



Command	Syntax	Type	Example	Description
User4_Role	System.Security.User4_Role	Role	System.Security.User3_Role = User !Done System.Security.User3_Role	Get or set the account role. The default role is <b>"User"</b> . Note that the role may only be changed by an Administrator.
Admin_Username	System.Security.Admin_Username	String	System.Security.Admin_Username = admin !Done System.Security.Admin_Username	Get or set the account username. The default is <b>"admin"</b> . Note that a PowerUser may change their own account Username while an Administrator may change other account Usernames.
Admin_Password	System.Security.Admin_Password	String	System.Security.Admin_Password = adminpw System.Security.Admin_Password = <Restricted> !Done System.Security.Admin_Password = adminpw	Write only. Set the account password. The default password is <b>"adminpw"</b> . Note that a PowerUser may change their own account password while an Administrator may change the passwords for other accounts.
Admin_Timeout	System.Security.Admin_Timeout	Integer	System.Security.Admin_Timeout = 300 !Done System.Security.Admin_Timeout	Get or set the account timeout in seconds. The account will be automatically logged out when the timeout expires. The default timeout is 300 seconds (5 minutes) and the maximum is 32767 seconds (about 9 hours). Setting the timeout to 0 disables the timeout (infinite). <b>Warning it is possible to set the timeout value so low that the system is unusable, it is recommended that values between 1 and 300 are not used.</b>

Command	Syntax	Type	Example	Description
Admin_Role	System.Security.Admin_Role	Role	System.Security.Admin_Role = Administrator !Done System.Security.Admin_Role	Get or set the account role. The default role is <b>“Administrator”</b> . Note that the role may only be changed by an Administrator.
Test_Username	System.Security.Test_Username	String	System.Security.Test_Username = test !Done System.Security.Test_Username	Get or set the account username. The default is <b>“test”</b> . Note that a PowerUser may change their own account Username while an Administrator may change other account Usernames.
Test_Password	System.Security.Test_Password	String	System.Security.Test_Password = testpw System.Security.Test_Password = <Restricted> !Done System.Security.Test_Password = testpw	Write only. Set the account password. The default password is <b>“testpw”</b> . Note that a PowerUser may change their own account password while an Administrator may change the passwords for other accounts.
Test_Timeout	System.Security.Test_Timeout	Integer	System.Security.Test_Timeout = 14400 !Done System.Security.Test_Timeout	Get or set the account timeout in seconds. The account will be automatically logged out when the timeout expires. The default timeout is 14400 seconds (4 hours) and the maximum is 32767 seconds (about 9 hours). Setting the timeout to 0 disables the timeout (infinite). <b>Warning it is possible to set the timeout value so low that the system is unusable, it is recommended that values between 1 and 300 are not used.</b>

Command	Syntax	Type	Example	Description
Test_Role	System.Security.Test_Role	Role	System.Security.Test_Role = Test !Done System.Security.Test_Role	Get or set the account role. The default role is <b>“Test”</b> . Note that the role may only be changed by an Administrator.

## System Security Certificates Commands

Note, if you do not have a CPU that supports HTTPS connections, this menu will not be available.

### Properties

Command	Syntax	Type	Example	Description
Name	System.Security.Certificates.Current.Name	String	System.Security.Certificates.Current.Name = Test	Read only. Displays the common name of the current certificate.
StartDate	System.Security.Certificates.Current.StartDate	String	System.Security.Certificates.Current.StartDate = 2018.12.13 16:42:10	Read only. Displays the start date of the current certificate.
ExpiryDate	System.Security.Certificates.Current.ExpiryDate	String	System.Security.Certificates.Current.StartDate = 2023.12.13 16:42:10	Read only. Displays the expiry date of the current certificate.

## System Time Commands

Note, if you do not have a CPU that supports HTTPS connections, this menu will not be available.

### Properties

Command	Syntax	Type	Example	Description
CurrentTime	System.Time.CurrentTime	String	System.Time.CurrentTime = "2018/12/13 16:54:00"	Can be used to set and read the current system time Format : YYYY/MM/DD hh:mm:ss  Note there is no automatic correction for daylight savings.
LastSetTime	System.Time.LastSetTime	String	System.Time.LastSetTime = "2018/12/13 16:54:00"	Read only. Displays the last time value used to set the clock
CurrentTimeValid	System.Time.CurrentTimeValid	String	System.Time.CurrentTimeValid = Yes	Read Only. Indicates whether the system believes the time to be valid or not Values; Yes   No
NTP.IPAddress	System.Time.NTP.IPAddress	String	System.Time.NTP.IPAddress = 216.239.35.8	Can be used to point to an NTP server so the system sets the correct time on boot up, and periodically thereafter. Default, 216.239.35.8 (time.google.com) which needs an external network connection.

## System Clients Commands

### Properties

Command	Syntax	Type	Example	Description
Clients	System.Clients	List	System.Clients.Ftp = <...> !Done System.Clients	Read only. Lists all available client settings
Ftp.Tls	System.Clients.Ftp.Tls	YesNo	System.Clients.Ftp.Tls = No !Done System.Clients.Ftp.Tls = No	Get or set whether FTP should use a secure TLS connection. Default = No
Ftp.IPAddress	System.Clients.Ftp.IPAddress	String	System.Clients.Ftp.IPAddress = 192.168.0.2 !Done System.Clients.Ftp.IPAddress = 192.168.0.2	Get or set the IP Address of the FTP server
Ftp.Port	System.Clients.Ftp.Port	Integer	System.Clients.Ftp.Port = 21 !Done System.Clients.Ftp.Port = 21	Get or set the FTP port
Ftp.User	System.Clients.Ftp.User	String	System.Clients.Ftp.User = "FtpUser" !Done System.Clients.Ftp.User = "FtpUser"	Get or set the username required to access the FTP server
Ftp.Password	System.Clients.Ftp.Password	String	System.Clients.Ftp.Password = "FtpPassword" !Done System.Clients.Ftp.Password = "FtpPassword"	Get or set the password for the FTP user account

## System Menu Commands

Command	Syntax	Type	Example	Description
Titles()	System.Menus.Titles()	Strings	CORIOmax ... !Done System.Menus.Titles()	Serialise the menu in the form of a list.
XML()	System.Menus.XML()	Strings		Not implemented.
Details()	System.Menus.Details()	Strings		Not implemented.

## Event Commands

The event mechanism allows you to subscribe to be notified of asynchronous events generated by the system. Once subscribed, events are returned as they occur in the format :

!Event <eventCategory>, <event>, <optional text>

For details on specific event categories, please refer to the Events sections for each module where available.

### Methods

Command	Syntax	Type	Example	Description
AddEvents	AddEvents(<eventCategory>)	void	AddEvents(HDMI) !Done AddEvents(HDMI)  <i>Example event</i> !Event HDMI,SINK_ATTACHED, s15.o1	Add a category of events to the communication channel. Events from this category will be sent asynchronously as separate messages.
RemoveEvents	RemoveEvents(<eventCategory>)	void	RemoveEvents(HDMI) !Done RemoveEvents(HDMI)	Remove a category of events from the communication channel. Events from this category will stop being sent asynchronously as separate messages.
ListEvents	ListEvents()	void	ListEvents() HDMI !Done ListEvents()	List all the event categories that have currently been added to the current communication channel



ListAllEvents	ListAllEvents(<eventcategory>)	Void	<p>ListAllEvents()          MEDIA_STORAGE,USB_HOTPLUG_ARRIVED          MEDIA_STORAGE,USB_HOTPLUG_REMOVED          MEDIA_STORAGE,OPERATION_STARTED          MEDIA_STORAGE,OPERATION_DONE          MEDIA_STORAGE,SYNC_STATUS          MEDIA_PLAYER,STATUS_UPDATE          MEDIA_PLAYER,ITEM_STATUS_CHANGED          MODULE,UPDATE_TRANSFER_STARTED          MODULE,UPDATE_TRANSFER_FINISHED          MODULE,UPDATE_TRANSFER_PROGRESS          MODULE,STATUS          MODULE,CORE_TEMPERATURE_ALERT          MODULE,USB_POWER_ALERT          MODULE,NETWORK_LINK_SPEED_CHANGED          MODULE,NETWORK_SETTINGS_CHANGED          MODULE_CORE_TEMPERATURE,CHANGED          PRESET,TAKE          PRESET,SAVE          PRESET,REMOVE          PRESET,COMPLETE          HDMI,SINK_UNPLUGGED          HDMI,SINK_ATTACHED          SYSTEM,UPDATE_STATUS          SYSTEM,POWERMODE_CHANGED          SECURITY,USERCERT_UPDATE_DECRYPTED          SECURITY,USERCERT_UPDATE_PARSE          SECURITY,USERCERT_UPDATE_VALIDATION          SECURITY,USERCERT_UPDATE_COMPLETE          SECURITY,USERCERT_INSTALL          FRONTPANEL,LOCKED          FRONTPANEL,UNLOCKED</p>	<p>Lists the all the available events for each category. If the optional &lt;eventCategory&gt; parameter is added, only the events for that category are listed.</p> <p>The format is one event per line in the format          &lt;eventCategory&gt;,&lt;event&gt;</p> <p>Note,          OUTPUT,AUDIO_FOLLOW_WINDOW_CHANGED is only supported on the CORIOmaster micro, C3-503 for Slot4.In1</p>
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Command	Syntax	Type	Example	Description
			FRONTPANEL,INFO_MODE_ON FRONTPANEL,INFO_MODE_OFF OUTPUT,AUDIO_FOLLOW_WINDOW_CHANGED OUTPUT,PROPERTY_CHANGED OUTPUT,STATUS_GROUP WINDOW,INPUT REGION,EXCHANGING REGION,EXCHANGED INPUT,STATUS_GROUP CANVAS,STBDCURRENT_CHANGED CANVAS,AUDIO_FOLLOW_WINDOW_CHANGED CANVAS,PROPERTY_CHANGED LAYOUT,PROPERTY_CHANGED OUTPUTS_SYNC,PROPERTY_CHANGED STBD,ISCURRENT_CHANGED DISPLAY,UNIT_DESC_TOO_LONG !Done listAllEvents()  ListAllEvents(HDMI) HDMI,SINK_UNPLUGGED HDMI,SINK_ATTACHED !Done listEvents(HDMI)	

## Aliases Commands

### Properties

Command	Syntax	Type	Example	Description
Aliases	Aliases	List	<pre>Aliases.Preset = Routing.Preset Aliases.Windows = Routing.Windows Aliases.Canvases = Routing.Canvases Aliases.Layouts = Routing.Layouts Aliases.MonitorViews = Routing.Monitorviews Aliases.s1i1 = Slots.Slot1.In1 ... Aliases.s16o2 = Slots.Slot16.Out2 !Done Aliases</pre>	<p>Displays defined aliases. Syntax: aliases.&lt;alias&gt; = &lt;command&gt;</p> <p>For example, "Preset" is an alias for "Routing.Preset" and typing "s1i1" is the same as typing "Slots.Slot1.In1".</p>

## Resources Commands

### Properties

Command	Syntax	Type	Example	Description
Resources	Resources	List	<pre>Resources.ConfigList() Resources.Configs = &lt;...&gt; Resources.EDID = &lt;...&gt; Resources.TPG = &lt;...&gt; Resources.Resolutions = &lt;...&gt; Resources.FrontPanel = &lt;...&gt; Resources.IP_Streams = &lt;...&gt; Resources.Playlists = &lt;...&gt; !Done Resources</pre>	List all of the Resources commands and display the values of the properties
Configs	Resources.Configs	List	<pre>Resources.Configs.Config1 = &lt;...&gt; Resources.Configs.Config2 = &lt;...&gt; ... Resources.Configs.Config19 = &lt;...&gt; Resources.Configs.Config20 = &lt;...&gt; !Done Resources.Configs</pre>	List all of the configuration slots (currently 1-20). See Resources Configuration Commands on page 46 below.
EDID	Resources.EDID	List	<pre>Resources.EDID.S10I1 = &lt;...&gt; Resources.EDID.S10I2 = &lt;...&gt; Resources.EDID.S10O1 = &lt;...&gt; Resources.EDID.S10O2 = &lt;...&gt; ... Resources.EDID.S16I1 = &lt;...&gt; Resources.EDID.S16I2 = &lt;...&gt; Resources.EDID.S16O1 = &lt;...&gt; Resources.EDID.S16O2 = &lt;...&gt; Resources.EDID.S1I2 = &lt;...&gt; Resources.EDID.S1O2 = &lt;...&gt; ... Resources.EDID.S9I1 = &lt;...&gt;</pre>	List every EDID for every potential input and output. Note that the order of the output starts at Slot 10 and works through to Slot 16 then starts again at Slot 1 and goes through to Slot 9. For more information see Resources EDID Commands on page 49 below.

Command	Syntax	Type	Example	Description
			Resources.EDID.S9I2 = <...> Resources.EDID.S9O1 = <...> Resources.EDID.S9O2 = <...> !Done Resources.EDID	
TPG	Resources.TPG	List	Resources.TPG.TPG1 = <...> !Done Resources.TPG	List the test pattern generator attributes. For more information see Resources Test Pattern Commands below. Note that there is only one test pattern generator (TPG1).
Resolutions	Resources.Resolutions	List	Resolutions.Resolution1 = <...> Resolutions.Resolution2 = <...> ... Resolutions.Resolution1000 = <...> Resolutions.Resolution1001 = <...> ... Resolutions.Resolution1008 = <...> Resolutions.Resolution1009 = <...> !Done Resolutions	List of all the supported video resolutions, including the user configurable custom resolutions. For more information see Resources Resolutions Commands on page 54 below.
FrontPanel	Resources.FrontPanel	List	Resources.FrontPanel.Backlight = <...> Resources.FrontPanel.Display = <...> !Done Resources.FrontPanel	Lists the front panel settings
IP_Streams	Resources.IP_Streams	List	Resources.IP_Streams.Stream1 = <...> Resources.IP_Streams.Stream2 = <...> ... Resources.IP_Streams.Stream19 = <...> Resources.IP_Streams.Stream20 = <...> !Done Resources.IP_Streams	List all the saved IP streams on the system. For more information see Resources IP Streams Commands below.

Command	Syntax	Type	Example	Description
Playlists	Resources.Playlists	List	Resources.Playlists Resources.Playlists.Playlist1 = <...> Resources.Playlists.Playlist2 = <...> ... Resources.Playlists.Playlist20 = <...> !Done Resources.Playlists	Lists all the playlists on the system. Playlists can only be played using the Streaming Media and 4K Playback Input Module.

### Methods

Command	Syntax	Type	Example	Description
ConfigList	Resources.ConfigList()	List	Resources.ConfigList() Resources.ConfigList[2]=test Resources.ConfigList[3]=Configuration !Done Resources.ConfigList()	List the saved configurations by name

## Resources Configuration Commands

It is possible to use `Configs.Config<n>` in place of `Resources.Configs.Config<n>`.

Where:

`Resources.Configs.Config<n>` is a configuration of the form `Resources.Configs.Config1`.

`Configs.Config<n>` is an output connection of the form `Configs.Config1`.

### Properties

Command	Syntax	Type	Example	Description
Configs	Configs	List	<pre>Configs.Config1 = &lt;...&gt; Configs.Config2 = &lt;...&gt; ... Configs.Config19 = &lt;...&gt; Configs.Config20 = &lt;...&gt; !Done Configs</pre>	List all 20 of the configurations.
Config<number>	Configs.Config<n>	List	<pre>Configs.Config1.Directory = mmc:\TVONE\CONFIGS\C1 Configs.Config1.Backup() Configs.Config1.Restore() Configs.Config1.Remove() !Done Configs.Config1</pre>	List all the commands and display the values of the properties for the specified configuration.
Directory	Configs.Config<n>.Directory	String	<pre>Configs.Config1.Directory = mmc:\TVONE\CONFIGS\C1 !Done Configs.Config1.Directory</pre>	<p>Read only.</p> <p>Get the name and path of the configuration file for this configuration.</p> <p>If the configuration is from a version of CPU firmware prior to M400, then this string will point to that configuration, otherwise it will indicate a new storage area for M400.</p>

## Methods

Command	Syntax	Type	Example	Description
Backup	Configs.Config<n>.Backup()	Void	<pre>// Backup: File delete: mmc:\TVONE\CONFIGS\C1\SETTINGS\SETUP_M.TXT ... // Backup: File delete: mmc:\TVONE\CONFIGS\C1\EDID\DEFAULTS\WUXGA.EDD // Backup: File copy: nand:\TVONE\SETTINGS\SETUP_M.TXT ... // Backup: File copy: nand:\TVONE\EDID\DEFAULTS\WUXGA.EDD // Backup: Dir made: mmc:\TVONE\CONFIGS\C1\PRESETS\U_D1000 // Backup: Complete !Done Configs.Config1.Backup()</pre>	<p>Backup the specified configuration from NAND to SD card. This is like "System.BackupToSDCard()" but for this configuration only.</p> <p>Note that if a configuration that pre-dates M400 release exists, that configuration WILL NOT be overwritten and a new one will be created.</p>



Command	Syntax	Type	Example	Description
Restore	Configs.Config<n>.Restore()	Void	<pre>// Restore: File delete: nand:\TVONE\SETTINGS\SETUP_M.TXT ... // Restore: File delete: nand:\TVONE\EDID\DEFAULTS\WUXGA.EDD // Restore: File copy: mmc:\TVONE\CONFIGS\C1\SETTINGS\SETUP_M.TXT ... // Restore: File copy: mmc:\TVONE\CONFIGS\C1\EDID\DEFAULTS\WUXGA.EDD // Restore: Complete !Done Configs.Config1.Restore()</pre>	<p>Restore the specified configuration from SD card to NAND This is like "System.RestoreBackup()" but for this configuration only.</p>
Remove	Configs.Config<n>.Remove()	Void	<pre>// Remove: File delete: mmc:\TVONE\CONFIGS\C1\SETTINGS\SETUP_M.TXT ... // Remove: File delete: mmc:\TVONE\CONFIGS\C1\EDID\DEFAULTS\WUXGA.EDD // Remove: Complete !Done Configs.Config1.Remove()</pre>	<p>Remove the specified configuration from the SD card.</p> <p>Note that if the configuration is a legacy configuration from an earlier version than M400, it will not be possible to remove it.</p> <p>If the configuration is from later than M400 and a prior configuration exists, then removing the M400 configuration will allow the older configuration to be re-loaded.</p>

## Resources EDID Commands

EDID methods for each possible connection in the device are accessed by slot number and input or output number.

It is possible to use EDID.S<n>I<n> in place of Resources.EDID.S<n>I<n> and EDID.S<n>O<n> in place of Resources.EDID.S<n>O<n>.

Where:

EDID.S<n>I<n> is an input connection of the form EDID.S1I1.

EDID.S<n>O<n> is an output connection of the form EDID.S1O1.

EDID.S<n><X><n> is an input or an output of the form EDID.S<n>I<n> or EDID.S<n>O<n>.

## Properties

Command	Syntax	Type	Example	Description
EDID.S<n><X><n>	EDID.S<n><X><n>	List	EDID.S3I1.Filename = nand:\TVONE\EDID\S3I1.EDD EDID.S3I1.EDIDVersion = 1.3 EDID.S3I1.Manufacturer = TVO EDID.S3I1.Name = TVOneCORIOmax EDID.S3I1.SerialNumber = 0 EDID.S3I1.ManufactureDate = 201310 EDID.S3I1.Width_mm = 600 EDID.S3I1.Height_mm = 450 EDID.S3I1.HorizBdr_pix = 0 EDID.S3I1.VertBdr_pix = 0 EDID.S3I1.Extensions = 1 EDID.S3I1.Resolutions() EDID.S3I1.Remove_File() !Done EDID.S3I1	Read only. List all the EDID properties for the specified input on the specified slot. An input will always show the EDID information from the file specified in the Filename attribute.
Filename	EDID.S<n><X><n>.Filename	String	EDID.S3I1.Filename = nand:\TVONE\EDID\S3I1.EDD !Done EDID.S3I1.Filename	Read only. Get the path and filename of the EDID file currently used for this connection.
EDIDVersion	EDID.S<n><X><n>.EDIDVersion	String	EDID.S3I1.EDIDVersion = 1.3 !Done EDID.S3I1.EDIDVersion	Read only. Get the EDID software version

Command	Syntax	Type	Example	Description
Manufacturer	EDID.S<n><X><n>.Manufacturer	String	EDID.S311.Manufacturer = TVO !Done EDID.S311.Manufacturer	Read only. Get the manufacturer.
Name	EDID.S<n><X><n>.Name	String	EDID.S311.Name = TVOneCORIOmax !Done EDID.S311.Name	Read only. Get the name
SerialNumber	EDID.S<n><X><n>.SerialNumber	Integer	EDID.S311.SerialNumber = 0 !Done EDID.S311.SerialNumber	Read only. Get the serial number.
ManufactureDate	EDID.S<n><X><n>.Manufacture Date	String	EDID.S311.ManufactureDate = 201310 !Done EDID.S311.ManufactureDate	Read only. Get the manufacture date in the form YYYYWW, where YYYY is the year and WW is the week.
Width_mm	EDID.S<n><X><n>.Width_mm	Integer	EDID.S311.Width_mm = 600 !Done EDID.S311.Width_mm	Read only. Get the addressable video image size of attached display, in millimetres
Height_mm	EDID.S<n><X><n>.Height_mm	Integer	EDID.S311.Height_mm = 450 !Done EDID.S311.Height_mm	Read only. Get the addressable video image size of attached display, in millimetres
HorizBdr_pix	EDID.S<n><X><n>.HorizBdr_pix	Integer	EDID.S311.HorizBdr_pix = 0 !Done EDID.S311.HorizBdr_pix	Read only. Get the image border size of attached display, in pixels
VertBdr_pix	EDID.S<n><X><n>.VertBdr_pix	Integer	EDID.S311.VertBdr_pix = 0 !Done EDID.S311.VertBdr_pix	Read only. Get the image border size of attached display, in pixels
Extensions	EDID.S<n><X><n>.Extensions	Integer	EDID.S311.Extensions = 1 !Done EDID.S311.Extensions	Read only. Get the number of 128-byte extension blocks included in EDID.

## Methods

Command	Syntax	Type	Example	Description
Resolutions	EDID.S<n><X><n>.Resolutions()	List	<pre>// EDID.S3I1.Resolutions() 720x400p70 640x480p60 640x480p72 800x600p56 1280x960p60 1280x1024p60 1280x800p60 1920x1080p60 1600x1000p60 1600x1200p60 1680x1050p60 1920x1200p60 1920x1200p60 1280x720p60 !Done EDID.S3I1.Resolutions()</pre>	<p>Read only.</p> <p>List the resolutions available for the specified connection.</p>
Remove_File	EDID.S<n><X><n>.Remove_File()	Void	<pre>EDID.S3I1.Remove_File() !Done EDID.S3I1.Remove_File()</pre>	<p>Removes the corresponding EDID file.</p> <p><b>Warning this removes the connection from the EDID list.</b></p>

## Resources Test Pattern Commands

Note that only one test pattern generator (TPG1) is supported.

It is possible to use TPG.TPG1 in place of Resources.TPG.TPG1.

### Properties

Command	Syntax	Type	Example	Description
TPG	TPG	List	TPG.TPG1 = <...> !Done TPG	List the test pattern generators.
TPG1	TPG.TPG1	List	TPG.TPG1.Resolution = 1280x720p60 TPG.TPG1.Pattern = RGB_100 TPG.TPG1.Moving_Bar = Off !Done TPG.TPG1	List the test pattern attributes
TPG1.Resolution	TPG.TPG1.Resolution	Resolution	TPG.TPG1.Resolution = 1280x720p60 !Done TPG.TPG1.Resolution	Get or set the resolution for the Test Pattern Generator. The resolution is set by name, see the name property in Resources Resolutions Commands on page 54 below. The default value is 1280x720p60
TPG1.Pattern	TPG.TPG1.Pattern	TestPattern	TPG.TPG1.Pattern = White !Done TPG.TPG1.Pattern	Get or set the test pattern.  The default value is RGB_100  Options: Black, RGB_100, 8x8_Grid, Dot, 8x8_ChqBrd, Vertical_Lines, Horizontal_Lines, Bars_n_Ramps, Blue, Red, Magenta, Green, Cyan, Yellow, White

Command	Syntax	Type	Example	Description
TPG1.Moving_Bar	TPG.TPG1.Moving_Bar	Boolean	TPG.TPG1.Moving_Bar = Off !Done TPG.TPG1.Moving_Bar	Get or set if the moving bar is enabled. The default value is Off

## Resources Resolutions Commands

List of all the supported video resolutions, including the user defined Custom Resolutions.

The system resolutions are read only and numbered from 1.

The custom resolutions can be modified and are numbered from 1000.

For more information on programming Custom Resolutions see the Resolution Editor Programming Guide.

It is possible to use Resolutions in place of Resources.Resolutions.

Properties for the System (built-in) resolutions are all Read Only.

Properties for the Custom Resolutions (Resolution1000 onwards) are Read/Write except where marked as Read only.

### Properties

Command	Syntax	Type	Example	Description
Resolutions	Resolutions	List	<pre>Resolutions.Resolution1 = &lt;...&gt; Resolutions.Resolution2 = &lt;...&gt; ... Resolutions.Resolution1000 = &lt;...&gt; Resolutions.Resolution1001 = &lt;...&gt; ... Resolutions.Resolution1008 = &lt;...&gt; Resolutions.Resolution1009 = &lt;...&gt; !Done Resolutions</pre>	List of all the supported video resolutions, including the user configurable custom resolutions.
Resolutions.Resolution<n>	Resolutions.Resolution<n>	List	<pre>Resolutions.Resolution1.Name = 640x480p60 Resolutions.Resolution1.Aspect = 4:3 Resolutions.Resolution1.CanFrameLoc k = No Resolutions.Resolution1.PixelClock = 25175000 Resolutions.Resolution1.ScanType = p Resolutions.Resolution1.HActive = 640</pre>	List the properties of the specified resolution.

Command	Syntax	Type	Example	Description
			Resolutions.Resolution1.HFrontPorch = 16 Resolutions.Resolution1.HSyncPulse = 96 Resolutions.Resolution1.HBackPorch = 48 Resolutions.Resolution1.VActive = 480 Resolutions.Resolution1.VFrontPorch = 10 Resolutions.Resolution1.VSyncPulse = 2 Resolutions.Resolution1.VBackPorch = 33 Resolutions.Resolution1.HSyncPolarity = N Resolutions.Resolution1.VSyncPolarity = N Resolutions.Resolution1.CEAID = 1 Resolutions.Resolution1.Origin = tvONE !Done Resolutions.Resolution1	
Name	Resolutions.Resolution<n>.Name	String	Resolutions.Resolution1.Name = 640x480p60 !Done Resolutions.Resolution1.Name	Get or set the name of this resolution.
Aspect	Resolutions.Resolution<n>.Aspect	AspectRatio	Resolutions.Resolution1.Aspect = 4:3 !Done Resolutions.Resolution1.Aspect	Get or set the aspect ratio of this resolution Used assist in the signal conversion when an input and the output have different aspect ratio.



Command	Syntax	Type	Example	Description
PixelClock	Resolutions.Resolution<n>.PixelClock	Integer	Resolutions.Resolution1.PixelClock = 25175000 !Done Resolutions.Resolution1.PixelClock	Get or set the speed of the Pixel Clock in pixels per second for this resolution.
ScanType	Resolutions.Resolution<n>.ScanType	ScanMode	Resolutions.Resolution1.ScanType = p !Done Resolutions.Resolution1.ScanType	Get or set the scan type for this Resolution: p Progressive. i Interlaced scan mode.
HActive	Resolutions.Resolution<n>.HActive	Integer	Resolutions.Resolution1.HActive = 640 !Done Resolutions.Resolution1.HActive	Get or set the length of the Horizontal Active Video for this resolution
HFrontPorch	Resolutions.Resolution<n>.HFrontPorch	Integer	Resolutions.Resolution1.HFrontPorch = 16 !Done Resolutions.Resolution1.HFrontPorch	Get or set the timing interval for the Horizontal Front Porch for this resolution.
HSyncPulse	Resolutions.Resolution<n>.HSyncPulse	Integer	Resolutions.Resolution1.HSyncPulse = 96 !Done Resolutions.Resolution1.HSyncPulse	Get or set the length of the Horizontal Sync Pulse for this resolution.
HBackPorch	Resolutions.Resolution<n>.HBackPorch	Integer	Resolutions.Resolution1.HBackPorch = 48 !Done Resolutions.Resolution1.HBackPorch	Get or set the timing interval for the Horizontal Back Porch for this resolution.
VActive	Resolutions.Resolution<n>.VActive	Integer	Resolutions.Resolution1.VActive = 480 !Done Resolutions.Resolution1.VActive	Get or set the length of the Vertical Active Video for this resolution
VFrontPorch	Resolutions.Resolution<n>.VFrontPorch	Integer	Resolutions.Resolution1.VFrontPorch = 10 !Done Resolutions.Resolution1.VFrontPorch	Get or set the timing interval for the Vertical Front Porch for this resolution.

Command	Syntax	Type	Example	Description
VSyncPulse	Resolutions.Resolution<n>.VSyncPulse	Integer	Resolutions.Resolution1.VSyncPulse Resolutions.Resolution1.VSyncPulse = 2	Get or set the length of the Vertical Sync Pulse for this resolution.
VBackPorch	Resolutions.Resolution<n>.VBackPorch	Integer	Resolutions.Resolution1.VBackPorch = 33 !Done Resolutions.Resolution1.VBackPorch	Get or set the timing interval for the Vertical Back Porch for this resolution.
HSyncPolarity	Resolutions.Resolution<n>.HSyncPolarity	Polarity	Resolutions.Resolution1.HSyncPolarity = N !Done Resolutions.Resolution1.HSyncPolarity	Get or set the Horizontal Sync Polarity. N = Negative P = Positive
VSyncPolarity	Resolutions.Resolution<n>.VSyncPolarity	Polarity	Resolutions.Resolution1.VSyncPolarity = N !Done Resolutions.Resolution1.VSyncPolarity	Get or set the Vertical Sync Polarity. N = Negative P = Positive
CEAID	Resolutions.Resolution<n>.CEAID	Integer	Resolutions.Resolution1.CEAID = 1 !Done Resolutions.Resolution1.CEAID	Get or set the Consumer Electronics Association Digital Television Profile as defined in CEA-861-D
Origin	Resolutions.Resolution<n>.Origin	String	Resolutions.Resolution1.Origin = tvONE !Done Resolutions.Resolution1.Origin	Get or set the origin of the Custom Resolution.

## Resources FrontPanel Commands

### Properties

Command	Syntax	Type	Example	Description
FrontPanel	Resources.FrontPanel	List	Resources.FrontPanel.Backlight = <...> Resources.FrontPanel.Display = <...> !Done Resources.FrontPanel	Lists the front panel settings
Backlight.Brightness	Resources.FrontPanel.Backlight.Brightness	Integer	Resources.FrontPanel.Backlight.Brightness = 2 !Done Resources.FrontPanel.Backlight.Brightness	Adjusts the brightness of the backlight LED. Valid values are percentages from 0 to 3 0 = Off, 3 = Highest The default is 2
Display.Enabled	Resources.FrontPanel.Display.Enabled	OnOff	Resources.FrontPanel.Display.Enabled = On !Done Resources.FrontPanel.Display.Enabled	Turn the fronpanel OLED display on or off. Valid values are On   Off The default is On
Display.Brightness	Resources.FrontPanel.Display.Brightness	Integer	Resources.FrontPanel.Display.Brightness = 7 !Done Resources.FrontPanel.Display.Brightness	Adjusts the relative brightness of the OLED display. Valid values are percentages from 0 to 7. The default is 7
Display.ShowIPAddress	Resources.FrontPanel.Display.ShowIPAddress	YesNo	Resources.FrontPanel.Display.ShowIPAddress = Yes !Done Resources.FrontPanel.Display.ShowIPAddress	Show the IP Address on the front panel display. Valid values are Yes   No The default is Yes
Display.ShowServerName	Resources.FrontPanel.Display.ShowServerName	YesNo	Resources.FrontPanel.Display.ShowServerName = Yes !Done Resources.FrontPanel.Display.ShowServerName	Show the server name on the front panel display. This is the name set in the System.Unit_Description setting Valid values are Yes   No The default is Yes

## Events

Event	Syntax	Category	Example	Description
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## Resources IP Streams Commands

Manage all the saved IP streams in the system. Saved IP streams are only an information store for external use; they are not used internally.

### Properties

Command	Syntax	Type	Example	Description
IP_Streams	Resources.IP_Streams	List	Resources.IP_Streams.Stream1 = <...> Resources.IP_Streams.Stream2 = <...> ... Resources.IP_Streams.Stream19 = <...> Resources.IP_Streams.Stream20 = <...> !Done Resources.IP_Streams	List all the saved IP streams on the system. There are currently 20 saved IP streams per system.
Stream<n>	Resources.IP_Streams.Stream<n>	List	Resources.IP_Streams.Stream1 Resources.IP_Streams.Stream1.Name = "Wowza" Resources.IP_Streams.Stream1.URL = "rtsp://172.16.22.240:1935/wowza-test/bbb-high-4.2-1920x1080p60.mp4" Resources.IP_Streams.Stream1.Transport = Auto !Done Resources.IP_Streams.Stream1	Returns the details for the chosen IP stream.
Stream<n>.Name	Resources.IP_Streams.Stream<n>.Name	String	Resources.IP_Streams.Stream1.Name = "Wowza" !Done Resources.IP_Streams.Stream1.Name	Get or set the name for the IP stream.
Stream<n>.URL	Resources.IP_Streams.Stream<n>.URL	String	Resources.IP_Streams.Stream1.URL = "rtsp://172.16.22.240:1935/wowza-test/bbb-high-4.2-1920x1080p60.mp4" !Done Resources.IP_Streams.Stream1.URL	Get or set the URL for the IP stream.
Stream<n>.Transport	Resources.IP_Streams.Stream<n>.Transport	Enum	Resources.IP_Streams.Stream1.Transport = Auto !Done Resources.IP_Streams.Stream1.Transport	Get or set the transport for the IP stream. Valid values are "Auto", "UDP", "TCP", "HTTP", "RTSPMulticast".

## Resources Playlists Commands

Manage all the playlists in the system. Playlists are only used by the Streaming Media and 4K Playback Input Module.

### Properties

Command	Syntax	Type	Example	Description
Playlists	Resources.Playlists	List	Resources.Playlists Resources.Playlists.Playlist1 = <...> Resources.Playlists.Playlist2 = <...> ... Resources.Playlists.Playlist20 = <...> !Done Resources.Playlists	Lists all the playlists on the system. Playlists can only be played using the Streaming Media and 4K Playback Input Module.
Playlist<n>	Resources.Playlists.Playlist<n>	Playlist	Resources.Playlists.Playlist3 Resources.Playlists.Playlist3.Name = "My Playlist" Resources.Playlists.Playlist3.Resolution = 1920x1080p60 Resources.Playlists.Playlist3.Slot = Slot4 Resources.Playlists.Playlist3.Items = <...> Resources.Playlists.Playlist3.InsertItem() Resources.Playlists.Playlist3.RemoveItem() Resources.Playlists.Playlist3.MoveItem() Resources.Playlists.Playlist3.ReplaceItem() Resources.Playlists.Playlist3.ClearItems() Resources.Playlists.Playlist3.Save() Resources.Playlists.Playlist3.Remove() !Done Resources.Playlists.Playlist3	Returns the details for the chosen playlist
Playlist <n>.Name	Resources.Playlists.Playlist<n>.Name	String	Resources.Playlists.Playlist2.Name = "New Name" !Done Resources.Playlists.Playlist2.Name = "New Name"	Gets or sets a name for the playlist. Note: a playlist with no name will be regarded as empty

Command	Syntax	Type	Example	Description
Playlist <n>.Slot	Resources.Playlists.Playlist<n>.Slot	String	Resources.Playlists.Playlist2.Slot = Slots.Slot4 !Done Resources.Playlists.Playlist2.Slot = Slots.Slot4	Get and set the supported slot for the Playlist.
Playlist<n>.Items	Resources.Playlists.Playlist<n>.Items	Array	Resources.Playlists.Playlist1.Items Resources.Playlists.Playlist1.Items.Item1 = (8,NULL,"file:///usb0/Interstellar%20-%20Docking%20Scene%20[1080p;%2060%20FPS;%20IMAX].mp4",243,Auto,1,OK,0,0) Resources.Playlists.Playlist1.Items.Item2 = (8,NULL,"file:///usb0/Everything%20Starts%20Again%2030.mp4",52,Auto,1,OK,0,0) Resources.Playlists.Playlist1.Items.Item3 = (8,NULL,"file:///usb0/PASSENGERS%20Official%20Trailer%20[4K%20Ultra%20HD].mp4",152,Auto,1,OK,0,0) Resources.Playlists.Playlist1.Items.Item4 = (1,"ipstream","rtsp://192.168.1.0",0,Auto,1,OK,0,0) .. Resources.Playlists.Playlist1.Items.Item20 = NULL !Done Resources.Playlists.Playlist1.Items	Returns the details media items in the Playlist. Each item is represented by a comma separated list. The format for each is as follows: (<type>,<friendlyName>,<uri>,<duration>,<protocol>,<retries>,<status>,<resultCode>,<low-latency>)  <i>type</i> is represented as an int with the following values: 1 = Video Stream 2 = Text File 4 = Image File 8 = Video File 16 = Sync Group  <i>friendlyName</i> - Can be NULL or a string <i>uri</i> <i>duration</i> - (seconds) <i>protocol</i> - Is currently always set to <i>Auto</i> <i>retries</i> - no retries = 0, retry (for duration of the clip) = 1 <i>status</i> - OK, Failed <i>resultCode</i> - Not used <i>low-latency</i> - 0 = normal, 1 = low-latency (no audio)

Command	Syntax	Type	Example	Description
Playlist<n>.InsertItem	Resources.Playlists.Playlist<n>.InsertItem(<int> index, <int> type, <string> friendlyName, <string> uri, <int> duration, <string> protocol, <int> retries, <int> low-latency, <string> metadata)	Function	<pre>// Insert an item into the Item 5 position Playlists.Playlist1.InsertItem(5,1,"ipstream","rt sp://192.168.1.0",0,Auto,1,0) !Done Playlists.Playlist1.InsertItem(5,1,"ipstream","rt sp://192.168.1.0",0,Auto,1,0)</pre>	<p>Function to add an item to the selected Playlist. Items are inserted into the queue. If there are items after the insert index they will be moved down to make space for the new item.</p> <p>The name and path must be URI encoded and surrounded by quotation marks.</p> <p>Parameters:</p> <p><i>index</i> - &lt;int&gt; Index at which to insert the item. 1 = beginning</p> <p><i>type</i> - &lt;int&gt; See <a href="#">Playlist&lt;n&gt;.Items</a> for supported type</p> <p><i>friendlyName</i> - &lt;string&gt; Friendly name of the queue item</p> <p><i>uri</i> - &lt;string&gt; Path to the item. Either a file path or a stream URL</p> <p><i>duration</i> - &lt;int&gt; Duration to play the item for. 0 = Infinite (seconds)</p> <p><i>protocol</i> - (Optional) Specify the stream protocol. This should be set to "Auto", unless you are using Encoder-100, where you may set it to "RTSPMulticast" for multicast operation.</p> <p><i>retries</i> - (Optional) Set the retry behaviour. 0 = no retries, 1 = always retry</p> <p><i>low-latency</i> - (Optional) Set the latency behaviour. 0 = normal, 1 = low latency (no audio)</p>



Command	Syntax	Type	Example	Description
				<p><i>metadata</i> - (Optional) Do not use. Required for CORIOgrapher</p> <p>Note: The friendlyName and uri must be URI encoded and surrounded by quotation marks.</p> <p>Note: Optional values must be specified progressively, i.e. retries requires protocol; low latency requires retries.</p>
Playlist<n>.RemoveItem	Resources.Playlists.Playlist<n>.RemoveItem(<int> index)	Function	<pre>// Remove Item3 from the Playlist Resources.Playlists.Playlist3.RemoveItem(3) !Done Resources.Playlists.Playlist3.RemoveItem()</pre>	<p>Function to remove an Item from the selected Playlist. The index number corresponds to the number returned in the Items list.</p> <p>Parameters: <i>index</i> - &lt;int&gt; The index at which to remove the item from</p> <p>Return Type: void</p>
Playlist<n>.MoveItem	Resources.Playlists.Playlist<n>.MoveItem(<int> fromIndex, <int> toIndex)	Function	<pre>// Move Item3 to the beginning of the Playlist Resources.Playlists.Playlist3.MoveItem(3,1) !Done Resources.Playlists.Playlist3.MoveItem()</pre>	<p>Function to move an Item to a different location within the selected Playlist. The index numbers correspond to the number returned in the Items list.</p> <p>Parameters: <i>fromIndex</i> - &lt;int&gt; The index of the Item you wish to move</p> <p><i>toIndex</i> - &lt;int&gt; The Index within the Items list to where the Item will be moved</p> <p>Return Type: void</p>

Command	Syntax	Type	Example	Description
Playlist<n>.Replaceltem	Resources.Playlists.Playlist<n>.Replaceltem(<int> index,<int> type, <string> friendlyName, <string> uri, <int> duration <string> protocol, <int> retries, <int> low-latency, <string> metadata)	Function	// Replace item at position 4 in the queue  Slot2.In1.ActiveQueue.Replaceltem(4,1,"ipstream","rtsp://192.168.1.0",300,Auto,1,1) 19/12/2018 12:47:17 >> !Done Slot2.In1.ActiveQueue.Replaceltem(4,1,"ipstream","rtsp://192.168.1.0",300,Auto,1,1)	Replace the item at the chosen playlist index. Item at the index is replaced with the new details supplied.  Parameters: <i>index</i> - <int> Index of item you wish to replace. <i>type</i> - <int> See <a href="#">Playlist&lt;n&gt;.Items</a> for supported type <i>friendlyName</i> - <string> Friendly name of the queue item <i>uri</i> - <string> Path to the item. Either a file path or a stream URL <i>duration</i> - <int> Duration to play the item for. 0 = Infinite <i>protocol</i> - (Optional) Specify the stream protocol. This should be set to "Auto", unless you are using Encoder-100, where you may set it to "RTSPMulticast" for multicast operation. <i>retries</i> - (Optional) Set the retry behaviour. 0 = no retries, 1 = always retry <i>low-latency</i> - (Optional) Set the latency behaviour. 0 = normal, 1 = low latency (no audio) <i>metadata</i> - (Optional) Do not use. Required for CORIOgrapher

Command	Syntax	Type	Example	Description
				<p>Note: The friendlyName and uri must be URI encoded and surrounded by quotation marks.</p> <p>Note: Optional values must be specified progressively, i.e. retries requires protocol; low latency requires retries.</p>
Playlist <n>.ClearItems	Resources.Playlists.Playlist<n>.ClearItems()	Function	Resources.Playlists.Playlist3.ClearItems() !Done Resources.Playlists.Playlist3.ClearItems()	Removes all items from the playlist
Playlist <n>.Save	Resources.Playlists.Playlist<n>.Save()	Function	Resources.Playlists.Playlist3.Save() !Done Resources.Playlists.Playlist3.Save()	Saves the Playlist to the device. This will make the playlist available after a reboot without the need to run "SaveAllSettings"
Playlist <n>.Remove	Resources.Playlists.Playlist<n>.Remove()	Function	Resources.Playlists.Playlist3.Remove() !Done Resources.Playlists.Playlist3.Remove()	Removes the Playlist. All items are removed, the name is erased, and the default resolution is set.

## Slots Commands

It is possible to use Slot<n> in place of Slots.Slot<n>.

The properties available in each Slot depend upon the Module in that Slot.

### Properties

Command	Syntax	Type	Example	Description
Slots	Slots	List	<pre>slots.Slot1 = &lt;...&gt; slots.Slot2 = &lt;...&gt; slots.Slot3 = NO CARD slots.Slot4 = &lt;...&gt; slots.Slot5 = NO CARD slots.Slot6 = NO CARD slots.Slot7 = NO CARD slots.Slot8 = NO CARD slots.Slot9 = NO CARD slots.Slot10 = &lt;...&gt; slots.Slot11 = &lt;...&gt; slots.Slot12 = &lt;...&gt; slots.Slot13 = NO CARD slots.Slot14 = NO CARD slots.Slot15 = &lt;...&gt; slots.Slot16 = &lt;...&gt; slots.Slot17 = &lt;...&gt; slots.Slot18 = NO CARD !Done Slots</pre>	List all the slots and report either the slot properties if there is a card or NO CARD if not.

## DVI Input Module

It is possible to use Slot<n>.In<n> and S<n>I<n> in place of Slots.Slot<n>.In<n>.

### Properties

Property Name	Syntax	Type	Example	Description
Slot<n>	Slot<n>	List	Slot4.Cardtype = DVI_U 2-in Slot4.Carddata = <...> Slot4.In1 = <...> Slot4.In2 = <...> Slot4.PhaseRetrain() Slot4.Module_Resolutions() !Done Slot4	List all the properties of the card in this slot or "NO CARD" if the slot is empty.
Cardtype	Slot<n>.Cardtype	CardTypeEnum	Slot4.Cardtype = DVI_U 2-in !Done Slot4.Cardtype	Read-only. Get the type of the card in this slot
Carddata	Slot<n>.Carddata	void	Slot4.Carddata.BaseNo = 218092000121 Slot4..Carddata.PTR = :::----- :::,,, centres at 30, 30 (29). !Done Slot4.Carddata	Returns card specific data BaseNo: base card serial number PTR: phase training result
In<n>	Slot<n>.In<n>	List	Slot4.In1.FullName = In1 Slot4.In1.Status = OK Slot4.In1.Alias = s4i1 Slot4.In1.WindowList = Window1,Window2 Slot4.In1.TypeChoice = DVI Slot4.In1.AspectChoice = 4:3 Slot4.In1.Brightness = 0 Slot4.In1.Contrast = 100 Slot4.In1.ColourScale = Auto Slot4.In1.TPG = Off Slot4.In1.Set_Resolution = 640x480p60 Slot4.In1.Measured_Resolution = 640x480p60	List the properties for an Input on the given Slot. Where In<n> is the input on the card.

Property Name	Syntax	Type	Example	Description
			Slot4.In1.Measured_Width = 640 Slot4.In1.Measured_Height = 480 Slot4.In1.Measured_Field_Rate = 60 Slot4.In1.Measured_VTotal = 525 Slot4.In1.Measured_Frame_ip = p Slot4.In1.EDID_Filename = s3i1.edd Slot4.In1.ForceLinkRefresh() Slot4.In1.LeftCrop = 0 Slot4.In1.RightCrop = 0 Slot4.In1.TopCrop = 0 Slot4.In1.BottomCrop = 0 Slot4.In1.AnH_Offset = 0 Slot4.In1.AnV_Offset = 0 Slot4.In1.OnSrcLossColour = Blue Slot4.In1.HDCP_Enabled = Supported Slot4.In1.HDCP_Required = Off Slot4.In1.HDMI = Found Slot4.In1.Audio = Found Slot4.In1.PreviewVideoType = 0 Slot4.In1.Equipment = Slot4.In1.CanFramelockTo = No Slot4.In1.AudioLevel = 0 Slot4.In1.AudioMute = Off Slot4.In1.AudioEnable = On !Done Slot4.In1	
FullName	Slot<n>.In<n>.FullName	String	Slot4.In1.FullName = In1 !Done Slot4.In1.FullName	Read-only. Get the full name of the Window
Status	Slot<n>.In<n>.Status	StatusEnum	Slot4.In1.Status = OK !Done Slot4.In1.Status	Read-only. Get the status of the input.

Property Name	Syntax	Type	Example	Description
Alias	Slot<n>.In<n>.Alias	String	Slot4.In1.Alias = s4i1 !Done Slot4.In1.Alias	Get or set the Alias name for this input. <i>Warning it is possible to set this value to that used by another input, in which case the other value will be set to NULL.</i>
WindowList	Slot<n>.In<n>.WindowList	String	Slot4.In1.WindowList = Window1 !Done Slot4.In1.WindowList	Read only. Get the window that the slot is routed to.
TypeChoice	Slot<n>.In<n>.TypeChoice	TypeChoice	Slot4.In1.TypeChoice = DVI !Done Slot4.In1.TypeChoice = DVI	Get or set the type of signal encoding on the input.
Brightness	Slot<n>.In<n>.Brightness	Integer	Slot4.In1.Brightness = 0 !Done Slot4.In1.Brightness	Get or set the brightness adjustment for this input. Valid range is from -30 to 30
Contrast	Slot<n>.In<n>.Contrast	Percentage	Slot4.In1.Contrast = 100 !Done Slot4.In1.Contrast	Get or set the contrast adjustment for the Input. Valid range is from 30% to 130%
ColourScale	Slot<n>.In<n>.ColourScale	ColourScale	Slot4.In1.ColourScale = Auto !Done Slot4.In1.ColourScale	Get or set the colour scale for this input.
TPG	Slot<n>.In<n>.TPG	Boolean	Slot4.In1.TPG = TPG1 !Done Slot4.In1.TPG = TPG1	Get or set to use the internal Test Pattern Generator (TPG1) for this input. Options are "Off" or "TPG1".
Dither	Slot<n>.In<n>.Dither	Boolean	Slot4.In1.Dither = On !Done Slot4.In1.Dither = On	Get or set whether this input has dither enabled. Options are "Off" or "On".
Set_Resolution	Slot<n>.In<n>.Set_Resolution	Resolution	Slot4.In1.Set_Resolution = 640x480p60 !Done Slot4.In1.Set_Resolution	Read-only. Get the current resolution set for this input.
Measured_Resolution	Slot<n>.In<n>.Measured_Resolution	Resolution	Slot4.In1.Measured_Resolution = 640x480p60 !Done Slot4.In1.Measured_Resolution	Read-only. Get the resolution being read from this Input.

Property Name	Syntax	Type	Example	Description
Measured_Width	Slot<n>.In<n>.Measured_Width	Integer	Slot4.In1.Measured_Width = 640 !Done Slot4.In1.Measured_Width	Read-only. Get the width of the resolution being read from this input.
Measured_Height	Slot<n>.In<n>.Measured_Height	Integer	Slot4.In1.Measured_Height = 480 !Done Slot4.In1.Measured_Height	Read-only. Get the measured height of the resolution being read from this input.
Measured_Field_Rate	Slot<n>.In<n>.Measured_Field_Rate	Integer	Slot4.In1.Measured_Field_Rate = 60 !Done Slot4.In1.Measured_Field_Rate	Read-only. Get the measured field rate of the resolution being read from this input.
Measured_VTotal	Slot<n>.In<n>.Measured_VTotal	Integer	Slot4.In1.Measured_VTotal = 525 !Done Slot4.In1.Measured_VTotal	Read-only. Get the measured total vertical lines of the resolution being read from this input.
Measure_Frame_ip	Slot<n>.In<n>.Measure_Frame_ip	FrameType	Slot4.In1.Measured_Frame_ip = p !Done Slot4.In1.Measured_Frame_ip	Read-only. Get the measured frame type of the resolution being read from this input.
EDID_Filename	Slot<n>.In<n>.EDID_Filename	String	Slot4.In1.EDID_Filename = s3i1.edd !Done Slot4.In1.EDID_Filename	Get or set the EDID file currently being used for this input.
LeftCrop	Slot<n>.In<n>.LeftCrop	Integer	Slot4.In1.LeftCrop = 0 !Done Slot4.In1.LeftCrop	Get or set the amount of left crop to be applied to this input.
RightCrop	Slot<n>.In<n>.RightCrop	Integer	Slot4.In1.RightCrop = 0 !Done Slot4.In1.RightCrop	Get or set the amount of right crop to be applied to this input.
TopCrop	Slot<n>.In<n>.TopCrop	Integer	Slot4.In1.TopCrop = 0 !Done Slot4.In1.TopCrop	Get or set the amount of top crop to be applied to this input.
BottomCrop	Slot<n>.In<n>.BottomCrop	Integer	Slot4.In1.BottomCrop = 0 !Done Slot4.In1.BottomCrop	Get or set the amount of bottom crop to be applied to this input.
AnH_Offset	Slot<n>.In<n>.AnH_Offset	Integer	Slot4.In1.AnH_Offset = 0 !Done Slot4.In1.AnH_Offset	Adjust the horizontal position of component analog input, measured in lines. Range from -100 to 100.



Property Name	Syntax	Type	Example	Description
AnV_Offset	Slot<n>.In<n>.AnV_Offset	Integer	Slot6.In1.AnV_Offset = 0 !Done Slot6.In1.AnV_Offset	Adjust the vertical position of component analog input, measured in lines. Range from -100 to 100.
OnSrcLossColor	Slot<n>.In<n>.OnSrcLossColor	SrcLossColor	Slot6.In1.OnSrcLossColor = Blue !Done Slot6.In1.OnSrcLossColor	Get or set the colour to be displayed when the input source is lost.
HDCP_Enabled	Slot<n>.In<n>.HDCP_Enabled	HDCPSup	Slot4.In1.HDCP_Enabled = Supported !Done Slot4.In1.HDCP_Enabled	Get or set if HDCP is enabled for this source
HDCP_Required	Slot<n>.In<n>.HDCP_Required	HDCPReq	Slot4.In1.HDCP_Required = Off !Done Slot4.In1.HDCP_Required	Read-only. Get the HDCP capability of the input source.
HDMI	Slot<n>.In<n>.HDMI	FoundNot	Slot4.In1.HDMI = Found !Done Slot4.In1.HDMI	Read-only. Get the detected HDMI status.
Audio	Slot<n>.In<n>.Audio	FoundOff	Slot4.in1.Audio = Found !Done Slot4.in1.Audio	Read only. Get if audio is available for this input.
PreviewVideoType	Slot<n>.In<n>.PreviewVideoType	Integer	Slot4.In1.PreviewVideoType = 0 !Done Slot4.In1.PreviewVideoType	<b>CORIOgrapher only.</b> Get or set the type of Preview Video (used in UI).
Equipment	Slot<n>.In<n>.Equipment	String	Slot4.In1.Equipment = !Done Slot4.In1.Equipment	<b>CORIOgrapher only.</b> Get or set the equipment connected to this input
CanFramelockTo	Slot<n>.In<n>.CanFramelockTo	Boolean	Slot4.In1.CanFramelockTo = No !Done Slot4.In1.CanFramelockTo	Read only. Get if the input can be used as a Framelock reference.
AudioEnable	Slot1.In1.AudioEnable	Boolean	Slot1.In1.AudioEnable = On !Done Slot1.In1.AudioEnable	Enable the embedded input audio on an input (if present) On : Off Default; On

Property Name	Syntax	Type	Example	Description
AudioLevel	Slot1.In1.AudioLevel	Integer	Slot1.In1.AudioLevel = 0 !Done Slot1.In1.AudioLevel	Get or set the embedded input audio level (in dB -20 to +20) (increments of 1) Default; 0
AudioMute	Slot1.In1.AudioMute	Boolean	Slot1.In1.AudioMute = Off !Done Slot1.In1.AudioMute	Mute the embedded input audio on an input (if present) On : Off Default; Off

## Methods

Command	Syntax	Type	Example	Description
PhaseRetrain	Slot<n>.PhaseRetrain()	void	// Module 3 phase :-----L; centres at 4, 5 (5). !Done Slot4.PhaseRetrain()	Initiate a Phase retrain for this slot
Module_Resolutions	Slot<n>.Module_Resolutions()	List	Slot4.Module_Resolutions() 640x480p60;4:3; 640x480p72;4:3; ... Empty1000;4:3; Empty1001;4:3; Empty1002;4:3; Empty1003;4:3; Empty1004;4:3; Empty1005;4:3; Empty1006;4:3; Empty1007;4:3; Empty1008;4:3; Empty1009;4:3; !Done Slot4.Module_Resolutions()	List all the supported resolutions for this slot. Custom resolutions will appear at the end of the list. The list is semicolon separated.
ForceLinkRefresh	Slot<n>.In<n>.ForceLinkRefresh()	Void	Slot4.In1.ForceLinkRefresh() !Done Slot4.In1.ForceLinkRefresh()	Reset the connection to the source.

## Events

Category	Event	Syntax	Example	Description
INPUT	STATUS_GROUP	STATUS_GROUP,<input >, <property>, <value>	!Event STATUS_GROUP,Slot1.In1,Status,OK	<p>Raised when an input property is changed.</p> <p>Properties;            Status; OK   Invalid            Measured_Resolution; &lt;a valid resolution&gt; or empty            Set_Resolution; &lt;a valid resolution&gt; or empty            CanFramelockTo; Yes   No            HDCP_Required; Required   Off            HDMI; Found   Not_found            Audio; Found   Off</p>

## HDBASE-T Input Module

It is possible to use Slot<n>.In<n> and S<n>I<n> in place of Slots.Slot<n>.In<n>.

### Properties

Property Name	Syntax	Type	Example	Description
Slot<n>	Slot<n>	List	Slot4.Cardtype = HDBASET 2-in Slot4.Carddata = <No Value> Slot4.In1 = <...> Slot4.In2 = <...> Slot4.PhaseRetrain() Slot4.Module_Resolutions() !Done Slot4	List all of the properties of the card in this slot or "NO CARD" if the slot is empty.
Cardtype	Slot<n>.Cardtype	CardTypeEnum	Slot4.Cardtype = HDBASET 2-in !Done Slot4.Cardtype	Read-only. Get the type of the card in this slot
Carddata	Slot<n>.Carddata	void	Slot4.Carddata.BaseNo = 218092000121 Slot4.Carddata.SubNo = 0000000000 Slot4.Carddata.ProdNo = 0000000000 Slot4..Carddata.PTR = :::----- :::,,, , centres at 30, 30 (29). !Done Slot4.Carddata	Returns card specific data BaseNo: base card serial number SubNo: sub card serial number ProdNo: assembly number PTR: phase training result
In<n>	Slot<n>.In<n>	List	Slot4.In1.FullName = In1 Slot4.In1.Status = OK Slot4.In1.Alias = s4i1 Slot4.In1.WindowList = Window1,Window2 Slot4.In1.AspectChoice = 4:3 Slot4.In1.Brightness = 0 Slot4.In1.Contrast = 100 Slot4.In1.ColourScale = Auto Slot4.In1.TPG = Off Slot4.In1.Set_Resolution = 640x480p60	List the properties for an Input on the given Slot. Where In<n> is the input on the card.

Property Name	Syntax	Type	Example	Description
			Slot4.In1.Measured_Resolution = 640x480p60 Slot4.In1.Measured_Width = 640 Slot4.In1.Measured_Height = 480 Slot4.In1.Measured_Field_Rate = 60 Slot4.In1.Measured_VTotal = 525 Slot4.In1.Measured_Frame_ip = p Slot4.In1.EDID_Filename = s3i1.edd Slot4.In1.ForceLinkRefresh() Slot4.In1.LeftCrop = 0 Slot4.In1.RightCrop = 0 Slot4.In1.TopCrop = 0 Slot4.In1.BottomCrop = 0 Slot4.In1.AnH_Offset = 0 Slot4.In1.AnV_Offset = 0 Slot4.In1.OnSrcLossColour = Blue Slot4.In1.HDCP_Enabled = Supported Slot4.In1.HDCP_Required = Off Slot4.In1.HDMI = Found Slot4.In1.Audio = Found Slot4.In1.HDBaseT = <...> Slot4.In1.PreviewVideoType = 0 Slot4.In1.Equipment = Slot4.In1.CanFramelockTo = No Slot4.In1.AudioLevel = 0 Slot4.In1.AudioMute = Off Slot4.In1.AudioEnable = On !Done Slot4.In1	
FullName	Slot<n>.In<n>.FullName	String	Slot4.In1.FullName = In1 !Done Slot4.In1.FullName	Read-only. Get the full name of the Window

Property Name	Syntax	Type	Example	Description
Status	Slot<n>.In<n>.Status	StatusEnum	Slot4.In1.Status = OK !Done Slot4.In1.Status	Read-only. Get the status of the input.
Alias	Slot<n>.In<n>.Alias	String	Slot4.In1.Alias = s4i1 !Done Slot4.In1.Alias	Get or set the Alias name for this input. <b>Warning it is possible to set this value to that used by another input, in which case the other value will be set to NULL.</b>
WindowList	Slot<n>.In<n>.WindowList	String	Slot4.In1.WindowList = Window1 !Done Slot4.In1.WindowList	Read only. Get the window that the slot is routed to.
Brightness	Slot<n>.In<n>.Brightness	Integer	Slot4.In1.Brightness = 0 !Done Slot4.In1.Brightness	Get or set the brightness adjustment for this input. Valid range is from -30 to 30
Contrast	Slot<n>.In<n>.Contrast	Percentage	Slot4.In1.Contrast = 100 !Done Slot4.In1.Contrast	Get or set the contrast adjustment for the Input. Valid range is from 30% to 130%
ColourScale	Slot<n>.In<n>.ColourScale	ColourScale	Slot4.In1.ColourScale = Auto !Done Slot4.In1.ColourScale	Get or set the colour scale for this input.
Dither	Slot<n>.In<n>.Dither	Boolean	Slot4.In1.Dither = On !Done Slot4.In1.Dither = On	Get or set whether this input has dither enabled. Options are "Off" or "On".
TPG	Slot<n>.In<n>.TPG	Boolean	Slot4.In1.TPG = TPG1 !Done Slot4.In1.TPG = TPG1	Get or set to use the internal Test Pattern Generator (TPG1) for this input. Options are "Off" or "TPG1".
Set_Resolution	Slot<n>.In<n>.Set_Resolution	Resolution	Slot4.In1.Set_Resolution = 640x480p60 !Done Slot4.In1.Set_Resolution	Read-only. Get the current resolution set for this input.
Measured_Resolution	Slot<n>.In<n>.Measured_Resolution	Resolution	Slot4.In1.Measured_Resolution = 640x480p60 !Done Slot4.In1.Measured_Resolution	Read-only. Get the resolution being read from this Input.

Property Name	Syntax	Type	Example	Description
Measured_Width	Slot<n>.In<n>.Measured_Width	Integer	Slot4.In1.Measured_Width = 640 !Done Slot4.In1.Measured_Width	Read-only. Get the width of the resolution being read from this input.
Measured_Height	Slot<n>.In<n>.Measured_Height	Integer	Slot4.In1.Measured_Height = 480 !Done Slot4.In1.Measured_Height	Read-only. Get the measured height of the resolution being read from this input.
Measured_Field_Rate	Slot<n>.In<n>.Measured_Field_Rate	Integer	Slot4.In1.Measured_Field_Rate = 60 !Done Slot4.In1.Measured_Field_Rate	Read-only. Get the measured field rate of the resolution being read from this input.
Measured_VTotal	Slot<n>.In<n>.Measured_VTotal	Integer	Slot4.In1.Measured_VTotal = 525 !Done Slot4.In1.Measured_VTotal	Read-only. Get the measured total vertical lines of the resolution being read from this input.
Measure_Frame_ip	Slot<n>.In<n>.Measure_Frame_ip	FrameType	Slot4.In1.Measured_Frame_ip = p !Done Slot4.In1.Measured_Frame_ip	Read-only. Get the measured frame type of the resolution being read from this input.
EDID_Filename	Slot<n>.In<n>.EDID_Filename	String	Slot4.In1.EDID_Filename = s3i1.edd !Done Slot4.In1.EDID_Filename	Get or set the EDID file currently being used for this input.
LeftCrop	Slot<n>.In<n>.LeftCrop	Integer	Slot4.In1.LeftCrop = 0 !Done Slot4.In1.LeftCrop	Get or set the amount of left crop to be applied to this input.
RightCrop	Slot<n>.In<n>.RightCrop	Integer	Slot4.In1.RightCrop = 0 !Done Slot4.In1.RightCrop	Get or set the amount of right crop to be applied to this input.
TopCrop	Slot<n>.In<n>.TopCrop	Integer	Slot4.In1.TopCrop = 0 !Done Slot4.In1.TopCrop	Get or set the amount of top crop to be applied to this input.
BottomCrop	Slot<n>.In<n>.BottomCrop	Integer	Slot4.In1.BottomCrop = 0 !Done Slot4.In1.BottomCrop	Get or set the amount of bottom crop to be applied to this input.
AnH_Offset	Slot<n>.In<n>.AnH_Offset	Integer	Slot4.In1.AnH_Offset = 0 !Done Slot4.In1.AnH_Offset	Adjust the horizontal position of component analog input, measured in lines. Range from -100 to 100.

Property Name	Syntax	Type	Example	Description
AnV_Offset	Slot<n>.In<n>.AnV_Offset	Integer	Slot6.In1.AnV_Offset = 0 !Done Slot6.In1.AnV_Offset	Adjust the vertical position of component analog input, measured in lines. Range from -100 to 100.
OnSrcLossColor	Slot<n>.In<n>.OnSrcLossColor	SrcLossColor	Slot6.In1.OnSrcLossColor = Blue !Done Slot6.In1.OnSrcLossColor	Get or set the colour to be displayed when the input source is lost.
HDCP_Enabled	Slot<n>.In<n>.HDCP_Enabled	HDCPSup	Slot4.In1.HDCP_Enabled = Supported !Done Slot4.In1.HDCP_Enabled	Get or set if HDCP is enabled for this source
HDCP_Required	Slot<n>.In<n>.HDCP_Required	HDCPReq	Slot4.In1.HDCP_Required = Off !Done Slot4.In1.HDCP_Required	Read-only. Get the HDCP capability of the input source.
HDMI	Slot<n>.In<n>.HDMI	FoundNot	Slot4.In1.HDMI = Found !Done Slot4.In1.HDMI	Read-only. Get the detected HDMI status.
Audio	Slot<n>.In<n>.Audio	FoundOff	Slot4.in1.Audio = Found !Done Slot4.in1.Audio	Read only. Get if audio is available for this input.
PreviewVideoType	Slot<n>.In<n>.PreviewVideoType	Integer	Slot4.In1.PreviewVideoType = 0 !Done Slot4.In1.PreviewVideoType	<b>CORIOgrapher only.</b> Get or set the type of Preview Video (used in UI).
Equipment	Slot<n>.In<n>.Equipment	String	Slot4.In1.Equipment = !Done Slot4.In1.Equipment	<b>CORIOgrapher only.</b> Get or set the equipment connected to this input
CanFramelockTo	Slot<n>.In<n>.CanFramelockTo	Boolean	Slot4.In1.CanFramelockTo = No !Done Slot4.In1.CanFramelockTo	Read only. Get if the input can be used as a Framelock reference.
HDBaseT	Slot<n>.In<n>.HDBaseT	Sub-Menu	Slot1.In1.HDBaseT = <...>	List the HDBaseT specific attributes for this card. See the HDBASE-T Sub-Menu.section below.
AudioEnable	Slot1.In1.AudioEnable	Boolean	Slot1.In1.AudioEnable = On !Done Slot1.In1.AudioEnable	Enable the embedded input audio on an input (if present) On : Off Default; On



Property Name	Syntax	Type	Example	Description
AudioLevel	Slot1.In1.AudioLevel	Integer	Slot1.In1.AudioLevel = 0 !Done Slot1.In1.AudioLevel	Get or set the embedded input audio level (in dB -20 to +20) (increments of 1) Default; 0
AudioMute	Slot1.In1.AudioMute	Boolean	Slot1.In1.AudioMute = Off !Done Slot1.In1.AudioMute	Mute the embedded input audio on an input (if present) On : Off Default; Off

## Events

Category	Event	Syntax	Example	Description
INPUT	STATUS_GROUP	STATUS_GROUP,<input >, <property>, <value>	!Event STATUS_GROUP,Slot1.In1,Status,OK	Raised when an input property is changed. Properties; Status; OK   Invalid Measured_Resolution; <a valid resolution> or empty Set_Resolution; <a valid resolution> or empty CanFramelockTo; Yes   No HDCP_Required; Required   Off HDMI; Found   Not_found Audio; Found   Off

## HDMI 4K Input Module (2-Input)

It is possible to use Slot<n>.In<n> and S<n>I<n> in place of Slots.Slot<n>.In<n>.

### Properties

Property Name	Syntax	Type	Example	Description
Slot<n>	Slot<n>	List	Slot15 Slot15.Cardtype = HDMI_4K 2-in Slot15.Carddata = <...> Slot15.In1 = <...> Slot15.In2 = <...> Slot15.PhaseRetrain() Slot15.Module_Resolutions() !Done Slot15	List all of the properties of the card in this slot or "NO CARD" if the slot is empty.
Cardtype	Slot<n>.Cardtype	CardTypeEnum	Slot4.Cardtype = HDMI_4K 2-in !Done Slot4.Cardtype	Read-only. Get the type of the card in this slot
Carddata	Slot<n>.Carddata	void	Slot4.Carddata.BaseNo = 218092000121 Slot4..Carddata.PTR = :::----- :::,,, , centres at 30, 30 (29). !Done Slot4.Carddata	Returns card specific data BaseNo: base card serial number PTR: phase training result
In<n>	Slot<n>.In<n>	List	Slot1.In1.FullName = In1 Slot1.In1.Status = OK Slot1.In1.Alias = s1i1 Slot1.In1.WindowList = Window1 Slot1.In1.AspectChoice = 4:3 Slot1.In1.Brightness = 0 Slot1.In1.Contrast = 100 Slot1.In1.ColourScale = Auto Slot1.In1.Dither = Off Slot1.In1.TPG = Off Slot1.In1.Set_Resolution = 2048x1152p60	List the properties for an Input on the given Slot. Where In<n> is the input on the card.

Property Name	Syntax	Type	Example	Description
			Slot1.In1.Measured_Resolution = 2048x1152p60 Slot1.In1.Measured_Width = 2048 Slot1.In1.Measured_Height = 1152 Slot1.In1.Measured_Field_Rate = 60 Slot1.In1.Measured_VTotal = 1173 Slot1.In1.Measured_Frame_ip = p Slot1.In1.EDID_Filename = edid4k.edd Slot1.In1.ForceLinkRefresh() Slot1.In1.LeftCrop = 0 Slot1.In1.RightCrop = 0 Slot1.In1.TopCrop = 0 Slot1.In1.BottomCrop = 0 Slot1.In1.AnH_Offset = 0 Slot1.In1.AnV_Offset = 0 Slot1.In1.OnSrcLossColour = Blue Slot1.In1.HDCP_Enabled = Supported Slot1.In1.HDCP_Required = Required Slot1.In1.HDMI = Found Slot1.In1.Audio = Off Slot1.In1.PreviewVideoType = 0 Slot1.In1.Equipment = "Default 4K 16:9 Source" Slot1.In1.CanFramelockTo = No Slot1.In1.AudioLevel = 0 Slot1.In1.AudioMute = Off Slot1.In1.AudioEnable = On !Done Slot1.In1	
FullName	Slot<n>.In<n>.FullName	String	Slot4.In1.FullName = In1 !Done Slot4.In1.FullName	Read-only. Get the full name of the Window

Property Name	Syntax	Type	Example	Description
Status	Slot<n>.In<n>.Status	StatusEnum	Slot4.In1.Status = OK !Done Slot4.In1.Status	Read-only. Get the status of the input.
Alias	Slot<n>.In<n>.Alias	String	Slot4.In1.Alias = s3i1 !Done Slot4.In1.Alias	Get or set the Alias name for this input. <b>Warning it is possible to set this value to that used by another input, in which case the other value will be set to NULL.</b>
WindowList	Slot<n>.In<n>.WindowList	String	Slot4.In1.WindowList = Window1 !Done Slot4.In1.WindowList	Read only. Get the window that the slot is routed to.
Brightness	Slot<n>.In<n>.Brightness	Integer	Slot4.In1.Brightness = 0 !Done Slot4.In1.Brightness	Get or set the brightness adjustment for this input. Valid range is from -30 to 30
Contrast	Slot<n>.In<n>.Contrast	Percentage	Slot4.In1.Contrast = 100 !Done Slot4.In1.Contrast	Get or set the contrast adjustment for the Input. Valid range is from 30% to 130%
ColourScale	Slot<n>.In<n>.ColourScale	ColourScale	Slot4.In1.ColourScale = Auto !Done Slot4.In1.ColourScale	Get or set the colour scale for this input.
Dither	Slot<n>.In<n>.Dither	Boolean	Slot4.In1.Dither = On !Done Slot4.In1.Dither = On	Get or set whether this input has dither enabled. Options are "Off" or "On".
TPG	Slot<n>.In<n>.TPG	Boolean	Slot4.In1.TPG = TPG1 !Done Slot4.In1.TPG = TPG1	Get or set to use the internal Test Pattern Generator (TPG1) for this input. Options are "Off" or "TPG1".
Set_Resolution	Slot<n>.In<n>.Set_Resolution	Resolution	Slot4.In1.Set_Resolution = 640x480p60 !Done Slot4.In1.Set_Resolution	Read-only. Get the current resolution set for this input.
Measured_Resolution	Slot<n>.In<n>.Measured_Resolution	Resolution	Slot4.In1.Measured_Resolution = 640x480p60 !Done Slot4.In1.Measured_Resolution	Read-only. Get the resolution being read from this Input.

Property Name	Syntax	Type	Example	Description
Measured_Width	Slot<n>.In<n>.Measured_Width	Integer	Slot4.In1.Measured_Width = 640 !Done Slot4.In1.Measured_Width	Read-only. Get the width of the resolution being read from this input.
Measured_Height	Slot<n>.In<n>.Measured_Height	Integer	Slot4.In1.Measured_Height = 480 !Done Slot4.In1.Measured_Height	Read-only. Get the measured height of the resolution being read from this input.
Measured_Field_Rate	Slot<n>.In<n>.Measured_Field_Rate	Integer	Slot4.In1.Measured_Field_Rate = 60 !Done Slot4.In1.Measured_Field_Rate	Read-only. Get the measured field rate of the resolution being read from this input.
Measured_VTotal	Slot<n>.In<n>.Measured_VTotal	Integer	Slot4.In1.Measured_VTotal = 525 !Done Slot4.In1.Measured_VTotal	Read-only. Get the measured total vertical lines of the resolution being read from this input.
Measure_Frame_ip	Slot<n>.In<n>.Measure_Frame_ip	FrameType	Slot4.In1.Measured_Frame_ip = p !Done Slot4.In1.Measured_Frame_ip	Read-only. Get the measured frame type of the resolution being read from this input.
EDID_Filename	Slot<n>.In<n>.EDID_Filename	String	Slot4.In1.EDID_Filename = s3i1.edd !Done Slot4.In1.EDID_Filename	Get or set the EDID file currently being used for this input.
LeftCrop	Slot<n>.In<n>.LeftCrop	Integer	Slot4.In1.LeftCrop = 0 !Done Slot4.In1.LeftCrop	Get or set the amount of left crop to be applied to this input.
RightCrop	Slot<n>.In<n>.RightCrop	Integer	Slot4.In1.RightCrop = 0 !Done Slot4.In1.RightCrop	Get or set the amount of right crop to be applied to this input.
TopCrop	Slot<n>.In<n>.TopCrop	Integer	Slot4.In1.TopCrop = 0 !Done Slot4.In1.TopCrop	Get or set the amount of top crop to be applied to this input.
BottomCrop	Slot<n>.In<n>.BottomCrop	Integer	Slot4.In1.BottomCrop = 0 !Done Slot4.In1.BottomCrop	Get or set the amount of bottom crop to be applied to this input.
AnH_Offset	Slot<n>.In<n>.AnH_Offset	Integer	Slot4.In1.AnH_Offset = 0 !Done Slot4.In1.AnH_Offset	Adjust the horizontal position of component analog input, measured in lines. Range from -100 to 100.

Property Name	Syntax	Type	Example	Description
AnV_Offset	Slot<n>.In<n>.AnV_Offset	Integer	Slot6.In1.AnV_Offset = 0 !Done Slot6.In1.AnV_Offset	Adjust the vertical position of component analog input, measured in lines. Range from -100 to 100.
OnSrcLossColor	Slot<n>.In<n>.OnSrcLossColor	SrcLossColor	Slot6.In1.OnSrcLossColor = Blue !Done Slot6.In1.OnSrcLossColor	Get or set the colour to be displayed when the input source is lost.
HDCP_Enabled	Slot<n>.In<n>.HDCP_Enabled	HDCPSup	Slot4.In1.HDCP_Enabled = Supported !Done Slot4.In1.HDCP_Enabled	Get or set if HDCP is enabled for this source
HDCP_Required	Slot<n>.In<n>.HDCP_Required	HDCPReq	Slot4.In1.HDCP_Required = Off !Done Slot4.In1.HDCP_Required	Read-only. Get the HDCP capability of the input source.
HDMI	Slot<n>.In<n>.HDMI	FoundNot	Slot4.In1.HDMI = Found !Done Slot4.In1.HDMI	Read-only. Get the detected HDMI status.
Audio	Slot<n>.In<n>.Audio	FoundOff	Slot4.in1.Audio = Found !Done Slot4.in1.Audio	Read only. Get if audio is available for this input.
PreviewVideoType	Slot<n>.In<n>.PreviewVideoType	Integer	Slot4.In1.PreviewVideoType = 0 !Done Slot4.In1.PreviewVideoType	<b>CORIOgrapher only.</b> Get or set the type of Preview Video (used in UI).
Equipment	Slot<n>.In<n>.Equipment	String	Slot4.In1.Equipment = !Done Slot4.In1.Equipment	<b>CORIOgrapher only.</b> Get or set the equipment connected to this input
CanFramelockTo	Slot<n>.In<n>.CanFramelockTo	Boolean	Slot4.In1.CanFramelockTo = No !Done Slot4.In1.CanFramelockTo	Read only. Get if the input can be used as a Framelock reference.
AudioEnable	Slot1.In1.AudioEnable	Boolean	Slot1.In1.AudioEnable = On !Done Slot1.In1.AudioEnable	Enable the embedded input audio on an input (if present) On : Off Default; On

Property Name	Syntax	Type	Example	Description
AudioLevel	Slot1.In1.AudioLevel	Integer	Slot1.In1.AudioLevel = 0 !Done Slot1.In1.AudioLevel	Get or set the embedded input audio level (in dB -20 to +20) (increments of 1) Default; 0
AudioMute	Slot1.In1.AudioMute	Boolean	Slot1.In1.AudioMute = Off !Done Slot1.In1.AudioMute	Mute the embedded input audio on an input (if present) On : Off Default; Off

## Events

Category	Event	Syntax	Example	Description
INPUT	STATUS_GROUP	STATUS_GROUP,<input >, <property>, <value>	!Event STATUS_GROUP,Slot1.In1,Status,OK	Raised when an input property is changed. Properties; Status; OK   Invalid Measured_Resolution; <a valid resolution> or empty Set_Resolution; <a valid resolution> or empty CanFramelockTo; Yes   No HDCP_Required; Required   Off HDMI; Found   Not_found Audio; Found   Off

## HDMI 4K Input Module (4-Input CORIOmaster2)

It is possible to use Slot<n>.In<n> and S<n>I<n> in place of Slots.Slot<n>.In<n>.

### Properties

Property Name	Syntax	Type	Example	Description
Slot<n>	Slot<n>	List	<pre>Slot5 Slot5.Cardtype = HDMI_4K 4-in Slot5.Carddata = &lt;...&gt; Slot5.In1 = &lt;...&gt; Slot5.In2 = &lt;...&gt; Slot5.In3 = &lt;...&gt; Slot5.In4 = &lt;...&gt; Slot5.PhaseRetrain() Slot5.Module_Resolutions() !Done Slot5</pre>	List all of the properties of the card in this slot or "NO CARD" if the slot is empty.
Cardtype	Slot<n>.Cardtype	CardTypeEnum	<pre>Slot5.Cardtype = HDMI_4K 4-in !Done Slot5.Cardtype</pre>	Read-only. Get the type of the card in this slot



Property Name	Syntax	Type	Example	Description
Carddata	Slot<n>.Carddata	void	<pre>Slot5.Carddata Slot5.Carddata.BaseNo = 2219671000143 Slot5.Carddata.SubNo = Slot5.Carddata.ProdNo = 2219671000143 Slot5.Carddata.TemperatureLocal = -1 Slot5.Carddata.TemperatureD1 = 0 Slot5.Carddata.TemperatureD2 = 0 Slot5.Carddata.TemperatureD3 = 0 Slot5.Carddata.Rail_0V9_mA = 44720 Slot5.Carddata.Rail_5V0 = 0 Slot5.Carddata.Rail_0V9 = 0 Slot5.Carddata.Rail_1V03 = 0 Slot5.Carddata.Rail_1V5 = 0 Slot5.Carddata.Rail_1V8 = 0 Slot5.Carddata.Rail_3V0 = 0 Slot5.Carddata.Rail_1V2 = 0 Slot5.Carddata.U22_VCC = 0 Slot5.Carddata.U32_VCC = 0 Slot5.Carddata.BOM = 0 Slot5.Carddata.FPGAInfo = &lt;...&gt; !Done Slot5.Carddata</pre>	Returns card specific data and various sensor and programming information.
In<n>	Slot<n>.In<n>	List	<pre>Slot5.In1 Slot5.In1.FullName = In1 Slot5.In1.Status = INVALID Slot5.In1.Alias = s5i1 Slot5.In1.WindowList = Window5001 Slot5.In1.Brightness = 0 Slot5.In1.Contrast = 100 Slot5.In1.ColourScale = Auto Slot5.In1.Dither = Off Slot5.In1.TPG = Off</pre>	List the properties for an Input on the given Slot. Where In<n> is the input on the card.

Property Name	Syntax	Type	Example	Description
			Slot5.In1.Set_Resolution = Slot5.In1.Measured_Resolution = Slot5.In1.Measured_Width = 0 Slot5.In1.Measured_Height = 0 Slot5.In1.Measured_Field_Rate = 0 Slot5.In1.Measured_VTotal = 0 Slot5.In1.Measured_Frame_ip = i Slot5.In1.EDID_Filename = edid4k60.edd Slot5.In1.ForceLinkRefresh() Slot5.In1.LeftCrop = 0 Slot5.In1.RightCrop = 0 Slot5.In1.TopCrop = 0 Slot5.In1.BottomCrop = 0 Slot5.In1.OnSrcLossColour = Blue Slot5.In1.HDCP_Enabled = Supported Slot5.In1.HDCP_Required = Off Slot5.In1.HDCP_Status = None Slot5.In1.HDCP_Version = <Out of Range> Slot5.In1.HDMI = Not_Found Slot5.In1.Audio = Off Slot5.In1.AudioBars = 0 Slot5.In1.PreviewVideoType = 0 Slot5.In1.Equipment = Slot5.In1.CanFramelockTo = No Slot5.In1.ClockDriveStrength = Hi_4x Slot5.In1.DataDriveStrength = Med_Hi_3x Slot5.In1.SyncDriveStrength = Med_Hi_3x Slot5.In1.AudioLevel = 0 Slot5.In1.AudioMute = Off Slot5.In1.AudioEnable = On !Done Slot5.In1	

Property Name	Syntax	Type	Example	Description
FullName	Slot<n>.In<n>.FullName	String	Slot5.In1.FullName = In1 !Done Slot5.In1.FullName	Read-only. Get the full name of the Window
Status	Slot<n>.In<n>.Status	StatusEnum	Slot5.In1.Status = OK !Done Slot5.In1.Status	Read-only. Get the status of the input.
Alias	Slot<n>.In<n>.Alias	String	Slot5.In1.Alias = s3i1 !Done Slot5.In1.Alias	Get or set the Alias name for this input. <b>Warning it is possible to set this value to that used by another input, in which case the other value will be set to NULL.</b>
WindowList	Slot<n>.In<n>.WindowList	String	Slot5.In1.WindowList = Window1 !Done Slot5.In1.WindowList	Read only. Get the window that the slot is routed to.
Brightness	Slot<n>.In<n>.Brightness	Integer	Slot5.In1.Brightness = 0 !Done Slot5.In1.Brightness	Get or set the brightness adjustment for this input. Valid range is from -30 to 30
Contrast	Slot<n>.In<n>.Contrast	Percentage	Slot5.In1.Contrast = 100 !Done Slot5.In1.Contrast	Get or set the contrast adjustment for the Input. Valid range is from 30% to 130%
ColourScale	Slot<n>.In<n>.ColourScale	ColourScale	Slot5.In1.ColourScale = Auto !Done Slot5.In1.ColourScale	Get or set the colour scale for this input.
Dither	Slot<n>.In<n>.Dither	Boolean	Slot5.In1.Dither = On !Done Slot5.In1.Dither = On	Get or set whether this input has dither enabled. Options are "Off" or "On".
TPG	Slot<n>.In<n>.TPG	Boolean	Slot5.In1.TPG = TPG1 !Done Slot5.In1.TPG = TPG1	Get or set to use the internal Test Pattern Generator (TPG1) for this input. Options are "Off" or "TPG1".
Set_Resolution	Slot<n>.In<n>.Set_Resolution	Resolution	Slot5.In1.Set_Resolution = 640x480p60 !Done Slot5.In1.Set_Resolution	Read-only. Get the current resolution set for this input.

Property Name	Syntax	Type	Example	Description
Measured_Resolution	Slot<n>.In<n>.Measured_Resolution	Resolution	Slot5.In1.Measured_Resolution = 640x480p60 !Done Slot5.In1.Measured_Resolution	Read-only. Get the resolution being read from this Input.
Measured_Width	Slot<n>.In<n>.Measured_Width	Integer	Slot5.In1.Measured_Width = 640 !Done Slot5.In1.Measured_Width	Read-only. Get the width of the resolution being read from this input.
Measured_Height	Slot<n>.In<n>.Measured_Height	Integer	Slot5.In1.Measured_Height = 480 !Done Slot5.In1.Measured_Height	Read-only. Get the measured height of the resolution being read from this input.
Measured_Field_Rate	Slot<n>.In<n>.Measured_Field_Rate	Integer	Slot5.In1.Measured_Field_Rate = 60 !Done Slot5.In1.Measured_Field_Rate	Read-only. Get the measured field rate of the resolution being read from this input.
Measured_VTotal	Slot<n>.In<n>.Measured_VTotal	Integer	Slot5.In1.Measured_VTotal = 525 !Done Slot5.In1.Measured_VTotal	Read-only. Get the measured total vertical lines of the resolution being read from this input.
Measure_Frame_ip	Slot<n>.In<n>.Measure_Frame_ip	FrameType	Slot5.In1.Measured_Frame_ip = p !Done Slot5.In1.Measured_Frame_ip	Read-only. Get the measured frame type of the resolution being read from this input.
EDID_Filename	Slot<n>.In<n>.EDID_Filename	String	Slot5.In1.EDID_Filename = s3i1.edd !Done Slot5.In1.EDID_Filename	Get or set the EDID file currently being used for this input.
LeftCrop	Slot<n>.In<n>.LeftCrop	Integer	Slot5.In1.LeftCrop = 0 !Done Slot5.In1.LeftCrop	Get or set the amount of left crop to be applied to this input.
RightCrop	Slot<n>.In<n>.RightCrop	Integer	Slot5.In1.RightCrop = 0 !Done Slot5.In1.RightCrop	Get or set the amount of right crop to be applied to this input.
TopCrop	Slot<n>.In<n>.TopCrop	Integer	Slot5.In1.TopCrop = 0 !Done Slot5.In1.TopCrop	Get or set the amount of top crop to be applied to this input.
BottomCrop	Slot<n>.In<n>.BottomCrop	Integer	Slot5.In1.BottomCrop = 0 !Done Slot5.In1.BottomCrop	Get or set the amount of bottom crop to be applied to this input.

Property Name	Syntax	Type	Example	Description
AnH_Offset	Slot<n>.In<n>.AnH_Offset	Integer	Slot5.In1.AnH_Offset = 0 !Done Slot5.In1.AnH_Offset	Adjust the horizontal position of component analog input, measured in lines. Range from -100 to 100.
AnV_Offset	Slot<n>.In<n>.AnV_Offset	Integer	Slot5.In1.AnV_Offset = 0 !Done Slot5.In1.AnV_Offset	Adjust the vertical position of component analog input, measured in lines. Range from -100 to 100.
OnSrcLossColor	Slot<n>.In<n>.OnSrcLossColor	SrcLossColor	Slot5.In1.OnSrcLossColor = Blue !Done Slot5.In1.OnSrcLossColor	Get or set the colour to be displayed when the input source is lost.
HDCP_Enabled	Slot<n>.In<n>.HDCP_Enabled	HDCPSup	Slot5.In1.HDCP_Enabled = Supported !Done Slot5.In1.HDCP_Enabled	Get or set if HDCP is enabled for this source
HDCP_Required	Slot<n>.In<n>.HDCP_Required	HDCPReq	Slot5.In1.HDCP_Required = Off !Done Slot5.In1.HDCP_Required	Read-only. Get the HDCP capability of the input source.
HDCP_Status	Slot<n>.In<n>.HDCP_Status	HDCPStatus	Slot5.In1.HDCP_Status Slot5.In1.HDCP_Status = None !Done Slot5.In1.HDCP_Status	Read-only Get current HDCP Status for the input. Values: None, v1_4 or v2_2 (depending on the source HDCP)
HDCP_Version	Slot<n>.In<n>.HDCP_Version	HDCPVersion	Slot5.In1.HDCP_Version = All !Done Slot5.In1.HDCP_Version = All	Get or set the HDCP version supported by this input. Values: All, v1_4 or v2_2
HDMI	Slot<n>.In<n>.HDMI	FoundNot	Slot5.In1.HDMI = Found !Done Slot5.In1.HDMI	Read-only. Get the detected HDMI status.
Audio	Slot<n>.In<n>.Audio	FoundOff	Slot5.in1.Audio = Found !Done Slot5.in1.Audio	Read only. Get if audio is available for this input.
PreviewVideoType	Slot<n>.In<n>.PreviewVideoType	Integer	Slot5.In1.PreviewVideoType = 0 !Done Slot5.In1.PreviewVideoType	<b>CORIOgrapher only.</b> Get or set the type of Preview Video (used in UI).

Property Name	Syntax	Type	Example	Description
Equipment	Slot<n>.In<n>.Equipment	String	Slot5.In1.Equipment = !Done Slot5.In1.Equipment	<b>CORIOgrapher only.</b> Get or set the equipment connected to this input
CanFramelockTo	Slot<n>.In<n>.CanFramelockTo	Boolean	Slot5.In1.CanFramelockTo = No !Done Slot5.In1.CanFramelockTo	Read only. Get if the input can be used as a Framelock reference.
AudioEnable	Slot1.In1.AudioEnable	Boolean	Slot1.In1.AudioEnable = On !Done Slot1.In1.AudioEnable	Enable the embedded input audio on an input (if present) On : Off Default; On
AudioLevel	Slot1.In1.AudioLevel	Integer	Slot1.In1.AudioLevel = 0 !Done Slot1.In1.AudioLevel	Get or set the embedded input audio level (in dB -20 to +20) (increments of 1) Default; 0
AudioMute	Slot1.In1.AudioMute	Boolean	Slot1.In1.AudioMute = Off !Done Slot1.In1.AudioMute	Mute the embedded input audio on an input (if present) On : Off Default; Off

## Events

Category	Event	Syntax	Example	Description
INPUT	STATUS_GROUP	STATUS_GROUP,<input >, <property>, <value>	!Event STATUS_GROUP,Slot1.In1,Status,OK	<p>Raised when an input property is changed.</p> <p>Properties;            Status; OK   Invalid            Measured_Resolution; &lt;a valid resolution&gt; or empty            Set_Resolution; &lt;a valid resolution&gt; or empty            CanFramelockTo; Yes   No            HDCP_Required; Required   Off            HDCP_Status; None   v1_4   v2_2            HDMI; Found   Not_found            Audio; Found   Off</p>

## HDMI 2K Input Module

It is possible to use Slot<n>.In<n> and S<n>I<n> in place of Slots.Slot<n>.In<n>.

### Properties

Property Name	Syntax	Type	Example	Description
Slot<n>	Slot<n>	List	Slot15 Slot15.Cardtype = HDMI_2K 4-in Slot15.Carddata = <...> Slot15.In1 = <...> Slot15.In2 = <...> Slot15.In3 = <...> Slot15.In4 = <...> Slot15.PhaseRetrain() Slot15.Module_Resolutions() !Done Slot15	List all the properties of the card in this slot or "NO CARD" if the slot is empty.
Cardtype	Slot<n>.Cardtype	CardTypeEnum	Slot4.Cardtype = HDMI_2K 4-in !Done Slot4.Cardtype	Read-only. Get the type of the card in this slot
Carddata	Slot<n>.Carddata	void	Slot4.Carddata.BaseNo = 218092000121 Slot4..Carddata.PTR = :::----- :::,,, centres at 30, 30 (29). !Done Slot4.Carddata	Returns card specific data BaseNo: base card serial number PTR: phase training result
In<n>	Slot<n>.In<n>	List	Slot4.In1.FullName = In1 Slot4.In1.Status = OK Slot4.In1.Alias = s4i1 Slot4.In1.WindowList = Window1 Slot4.In1.AspectChoice = 4:3 Slot4.In1.Brightness = 0 Slot4.In1.Contrast = 100 Slot4.In1.ColourScale = Auto Slot4.In1.Dither = Off Slot4.In1.TPG = Off	List the properties for an Input on the given Slot. Where In<n> is the input on the card.



Property Name	Syntax	Type	Example	Description
			Slot4.In1.Set_Resolution = 2048x1152p60 Slot4.In1.Measured_Resolution = 2048x1152p60 Slot4.In1.Measured_Width = 2048 Slot4.In1.Measured_Height = 1152 Slot4.In1.Measured_Field_Rate = 60 Slot4.In1.Measured_VTotal = 1173 Slot4.In1.Measured_Frame_ip = p Slot4.In1.EDID_Filename = edid4k.edd Slot4.In1.ForceLinkRefresh() Slot4.In1.LeftCrop = 0 Slot4.In1.RightCrop = 0 Slot4.In1.TopCrop = 0 Slot4.In1.BottomCrop = 0 Slot4.In1.OnSrcLossColour = Blue Slot4.In1.HDCP_Enabled = Supported Slot4.In1.HDCP_Required = Required Slot4.In1.HDMI = Found Slot4.In1.Audio = Off Slot4.In1.PreviewVideoType = 0 Slot4.In1.Equipment = "Default 4K 16:9 Source" Slot4.In1.CanFramelockTo = No Slot4.In1.AudioLevel = 0 Slot4.In1.AudioMute = Off Slot4.In1.AudioEnable = On !Done Slot4.In1	
FullName	Slot<n>.In<n>.FullName	String	Slot4.In1.FullName = In1 !Done Slot4.In1.FullName	Read-only. Get the full name of the Window
Status	Slot<n>.In<n>.Status	StatusEnum	Slot4.In1.Status = OK !Done Slot4.In1.Status	Read-only. Get the status of the input.

Property Name	Syntax	Type	Example	Description
Alias	Slot<n>.In<n>.Alias	String	Slot4.In1.Alias = s3i1 !Done Slot4.In1.Alias	Get or set the Alias name for this input. <i>Warning it is possible to set this value to that used by another input, in which case the other value will be set to NULL.</i>
WindowList	Slot<n>.In<n>.WindowList	String	Slot4.In1.WindowList = Window1 !Done Slot4.In1.WindowList	Read only. Get the window that the slot is routed to.
Brightness	Slot<n>.In<n>.Brightness	Integer	Slot4.In1.Brightness = 0 !Done Slot4.In1.Brightness	Get or set the brightness adjustment for this input. Valid range is from -30 to 30
Contrast	Slot<n>.In<n>.Contrast	Percentage	Slot4.In1.Contrast = 100 !Done Slot4.In1.Contrast	Get or set the contrast adjustment for the Input. Valid range is from 30% to 130%
ColourScale	Slot<n>.In<n>.ColourScale	ColourScale	Slot4.In1.ColourScale = Auto !Done Slot4.In1.ColourScale	Get or set the colour scale for this input.
Dither	Slot<n>.In<n>.Dither	Boolean	Slot4.In1.Dither = On !Done Slot4.In1.Dither = On	Get or set whether this input has dither enabled. Options are "Off" or "On".
TPG	Slot<n>.In<n>.TPG	Boolean	Slot4.In1.TPG = TPG1 !Done Slot4.In1.TPG = TPG1	Get or set to use the internal Test Pattern Generator (TPG1) for this input. Options are "Off" or "TPG1".
Set_Resolution	Slot<n>.In<n>.Set_Resolution	Resolution	Slot4.In1.Set_Resolution = 640x480p60 !Done Slot4.In1.Set_Resolution	Read-only. Get the current resolution set for this input.
Measured_Resolution	Slot<n>.In<n>.Measured_Resolution	Resolution	Slot4.In1.Measured_Resolution = 640x480p60 !Done Slot4.In1.Measured_Resolution	Read-only. Get the resolution being read from this Input.

Property Name	Syntax	Type	Example	Description
Measured_Width	Slot<n>.In<n>.Measured_Width	Integer	Slot4.In1.Measured_Width = 640 !Done Slot4.In1.Measured_Width	Read-only. Get the width of the resolution being read from this input.
Measured_Height	Slot<n>.In<n>.Measured_Height	Integer	Slot4.In1.Measured_Height = 480 !Done Slot4.In1.Measured_Height	Read-only. Get the measured height of the resolution being read from this input.
Measured_Field_Rate	Slot<n>.In<n>.Measured_Field_Rate	Integer	Slot4.In1.Measured_Field_Rate = 60 !Done Slot4.In1.Measured_Field_Rate	Read-only. Get the measured field rate of the resolution being read from this input.
Measured_VTotal	Slot<n>.In<n>.Measured_VTotal	Integer	Slot4.In1.Measured_VTotal = 525 !Done Slot4.In1.Measured_VTotal	Read-only. Get the measured total vertical lines of the resolution being read from this input.
Measure_Frame_ip	Slot<n>.In<n>.Measure_Frame_ip	FrameType	Slot4.In1.Measured_Frame_ip = p !Done Slot4.In1.Measured_Frame_ip	Read-only. Get the measured frame type of the resolution being read from this input.
EDID_Filename	Slot<n>.In<n>.EDID_Filename	String	Slot4.In1.EDID_Filename = s3i1.edd !Done Slot4.In1.EDID_Filename	Get or set the EDID file currently being used for this input.
LeftCrop	Slot<n>.In<n>.LeftCrop	Integer	Slot4.In1.LeftCrop = 0 !Done Slot4.In1.LeftCrop	Get or set the amount of left crop to be applied to this input.
RightCrop	Slot<n>.In<n>.RightCrop	Integer	Slot4.In1.RightCrop = 0 !Done Slot4.In1.RightCrop	Get or set the amount of right crop to be applied to this input.
TopCrop	Slot<n>.In<n>.TopCrop	Integer	Slot4.In1.TopCrop = 0 !Done Slot4.In1.TopCrop	Get or set the amount of top crop to be applied to this input.
BottomCrop	Slot<n>.In<n>.BottomCrop	Integer	Slot4.In1.BottomCrop = 0 !Done Slot4.In1.BottomCrop	Get or set the amount of bottom crop to be applied to this input.
OnSrcLossColor	Slot<n>.In<n>.OnSrcLossColor	SrcLossColor	Slot6.In1.OnSrcLossColor = Blue !Done Slot6.In1.OnSrcLossColor	Get or set the colour to be displayed when the input source is lost.
HDCP_Enabled	Slot<n>.In<n>.HDCP_Enabled	HDCPSup	Slot4.In1.HDCP_Enabled = Supported !Done Slot4.In1.HDCP_Enabled	Get or set if HDCP is enabled for this source

Property Name	Syntax	Type	Example	Description
HDCP_Required	Slot<n>.In<n>.HDCP_Required	HDCPReq	Slot4.In1.HDCP_Required = Off !Done Slot4.In1.HDCP_Required	Read-only. Get the HDCP capability of the input source.
HDMI	Slot<n>.In<n>.HDMI	FoundNot	Slot4.In1.HDMI = Found !Done Slot4.In1.HDMI	Read-only. Get the detected HDMI status.
Audio	Slot<n>.In<n>.Audio	FoundOff	Slot4.in1.Audio = Found !Done Slot4.in1.Audio	Read only. Get if audio is available for this input.
PreviewVideoType	Slot<n>.In<n>.PreviewVideoType	Integer	Slot4.In1.PreviewVideoType = 0 !Done Slot4.In1.PreviewVideoType	<b>CORIOgrapher only.</b> Get or set the type of Preview Video (used in UI).
Equipment	Slot<n>.In<n>.Equipment	String	Slot4.In1.Equipment = !Done Slot4.In1.Equipment	<b>CORIOgrapher only.</b> Get or set the equipment connected to this input
CanFramelockTo	Slot<n>.In<n>.CanFramelockTo	Boolean	Slot4.In1.CanFramelockTo = No !Done Slot4.In1.CanFramelockTo	Read only. Get if the input can be used as a Framelock reference.
AudioEnable	Slot1.In1.AudioEnable	Boolean	Slot1.In1.AudioEnable = On !Done Slot1.In1.AudioEnable	Enable the embedded input audio on an input (if present) On : Off Default; On
AudioLevel	Slot1.In1.AudioLevel	Integer	Slot1.In1.AudioLevel = 0 !Done Slot1.In1.AudioLevel	Get or set the embedded input audio level (in dB -20 to +20) (increments of 1) Default; 0
AudioMute	Slot1.In1.AudioMute	Boolean	Slot1.In1.AudioMute = Off !Done Slot1.In1.AudioMute	Mute the embedded input audio on an input (if present) On : Off Default; Off

## Events

Category	Event	Syntax	Example	Description
INPUT	STATUS_GROUP	STATUS_GROUP,<input >, <property>, <value>	!Event STATUS_GROUP,Slot1.In1,Status,OK	<p>Raised when an input property is changed.</p> <p>Properties;            Status; OK   Invalid            Measured_Resolution; &lt;a valid resolution&gt; or empty            Set_Resolution; &lt;a valid resolution&gt; or empty            CanFramelockTo; Yes   No            HDCP_Required; Required   Off            HDMI; Found   Not_found            Audio; Found   Off</p>

## SDI Input Module

Applies to both 2 and 4 input modules (depending on which modules the product supports)

It is possible to use Slot<n>.In<n> and S<n>I<n> in place of Slots.Slot<n>.In<n>.

### Properties

Property Name	Syntax	Type	Example	Description
Slot<n>	Slot<n>	List	Slot2.Cardtype = SDI_3G 4-in Slot2.Carddata = <...> Slot2.In1 = <...> Slot2.In2 = <...> Slot2.In3 = <...> Slot2.In4 = <...> Slot2.PhaseRetrain() Slot2.Module_Resolutions() !Done Slot2	List the properties of the card in this slot or "NO CARD" if the slot is empty. Note that the 3G-SDI 2 input module does not have In3 and In4.
Cardtype	Slot<n>.Cardtype	CardTypeEnum	Slot2.Cardtype = SDI_3G 4-in !Done Slot2.Cardtype	Read-only. Get the type of the card in this slot
Carddata	Slot<n>.Carddata	void	Slot2.Carddata.BaseNo = 218092000121 Slot2..Carddata.PTR = :::----- :::,,, , centres at 30, 30 (29). !Done Slot2.Carddata	Returns card specific data BaseNo: base card serial number PTR: phase training result
In<n>	Slot<n>.In<n>	List	Slot2.In1.FullName = In1 Slot2.In1.Status = OK Slot2.In1.Alias = s2i1 Slot2.In1.WindowList = Window1 Slot2.In1.TypeChoice = SDI Slot2.In1.AspectChoice = 4:3 Slot2.In1.Brightness = 0 Slot2.In1.Contrast = 100 Slot2.In1.ColourScale = Auto Slot2.In1.Dither = Off	List the properties for an Input on the given Slot. Where <n> is the number of the input on the card.

Property Name	Syntax	Type	Example	Description
			Slot2.In1.TPG = Off Slot2.In1.Set_Resolution = 1920x1080p30 Slot2.In1.Measured_Resolution = 1920x1080p30 Slot2.In1.Measured_Width = 1920 Slot2.In1.Measured_Height = 1080 Slot2.In1.Measured_Field_Rate = 30 Slot2.In1.Measured_VTotal = 1125 Slot2.In1.Measured_Frame_ip = p Slot2.In1.LeftCrop = 0 Slot2.In1.RightCrop = 0 Slot2.In1.TopCrop = 0 Slot2.In1.BottomCrop = 0 Slot2.In1.OnSrcLossColour = Blue Slot2.In1.HDMI = Not_Found Slot2.In1.Audio = Off Slot2.In1.PreviewVideoType = 0 Slot2.In1.Equipment = Slot2.In1.CanFramelockTo = Yes Slot2.In1.AudioLevel = 0 Slot2.In1.AudioMute = Off Slot2.In1.AudioEnable = On !Done Slot2.In1	
FullName	Slot<n>.In<n>.FullName	String	Slot2.In1.FullName = In1 !Done Slot2.In1.FullName	Read-only. Get the full name of the Window
Status	Slot<n>.In<n>.Status	StatusEnum	Slot2.In1.Status = OK !Done Slot2.In1.Status	Read-only. Get the status of the input.

Property Name	Syntax	Type	Example	Description
Alias	Slot<n>.In<n>.Alias	String	Slot2.In1.Alias = s2i1 !Done Slot2.In1.Alias	Get or set the Alias name for this input. <i>Warning it is possible to set this value to that used by another input, in which case the other value will be set to NULL.</i>
WindowList	Slot<n>.In<n>.WindowList	String	Slot2.In1.WindowList = Window1 !Done Slot2.In1.WindowList	Read only. Get the window that the slot is routed to.
TypeChoice	Slot<n>.In<n>.TypeChoice	TypeChoice	Slot2.In1.TypeChoice = SDI !Done Slot2.In1.TypeChoice	Read only. Selects the type of input.
Brightness	Slot<n>.In<n>.Brightness	Integer	Slot2.In1.Brightness = 0 !Done Slot2.In1.Brightness	Get or set the brightness adjustment for this input. Valid range is from -30 to 30
Contrast	Slot<n>.In<n>.Contrast	Percentage	Slot2.In1.Contrast = 100 !Done Slot2.In1.Contrast	Get or set the contrast adjustment for the Input. Valid range is from 30% to 130%
ColourScale	Slot<n>.In<n>.ColourScale	ColourScale	Slot2.In1.ColourScale = Auto !Done Slot2.In1.ColourScale	Get or set the colour scale for this input.
Dither	Slot<n>.In<n>.Dither	Boolean	Slot4.In1.Dither = On !Done Slot4.In1.Dither = On	Get or set whether this input has dither enabled. Options are "Off" or "On".
TPG	Slot<n>.In<n>.TPG	Boolean	Slot2.In1.TPG = Off !Done Slot2.In1.TPG	Get or set to use the internal Test Pattern Generator (TPG1) for this input. Options are "Off" or "TPG1".
Set_Resolution	Slot<n>.In<n>.Set_Resolution	Resolution	Slot2.In1.Set_Resolution = 1920x1080p30 !Done Slot2.In1.Set_Resolution	Read-only. Get the current resolution set for this input.
Measured_Resolution	Slot<n>.In<n>.Measured_Resolution	Resolution	Slot2.In1.Measured_Resolution = 1920x1080p30 !Done Slot2.In1.Measured_Resolution	Read-only. Get the resolution being read from this Input.



Property Name	Syntax	Type	Example	Description
Measured_Width	Slot<n>.In<n>.Measured_Width	Integer	Slot2.In1.Measured_Width = 1920 !Done Slot2.In1.Measured_Width	Read-only. Get the width of the resolution being read from this input.
Measured_Height	Slot<n>.In<n>.Measured_Height	Integer	Slot2.In1.Measured_Height = 1080 !Done Slot2.In1.Measured_Height	Read-only. Get the measured height of the resolution being read from this input.
Measured_Field_Rate	Slot<n>.In<n>.Measured_Field_Rate	Integer	Slot2.In1.Measured_Field_Rate = 30 !Done Slot2.In1.Measured_Field_Rate	Read-only. Get the measured field rate of the resolution being read from this input.
Measured_VTotal	Slot<n>.In<n>.Measured_VTotal	Integer	Slot2.In1.Measured_VTotal = 1125 !Done Slot2.In1.Measured_VTotal	Read-only. Get the measured total vertical lines of the resolution being read from this input.
Measure_Frame_ip	Slot<n>.In<n>.Measure_Frame_ip	FrameType	Slot2.In1.Measured_Frame_ip = p !Done Slot2.In1.Measured_Frame_ip	Read-only. Get the measured frame type of the resolution being read from this input.
LeftCrop	Slot<n>.In<n>.LeftCrop	Integer	Slot2.In1.LeftCrop = 0 !Done Slot2.In1.LeftCrop	Get or set the amount of left crop to be applied to this input.
RightCrop	Slot<n>.In<n>.RightCrop	Integer	Slot2.In1.RightCrop = 0 !Done Slot2.In1.RightCrop	Get or set the amount of right crop to be applied to this input.
TopCrop	Slot<n>.In<n>.TopCrop	Integer	Slot2.In1.TopCrop = 0 !Done Slot2.In1.TopCrop	Get or set the amount of top crop to be applied to this input.
BottomCrop	Slot<n>.In<n>.BottomCrop	Integer	Slot2.In1.BottomCrop = 0 !Done Slot2.In1.BottomCrop	Get or set the amount of bottom crop to be applied to this input.
HDMI	Slot<n>.In<n>.HDMI	FoundNot	Slot2.In1.HDMI = Not_Found !Done Slot2.In1.HDMI	Read-only. Get the detected HDMI status.
Audio	Slot<n>.In<n>.Audio	FoundOff	Slot2.In1.Audio = Off !Done Slot2.In1.Audio	Read only. Get if audio is available for this input.
PreviewVideoType	Slot<n>.In<n>.PreviewVideoType	Integer	Slot2.In1.PreviewVideoType = 0 !Done Slot2.In1.PreviewVideoType	<b>CORIOgrapher only.</b> Get or set the type of Preview Video (used in UI).

Property Name	Syntax	Type	Example	Description
Equipment	Slot<n>.In<n>.Equipment	String	Slot2.In1.Equipment = !Done Slot2.In1.Equipment	<b>CORIOgrapher only.</b> Get or set the equipment connected to this input
CanFramelockTo	Slot<n>.In<n>.CanFramelockTo	Boolean	Slot2.In1.CanFramelockTo = Yes !Done Slot2.In1.CanFramelockTo	Read only. Get if the input can be used as a Framelock reference.
AudioEnable	Slot1.In1.AudioEnable	Boolean	Slot1.In1.AudioEnable = On !Done Slot1.In1.AudioEnable	Enable the embedded input audio on an input (if present) On : Off Default; On
AudioLevel	Slot1.In1.AudioLevel	Integer	Slot1.In1.AudioLevel = 0 !Done Slot1.In1.AudioLevel	Get or set the embedded input audio level (in dB -20 to +20) (increments of 1) Default; 0
AudioMute	Slot1.In1.AudioMute	Boolean	Slot1.In1.AudioMute = Off !Done Slot1.In1.AudioMute	Mute the embedded input audio on an input (if present) On : Off Default; Off

## Methods

Command	Syntax	Type	Example	Description
PhaseRetrain	Slot<n>.PhaseRetrain()	void	// Module 2 phase -----L:.....:-----, centres at 15, 15 (15). !Done Slot2.PhaseRetrain()	Initiate a Phase retrain for this slot

Command	Syntax	Type	Example	Description
Module_Resolutions	Slot<n>.Module_Resolutions()	List	<pre> 720x487i59.94;4:3; 720x576i50;4:3; 1280x720p23.98;16:9; 1280x720p24;16:9; 1280x720p25;16:9; 1280x720p29.97;16:9; 1280x720p30;16:9; 1280x720p50;16:9; 1280x720p59.94;16:9; 1280x720p60;16:9; 1920x1080i50;16:9; 1920x1080i59.94;16:9; 1920x1080i60;16:9; 1920x1080p23.98;16:9; 1920x1080p24;16:9; 1920x1080p25;16:9; 1920x1080p29.97;16:9; 1920x1080p30;16:9; 1920x1080p50;16:9; 1920x1080p59.94;16:9; 1920x1080p60;16:9; !Done Slot2.Module_Resolutions() </pre>	<p>List all the supported resolutions for this slot.</p> <p>The list is semicolon separated.</p> <p>Note that the following resolutions are for the 3G-SDI module only:</p> <ul style="list-style-type: none"> <li>1920x1080p50;16:9;</li> <li>1920x1080p59.94;16:9;</li> <li>1920x1080p60;16:9;</li> </ul> <p>Custom resolutions may not be used and will not appear.</p>

## Events

Category	Event	Syntax	Example	Description
INPUT	STATUS_GROUP	STATUS_GROUP,<input >, <property>, <value>	!Event INPUT,STATUS_GROUP,Slot1.In1,Status,OK	Raised when an input property is changed. Properties; Status; OK   Invalid Measured_Resolution; <a valid resolution> or empty Set_Resolution; <a valid resolution> or empty CanFramelockTo; Yes   No Audio; Found   Off

## Streaming Media and 4K Playback Input Module

It is possible to use Slot<n>.In<n> and S<n>I<n> in place of Slots.Slot<n>.In<n>.

### Properties

Property Name	Syntax	Type	Example	Description
Slot<n>	Slot<n>	List	Slot2.Cardtype = MEDIA_4K IN Slot2.Storage = <...> Slot2.Networking = <...> Slot2.Carldata = <...> Slot2.In1 = <...> Slot2.In2 = <...> Slot2.PhaseRetrain() Slot2.Module_Resolutions() Slot2.Update = <...> Slot2.Status = READY Done Slot2	List the properties of the card in this slot or "NO CARD" if the slot is empty.
Cardtype	Slot<n>.Cardtype	String	Slot2.Cardtype = MEDIA_4K IN !Done Slot2.Cardtype	Read-only. Get the type of the card in this slot
Status	Slot<n>.Status	AvipStatusEnum	Slot2.Status !Done Slot2.Status	Read-only. Get the status of the AVIP card in this slot.

Property Name	Syntax	Type	Example	Description
Carddata	Slot<n>.Carddata	void	Slot4.Carddata.BaseNo = 218092000121 Slot4.Carddata.SubNo = 0000000000 Slot4.Carddata.ProdNo = 0000000000 Slot4..Carddata.PTR = :::----- :::;, centres at 30, 30 (29). Slot4.Carddata.mVoltIn = 12076 Slot4.Carddata.mAmplIn = 848 Slot4.Carddata.uWattIn = 10240448 Slot4.Carddata.Alerts = OK Slot4.Carddata.CoreTemperature = 75 Slot4.Carddata.Version = fw:0x002b,api:0x0012 !Done Slot4.Carddata	Returns card specific data BaseNo: base card serial number SubNo: sub card serial number ProdNo: assembly number PTR: phase training result mVoltIn: measured 12V input rail mAmplIn: measured current consumed uWattIn: Instantaneous power consumption Alerts: Values are OK,Over_temperature,Warning_tempe rature,Over_power Version: module firmware version
Networking	Slot<n>.Networking	List	Slot1.Networking.Mode = On Slot1.Networking.IP_Address = 192.168.0.10 Slot1.Networking.IP_Subnet_Mask = 255.255.255.0 Slot1.Networking.IP_Gateway = 192.168.0.1 Slot1.Networking.IP_DNS1 = 192.168.0.254 Slot1.Networking.IP_DNS2 = Slots.Slot1.Networking.DHCP = <...> Slot1.Networking.RestartEthernet() !Done Slots.Slot1.Networking	Lists the available network settings which can be changed
Mode	Slot<n>.Networking.Mode	Enum	Slot1.Networking.Mode = Off !Done Slot1.Networking.Mode = Off	Gets or sets the current networking mode; Off, Static or DHCP

Property Name	Syntax	Type	Example	Description
DHCP	Slot<n>.Networking.DHCP	List	Slot1.Networking.DHCP.IP_Address = 192.168.0.10 Slot1.Networking.DHCP.IP_Subnet_Mask = 255.255.255.0 Slot1.Networking.DHCP.IP_Gateway = 192.168.0.1 Slot1.Networking.DHCP.IP_DNS1 = 192.168.0.254 Slot1.Networking.DHCP.IP_DNS2 = !Done Slot1.Networking.DHCP	Lists the available network DHCP settings which can be changed. Used if Networking.Mode = DHCP
LinkSpeed	Slot<n>.Networking.LinkSpeed	Integer	Slot4.Networking.LinkSpeed = 1000 !Done Slot4.Networking.LinkSpeed	Gets the speed of the connected network in Mbps.
Storage	Slot<n>.Storage	List	Slot2.Storage.USB = <...> Slot2.Storage.Local = <...> !Done Slot2.Storage	List available storage devices on the module
USB	Slot<n>.Storage.USB	List	Slot1.Storage.USB.ListDirectory(string,byte,int,int) Slot1.Storage.USB.Name = "My_USB" Slot1.Storage.USB.RootPath = "/usb0" !Done Slot1.Storage.USB	Show all properties and functions for the USB storage component of the card
USB.Name	Slot<n>.Storage.USB.Name	String	Slot1.Storage.USB.Name = "My Device" Done Slot1.Storage.USB.Name	Get the name of the connected USB device

Property Name	Syntax	Type	Example	Description
Local	Slot<n>.Storage.Local	List	<pre>Slot2.Storage.Local.Name = "usr0" Slot2.Storage.Local.Size = 15950241792 Slot2.Storage.Local.Free = 9565286400 Slot2.Storage.Local.ListDirectory() Slot2.Storage.Local.RootPath = "/usr0" Slot2.Storage.Local.Move() Slot2.Storage.Local.Delete() Slot2.Storage.Local.CreateDirectory() Slot2.Storage.Local.StartFtpSync() Slot2.Storage.Local.IsSyncInProgress = No Slot2.Storage.Local.LastErrorDatetime = NULL Slot2.Storage.Local.LastErrorMessage = NULL Slot2.Storage.Local.ContentLastDownloaded = 20160626T185643 Slot2.Storage.Local.ContentHash = NULL !Done Slot2.Storage.Local</pre>	Show all properties and functions for the local storage component of the card
Local.Size	Slot<n>.Storage.Local.Size	Number		Read only. Get the total size of the internal storage in bytes
Local.Free	Slot<n>.Storage.Local.Free	Number		Read only. Get the total remaining usable size of the internal storage in bytes
Local.IsSyncInProgress	Slot<n>.Storage.Local.IsSyncInProgress	YesNo		Read only. Indicate whether an FTP sync is in progress. To start a sync use the StartFtpSync() command. This uses settings defined in the Clients.Ftp menu to sync from an FTP server



Property Name	Syntax	Type	Example	Description
Local.LastErrorDatetime	Slot<n>.Storage.Local.LastErrorDatetime	DateTime		Read only. Report the date and time of the last sync failure. NULL if no failure
Local.LastErrorMessage	Slot<n>.Storage.Local.LastErrorMessage	String		Read only. Report the reason of the last sync failure. NULL if no failure
Local.ContentLastDownload	Slot<n>.Storage.Local.ContentLastDownload	DateTime		Read only. Report the date and time of the last sync success. NULL if no successful sync
Local.ContentHash	Slot<n>.Storage.Local.ContentHash	Number		Read only. Get a hash of all the media in the FTP sync directory. This can be used to determine if the client has the same content as the server. Please contact tvONE support for more details.
In<n>	Slot<n>.In<n>	List	Slot2.In1.FullName = In1 Slot2.In1.Status = OK Slot2.In1.Alias = s2i1 Slot2.In1.WindowList = Window1 Slot2.In1.AspectChoice = 4:3 Slot2.In1.Brightness = 0 Slot2.In1.Contrast = 100 Slot2.In1.ColourScale = Auto Slot2.In1.TPG = Off Slot2.In1.Set_Resolution = 1920x1080p60 Slot2.In1.Measured_Resolution = 1920x1080p60 Slot2.In1.Measured_Width = 1920 Slot2.In1.Measured_Height = 1080 Slot2.In1.Measured_Field_Rate = 60	List the properties for an Input on the given Slot. Where <n> is the number of the input on the card.

Property Name	Syntax	Type	Example	Description
			Slot2.In1.Measured_VTotal = 1125 Slot2.In1.Measured_Frame_ip = p Slot2.In1.LeftCrop = 0 Slot2.In1.RightCrop = 0 Slot2.In1.TopCrop = 0 Slot2.In1.BottomCrop = 0 Slot2.In1.AnH_Offset = 0 Slot2.In1.AnV_Offset = 0 Slot2.In1.OnSrcLossColour = Blue Slot2.In1.HDCP_Enabled = Supported Slot2.In1.HDCP_Required = Off Slot2.In1.HDMI = Found Slot2.In1.Audio = Off Slot2.In1.PreviewVideoType = 0 Slot2.In1.Equipment = Slot2.In1.CanFramelockTo = No Slot2.In1.dll = 16 Slot2.In1.imm = Yes Slot2.In1.ClockDriveStrength = Hi_4x Slot2.In1.DataDriveStrength = Med_Hi_3x Slot2.In1.SyncDriveStrength = Med_Hi_3x Slot2.In1.AudioLevel = 0 Slot2.In1.AudioMute = Off Slot2.In1.ActiveQueue = <...> Slot2.In1.QueueItems = <...> Slot2.In1.Label = <...> Slot2.In1.AudioEnable = On !Done Slot2.In1	
FullName	Slot<n>.In<n>.FullName	String	Slot2.In1.FullName = In1 !Done Slot2.In1.FullName	Read-only. Get the full name of the Window

Property Name	Syntax	Type	Example	Description
Status	Slot<n>.In<n>.Status	StatusEnum	Slot2.In1.Status = OK !Done Slot2.In1.Status	Read-only. Get the status of the input.
Alias	Slot<n>.In<n>.Alias	String	Slot2.In1.Alias = s2i1 !Done Slot2.In1.Alias	Get or set the Alias name for this input. <b>Warning it is possible to set this value to that used by another input, in which case the other value will be set to NULL.</b>
WindowList	Slot<n>.In<n>.WindowList	String	Slot2.In1.WindowList = Window1 !Done Slot2.In1.WindowList	Read only. Get the window that the slot is routed to.
AspectChoice	Slot<n>.In<n>.AspectChoice	AspectRatio	Slot2.In1.AspectChoice = 4:3 !Done Slot2.In1.AspectChoice	Get or set the aspect ratio for this input
Brightness	Slot<n>.In<n>.Brightness	Integer	Slot2.In1.Brightness = 0 !Done Slot2.In1.Brightness	Get or set the brightness adjustment for this input. Valid range is from -30 to 30
Contrast	Slot<n>.In<n>.Contrast	Percentage	Slot2.In1.Contrast = 100 !Done Slot2.In1.Contrast	Get or set the contrast adjustment for the Input. Valid range is from 30% to 130%
ColourScale	Slot<n>.In<n>.ColourScale	ColourScale	Slot2.In1.ColourScale = Auto !Done Slot2.In1.ColourScale	Get or set the colour scale for this input.
TPG	Slot<n>.In<n>.TPG	Boolean	Slot2.In1.TPG = Off !Done Slot2.In1.TPG	Get or set to use the internal Test Pattern Generator (TPG1) for this input. Options are "Off" or "TPG1".
Set_Resolution	Slot<n>.In<n>.Set_Resolution	Resolution	Slot2.In1.Set_Resolution = 1920x1080p60 !Done Slot2.In1.Set_Resolution	Read-only. Get the current resolution set for this input.
Measured_Resolution	Slot<n>.In<n>.Measured_Resolution	Resolution	Slot2.In1.Measured_Resolution = 1920x1080p60 !Done Slot2.In1.Measured_Resolution	Read-only. Get the resolution being read from this Input.

Property Name	Syntax	Type	Example	Description
Measured_Width	Slot<n>.In<n>.Measured_Width	Integer	Slot2.In1.Measured_Width = 1920 !Done Slot2.In1.Measured_Width	Read-only. Get the width of the resolution being read from this input.
Measured_Height	Slot<n>.In<n>.Measured_Height	Integer	Slot2.In1.Measured_Height = 1080 !Done Slot2.In1.Measured_Height	Read-only. Get the measured height of the resolution being read from this input.
Measured_Field_Rate	Slot<n>.In<n>.Measured_Field_Rate	Integer	Slot2.In1.Measured_Field_Rate = 60 !Done Slot2.In1.Measured_Field_Rate	Read-only. Get the measured field rate of the resolution being read from this input.
Measured_VTotal	Slot<n>.In<n>.Measured_VTotal	Integer	Slot2.In1.Measured_VTotal = 1125 !Done Slot2.In1.Measured_VTotal	Read-only. Get the measured total vertical lines of the resolution being read from this input.
Measure_Frame_ip	Slot<n>.In<n>.Measure_Frame_ip	FrameType	Slot2.In1.Measured_Frame_ip = p !Done Slot2.In1.Measured_Frame_ip	Read-only. Get the measured frame type of the resolution being read from this input.
LeftCrop	Slot<n>.In<n>.LeftCrop	Integer	Slot2.In1.LeftCrop = 0 !Done Slot2.In1.LeftCrop	Get or set the amount of left crop to be applied to this input.
RightCrop	Slot<n>.In<n>.RightCrop	Integer	Slot2.In1.RightCrop = 0 !Done Slot2.In1.RightCrop	Get or set the amount of right crop to be applied to this input.
TopCrop	Slot<n>.In<n>.TopCrop	Integer	Slot2.In1.TopCrop = 0 !Done Slot2.In1.TopCrop	Get or set the amount of top crop to be applied to this input.
BottomCrop	Slot<n>.In<n>.BottomCrop	Integer	Slot2.In1.BottomCrop = 0 !Done Slot2.In1.BottomCrop	Get or set the amount of bottom crop to be applied to this input.
HDMI	Slot<n>.In<n>.HDMI	FoundNot	Slot2.In1.HDMI = Not_Found !Done Slot2.In1.HDMI	Read-only. Get the detected HDMI status.
Audio	Slot<n>.In<n>.Audio	FoundOff	Slot2.In1.Audio = Off !Done Slot2.In1.Audio	Read only. Get if audio is available for this input.
PreviewVideoType	Slot<n>.In<n>.PreviewVideoType	Integer	Slot2.In1.PreviewVideoType = 0 !Done Slot2.In1.PreviewVideoType	<b>CORIOgrapher only.</b> Get or set the type of Preview Video (used in UI).

Property Name	Syntax	Type	Example	Description
Equipment	Slot<n>.In<n>.Equipment	String	Slot2.In1.Equipment = "Default 16:9 Source" !Done Slot2.In1.Equipment	<b>CORIOgrapher only.</b> Get or set the equipment connected to this input
CanFramelockTo	Slot<n>.In<n>.CanFramelockTo	Boolean	Slot2.In1.CanFramelockTo = Yes !Done Slot2.In1.CanFramelockTo	Read only. Get if the input can be used as a Framelock reference.
ActiveQueue	Slot<n>.In<n>.ActiveQueue	Playlist	Slot2.In1.ActiveQueue Slot2.In1.ActiveQueue.Resolution = 1920x1080p60 Slot2.In1.ActiveQueue.ListResolutions() Slot2.In1.ActiveQueue.CurrentIndex = 1 Slot2.In1.ActiveQueue.Status = Idle Slot2.In1.ActiveQueue.PlayMode = Single Slot2.In1.ActiveQueue.PlayOnStartup = Off Slot2.In1.ActiveQueue.Play() Slot2.In1.ActiveQueue.Stop() Slot2.In1.ActiveQueue.Pause() Slot2.In1.ActiveQueue.SkipForward() Slot2.In1.ActiveQueue.SkipBackward() Slot2.In1.ActiveQueue.InsertItem() Slot2.In1.ActiveQueue.RemoveItem() Slot2.In1.ActiveQueue.MoveItem() Slot2.In1.ActiveQueue.ReplaceItem() Slot2.In1.ActiveQueue.ClearAll() Slot2.In1.ActiveQueue.LoadPlayList() !Done Slot2.In1.ActiveQueue	Returns the details for the play queue for the selected channel

Property Name	Syntax	Type	Example	Description
CurrentIndex	Slot<n>.In<n>.ActiveQueue.CurrentIndex	Integer	Slot1.In2.ActiveQueue.CurrentIndex = 3 !Done Slot1.In2.ActiveQueue.CurrentIndex	Get the index of the currently playing item in the play queue. The index matches the number of the Item in the Items list
Status	Slot<n>.In<n>.ActiveQueue.Status	ChannelStatus Enum	Slot1.In2.ActiveQueue.Status = Idle !Done Slot1.In2.ActiveQueue.Status	Get the status for the channel. The following status values are supported: Idle, Configured, Connecting, Playing, Paused, Disconnecting, Retrying
ListResolutions	Slot<n>.In<n>.ActiveQueue.ListResolutions()	List	3840x2160p30 3840x2160p29.97 ... 640x480p60 !Done Slots.Slot1.In1.ActiveQueue.ListResolutions()	Gets a list of supported resolutions for each of the connectors. Each resolution is returned as a string on a new line.
Resolution	Slot<n>.In<n>.ActiveQueue.Resolution	String	Slot1.In2.ActiveQueue.Resolution = 1280x720p60 !Done Slot1.In2.ActiveQueue.Resolution	Get and set the resolution for the play queue. All items in the queue will be played at this resolution. Note: if the native resolution is not the same then you may have noticeable frame dropping
PlayMode	Slot<n>.In<n>.ActiveQueue.PlayMode	String	Slot1.In2.ActiveQueue.PlayMode = Repeat !Done Slot1.In2.ActiveQueue.PlayMode	Get and set the play mode of the play queue. Single = The queue will play only once (no repeat) Repeat = The queue will loop indefinitely

Property Name	Syntax	Type	Example	Description
PlayOnStartup	Slot<n>.In<n>.ActiveQueue.PlayOnStartup	enum	Slot1.In2.ActiveQueue.PlayOnStartup = On !Done Slot1.In2.ActiveQueue.PlayOnStartup	Get and set whether the play queue will automatically start playback on device boot. On = start playback of play queue on device boot Off = do not start play queue on boot
LoadPlaylist	Slot<n>.In<n>.ActiveQueue.LoadPlayList(<string> playlist)	Function	Slot2.In1.ActiveQueue.LoadPlayList ("Resources.Playlists.Playlist1") !Done Slot2.In1.ActiveQueue.LoadPlayList ()	Loads the specified playlist into the playqueue. The parameter <i>playlist</i> is the full alias of the playlist, e.g. "Resources.Playlists.Playlist1"  The playlist items are loaded into the queue in the current input module channel.  This will stop the queue if currently playing but it will not automatically start playback once the items are loaded  If you attempt to play a playlist on an input that does not match the Slot, then the command will fail and no items are loaded.

Property Name	Syntax	Type	Example	Description
QueueItems	Slot<n>.In<n>.QueueItems	List	<pre>Slot2.In1.QueueItems Slot2.In1.QueueItems.Item1 = (8,NULL,"file:///usb0/Interstellar%20- %20Docking%20Scene%20[1080p;%2060 %20FPS;%20IMAX].mp4",243,Auto,1,OK,0, 0) Slot2.In1.QueueItems.Item2 = (8,NULL,"file:///usb0/Everything%20Starts %20Again%2030.mp4",52,Auto,1,OK,0,0) Slot2.In1.QueueItems.Item3 = (1,"ipstream","rtsp://192.168.1.0",300,Aut o,1,OK,0,1) Slot2.In1.QueueItems.Item4 = (8,NULL,"file:///usb0/PASSENGERS%20Off icial%20Trailer%20[4K%20Ultra%20HD]. mp4",152,Auto,1,OK,0,0) Slot2.In1.QueueItems.Item5 = (8,NULL,"file:///usb0/harveyGoodall_Comp p_Upload.mp4",7,Auto,1,OK,0,0) Slot2.In1.QueueItems.Item6 = NULL .. Slot2.In1.QueueItems.Item20 = NULL !Done Slot2.In1.QueueItems</pre>	<p>Get the list of items in the play queue. All available items are returned even if they empty. Empty items are shown as "NULL".</p> <p>Each item is returned as a variable length parameter list. Parameters can be added but will never be removed. Format:  (&lt;type&gt;,&lt;friendlyName&gt;,&lt;uri&gt;,&lt;duration&gt;,&lt;protocol&gt;,&lt;retries&gt;,&lt;status&gt;,&lt;resultCode&gt;,&lt;low-latency&gt;,&lt;metadata&gt;)</p> <p><i>type</i> is represented as an int with the following values:  1 = Video Stream  2 = Text File  4 = Image File  8 = Video File</p> <p><i>friendlyName</i> - Can be NULL or a string  <i>uri</i>  <i>duration</i> - (seconds)  <i>protocol</i> - Is currently always set to <i>Auto</i>  <i>retries</i> - no retries = 0, retry (for duration of the clip) = 1  <i>status</i> - OK, Failed  <i>resultCode</i> - Not used  <i>low-latency</i> - 0 = normal, 1 = low-latency (no audio)  <i>metadata</i> - used by CORIOgrapher only</p>



Property Name	Syntax	Type	Example	Description
AudioEnable	Slot<n>.In<n>.AudioEnable	Boolean	Slot1.In1.AudioEnable = On !Done Slot1.In1.AudioEnable	Enable the embedded input audio on an input (if present) On : Off Default; On
AudioLevel	Slot<n>.In<n>.AudioLevel	Integer	Slot1.In1.AudioLevel = 0 !Done Slot1.In1.AudioLevel	Get or set the embedded input audio level (in dB -20 to +20) (increments of 1) Default; 0
AudioMute	Slot<n>.In<n>.AudioMute	Boolean	Slot1.In1.AudioMute = Off !Done Slot1.In1.AudioMute	Mute the embedded input audio on an input (if present) On : Off Default; Off
Label	Slot<n>.In<n>.Label	List	Slot1.In1.Label Slot1.In1.Label.LabelEnabled = Off Slot1.In1.Label.LabelFormat = 0 Slot1.In1.Label.LabelText = Slot1.In1.Label.LabelPosition = 0 Slot1.In1.Label.LabelTextSize = 64 Slot1.In1.Label.LabelTextFont = "Open Sans" Slot1.In1.Label.LabelBorderWidth = 0 Slot1.In1.Label.LabelBorderRGB = 0 Slot1.In1.Label.LabelInverse = Off !Done Slot1.In1.Label	Returns the input label details for the selected channel
LabelEnabled	Slot<n>.In<n>.Label.LabelEnabled	Boolean	Slot1.In1.Label.LabelEnabled = Off !Done Slot1.In1.Label.LabelEnabled	Turns the Label On or Off for the nominated input

Property Name	Syntax	Type	Example	Description
LabelFormat	Slot<n>.In<n>.Label.LabelFormat	Integer	Slot1.In1.Label.LabelFormat = 2 !Done Slot1.In1.Label.LabelFormat	Controls the displayed label format; ( custom text set with LabelText property)  0 Friendly name (or filename if none) 1 Label Text 2 File title (or filename if none) 3 Filename 4 Debug (reserved)
LabelText	Slot<n>.In<n>.Label.LabelText	String	Slot1.In1.Label.LabelText = "test text" !Done Slot1.In1.Label.LabelText = "test text"	Custom Text for the input label. Up to 20 characters.
LabelPosition	Slot<n>.In<n>.Label.LabelPosition	Integer	Slot1.In1.Label.LabelPosition = 0 !Done Slot1.In1.Label.LabelPosition	Get or set the position of the input label. This is a position relative to the input dimensions  0 Top Left 1 Top Centre 2 Top Right 3 Mid Left 4 Mid Centre 5 Mid Right 6 Bottom Left 7 Bottom Centre 8 Bottom Right 9 Custom X,Y
LabelTextSize	Slot<n>.In<n>.Label.LabelTextSize	Integer	Slot1.In1.Label.LabelTextSize = 32 !Done Slot1.In1.Label.LabelTextSize	Get or set the Font Size ( in pixels ). This must match one of the available Font sizes on this system. See system.Fonts.ListFonts()

Property Name	Syntax	Type	Example	Description
LabelTextFont	Slot<n>.In<n>.Label.LabelTextFont	String	Slot1.In1.Label.LabelTextFont = "Open Sans" !Done Slot1.In1.Label.LabelTextFont	Returns the Current Font. Will Default to system font only ( Currently OpenSans )
LabelBorderWidth	Slot<n>.In<n>.Label.LabelBorderWidth	Integer	Slot1.In1.Label.LabelBorderWidth = 0 !Done Slot1.In1.Label.LabelBorderWidth	Sets the border width. Range between 0 and 16 pixels.
LabelBorderRGB	Slot<n>.In<n>.Label.LabelBorderRGB	Integer	Slot1.In1.Label.LabelBorderRGB = 0 !Done Slot1.In1.Label.LabelBorderRGB	Sets the border colour. Follows the same format as border colour i.e. 0xRRGGBB .
LabelInverse	Slot<n>.In<n>.Label.LabelInverse	Boolean	Slot1.In1.Label.LabelInverse = Off !Done Slot1.In1.Label.LabelInverse	Sets the text to inverse colours – i.e. black text on white border

## Methods

Command	Syntax	Type	Example	Description
PhaseRetrain	Slot<n>.PhaseRetrain()	void	// Module 2 phase -----L:.....:-----, centres at 15, 15 (15). !Done Slot2.PhaseRetrain()	Initiate a Phase retrain for this slot

Command	Syntax	Type	Example	Description
Module_Resolutions	Slot<n>.Module_Resolutions()	List	<pre>640x480p60;4:3; 640x480p72;4:3;  ....  1920x1080p60;16:9; 1920x1200p50cvt-rb;16:10; 1920x1200p60cvt-rb;16:10; 3840x2160p23.98;16:9; 3840x2160p24;16:9; 3840x2160p25;16:9; 3840x2160p29.97;16:9; 3840x2160p30;16:9; 4096x2160p23.98;256:135; 4096x2160p24;256:135; 4096x2160p25;256:135; !Done Slot2.Module_Resolutions()</pre>	List all of the supported resolutions for this slot.

USB.ListDirectory	Slot<n>.Storage.USB.ListDirectory(<string> path, <int> typeMask, <int> offset, <int> limit)	Array	<pre> // Return first 100 directories in the root path Slot1.Storage.USB. ListDirectory("", 1, 0, 100) - 1,"MyFolder",0,0,0,0,0   1,"MyFolder_2",0,0,0,0,0   ... !Done Slot1.Storage.USB.ListDirectory ()  // Return file 10 to 20 in the root path Slot1.Storage.USB. ListDirectory("", 14, 9, 10) 4,"An_Image_File.jpg",1000,1920,1080,0,0,0 8,"A_Video_File.mov",1000000,1920,1080,30,30 0,10,H264   ... !Done Slot1.Storage.USB.ListDirectory () </pre>	<p>Function to return a list of files and directories stored on the USB storage device.</p> <p><i>path</i> - Path to the directory to search - must be in ""</p> <p><i>typeMask</i> - Bit mask to filter the items to retrieve. Where:</p> <ul style="list-style-type: none"> <li>1 = Directory</li> <li>2 = Text File</li> <li>4 = Image File</li> <li>8 = Video File</li> </ul> <p><i>offset</i> - Start index for retrieving the Directory list. 0 = beginning</p> <p><i>limit</i> - Maximum amount of items to return.</p> <p>The returned &lt;array&gt; contains the details for each item on a separate line.</p> <p>Each item is comma separated using the following structure:  <i>type,name,size,width,height,framerate,duration,bitrate,codec</i></p> <p><i>type</i> - int to represent the type  <i>name</i> - the name of the file/directory  <i>size</i> - the size on disk of the item (0 for directories) in bytes  <i>width</i> - width in pixels of the image/video  <i>height</i> - height in pixels of the image/video</p>
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Command	Syntax	Type	Example	Description
				<i>framerate</i> – framerate of the video clip <i>duration</i> – duration in seconds of the video clip <i>bitrate</i> – bitrate of the video clip <i>codec</i> – the codec used by the video clip
Local.ListDirectory	Slot<n>.Storage.Local.ListDirectory(<string> path, <int> typeMask, <int> offset, <int> limit)	Array	See USB.ListDirectory above.	Function to return a list of files and directories stored on the local storage device. See USB.ListDirectory above for details on parameters.
Local.StartFtpSync() ( )	Slot<n>.Storage.Local.StartFtpSync()	Void	Slot2.Storage.Local.StartFtpSync().	Function to start an FTP sync from the FTP server. This uses settings defined in the Clients.Ftp menu for the FTP server.

Command	Syntax	Type	Example	Description
USB.Copy	Slot<n>.Storage.USB.Copy(<string> src, <string> dest)	void	Slots.Slot1.Storage.USB.Copy("/usb0/Test Clip.mp4", "/usr0/New clip.mp4") !Done Slots.Slot1.Storage.USB.Copy	<p>Copies a file or directory from <i>src</i> on the USB drive to <i>dest</i> on the internal storage.</p> <p>This command will be blocked if playback is in progress.</p> <p>The copy will return an error in the OPERATION_DONE event (see below) if the destination already exists.</p> <p><i>Asynchronous operation</i> This is an asynchronous operation. The command will return immediately as soon as the operation has started.</p> <p>Completion of the operation is signalled using the MEDIA_STORAGE, OPERATION_DONE event, which includes whether the operation was successful. See the description of the <a href="#">OPERATION_DONE</a> event below for more details.</p> <p>You must subscribe to the MEDIA_STORAGE event in order to receive this notification. Other internal storage file operations will return busy while this operation is in progress.</p>

Command	Syntax	Type	Example	Description
Local.Delete	Slot<n>.Storage.Local.Delete(<string> path)	void	Slots.Slot1.Storage.Local.Delete("/usr0/Test Clip.mp4") !Done Slots.Slot1.Storage.Local.Delete	Deletes a file or directory at <i>path</i> on the internal storage. If a directory is specified, all entries under the directory, including any subdirectories, will be deleted.  This command will be blocked if playback is in progress.  <i>This is an asynchronous operation.</i> See <a href="#">USB.Copy</a> for details on asynchronous operations.
Local.Delete	Slot<n>.Storage.Local.Delete(<string> path)	void	Slots.Slot1.Storage.Local.Delete("/usr0/Test Clip.mp4") !Done Slots.Slot1.Storage.Local.Delete  // To delete a sync group  Slot2.Storage.Local.Delete("/usr0/syncgroups/My_Group.sfg") !Done Slot2.Storage.Local.Delete("/usr0/syncgroups/My_Group.sfg")	Deletes a file or directory at <i>path</i> on the internal storage. If a directory is specified, all entries under the directory, including any subdirectories, will be deleted.  This command will be blocked if playback is in progress.  <i>This is an asynchronous operation.</i> See <a href="#">USB.Copy</a> for details on asynchronous operations.



Command	Syntax	Type	Example	Description
Local.Move	Slot<n>.Storage.Local.Move(<string> src, <string> dest)	void	Slots.Slot1.Storage.Local,Move("/usr0/Test Clip.mp4", "/usr0/Subfolder/New clip.mp4") !Done Slots.Slot1.Storage.Local.Move	<p>Moves a file or directory from <i>src</i> to <i>dest</i> on the internal storage. This command may also be used to rename a file or directory.</p> <p>The command is will fail if the destination already exists, and will be blocked if playback is in progress.</p> <p><i>This is an asynchronous operation.</i> See <a href="#">USB.Copy</a> for details on asynchronous operations.</p>
Local.CreateDirectory	Slot<n>.Storage.Local.CreateDirectory(<string> path)	Void	Slots.Slot1.Storage.Local.CreateDirectory("/usr0/Subfolder") !Done Slots.Slot1.Storage.Local.CreateDirectory	<p>Creates a new directory at <i>path</i> on the internal storage</p> <p>This command will be blocked if playback is in progress.</p> <p><i>This is an asynchronous operation.</i> See <a href="#">USB.Copy</a> for details on asynchronous operations.</p>

<p>SyncGroup.Replaceltem</p>	<pre>Slot&lt;n&gt;.Storage.SyncGroup.Replaceltem( &lt;string&gt; name, &lt;int&gt; index, &lt;int&gt; type, &lt;string&gt; friendlyName, &lt;string&gt; uri, &lt;int&gt; duration, &lt;string&gt; protocol, &lt;int&gt; retries, &lt;int&gt; low-latency )</pre>		<pre>// Example showing how to add the clip My- Vid.mp4 to the first position within the group My_Group  Slot2.Storage.SyncGroup.Replaceltem("My_Group",1,8,"","file:///usr0/My_Vid.mp4",30,Auto,0,0 )  !Done Slot2.Storage.SyncGroup.Replaceltem("My_Group",1,8,"","file:///usr0/My_Vid.mp4",30,Auto,0,0 )</pre>	<p>Create or edit a sync group by adding files into the group.</p> <p>To create an empty group, set the &lt;uri&gt; property to NULL and set the others to default values</p> <p>To add items to a group, set the group name you want to edit in the &lt;name&gt; property. You can add video files to up to 8 locations (using &lt;index&gt;).</p> <p><i>name</i> - name of the sync group (max 64 characters)</p> <p><i>index</i> - Index at which to insert the item. 0 = beginning, max is 7</p> <p><i>type</i> - only video files supported, as follows:</p> <p style="padding-left: 40px;">8 = Video File</p> <p><i>friendlyName</i> - Friendly name of the queue item. Not used for video files, can be NULL</p> <p><i>uri</i> - Path to the item. Either a file path or a stream URI</p> <p><i>duration</i> - Duration to play the item for. 0 = Infinite</p> <p><i>protocol</i> - (Optional) Specify the stream protocol. This should be set to "Auto", unless you are using Encoder-100, where you may set it to "RTSPMulticast" for multicast operation. Not used for file playback</p> <p><i>retries</i> - (Optional) Set the retry behaviour.</p>
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Command	Syntax	Type	Example	Description
				<p>0 = no retries, 1 = always retry.            Not used for file playback  <i>low-latency</i> - (Optional) Set the low-latency behaviour. 0 = normal, 1 = low-latency (no audio). Not used for file playback</p> <p>Note: The friendlyName and uri must be URI encoded and surrounded by quotation marks.</p> <p>Note: Optional values must be specified progressively, i.e. retries requires protocol; low-latency requires retries.</p>

Command	Syntax	Type	Example	Description
SyncGroup.Items	Slot<n>.Storage.SyncGroup.Items( <string> name )		<pre>// List all items in the group My_Group (which only has 1 item)  Slot2.Storage.SyncGroup.Items("My_Group") Item1 = (8,NULL,"file:///usr0/My_Vid.mp4",30,Auto,0,OK,0,0) Item2 = NULL Item3 = NULL Item4 = NULL Item5 = NULL Item6 = NULL Item7 = NULL Item8 = NULL  !Done Slot2.Storage.SyncGroup.Items("My_Group")</pre>	<p>List all the items within a specified sync group. All items 1 to 8 are returned with empty items listed as NULL</p> <p><i>name</i> - name of the sync group you want to list items for</p>
SyncGroup.Swap	Slot<n>.Storage.SyncGroup.Swap( <string> name <int> index1 <int> index2 )		<pre>// move the clip My_Vid.mp4 (which is at position 1) to the second position within the sync group My_Group  Slot2.Storage.SyncGroup.Swap("My_Group",1,2)  !Done Slot2.Storage.SyncGroup.Swap("My_Group",1,2)</pre>	<p>Swap the position of 2 items within a sync group.</p> <p><i>name</i> - name of the sync group <i>index1</i> - the index of the first item to swap <i>index2</i> - the index of the second item to swap</p> <p>This command can be used to reposition items within the 8 positions in the sync group.</p>

<p>InsertItem</p>	<pre>Slot&lt;n&gt;.In&lt;n&gt;.ActiveQueue.InsertItem( &lt;int&gt; index, &lt;int&gt; type, &lt;string&gt; friendlyName, &lt;string&gt; uri, &lt;int&gt; duration, &lt;string&gt; protocol, &lt;int&gt; retries, &lt;int&gt; low-latency, &lt;string&gt; metadata )</pre>	<p>void</p>	<pre>// Add a new item at position 4 in the queue with retries enabled  Slot2.In1.ActiveQueue.InsertItem(5,8,"NULL","file:///usb0/test.mp4",7,Auto,0,0) !Done Slot2.In1.ActiveQueue.InsertItem(5,8,"NULL","file:///usb0/test.mp4",7,Auto,0,0)</pre>	<p>Add a new item to the chosen queue index. Items are inserted into the queue. If there are items after the insert index they will be moved down to make space for the new item.</p> <p><i>index</i> - Index at which to insert the item. 1 = beginning</p> <p><i>type</i> - type of file, as follows:</p> <ul style="list-style-type: none"> <li>1 = Video Stream</li> <li>2 = Text File</li> <li>4 = Image File</li> <li>8 = Video File</li> <li>16 = Sync Group</li> </ul> <p><i>friendlyName</i> - Friendly name of the queue item</p> <p><i>uri</i> - Path to the item. Either a file path or a stream URI</p> <p><i>duration</i> - Duration to play the item for. 0 = Infinite</p> <p><i>protocol</i> - (Optional) Specify the stream protocol. This should be set to "Auto", unless you are using Encoder-100, where you may set it to "RTSPMulticast" for multicast operation.</p> <p><i>retries</i> - (Optional) Set the retry behaviour. 0 = no retries, 1 = always retry</p> <p><i>low-latency</i> - (Optional) Set the low-latency behaviour. 0 = normal, 1 = low-latency (no audio)</p>
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Command	Syntax	Type	Example	Description
				<p><i>metadata</i> – (Optional) Do not use. Required for CORIOgrapher</p> <p>Note: The friendlyName and uri must be URI encoded and surrounded by quotation marks.</p> <p>Note: Optional values must be specified progressively, i.e. retries requires protocol; low-latency requires retries.</p>
RemoveItem	Slot<n>.In<n>.ActiveQueue.RemoveItem(<int> index)	void	<pre>// Remove Item3 from the play queue Slot1.In2.ActiveQueue.RemoveItem(3) !Done Slot1.In2.ActiveQueue.RemoveItem()</pre>	<p>Function to remove an Item from the play queue.</p> <p>The index number corresponds to the number returned in the Items list. All items after the index are moved up in the queue.</p>
MoveItem	Slot<n>.In<n>.ActiveQueue.MoveItem(<int> fromIndex, <int> toIndex)	void	<pre>// Move Item3 to the beginning of the active play queue Slot1.In2.ActiveQueue.MoveItem(3,1) !Done Slot1.In2.ActiveQueue.MoveItem()</pre>	<p>Function to move an Item to a different location within the play queue. The index numbers correspond to the number returned in the Items list.</p>

<p>Replaceltem</p>	<pre>Slot&lt;n&gt;.In&lt;n&gt;.ActiveQueue.Replaceltem( &lt;int&gt; index, &lt;int&gt; type, &lt;string&gt; friendlyName, &lt;string&gt; uri, &lt;int&gt; duration, &lt;string&gt; protocol, &lt;int&gt; retries, &lt;int&gt; low-latency, &lt;string&gt; metadata )</pre>	<p>void</p>	<pre>// Replace item at position 5 in the queue Slot2.In1.ActiveQueue.Replaceltem(5,8,"My_Vid _New","file:///usb0/dir/My_Vid.mp4",2000,Auto ,0,0) !Done Slot2.In1.ActiveQueue.Replaceltem(5,8,"My_Vid _New","file:///usb0/dir/My_Vid.mp4",2000,Auto ,0,0)</pre>	<p>Replace the item at the chosen queue index with the new details provided.</p> <p><i>index</i> - Index of item to replace  <i>type</i> - type of file, as follows:  1 = Video Stream  2 = Text File  4 = Image File  8 = Video File  16 = Sync Group</p> <p><i>friendlyName</i> - Friendly name of the queue item  <i>uri</i> - Path to the item. Either a file path or a stream URL  <i>duration</i> - Duration to play the item for. 0 = Infinite  <i>protocol</i> - (Optional) Specify the stream protocol. Currently only "Auto"  <i>retries</i> - (Optional) Set the retry behaviour. 0 = no retries, 1 = always retry  <i>low-latency</i> - (Optional) Set the low-latency behaviour. 0 = normal, 1 = low-latency (no audio)  <i>metadata</i> - (Optional) Do not use. Required for CORIOgrapher</p> <p>Note: The friendlyName and uri must be URI encoded and surrounded by quotation marks.</p>
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Command	Syntax	Type	Example	Description
				Note: Optional values must be specified progressively, i.e. retries requires protocol; low-latency requires retries.
ClearAll	Slot<n>.In<n>.ActiveQueue.ClearAll()	void	!Done Slot1.In2.ActiveQueue.ClearAll()	Clear the play queue. Stops all playback and empties the play queue items
Play	Slot<n>.In<n>.ActiveQueue.Play()	void	!Done Slot1.In2.ActiveQueue.Play()	Starts/continues playback of the play queue



<p>PlayItem</p>	<pre>Slot&lt;n&gt;.In&lt;n&gt;.ActiveQueue.PlayItem( &lt;int&gt; index, &lt;int&gt; type, &lt;string&gt; friendlyName, &lt;string&gt; uri, &lt;int&gt; duration, &lt;string&gt; protocol, &lt;int&gt; retries, &lt;int&gt; low-latency, &lt;string&gt; metadata )</pre>		<pre>// Load and play My_Vid.mp4 only  Slot2.In1.ActiveQueue.PlayItem (1,8,"My_Vid_New","file:///usb0/dir/My_Vid.mp4",2000,Auto,0,0)  !Done Slot2.In1.ActiveQueue.PlayItem (1,8,"My_Vid_New","file:///usb0/dir/My_Vid.mp4",2000,Auto,0,0)</pre>	<p>Play a specific item only. This will clear the queue, insert and play only the item specified by the command.</p> <p><i>index</i> – can <b>only</b> be set to 1  <i>type</i> – type of file, as follows:  1 = Video Stream  2 = Text File  4 = Image File  8 = Video File  16 = Sync Group</p> <p><i>friendlyName</i> - Friendly name of the queue item  <i>uri</i> - Path to the item. Either a file path or a stream URL  <i>duration</i> - Duration to play the item for. 0 = Infinite  <i>protocol</i> - (Optional) Specify the stream protocol. Currently only "Auto"  <i>retries</i> - (Optional) Set the retry behaviour. 0 = no retries, 1 = always retry  <i>low-latency</i> - (Optional) Set the low-latency behaviour. 0 = normal, 1 = low-latency (no audio)  <i>metadata</i> – (Optional) Do not use. Required for CORIOgrapher</p> <p>Note: The friendlyName and uri must be URI encoded and surrounded by quotation marks.</p>
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Command	Syntax	Type	Example	Description
				Note: Optional values must be specified progressively, i.e. retries requires protocol; low-latency requires retries.
Stop	Slot<n>.In<n>.ActiveQueue.Stop()	void	!Done Slot1.In2.ActiveQueue.Stop()	Stops playback of the play queue. The CurrentIndex will be set to the start of the play queue.
Pause	Slot<n>.In<n>.ActiveQueue.Pause()	void	!Done Slot1.In2.ActiveQueue.Pause()	Pause playback of the play queue
SkipForward	Slot<n>.In<n>.ActiveQueue.SkipForward()	void	!Done Slot1.In2.ActiveQueue.SkipForward()	Moves playback to the next item in the play queue. Will stop at the end of the play queue unless loop is on – then it will wrap round to the first item in the play queue.
SkipBackward	Slot<n>.In<n>.ActiveQueue.SkipBackward()	void	!Done Slot1.In2.ActiveQueue.SkipBackward()	Moves playback to the beginning of item or previous item in the play queue. Will stop at the beginning on the Play queue and will report !Failed if called in this position unless loop is on – then it will wrap around to the last item in the play queue. It will always skip to the previous track (if there is one) regardless of how far into the current track playback is.

## Events

Category	Event	Syntax	Example	Description
MEDIA_STORAGE	USB_HOTPLUG_ARRIVED	USB_HOTPLUG_ARRIVED,<slot>,<label>,<total size>,<free space>	// Event example !Event MEDIA_STORAGE, USB_HOTPLUG_ARRIVED,Slot5,"Name",156165151, 54654654	When a USB device is connected to the card it will raise this event.
MEDIA_STORAGE	USB_HOTPLUG_REMOVED	USB_HOTPLUG_REMOVED,<slot>	// Event example !Event MEDIA_STORAGE, USB_HOTPLUG_REMOVED,Slot5	When a USB device is disconnected from the card it will raise this event
MEDIA_STORAGE	OPERATION_DONE	OPERATION_DONE,<slot>,<exitCode>	// Event example !Event MEDIA_STORAGE, OPERATION_DONE,Slot5,0	Event raised when an asynchronous file operation is completed. A value of 0 for the exit code indicates successful completion, and non-zero value indicates failure.  Unless otherwise stated, all commands are synchronous and will not raise this event on completion unless stated explicitly in the command description. See <a href="#">USB.Copy</a> above for an example of its use.
MODULE	USB_POWER_ALERT	USB_POWER_ALERT,<slot>,<status>	!Event MEDIA_STORAGE, USB_POWER_ALERT,Slot5,OK	Raise event to indicate whether the USB device's power requirements can be met. Status = OK,OverCurrent
MODULE	STATUS	STATUS,<Slot>,"<ModuleStatus>"	!Event MODULE,STATUS,Slot4,"READY"	Raised when the streaming media and 4k playback module status changes. <ModuleStatus> can be READY, SHUTDOWN, BOOTING, UPDATING, BOOTFAILED, UPDATEFAILED, WAITFORVERSION, CARDFAILED

Category	Event	Syntax	Example	Description
MODULE	UPDATE_TRANSFER_STARTED	UPDATE_TRANSFER_STARTED,<Slot>	!Event MODULE,UPDATE_TRANSFER_STARTED,Slot4	Raised when the streaming media and 4k playback module update transfer has started.
MODULE	UPDATE_TRANSFER_PROGRESS	UPDATE_TRANSFER_PROGRESS,<Slot>,<percent_complete>,<transferred_bytes>	!Event MODULE,UPDATE_TRANSFER_PROGRESS,Slot4,40,909345	Raised during the streaming media and 4k playback module update transfer to provide update progress. <percent_complete> is an integer value out of 100.
MODULE	UPDATE_TRANSFER_FINISHED	UPDATE_TRANSFER_FINISHED,<Slot>,<UpdateTransferResult>	!Event MODULE,UPDATE_TRANSFER_FINISHED,Slot4,UpdateComplete	Raised when the streaming media and 4k playback module update transfer has completed. <UpdateTransferResult> can be NotSet, UpdateComplete, UpdateFailedOnModule, FileNotFound, BPCommsError
MODULE	NETWORK_LINK_SPEED_CHANGED	NETWORK_LINK_SPEED_CHANGED,<Slot>,<LinkSpeed>	!Event MODULE,NETWORK_LINK_SPEED_CHANGED,Slot4,100	Raised when the streaming media and 4k playback module network link speed changes. <LinkSpeed> = 0, 100, 1000
MODULE	NETWORK_SETTINGS_CHANGED	NETWORK_SETTINGS_CHANGED,<Slot>	!Event MODULE,NETWORK_SETTINGS_CHANGED,Slot4	Raised when the streaming media and 4k playback module network settings changes.

Category	Event	Syntax	Example	Description
MODULE	CORE_TEMPERATURE_ALERT	CORE_TEMPERATURE_ALERT,<Slot>,<status>,<coretemperature>	!Event MODULE,CORE_TEMPERATURE_ALERT,Slot4,RunningHot,73	Raised when the streaming media and 4k playback module over core temperature status changes. <status> reports one of the following values: OK – temperature is within safe operating value RunningHot – temperature is higher than normal but should not affect performance OverTemperature – temperature is too high and performance is affected
MODULE_CORE_TEMPERATURE	CHANGED	CHANGED,<Slot>,<CoreTemperature>	!Event MODULE_CORE_TEMPERATURE,CHANGED,Slot4,47	Raised when the streaming media and 4k playback module Core Temperature changes.
MEDIA_PLAYER	ITEM_STATUS_CHANGED	ITEM_STATUS_CHANGED,<input>,<itemNumber>,<status>,<resultCode>	!Event MEDIA_PLAYER,ITEM_STATUS_CHANGED,Slot4.In1,3,Failed,0	Raised when the status of an item in the active play queue changes. <input> = Slot<n>.In<n> <itemNumber> = Number of item in queue. 1 – 20 <status> = OK or Failed <resultCode> = currently unused
MEDIA_PLAYER	STATUS_UPDATE	STATUS_UPDATE,<Input>,<state>,<index>	!Event STATUS_UPDATE,Slot4.In1,Idle,3	Raised on any change of state on the media player <channel> = Slot<n>.In<n> <state> = Idle, Configured, Connecting, Playing, Paused, Disconnecting,Retrying <index> = is the currently playing index in the queue (1-20)

Category	Event	Syntax	Example	Description
SYSTEM	POWERMODE_CHANGED	POWERMODE_CHANGED,<status>	!Event POWERMODE_CHANGED,Standby	<p>Event indicates the status of AVIP module updates across the system. The events represent the combined status of all AVIP modules present in the system</p> <p>Value returned is the mode the modules are entering, values are; Standby, Resuming, Resumed</p>
SYSTEM	UPDATE_STATUS	UPDATE_STATUS,<status>	!Event UPDATE_STATUS,Updating	<p>Status of modules which update after the system has rebooted. Only applies to the Streaming media and 4k playback module at present. Status values are Booting, Updating, Ready, UpdateFailed.</p>
INPUT	STATUS_GROUP	STATUS_GROUP,<input>, <property>, <value>	!Event INPUT,STATUS_GROUP,Slot1.In1,Status,OK	<p>Raised when an input property is changed.</p> <p>Properties;            Status; OK   Invalid            Measured_Resolution; &lt;a valid resolution&gt; or empty            Set_Resolution; &lt;a valid resolution&gt; or empty            CanFramelockTo; Yes   No            HDCP_Required; Required   Off            HDMI; Found   Not_found            Audio; Found   Off</p>

## HDMI Output Module (CORIOmaster2)

Applies to both 4 (4K) and 8 (1080p) output modules

It is possible to use Slot<n>.Out<n> and S<n>O<n> in place of Slots.Slot<n>.Out<n>.

### Properties

Property Name	Syntax	Type	Example	Description
Slot<n>	Slot<n>	List	Slot17.Cardtype = HDMI 4K 4-out Slot17.Carldata = <...> Slot17.Out1 = <...> Slot17.Out2 = <...> Slot17.Out3 = <...> Slot17.Out4 = <...> Slot17.PhaseRetrain() Slot17.Module_Resolutions() Slot17.Resolutions = <...> !Done Slot17	List the properties of the card in this slot or "NO CARD" if the slot is empty.
Cardtype	Slot<n>.Cardtype	CardTypeEnum	Slot15.Cardtype = HDMI 4K 1-out !Done Slot15.Cardtype	Read-only. Get the type of the card in this slot

Property Name	Syntax	Type	Example	Description
CardData	Slot<n>.Carddata	void	<pre>Slot17.Carddata.BaseNo = 221964... Slot17.Carddata.SubNo = Slot17.Carddata.ProdNo = Slot17.Carddata.TemperatureLocal = 39 Slot17.Carddata.TemperatureD1 = 39 Slot17.Carddata.TemperatureD2 = 39 Slot17.Carddata.TemperatureD3 = 44 Slot17.Carddata.U6_Temperature = 46 Slot17.Carddata.U6_Current = 7406 Slot17.Carddata.Rail_5V0 = 5052 Slot17.Carddata.Rail_0V9 = 917 Slot17.Carddata.Rail_1V03 = 1047 Slot17.Carddata.Rail_1V5 = 1512 Slot17.Carddata.Rail_1V8 = 1806 Slot17.Carddata.Rail_3V0 = 3024 Slot17.Carddata.Rail_2V5 = 2514 Slot17.Carddata.Rail_1V1 = 1104 Slot17.Carddata.Rail_3V3 = 3297 Slot17.Carddata.Rail_1V2 = 1202 Slot17.Carddata.HDMI_5V0 = 5251 Slot17.Carddata.HDMI_2Out_5V0 = 5268 Slot17.Carddata.U22_VCC = 3301 Slot17.Carddata.U32_VCC = 3297 Slot17.Carddata.FPGAInfo = &lt;...&gt; !Done Slot17.Carddata</pre>	Read only. Various sensor and programming information.
Out<n>	Slot<n>.Out<n>	List	<pre>Slot17.Out1 Slot17.Out1.FullName = Out1 Slot17.Out1.Status = UNKNOWN Slot17.Out1.Alias = s17o1 Slot17.Out1.DisplayType = Monitor Slot17.Out1.Resolution = 1920x1080p60</pre>	List the properties for an Output on the given Slot. Where Out<n> is the output on the card.



Property Name	Syntax	Type	Example	Description
			Slot17.Out1.DefaultLoRes = 720x576i50 Slot17.Out1.Width = 1920 Slot17.Out1.Height = 1080 Slot17.Out1.Field_Rate = 60.00 Slot17.Out1.Frame_ip = p Slot17.Out1.OutputMode = Auto Slot17.Out1.ColourScale = Auto Slot17.Out1.ForceLinkRefresh() Slot17.Out1.HDCP_Active = Off Slot17.Out1.HDCP_Downstream = HoldOn Slot17.Out1.HDCP_Status = v2_2 Slot17.Out1.HDMI = Not_Found Slot17.Out1.Layout = NULL Slot17.Out1.WidthInLayout = 1024 Slot17.Out1.HeightInLayout = 768 Slot17.Out1.LayoutXCentre = 0 Slot17.Out1.LayoutYCentre = 0 Slot17.Out1.RotateOutDeg = 0 Slot17.Out1.GammaRed = 1 Slot17.Out1.GammaGreen = 1 Slot17.Out1.GammaBlue = 1 Slot17.Out1.SCurve = 1 Slot17.Out1.EdgeBlend_Mode = Off Slot17.Out1.OuterGrid = Off Slot17.Out1.InnerGrid = Off Slot17.Out1.LeftOverlap = 80 Slot17.Out1.RightOverlap = 80 Slot17.Out1.TopOverlap = 80 Slot17.Out1.BottomOverlap = 80 Slot17.Out1.LeftEBPos = -511	

Property Name	Syntax	Type	Example	Description
			Slot17.Out1.RightEBPos = 511 Slot17.Out1.TopEBPos = -383 Slot17.Out1.BottomEBPos = 383 Slot17.Out1.Centre_BB = 0 Slot17.Out1.Left_BB = 0 Slot17.Out1.Right_BB = 0 Slot17.Out1.Top_BB = 0 Slot17.Out1.Bottom_BB = 0 Slot17.Out1.ProjectorWidthDeg = 30 Slot17.Out1.ProjectorHeightDeg = 30 Slot17.Out1.KeystoneXDeg = 0 Slot17.Out1.KeystoneYDeg = 0 Slot17.Out1.EDID_Filename = Slot17.Out1.Equipment = Slot17.Out1.PhysicalCenterX = 0 Slot17.Out1.PhysicalCenterY = 0 Slot17.Out1.PhysicalWidth = 0 Slot17.Out1.PhysicalHeight = 0 Slot17.Out1.PhysicalPixelWidth = 0 Slot17.Out1.PhysicalPixelHeight = 0 Slot17.Out1.PhysicalBezelTop = 0 Slot17.Out1.PhysicalBezelBottom = 0 Slot17.Out1.PhysicalBezelLeft = 0 Slot17.Out1.PhysicalBezelRight = 0 Slot17.Out1.InsList = <Empty> Slot17.Out1.CutToBlack = Off Slot17.Out1.TMDSdataAmp = 16 Slot17.Out1.TMDSdataAdj = Off Slot17.Out1.EcoMode = Off Slot17.Out1.AudioEnable = On Slot17.Out1.AudioFollowWindow = 0	

Property Name	Syntax	Type	Example	Description
			Slot17.Out1.AudioMode = FromSource Slot17.Out1.AudioVolume = 100 Slot17.Out1.AudioMute = Off Slot17.Out1.AudioSource = NULL !Done Slot17.Out1	
FullName	Slot<n>.Out<n>.FullName	String	Slot17.Out1.FullName = Out1 !Done Slot17.Out1.FullName	Read-only. Get the full name of the Window
Status	Slot<n>.Out<n>.Status	StatusEnum	Slot17.Out1.Status = UNKNOWN !Done Slot17.Out1.Status	Read-only. Get the status of the output
Alias	Slot<n>.Out<n>.Alias	String	Slot17.Out1.Alias = s15o1 !Done Slot17.Out1.Alias	Get or set the Alias name for this output. <b>Warning it is possible to set this value to that used by another output, in which case the other value will be set to NULL.</b>
DisplayType	Slot<n>.Out<n>.DisplayType	DisplayType	Slot17.Out1.DisplayType = Monitor !Done Slot17.Out1.DisplayType	Get or set the type of display connected to this output.
Resolution	Slot<n>.Out<n>.Resolution	Resolution	Slot17.Out1.Resolution = 1280x720p60 !Done Slot17.Out1.Resolution	Get or set the resolution to use on this output. This must be the name of a valid resolution. For more information see Resources Resolutions Commands on page 54 above.

Property Name	Syntax	Type	Example	Description
DefaultLoRes	Slot<n>.Out<n>.DefaultLoRes	Resolution	Slot17.Out1.DefaultLoRes = 720x576i50 !Done Slot17.Out1.DefaultLoRes	Get or set the resolution to use on this output when HDCP is requested by the source but the display failed HDCP negotiation. This must be the name of a valid resolution. For more information see Resources Resolutions Commands on page 54 above.
Width	Slot<n>.Out<n>.Width	Integer	Slot17.Out1.Width = 1280 !Done Slot17.Out1.Width	Read-only. Get the width of this output based on the select resolution.
Height	Slot<n>.Out<n>.Height	Integer	Slot17.Out1.Height = 720 !Done Slot17.Out1.Height	Read-only. Get the height of this output based on the select resolution.
Field_Rate	Slot<n>.Out<n>.Field_Rate	Number	Slot17.Out1.Field_Rate = 60.00 !Done Slot17.Out1.Field_Rate	Read-only. Get the field rate for this output based on the select resolution.
Frame_ip	Slot<n>.Out<n>.Frame_ip	FrameType	Slot17.Out1.Frame_ip = p !Done Slot17.Out1.Frame_ip	Read-only. Get the frame type for this output based on the select resolution.
OutputMode	Slot<n>.Out<n>.OutputMode	String	Slot17.Out1.OutputMode = Auto !Done Slot17.Out1.OutputMode	Auto = default, unit selects output appropriately based on incoming EDID from the display (HDMI/DVI) HDMI = EDID from sink is ignored and output is forced to HDMI DVI = EDID from sink is ignored and output is forced to DVI
ColourScale	Slot<n>.Out<n>.ColourScale	ColourScale	Slot17.Out1.ColourScale = Auto !Done Slot17.Out1.ColourScale	Get or set the color scale to use on this output.

Property Name	Syntax	Type	Example	Description
HDCP_Active	Slot<n>.Out<n>.HDCP_Active	ActiveOff	Slot17.Out1.HDCP_Active = Off !Done Slot17.Out1.HDCP_Active	Read only. Get the HDCP status of this output.
HDCP_Status	Slot<n>.Out<n>.HDCP_Status	HDCPStatus	Slot17.Out1.HDCP_Active = Off !Done Slot17.Out1.HDCP_Active	Read only. Get the HDCP status of this output. This returns the version of HDCP if found.  Values: None, v1_4 and v2_2
HDCP_Downstream	Slot<n>.Out<n>.HDCP_Downstream	HDCPDownstream	Slot17.Out1.HDCP_Downstream = HoldOn !Done Slot17.Out1.HDCP_Downstream	Get or set the downstream HDCP mode.
HDMI	Slot<n>.Out<n>.HDMI	FoundNot	Slot17.Out1.HDMI = Found !Done Slot17.Out1.HDMI	Read-only. Get the detected HDMI status.
Layout	Slot<n>.Out<n>.Layout	Layout	Slot17.Out1.Layout = NULL !Done Slot17.Out1.Layout	Get or set the layout to which this output is assigned
WidthInLayout	Slot<n>.Out<n>.WidthInLayout	Integer	Slot17.Out1.WidthInLayout = 1024 !Done Slot17.Out1.WidthInLayout	Get or set the width of this output within the layout
HeightInLayout	Slot<n>.Out<n>.HeightInLayout	Integer	Slot17.Out1.HeightInLayout = 768 !Done Slot17.Out1.HeightInLayout = 768	Get or set the height of this output within the layout
LayoutXCentre	Slot<n>.Out<n>.LayoutXCentre	Integer	Slot17.Out1.HeightInLayout = 768 !Done Slot17.Out1.HeightInLayout	Get or set the centre X coordinate of this output
LayoutYCentre	Slot<n>.Out<n>.LayoutYCentre	Integer	Slot17.Out1.LayoutYCentre = 0 !Done Slot17.Out1.LayoutYCentre	Get or set the centre Y coordinate of this output
RotateOutDeg	Slot<n>.Out<n>.RotateOutDeg	Degree	Slot17.Out1.RotateOutDeg = 0 !Done Slot17.Out1.RotateOutDeg	Get or set the degree of rotation of this output. From 0 to 359
GammaRed	Slot<n>.Out<n>.GammaRed	Number	Slot17.Out1.GammaRed = 1 !Done Slot17.Out1.GammaRed	Get or set the red gamma value for this output Range: 0.30 to 2.00

Property Name	Syntax	Type	Example	Description
GammaGreen	Slot<n>.Out<n>.GammaGreen	Number	Slot17.Out1.GammaGreen = 1 !Done Slot17.Out1.GammaGreen	Get or set the green gamma value for this output Range: 0.30 to 2.00
GammaBlue	Slot<n>.Out<n>.GammaBlue	Number	Slot17.Out1.GammaBlue = 1 !Done Slot17.Out1.GammaBlue	Get or set the blue gamma value for this output Range: 0.30 to 2.00
SCurve	Slot<n>.Out<n>.SCurve	Number	Slot17.Out1.SCurve = 1 !Done Slot17.Out1.SCurve	Get or set the SCurve value for this output. (brightness curve) Range: 0.30 to 2.00
EdgeBlend_Mode	Slot<n>.Out<n>.EdgeBlend_Mode	Boolean	Slot17.Out1.EdgeBlend_Mode = Off !Done Slot17.Out1.EdgeBlend_Mode	Get or set the addition of a border to this output to aid with edge blending.
OuterGrid	Slot<n>.Out<n>.OuterGrid	Boolean	Slot17.Out1.OuterGrid = Off !Done Slot17.Out1.OuterGrid	Get or set if an alignment grid is shown on this output. The DisplayType must be set to Projector.
LeftOverlap	Slot<n>.Out<n>.LeftOverlap	Integer	Slot17.Out1.LeftOverlap = 80 !Done Slot17.Out1.LeftOverlap	<b>CORIOgrapher only.</b> Used in Edge Blending. Values are worked out by the GUI and depend on the physical projector position.
RightOverlap	Slot<n>.Out<n>.RightOverlap	Integer	Slot17.Out1.RightOverlap = 80 !Done Slot17.Out1.RightOverlap	
TopOverlap	Slot<n>.Out<n>.TopOverlap	Integer	Slot17.Out1.TopOverlap = 80 !Done Slot17.Out1.TopOverlap	
BottomOverlap	Slot<n>.Out<n>.BottomOverlap	Integer	Slot17.Out1.BottomOverlap = 80 !Done Slot17.Out1.BottomOverlap	
LeftEBPos	Slot<n>.Out<n>.LeftEBPos	Integer	Slot17.Out1.LeftEBPos = -511 !Done Slot17.Out1.LeftEBPos	
RightEBPos	Slot<n>.Out<n>.RightEBPos	Integer	Slot17.Out1.RightEBPos = 511 !Done Slot17.Out1.RightEBPos	
TopEBPos	Slot<n>.Out<n>.TopEBPos	Integer	Slot17.Out1.TopEBPos = -383 !Done Slot17.Out1.TopEBPos	
BottomEBPos	Slot<n>.Out<n>.BottomEBPos	Integer	Slot17.Out1.BottomEBPos = 383 !Done Slot17.Out1.BottomEBPos	

Property Name	Syntax	Type	Example	Description
Centre_BB	Slot<n>.Out<n>.Centre_BB	Integer	Slot17.Out1.Centre_BB = 0 !Done Slot17.Out1.Centre_BB	
Left_BB	Slot<n>.Out<n>.Left_BB	Integer	Slot17.Out1.Left_BB = 0 !Done Slot17.Out1.Left_BB	
Right_BB	Slot<n>.Out<n>.Right_BB	Integer	Slot17.Out1.Right_BB = 0 !Done Slot17.Out1.Right_BB	
Top_BB	Slot<n>.Out<n>.Top_BB	Integer	Slot17.Out1.Top_BB = 0 !Done Slot17.Out1.Top_BB	
Bottom_BB	Slot<n>.Out<n>.Bottom_BB	Integer	Slot17.Out1.Bottom_BB = 0 !Done Slot17.Out1.Bottom_BB	
EDID_Filename	Slot<n>.Out<n>.EDID_Filename	String	Slot17.Out1.EDID_Filename = !Done Slot17.Out1.EDID_Filename	Get or set the EDID file in any currently being used for this output.
Equipment	Slot<n>.Out<n>.Equipment	String	Slot17.Out1.Equipment = !Done Slot17.Out1.Equipment	<b>CORIOgrapher only.</b> Get or set the equipment connected to this input.
PhysicalCenterX	Slot<n>.Out<n>.PhysicalCenterX	Integer	Slot17.Out1.PhysicalCenterX = 0 !Done Slot17.Out1.PhysicalCenterX	<b>CORIOgrapher only.</b> Get or set the center of the display in microns.
PhysicalCenterY	Slot<n>.Out<n>.PhysicalCenterY	Integer	Slot17.Out1.PhysicalCenterY = 0 !Done Slot17.Out1.PhysicalCenterY	<b>CORIOgrapher only.</b> Get or set the center of the display as a pixel location (in vertical axis)
PhysicalWidth	Slot<n>.Out<n>.PhysicalWidth	Integer	Slot17.Out1.PhysicalWidth = 0 !Done Slot17.Out1.PhysicalWidth	<b>CORIOgrapher only.</b> Get or set the width of the display in microns.
PhysicalHeight	Slot<n>.Out<n>.PhysicalHeight	Integer	Slot17.Out1.PhysicalHeight = 0 !Done Slot17.Out1.PhysicalHeight	<b>CORIOgrapher only.</b> Get or set the height of the display in microns.
PhysicalPixelWidth	Slot<n>.Out<n>.PhysicalPixelWidth	Integer	Slot17.Out1.PhysicalPixelWidth = 0 !Done Slot17.Out1.PhysicalPixelWidth	<b>CORIOgrapher only.</b> Get or set the width of a pixel on the display in microns.

Property Name	Syntax	Type	Example	Description
PhysicalPixelHeight	Slot<n>.Out<n>.PhysicalPixelHeight	Integer	Slot17.Out1.PhysicalPixelHeight = 0 !Done Slot17.Out1.PhysicalPixelHeight	<b>CORIOgrapher only.</b> Defines the height of a pixel on the display in microns.
PhysicalBezelTop	Slot<n>.Out<n>.PhysicalBezelTop	Integer	Slot17.Out1.PhysicalBezelTop = 0 !Done Slot17.Out1.PhysicalBezelTop	<b>CORIOgrapher only.</b> Defines the size of the top bezel in microns.
PhysicalBezelBottom	Slot<n>.Out<n>.PhysicalBezelBottom	Integer	Slot17.Out1.PhysicalBezelBottom = 0 !Done Slot17.Out1.PhysicalBezelBottom	<b>CORIOgrapher only.</b> Defines the size of the bottom bezel in microns
PhysicalBezelLeft	Slot<n>.Out<n>.PhysicalBezelLeft	Integer	Slot17.Out1.PhysicalBezelLeft = 0 !Done Slot17.Out1.PhysicalBezelLeft	<b>CORIOgrapher only.</b> Defines the size of the left bezel in microns
PhysicalBezelRight	Slot<n>.Out<n>.PhysicalBezelRight	Integer	Slot17.Out1.PhysicalBezelRight = 0 !Done Slot17.Out1.PhysicalBezelRight	<b>CORIOgrapher only.</b> Defines the size of the right bezel in microns
CutToBlack	Slot<n>.Out<n>.CutToBlack	Boolean	Slot17.Out1.CutToBlack = Off !Done Slot17.Out1.CutToBlack	Get or set the output to black. When setting multiple outputs to black it is recommended to surround them with startbatch() endbatch() to synchronise output blanking
TMDSdataAdj	Slot<n>.Out<n>.TMDSdataAdj	Boolean	Slot17.Out1.TMDSdataAdj = On !Done Slot17.Out1.CutToBlack = On	Get or set ability to tweak TMDS values. On   Off Default: Off
TMDSdataAmp	Slot<n>.Out<n>.TMDSdataAmp	Boolean	Slot17.Out1.TMDSdataAmp = 25 !Done Slot17.Out1.CutToBlack = 25	Get or set TMDS power when TMDSdataAdj is set to On Range: <0..31> Default: <depends on resolution>



Property Name	Syntax	Type	Example	Description
EcoMode	Slot<n>.Out<n>.EcoMode	Boolean	Slot14.Out1. EcoMode = On !Done Slot14.Out1. EcoMode	Get or set the EcoMode setting for this output. When set to On, the output is configured to allow any attached monitor to enter standby mode. This value does not persist over a power cycle. Default is Off.
AudioEnable	Slot10.Out1.AudioEnable	Boolean	Slot10.Out1.AudioEnable = On !Done Slot10.Out1.AudioEnable	Enable the embedded audio on a specific output, independent of canvas On : Off Default; On
AudioMode	Slot10.Out1.AudioMode	String	Slot10.Out1.AudioMode = FromSource !Done Slot10.Out1.AudioMode	Read only, set via canvas menu
AudioFollowWindow	Slot10.Out1.AudioFollowWindow	Integer	Slot10.Out1.AudioFollowWindow = 1 !Done Slot10.Out1.AudioFollowWindow	Read only, set via canvas menu
AudioSource	Slot10.Out1.AudioSource	String	Slot10.Out1.AudioSource = NULL !Done Slot10.Out1.AudioSource	Read only, set via canvas menu
AudioVolume	Slot10.Out1.AudioVolume	Integer	Slot10.Out1.AudioVolume = 100 !Done Slot10.Out1.AudioVolume	Read only, set via canvas menu
AudioMute	Slot10.Out1.AudioMute	Boolean	Slot10.Out1.AudioMute = Off !Done Slot10.Out1.AudioMute	Mute the embedded audio on a specific output, independent of canvas On : Off Default; Off

Property Name	Syntax	Type	Example	Description
Resolutions	Slot<n>	List	Slot17.Resolutions.Resolution1 = <...> Slot17.Resolutions.Resolution2 = <...> ... Slot17.Resolutions.Resolution1000 = <...> Slot17.Resolutions.Resolution1001 = <...> Slot17.Resolutions.Resolution1002 = <...> Slot17.Resolutions.Resolution1003 = <...> Slot17.Resolutions.Resolution1004 = <...> Slot17.Resolutions.Resolution1005 = <...> Slot17.Resolutions.Resolution1006 = <...> Slot17.Resolutions.Resolution1007 = <...> Slot17.Resolutions.Resolution1008 = <...> Slot17.Resolutions.Resolution1009 = <...> !Done Slot17.Resolutions	List the properties for a Resolution. Where <n> is the number of the Resolution. Note that Resolution1000 to Resolution1009 are Custom Resolutions.
Resolution<n>	Slot<n>.Resolutions.Resolution<n>	List	Slot17.Resolutions.Resolution1.Name = 640x480p60 Slot17.Resolutions.Resolution1.Aspect = 4:3 Slot17.Resolutions.Resolution1.CanFrame lock = No !Done Slot17.Resolutions.Resolution1	List the properties of the selected resolution.
Name	Slot<n>.Resolutions.Resolution<n>.Name	String	Slot17.Resolutions.Resolution1.Name = 640x480p60 !Done Slot17.Resolutions.Resolution1.Name	Read only. Get the name of this resolution.
Aspect	Slot<n>.Resolutions.Resolution<n>.Aspect	AspectRatio	Slot17.Resolutions.Resolution1.Aspect = 4:3 !Done Slot17.Resolutions.Resolution1.Aspect	Read only. Get or set the aspect ratio of this resolution Used assist in the signal conversion when an input and the output have different aspect ratio.

Property Name	Syntax	Type	Example	Description
CanFramelock	Slot<n>.Resolutions.Resolution<n>.CanFramelock	Boolean	Slot17.Resolutions.Resolution1.CanFramelock = No !Done Slot17.Resolutions.Resolution1.CanFramelock	Read only. Get if the Resolution is compatible with Framelock.

## Methods

Command	Syntax	Type	Example	Description
PhaseRetrain	Slot<n>.PhaseRetrain()	void	// Module 15 phase -----R:::R---, centres at 23, 23 (23). !Done Slot17.PhaseRetrain()	Initiates a Phase retrain for this slot
Module_Resolutions	Slot<n>.Module_Resolutions()	List	Slot17.Module_Resolutions() 720x480i59.94;4:3; 720x480p59.94;4:3; : 3840x2160p30;16:9; 3840x600p50;16:9; Empty1001;16:9; Empty1002;16:9; Empty1003;16:9; Empty1004;16:9; Empty1005;16:9; Empty1006;16:9; Empty1007;16:9; Empty1008;16:9; Empty1009;16:9; !Done Slot17.Module_Resolutions()	List all the supported resolutions for this slot. Custom resolutions will appear at the end of the list. The list is semicolon separated.
ForceLinkRefresh	Slot<n>.Out<n>.ForceLinkRefresh()	Void	Slot17.Out1.ForceLinkRefresh() !Done Slot17.Out1.ForceLinkRefresh()	Reset the connection to the display.

## Events

Category	Syntax	Event	Example	Description
HDMI	SINK_ATTACHED,<output>	SINK_ATTACHED	!Event HDMI,SINK_ATTACHED,s3.o1	Raised when an HDMI connection is attached to an output
HDMI	SINK_UNPLUGGED,<output>	SINK_UNPLUGGED	!Event HDMI,SINK_UNPLUGGED,s3.o1	Raised when an HDMI connection is unplugged from an output

Category	Syntax	Event	Example	Description
OUTPUT	AUDIO_FOLLOW_WINDOW_CHANGED	AUDIO_FOLLOW_WINDOW_CHANGE D,<output>, <Window Source>	!Event OUTPUT,AUDIO_FOLLOW_WINDOW_CHANGE D,Slot4.Out1,Window5	CORIOmaster micro only Raised when a window being used to source the audio playing on the identified output is changed to another window.
OUTPUT	PROPERTY_CHANGED	PROPERTY_CHANGED,<output>,AudioEnable,<value>	!Event OUTPUT,PROPERTY_CHANGED,Slot16.Out1,AudioEnable,Off	Raised when the AudioEnable on a specific output is changed. On   Off
OUTPUT	PROPERTY_CHANGED	PROPERTY_CHANGED,<output>,AudioMute,<value>	!Event OUTPUT,PROPERTY_CHANGED,Slot16.Out1,AudioMute,On	Raised when the AudioMute on a specific output is changed. On   Off
OUTPUT	PROPERTY_CHANGED	PROPERTY_CHANGED,<output>,CutToBlack,<value>	!Event OUTPUT,PROPERTY_CHANGED,Slot16.Out1,CutToBlack,On	Raised when the CutToBlack on a specific output is changed. On   Off
OUTPUT	STATUS_GROUP	STATUS_GROUP,<output>,<property>,<value>	! Event OUTPUT, STATUS_GROUP,Slot16.Out1,HDCP_Active,Active	Raised when an output property is changed. Properties; HDCP_Active; Active   Off HDMI; Found   Not_Found FramelockStatus; Locked   Unlocked Genlock; Off   Locked

## Audio Module (CM2-AUD-2IN-3OUT)

It is possible to use Slot<n>.Out<n> and S<n>O<n> in place of Slots.Slot<n>.Out<n> and Slot<n>.Out<n> and S<n>O<n> in place of Slots.Slot<n>.Out<n>.

### Properties

Property Name	Syntax	Type	Example	Description
Slot<n>	Slot<n>	List	Slot13.Cardtype = Audio 2-in 4-out Slot13.Carddata = <No Value> Slot13.In1 = <...> Slot13.In2 = <...> Slot13.Out1 = <...> Slot13.Out2 = <...> Slot13.Out3 = <...> !Done Slot13	List the properties of the card in this slot or "NO CARD" if the slot is empty.  CM-AUD-2IN-3OUT supported in Slot13 of CM2-547
Cardtype	Slot<n>.Cardtype	CardTypeEnum	Slot13.Cardtype = Audio 2-in 3-out !Done Slot13.Cardtype	Read-only. Get the type of the card in this slot.
Carddata	Slot<n>.Carddata	void	Slot13.Carddata = <No Value> ! Done Slot13.Carddata	Not supported
In<n>	Slot<n>.In<n>	List	Slot13.In1.FullName = In1 Slot13.In1.Status = OK Slot13.In1.Alias = s13i1 Slot13.In1.AudioLevel = 0 Slot13.In1.AudioMute = Off Slot13.In1.AudioEnable = On	List the properties for an Input on this Slot. Where In<n> is the input on the card, 0   1
FullName	Slot<n>.In<n>.FullName	String	Slot13.In1.FullName = In1 !Done Slot13.In1.FullName	Read-only. Get the full name of the Audio Channel
Status	Slot<n>.In<n>.Status	String	Slot13.In1.Status = OK !Done Slot13. Status	Read-only. Get the status of the input.

Property Name	Syntax	Type	Example	Description
Alias	Slot<n>.In<n>.Alias	String	Slot13.In1.Alias = s13i1 !Done Slot13. Alias	Get or set the Alias name for this input. <i>Warning it is possible to set this value to that used by another input, in which case the other value will be set to NULL.</i>
AudioLevel	Slot<n>.In<n>.AudioLevel	Integer	Slot13.In1.AudioLevel = 0 !Done Slot13. AudioLevel	Get or set the input audio level (in dB -20 to +20) (increments of 1) Default; 0
AudioMute	Slot<n>.In<n>.AudioMute	Boolean	Slot13.In1.AudioMute = Off !Done Slot13. AudioMute	Mute the input On : Off Default; Off
AudioEnable	Slot<n>.In<n>.AudioEnable	Boolean	Slot13.In1.AudioEnable = On !Done Slot13. AudioEnable	Enable the input On : Off Default; On
Out<n>	Slot<n>.Out<n>	List	Slot13.Out1.FullName = Out1 Slot13.Out1.Status = UNKNOWN Slot13.Out1.Alias = s13o1 Slot13.Out1.Layout = Layout1 Slot13.Out1.AudioEnable = On Slot13.Out1.AudioMode = FromSource Slot13.Out1.AudioFollowWindow = 0 Slot13.Out1.AudioSource = NULL Slot13.Out1.AudioVolume = 100 Slot13.Out1.AudioMute = Off !Done Slot13.Out1	List the properties for an Output on this Slot. Where Out<n> is the output on the card, 0 - 1
FullName	Slot<n>.Out<n>.FullName	String	Slot13.Out1.FullName = Out1 !Done Slot13.Out1.FullName	Read-only. Get the full name of the Audio Channel

Property Name	Syntax	Type	Example	Description
Status	Slot<n>.Out<n>.Status	String	Slot13.Out1.Status = UNKNOWN !Done Slot13.Out1.Status	Read-only. Get the status of the input. Always UNKNOWN for this card.
Alias	Slot<n>.Out<n>.Alias	String	Slot13.Out1.Alias = s13o1 !Done Slot13.Out1.Alias	Get or set the Alias name for this input. <b>Warning it is possible to set this value to that used by another input, in which case the other value will be set to NULL.</b>
Layout	Slot<n>.Out<n>.Layout	String	Slot13.Out1.Layout = Layout1 !Done Slot13.Out1.Layout	Read only value to help understand which Canvas/Layout is associated with which output
AudioEnable	Slot<n>.Out<n>.AudioEnable	Boolean	Slot13.Out1.AudioEnable = On !Done Slot13.Out1.AudioEnable	Enable the embedded audio on a specific output, independent of canvas On : Off Default; On
AudioMode	Slot<n>.Out<n>.AudioMode	String	Slot13.Out1.AudioMode = FromSource !Done Slot13.Out1.AudioMode	Read only, set via canvas menu
AudioFollowWindow	Slot<n>.Out<n>.AudioFollowWindow	Integer	Slot13.Out1.AudioFollowWindow = 0 !Done Slot13.Out1.AudioFollowWindow	Read only, set via canvas menu
AudioSource	Slot<n>.Out<n>.AudioSource	String	Slot13.Out1.AudioSource = NULL !Done Slot13.Out1.AudioSource	Read only, set via canvas menu
AudioVolume	Slot<n>.Out<n>.AudioVolume	Integer	Slot13.Out1.AudioVolume = 100 !Done Slot13.Out1.AudioVolume	Read only, set via canvas menu
AudioMute	Slot<n>.Out<n>.AudioMute	Boolean	Slot13.Out1.AudioMute = Off !Done Slot13.Out1.AudioMute	Mute the audio on a specific output, independent of canvas On : Off Default; Off



## HDBASE-T Sub-Menu

This section applies to any HDBaseT modules supported by your product

For output cards it is possible to use Slot<n>.Out<n> and S<n>O<n> in place of Slots.Slot<n>.Out<n>. (Not available in CORIOmaster2)

It is possible to use Slot<n>.[In/Out]<n> and S<n>[I/O]<n> in place of Slots.Slot<n>.In<n>. For example, Slots.Slot1.In1 can be replaced by the alias s1i1 (default, user can change this) or the shortened version Slot1.In1

Command	Syntax	Type	Example	Description
HDBaseT	Slot<n>.In<n>.HDBaseT	List	Slot15.In1.HDBaseT.CurrentMode = Auto Standard mode Slot15.In1.HDBaseT.LocalLinkStatus = HDBASE_T_LINK_ON Slot15.In1.HDBaseT.LocalFwVer = 1.30.37.10 Slot15.In1.HDBaseT.CableLength = Invalid Slot15.In1.HDBaseT.LocalHDMIStatus = HDBASE_T_HDMI_HDCP_ON Slot15.In1.HDBaseT.MaxError = Caution: 1 : 0 : 0 : 0 Slot15.In1.HDBaseT.RemoteFWVer = 1.30.4.0 Slot15.In1.HDBaseT.RemoteLinkStatus = HDBASE_T_LINK_ON Slot15.In1.HDBaseT.RemoteHDMIStatus = HDBASE_T_HDMI_HDCP_ON Slot15.In1.HDBaseT.LocalLinkReset() Slot15.In1.HDBaseT.RemoteLinkReset() !Done Slot15.In1.HDBaseT	List the HDBaseT specific attributes for this card.
CurrentMode	Slot<n>.Out<n>.HDBaseTCurrentMode Slot<n>.In<n>.HDBaseTCurrentMode	HDBaseTStatus	Slot15.In1.HDBaseT.CurrentMode = Auto Standard mode !Done Slot15.In1.HDBaseT.CurrentMode	Read only. Get the current HDBaseT status. This comprises of the current configuration and mode.

Command	Syntax	Type	Example	Description
LocalLinkStatus	Slot<n>.Out<n>.HDBaseTLocalLinkStatus Slot<n>.In<n>.HDBaseTLocalLinkStatus	HDBaseTLink	Slot15.In1.HDBaseT.LocalLinkStatus = HDBASE_T_LINK_ON !Done Slot15.In1.HDBaseT.LocalLinkStatus	Read only. Get the status of the local end of the link.
LocalFwVer	Slot<n>.Out<n>.HDBaseTLocalFwVer Slot<n>.In<n>.HDBaseTLocalFwVer	String	Slot15.In1.HDBaseT.LocalFwVer = 1.30.37.10 !Done Slot15.In1.HDBaseT.LocalFwVer	Read only. Get the version of the HDBaseT firmware in the card.
CableLength	Slot<n>.Out<n>.HDBaseTCableLength Slot<n>.In<n>.HDBaseTCableLength	String	Slot15.In1.HDBaseT.CableLength = Invalid !Done Slot15.In1.HDBaseT.CableLength	Read only. Get the link cable length in meters as measured by the card. This may be "Invalid" or a value between 20 and 100. "Invalid," a value outside the range or significantly different from that of the physical cable may indicate a cabling issue.
LocalHDMIStatus	Slot<n>.Out<n>.HDBaseTLocalHDMIStatus Slot<n>.In<n>.HDBaseTLocalHDMIStatus	HDBaseTHDMI	Slot15.In1.HDBaseT.LocalHDMIStatus = HDBASE_T_HDMI_HDCP_ON !Done Slot15.In1.HDBaseT.LocalHDMIStatus	Read only. Get the status of the video connection at the local end of the link.
MaxError	Slot<n>.Out<n>.HDBaseTMaxError Slot<n>.In<n>.HDBaseTMaxError	HDBaseTError	Slot15.In1.HDBaseT.MaxError = Caution: 255 : 255 : 255 : 255 !Done Slot15.In1.HDBaseT.MaxError	Read only. Get the error statistics.
RemoteFWVer	Slot<n>.Out<n>.HDBaseTRemoteFWVer Slot<n>.In<n>.HDBaseTRemoteFWVer	String	Slot15.In1.HDBaseT.RemoteFWVer = 1.30.4.0 !Done Slot15.In1.HDBaseT.RemoteFWVer	Read only. Get the version of the HDBaseT firmware in the remote device.

Command	Syntax	Type	Example	Description
RemoteLinkStatus	Slot<n>.Out<n>.HDBaseT.RemoteLinkStatus Slot<n>.In<n>.HDBaseT.RemoteLinkStatus	HDBaseLink	Slot15.In1.HDBaseT.RemoteLinkStatus = HDBASE_T_LINK_ON !Done Slot15.In1.HDBaseT.RemoteLinkStatus	Read only. Get the status of the remote end of the link.
RemoteHDMIStatus	Slot<n>.Out<n>.HDBaseT.RemoteHDMIStatus Slot<n>.In<n>.HDBaseT.RemoteHDMIStatus	HDBaseHDMI	Slot15.In1.HDBaseT.RemoteHDMIStatus = HDBASE_T_HDMI_HDCP_ON !Done Slot15.In1.HDBaseT.RemoteHDMIStatus	Read only. Get the status of the video connection at the remote end of the link.
LocalLinkReset	Slot<n>.Out<n>.HDBaseT.LocalLinkReset() Slot<n>.In<n>.HDBaseT.LocalLinkReset()	Void	Slot15.In1.HDBaseT.LocalLinkReset() !Done Slot15.In1.HDBaseT.LocalLinkReset()	Reset the local end of the link.
RemoteLinkReset()	Slot<n>.Out<n>.HDBaseT.RemoteLinkReset() Slot<n>.In<n>.HDBaseT.RemoteLinkReset()	Void	Slot15.In1.HDBaseT.RemoteLinkReset() !Done Slot15.In1.HDBaseT.RemoteLinkReset()	Reset the remote end of the link.
SetMode	Slot<n>.Out<n>. SetMode Slot<n>.In<n>.HDBaseT.SetMode	String	Slot<n>.Out<n>. SetMode = Auto !Done s2i1.hdbaset.SetMode = Auto	Manually get and set the HDBASE-T link mode. Allowed values: Auto, LongReach, Standard. Note1: Use with caution - will only work if the device at the other end of the link is in Auto mode. Note 2: Manually set value may disagree with CurrentMode (qv). This is a function of Valens FW.

## Routing Commands

### Properties

Command	Syntax	Type	Example	Description
Routing	Routing	List	<pre>Routing.Windows = &lt;...&gt; Routing.Canvases = &lt;...&gt; Routing.Layouts = &lt;...&gt; Routing.Preset = &lt;...&gt; Routing.Stbds = &lt;...&gt; !Done Routing</pre>	List the routing commands and properties

## Window Commands

In Window<n> the "<n>" represents the number of the Window (for example "1" for Window1).

It is possible to use either Window<n> or Windows.Window<n> in place of Routing.Windows.Window<n>.

### Properties

Command	Syntax	Type	Example	Description
Windows	Windows	List	Windows.Window1 = <...> Windows.Window2 = <...> ... !Done Windows	List all the Windows.
Window<n>	Window<n>	List	Window1.FullName = Window1 Window1.Status = FREE Window1.Alias = NULL Window1.Input = Slot4.In1 Window1.Canvas = Canvas1 Window1.CanWidth = 1280 Window1.CanHeight = 720 Window1.CanXCentre = 689 Window1.CanYCentre = 0 Window1.Zorder = 1 Window1.RotateDeg = 0 Window1.WDP = 0 Window1.WDPQ = 2048 Window1.BdrPixWidth = 1 Window1.BdrRGB = 0 Window1.HFlip = Off Window1.VFlip = Off Window1.FTB = 0 Window1.SCFTB = Off Window1.SCHShrink = Off Window1.SCVShrink = Off	List all the properties of this Window.

Command	Syntax	Type	Example	Description
			<pre>Window1.SCSpin = 0 Window1.AccountForBezel = No Window1.PhysicalCenterX = 547800 Window1.PhysicalCenterY = 0 Window1.PhysicalWidth = 1018300 Window1.PhysicalHeight = 572800 Window1.KeyingYMin = 0 Window1.KeyingYMax = 255 Window1.KeyingYSoft = 1 Window1.KeyingUMin = 0 Window1.KeyingUMax = 255 Window1.KeyingUSoft = 1 Window1.KeyingVMin = 0 Window1.KeyingVMax = 255 Window1.KeyingVSoft = 1 Window1.KeyingEnabled = Off !Done Window1</pre>	
FullName	Window<n>.FullName	String	<pre>Window1.FullName = Window1 !Done Window1.FullName</pre>	Read-only. Get the full name of the Window
Alias	Window<n>.Alias	String	<pre>Window1.Alias = DVDplayer !Done Window1.Alias</pre>	Get or set the Alias name for this Window
Input	Window<n>.Input	InputName	<pre>Window1.Input = Slot4.In1 !Done Window1.Input</pre>	Get or set the Input assigned to this Window <b>This must NOT be set to NULL. The behaviour is undefined if this value is set to NULL.</b>
Canvas	Window<n>.Canvas	List	<pre>Window1.Canvas = Canvas1 !Done Window1.Canvas</pre>	Get or set the canvases to which this Window is assigned. Set to NULL to remove from all canvas. The list is comma delimited

Command	Syntax	Type	Example	Description
CanWidth	Window<n>.CanWidth	Integer	Window1.CanWidth = 1280 !Done Window1.CanWidth	Get or set the width of the Window. 14-bit unsigned integer.
CanHeight	Window<n>.CanHeight	Integer	Window1.CanHeight = 720 !Done Window1.CanHeight	Get or set the height of the Window. 14-bit unsigned integer.
CanXCentre	Window<n>.CanXCentre	Integer	Window1.CanXCentre = 689 !Done Window1.CanXCentre	Get or set the X co-ordinated of the centre of the Window. 14-bit signed integer.
CanYCentre	Window<n>.CanYCenter	Integer	Window1.CanYCentre = 0 !Done Window1.CanYCentre	Get or set the Y co-ordinated of the centre of the Window. 14-bit signed integer.
Zorder	Window<n>.Zorder	Integer	Window1.Zorder = 1 !Done Window1.Zorder	Get or set the depth of the Window within the canvas. 4-bit unsigned.
RotateDeg	Window<n>.RotateDeg	Integer	Window1.RotateDeg = 0 !Done Window1.RotateDeg	Get or set the degree of rotation for the Window. 0 to 359.
WDPQ	Window<n>.WDPQ	Integer	Window1.WDPQ = 2048 !Done Window1.WDPQ	Get or set the window quality for the window. 0 = Preview 1024 = HQ 2048 = EHQ 4096 = UHQ
BdrPixwidth	Window<n>.BdrPixWidth	Integer	Window1.BdrPixWidth = 1 !Done Window1.BdrPixWidth	Get or set the width of the border. 0 to 64 Note that Setting this to 0 will degrade image quality when rotated
BdrRGB	Window<n>.BdrRGB	Integer	Window1.BdrRGB = 0 !Done Window1.BdrRGB	Get or set the colour of the border using RGB represented as a integer.
HFlip	Window<n>.HFlip	Boolean	Window1.HFlip = Off !Done Window1.HFlip	Get or set if the Window is inverted horizontally.
VFlip	Window<n>.VFlip	Boolean	Window1.VFlip = Off !Done Window1.VFlip	Get or set if the Window is inverted vertically.

Command	Syntax	Type	Example	Description
FTB	Window<n>.FTB	Integer	Window1.FTB = 0 !Done Window1.FTB	Get or set the brightness for this Window. The range is 0 to 256 with 0 being full brightness and 256 being black.
SCFTB	Window<n>.SCFTB	Boolean	Window1.SCFTB = Off !Done Window1.SCFTB	Get or set the Fade Through Black animation property for this Window.
SCHShrink	Window<n>.SCHShrink	Boolean	Window1.SCHShrink = Off !Done Window1.SCHShrink	Get or set the Horizontal Shrink animation property for this Window.
SCVShrink	Window<n>.SCVShrink	Boolean	Window1.SCVShrink = Off !Done Window1.SCVShrink	Get or set the Vertical Shrink animation property for this Window.
SCSpin	Window<n>.SCSpin	Boolean	Window1.SCSpin = 0 !Done Window1.SCSpin	Get or set the Spin animation property for this Window. The range is -7 to 7 with 0 being off, negative numbers are for anti-clockwise and positive numbers for clockwise spins.
AccountForBezel	Window<n>.AccountForBezel	Boolean	Window1.AccountForBezel = No !Done Window1.AccountForBezel	<b>CORIOgrapher only.</b> Get or set if the "Account for Bezel" option is enabled.
PhysicalCenterX	Window<n>.PhysicalCenterX	Integer	Window1.PhysicalCenterX = 547800 !Done Window1.PhysicalCenterX	<b>CORIOgrapher only.</b> Numerical value for window placement within CORIOgrapher software.
PhysicalCenterY	Window<n>.PhysicalCenterY	Integer	Window1.PhysicalCenterY = 0 !Done Window1.PhysicalCenterY	<b>CORIOgrapher only.</b> Numerical value for window placement within CORIOgrapher software.
PhysicalWidth	Window<n>.PhysicalWidth	Integer	Window1.PhysicalWidth = 1018300 !Done Window1.PhysicalWidth	<b>CORIOgrapher only.</b> Numerical value for window placement within CORIOgrapher software.



Command	Syntax	Type	Example	Description
PhysicalHeight	Window<n>.PhysicalHeight	Integer	Window1.PhysicalHeight = 572800 !Done Window1.PhysicalHeight	<b>CORIOgrapher only.</b> Numerical value for window placement within CORIOgrapher software.
KeyingEnabled	Window<n>.KeyingEnabled	Integer	Window1.KeyingEnabled = On !Done Window1.KeyingEnabled	Turns keying On or Off for a window. Values: Off = No keying (default) On = Keying
KeyingYMin	Window<n>.KeyingYMin	Integer	Window1.KeyingYMin= 0 !Done Window1.KeyingYMin	Sets minimum luma keying value. Range: 0 to 255 (Default 0)
KeyingYMax	Window<n>.KeyingYMax	Integer	Window1.KeyingYMax= 0 !Done Window1.KeyingYMax	Sets maximum luma keying value. Range: 0 to 255 (Default 0)
KeyingYSoft	Window<n>.KeyingYSoft	Integer	Window1.KeyingYSoft= 5 !Done Window1.KeyingYSoft	Sets luma keying softness. Higher values for softer and lower values for harder keying Range: 0 to 15 (Default 1)  Note: Setting this to 0 will turn off keying.

## Events

Category	Syntax	Event	Example	Description
WINDOW	INPUT, <window>, <input>	INPUT	!Event WINDOW,INPUT,Window1,Slot5.In1	Triggered when the source to WindowN is changed, report back the new input source.

## Canvases Commands

In Canvas<n> the “<n>” represents the number of the Canvas (for example “1” for Canvas1).

It is possible to use either Canvas<n> or Canvases.Canvas<n> in place of Routing.Canvases.Canvas<n>.

### Properties

Property Name	Syntax	Type	Example	Description
Canvases	Canvases	List	Canvases.Canvas1 = <...> Canvases.Canvas2 = <...> ... !Done Canvases	List the Canvases.
Canvas<n>	Canvas<n>	List	Canvas1.FullName = Canvas1 Canvas1.Status = FREE Canvas1.Alias = NULL Canvas1.WindowList = Window1,Window2 Canvas1.LayoutList = Layout1 Canvas1.StbdCurrent = NULL Canvas1.AudioFollowWindow = 0 Canvas1.AudioMute = Off Canvas1.AudioSource = NULL Canvas1.AudioMode = FromSource Canvas1.AudioVolume = 100 !Done Canvas1	List all the properties of this Canvas.
FullName	Canvas<n>.FullName	String	Canvas1.FullName = Canvas1 !Done Canvas1.FullName	Read-only. Get the full name for this Canvas.
Alias	Canvas<n>.Alias	String	Canvas1.Alias = NULL !Done Canvas1.Alias	Get or set an alias name for this Canvas.
WindowList	Canvas<n>.WindowList	List	Canvas1.WindowList = Window1,Window2 !Done Canvas1.WindowList	Get or set the list of Windows that are associated with the Canvas
LayoutList	Canvas<n>.LayoutList	List	Canvas1.LayoutList = Layout1 !Done Canvas1.LayoutList	Get or set the list of layouts that the Canvas is assigned to.

Property Name	Syntax	Type	Example	Description
StbdCurrent	Canvas<n>.StbdCurrent	List	Canvas1.StbdCurrent Canvas1.StbdCurrent = Stbd1 !Done Canvas1.StbdCurrent	Read-only Get the current preset for the Canvas. "NULL" if not preset is active
AudioMode	Canvas<n>.AudioMode	String	canvas1.AudioMode = FromSource !Done canvas1.audiomode	Get or set the audio mode for the canvas FromSource – audio source for the canvas is defined by Canvas1.AudioSource FollowWindow – audio source for the canvas is defined by Canvas1.AudioFollowWindow Default; FromSource
AudioFollowWindow	Canvas<n>..AudioFollowWindow	Integer	Canvas1.AudioFollowWindow = 1 !Done Canvas1.AudioFollowWindow=1	Get or set the window ID of the audio being output on the canvas Default; 0
AudioSource	Canvas<n>.AudioSource	String	Canvas1.AudioSource = Slot1.In1 !Done Canvas1.AudioSource	Get or set the audio source of the audio being output on the canvas. Default; NULL
AudioMute	Canvas<n>.AudioMute	String	Canvas1.AudioMute = On	Get or set audio mute for the current canvas. On   Off Default; On
AudioVolume	Canvas<n>.AudioVolume	Integer	Canvas1.AudioVolume = 100 !Done Canvas1.AudioVolume	Get or set the audio volume of the audio being output on the canvas. Range; 0-100 (%) in steps of 1 Default; 100

## Events

Category	Syntax	Event	Example	Description
CANVAS	PROPERTY_CHANGED,<CanvasN>,<property>,<value>	PROPERTY_CHANGED	!Event CANVAS,PROPERTY_CHANGED,Canvas1,AudioMute,On	Canvas output audio mute status; On   Off
CANVAS	PROPERTY_CHANGED,<CanvasN>,<property>,<value>	PROPERTY_CHANGED	!Event CANVAS,PROPERTY_CHANGED,Canvas1,AudioMode,FromSource	Triggers on changes to a canvas' audio source; FollowWindow   FromSource
CANVAS	PROPERTY_CHANGED,<CanvasN>,<property>,<value>	PROPERTY_CHANGED	!Event CANVAS,PROPERTY_CHANGED,Canvas1,AudioFollowWindow,Window1	Triggers on a change to the Window being used for the audio being played out by the canvases when AudioMode=FollowWindow
CANVAS	PROPERTY_CHANGED,<CanvasN>,<property>,<value>	PROPERTY_CHANGED	!Event CANVAS,PROPERTY_CHANGED,Canvas1,AudioSource,Slot1.In1	Triggers on a change to the audio source being used for the audio being played out by the canvases when AudioMode=FromSource
CANVAS	PROPERTY_CHANGED,<CanvasN>,<property>,<value>	PROPERTY_CHANGED	!Event CANVAS,PROPERTY_CHANGED,Canvas1,AudioVolume,50	Triggers on a change to the audio output volume Range 0-100
CANVAS	STBDCURRENT_CHANGED,<CanvasN>,<StbdN>,<value>	STBDCURRENT_CHANGED	!Event CANVAS,STBDCURRENT_CHANGED,Canvas1,Stbd1	Triggers on a change to the current storyboard being used on canvas.

## Layouts Commands

In Layout<n> the "<n>" represents the number of the Layout (for example "1" for Layout1).

It is possible to use either Layout<n> or Layouts.Layout<n> in place of Routing.Layouts.Layout<n>.

### Properties

Property Name	Syntax	Type	Example	Description
Layouts	Layouts	List	Layouts.Layout1 = <...> Layouts.Layout2 = <...> Layouts.Layout2 = <...> Layouts.OutputsSync= <...> !Done Layouts	List the Layouts.
Layout<n>	Layout<n>	List	Layout1.FullName = Layout1 Layout1.Status = FREE Layout1.Alias = NULL Layout1.Canvas = Canvas1 Layout1.CanWidth4kUnit = 4096 Layout1.CanHeight4kUnit = 4096 Layout1.CanXCentre = 0 Layout1.CanYCentre = 0 Layout1.StbdActive = No Layout1.OutputList = Slot13.Out1,Slot16.Out2 Layout1.Mode = Normal Layout1.FrameRate = NULL Layout1.Lock = No !Done Layout1	List all the properties of this Layout.
FullName	Layout<n>.FullName	String	Layout1.FullName = Layout1 !Done Layout1.FullName	Read-only. Get the full name for this Layout.
Alias	Layout<n>.Alias	String	Layout1.Alias = NULL !Done Layout1.Alias	Get or set the alias name for this Layout.

Property Name	Syntax	Type	Example	Description
Canvas	Layout<n>.Canvas	Canvas	Layout1.Canvas = Canvas1 !Done Layout1.Canvas	Get or set the Canvas the Layout is assigned to.
CanHeight4kUnit	Layout<n>.CanHeight4kUnit	Integer	Layout1.CanWidth4kUnit = 4096 !Done Layout1.CanWidth4kUnit	Get or set the vertical image sizing value for the canvas. This is in the range -32 to 16383 (the smaller number is the larger image).
CanWidth4kUnit	Layout<n>.CanWidth4kUnit	Integer	Layout1.CanHeight4kUnit = 4096 !Done Layout1.CanHeight4kUnit	Get or set the horizontal image sizing value for the canvas. Range: -32 to 16383 (smaller number is larger image).
CanXCentre	Layout<n>.CanXCentre	Integer	Layout1.CanXCentre = 0 !Done Layout1.CanXCentre	Get or set the vertical centring value for the canvas This is in the range -8191 to 8191 (negative shifts down; positive shifts up).
CanYCentre	Layout<n>.CanYCentre	Integer	Layout1.CanYCentre = 0 !Done Layout1.CanYCentre	Get or set the horizontal centring value for the canvas. This is in the range -8191 to 8191 (negative shifts right; positive shifts left).
StbdActive	Layout<n>.StbdActive	Integer	Layout1.StbdActive = No !Done Layout1.StbdActive	Read only. Get if there is a Storyboard currently animating on this Layout.
OutputList	Layout<n>.OutputList	List	Layout1.OutputList = Slot12.Out1,Slot12.Out2 !Done Layout1.OutputList	Get or set the list of Outputs that are associated with the Layout.
FrameRate	Layout<n>.FrameRate	Integer	Layout1.FrameRate = p60 !Done Layout1.FrameRate = p60	<b>CORIOgrapher only.</b> Get or set the framerate for the layout

Property Name	Syntax	Type	Example	Description
Lock	Layout<n>.Lock	String	Layout1.Lock = Yes !Done Layout1.Lock = Yes	<p>Get or set how the layout is locked. Valid values: No   Yes Default: No</p> <p>In Synclock mode, if this is No, the layout is locked to itself. If you wish to lock multiple layouts together, then set this to Yes on all the required layouts.</p> <p>In Framelock mode, you must set this to Yes in order to lock this layout to the framelock source.</p>
Layouts.OutputsSync	Layouts.OutputsSync	List	Layouts.OutputsSync.LockMode = Synclock Layouts.OutputsSync.LockSource = NULL Layouts.OutputsSync.LockAccuracy = 1024 Layouts.OutputsSync.LockStatus = Off !Done Layouts.OutputsSync	<p>Read only. List all OutputsSync properties.</p>
OutputsSync.LockMode	Layouts.OutputsSync.LockMode	String	Layouts.OutputsSync.LockMode = Synclock !Done Layouts.OutputsSync.LockMode = Synclock	<p>Get or set the lock mode for the layout (canvas). Synclock will lock outputs on the layout. Framelock will lock to the source set in LockSource Valid values: Synclock   Framelock Default: Synclock</p>
OutputsSync.LockSource	Layouts.OutputsSync.LockSource	String	Layouts.OutputsSync.LockSource = Slot1.In1 !Done Layouts.OutputsSync.LockSource = Slot1.In1	<p>Get or set the frame lock source for the layout. Valid values: NULL   &lt;alias&gt;   &lt;SlotX.InY&gt; Default: NULL</p>

Property Name	Syntax	Type	Example	Description
OutputsSync.Lock Accuracy	Layouts.OutputsSync.LockAccuracy	Integer		Read only. Get the current frame lock accuracy for the layout. A value of 100 or less indicates the source is locked. Valid values: 0-1024 (1024 is displayed when in Synclock mode)
OutputsSync.Lock Status	Layouts.OutputsSync.LockStatus	String		Read only. Get the current frame lock status for the layout. Valid values: Off   Acquiring   Locked

## Events

Category	Syntax	Event	Example	Description
OUTPUTS_SYNC	PROPERTY_CHANGED,LockMode,<value>	PROPERTY_CHANGED	!Event OUTPUTS_SYNC,PROPERTY_CHANGED,LockMode,FrameLock	Triggers when the lock mode changes. Value: Synclock   FrameLock
OUTPUTS_SYNC	PROPERTY_CHANGED,LockSource,<value>	PROPERTY_CHANGED	!Event OUTPUTS_SYNC,PROPERTY_CHANGED,LockSource,Slot1.In1	Triggers on changes to the lock mode source. Value: NULL   <alias>   <SlotX.InY>
OUTPUTS_SYNC	PROPERTY_CHANGED,LockStatus,<value>	PROPERTY_CHANGED	!Event OUTPUTS_SYNC,PROPERTY_CHANGED,LockStatus,Locked	Triggers when the lock status changes. Value: Off   Acquiring   Locked
LAYOUT	PROPERTY_CHANGED,<LayoutN>,FrameRate,<value>	PROPERTY_CHANGED	!Event LAYOUT,PROPERTY_CHANGED,Layout1,FrameRate,p60	Triggers when the layout framerate changes. Only used by CORIOgrapher.
LAYOUT	PROPERTY_CHANGED,<LayoutN>,Lock,<value>	PROPERTY_CHANGED	!Event LAYOUT,PROPERTY_CHANGED,Layout1,Lock,Yes	Triggers when the layout lock has changed. Value: No   Yes



## Storyboard Commands

In Stbd<n> the "<n>" represents the number of the Storyboard (for example "1" for Stbd1).

It is possible to use either Stbds.Stbd<n> in place of Routing.Stbds.Stbd<n>.

### Properties

Property Name	Syntax	Type	Example	Description
Stbds	Stbds	List	Stbds.Stbd1 = <...> ... Stbds.Stbd50 = <...> !Done Stbds	List the Storyboards.
Stbd<n>	Stbds.Stbd<n>	List	Stbds.Stbd1.Name = start Stbds.Stbd1.Canvas = Canvas1 Stbds.Stbd1.Kfrms = <...> Stbds.Stbd1.Take() Stbds.Stbd1.Save() Stbds.Stbd1.Remove() Stbds.Stbd1.IsCurrent = No !Done Stbds.Stbd1	List all the properties of this Storyboard.
Name	Stbds.Stbd<n>.Name	String	Stbds.Stbd1.Name = start !Done Stbds.Stbd1.Name	Get or set the name for this Storyboard.
Canvas	Stbds.Stbd<n>.Canvas	Canvas	Stbds.Stbd1.Canvas = Canvas1 !Done Stbds.Stbd1.Canvas	Get or set the Canvas the Layout is assigned to.
IsCurrent	Stbds.Stbd<n>.IsCurrent	Boolean	Stbds.Stbd1.IsCurrent Stbds.Stbd1.IsCurrent = No !Done Stbds.Stbd1.IsCurrent	Read-only. Get the status of the storyboard. Returns Yes when the current storyboard is active  Values: Yes   No
Kfrms	Stbds.Stbd<n>.Kfrms	List	Stbds.Stbd1.Kfrms.Kfrm1 = (Window1.Input,0,Slot4.In1,Discrete)	Get a list of the Key Frames for this Storyboard.

Property Name	Syntax	Type	Example	Description
			Stbds.Stbd1.Kfrms.Kfrm2 = (Window1.CanWidth,0,1920,Linear) ... !Done Stbds.Stbd1.Kfrms	
Kfrm<n>	Stbds.Stbd<n>.Kfrms.Kfrm<n>	KeyFrame	Stbds.Stbd1.Kfrms.Kfrm1 = (Window1.Input,0,Slot4.In1,Discrete) !Done Stbds.Stbd1.Kfrms.Kfrm1	Get or set the attributes of this Key Frame.

## Methods

Command	Syntax	Type	Example	Description
Take	Stbds.Stbd<n>.Take()	Void	Stbds.Stbd1.Take() !Done Stbds.Stbd1.Take()	Execute this Storyboard
Save	Stbds.Stbd<n>.Save()	Void	Stbds.Stbd1.Save() !Done Stbds.Stbd1.Save()	Make this Storyboard persistent. Note it saved to the file system and automatically loaded on power on.
Remove	Stbds.Stbd<n>.Remove()	Void	Stbds.Stbd1.Remove() !Done Stbds.Stbd1.Remove()	Clear this Storyboard.

## Events

Category	Syntax	Event	Example	Description
STBD	ISCURRENT_CHANGED,<stbd N>,<is_current>	ISCURRENT_CHANGED	!Event STBD, ISCURRENT_CHANGED,Stbd1,1	Returns the index of the current storyboard and whether it is active or not.

## Preset Commands

It is possible to use Preset in place of Routing.Preset.

Note: Do not use presets to add and remove windows. If you want to remove a window from your display with a preset, do not delete the window. Instead move the window away from the display, resize the window smaller to reduce the video bandwidth, and set the preset duration to 0 seconds.

### Properties

Property Name	Syntax	Type	Example	Description
Preset	Preset	List	Preset.PresetList() Preset.Take = 1 Preset.Read = 1 Preset.Valid = No Preset.NameRead = start Preset.CanvasRead = NULL Preset.DurationRead = 0 Preset.SeqNumRead = 0 Preset.FlagsRead = 0 Preset.SaveRead() Preset.RestoreRead() Preset.RmvPresetFileRead() Preset.SaveAllPresets() Preset.RestoreAllPresets() Preset.RemovePresetFiles() !Done Preset	List all the preset properties.
Take	Preset.Take	Integer	Preset.Take = 1 !Done Preset.Take	Get or set the active preset (by ID number: 1-49) This is the equivalent to Preset.Read followed by Preset.RestoreRead.
Read	Preset.Read	Integer	Preset.Read = 1 !Done Preset.Read	Get or set the preset to be edited (by ID number: 1-49)

Property Name	Syntax	Type	Example	Description
Valid	Preset.Valid	Boolean	Preset.Valid = No !Done Preset.Valid	Read-only. Get if the active preset has been saved.
NameRead	Preset.NameRead	String	Preset.NameRead = start !Done Preset.NameRead	Get or set the name of the active preset. The name may be up to 20 alphanumeric characters, no spaces.
CanvasRead	Preset.CanvasRead	String	Preset.CanvasRead = NULL !Done Preset.CanvasRead	Returns the name of the canvas associated with the active preset.
DurationRead	Preset.DurationRead	Integer	Preset.DurationRead = 0 !Done Preset.DurationRead	The time in milliseconds for a Storyboard to be applied. The range is 0 to 60,000.

## Methods

Command	Syntax	Type	Example	Description
PresetList	Preset.PresetList()	List	Routing.Preset.PresetList[1]=start,Canvas1,1000 Routing.Preset.PresetList[2]=side_by_side,Canvas1,3000 Routing.Preset.PresetList[3]=top_and_bottom,Canvas1,2000 Routing.Preset.PresetList[4]=two,Canvas1,1000 Routing.Preset.PresetList[5]=one,Canvas1,2000 Routing.Preset.PresetList[8]=one_inverted,Canvas1,2000 Routing.Preset.PresetList[11]=more,Canvas1,1000 !Done Preset.PresetList()	List all the valid presets by ID. The result will contain the preset name and Canvas name if any. Note that this list is an ordered sparse list. There may be IDs that are unused that these will not be shown in the list.

Command	Syntax	Type	Example	Description
SaveRead	Preset.SaveRead()	Void	// Preset(s) saved. !Done Preset.SaveRead()	Save the active preset from the live data (RAM) to the on-chip memory.
RestoreRead	Preset.RestoreRead()	Void	// Preset(s) restored. !Done Preset.RestoreRead()	Restore the active preset from the on-chip memory to the live data (RAM).
RmvPresetFileRead	Preset.RmvPresetFileRead()	Void	// Preset(s) cleared. !Done Preset.RmvPresetFileRead()	Clear the active preset from the on-chip memory.
RemovePresetFiles	Preset.RemovePresetFiles()	Void	// Preset(s) cleared. !Done Preset.RemovePresetFiles()	Clear all presets from the on-chip memory.

## Events

Category	Event	Syntax	Example	Description
PRESET	TAKE	TAKE,<preset>	!Event PRESET,TAKE,1	Raised when a preset is taken
PRESET	COMPLETE	COMPLETE,<preset>	!Event PRESET, COMPLETE,1	Raised when a preset is completed
PRESET	SAVE	SAVE,<preset>	!Event PRESET,SAVE,1	Raised when a preset is saved
PRESET	REMOVE	REMOVE,<preset>	!Event PRESET, REMOVE,1	Raised when a preset is removed

## Custom Types

Name	Values
ActiveOff	Active, Off
AnalogType	RGBHV, RGBS, RGsB, YUV, CV+YC
AspectRatio	16:9, 4:3, 5:4, 16:10, 5:3, 1:1, 16:6
AudioInput	Slot<n>.In<n>.AudIn<X>, NULL – Where <n> is a number and <X> is a letter.
AvipStatusEnum	READY, SHUTDOWN, BOOTING, UPDATING, BOOTFAILED, UPDATEFAILED, WAITFORVERSION, CARDFAILED
Boolean	“On” and “Off” or “Yes” and “No”
ColourScale	Auto, RGB, YUV, Black, RGB_601, RGB_709, YUV_601, YUV_709, Ident.
DisplayType	Monitor, Projector, None
FoundNot	Found, Not_Found
FoundOff	Found, Off
FramelockStatus	Locked, Unlocked
FrameType	I Interlaced P Progressive
GenlockStatus	Off, Locked
HDBaseTError	The quality of the HDBaseT link. Max error Status: Valid: <n> : <n> : <n> : <n>                      The error statistics have stabilised. Caution: <n> : <n> : <n> : <n>                      The error statistics have not yet stabilised. Four channels of error statistics. If valid, the lower the number the better the quality of the link For example: Valid: 16 : 15 : 15 : 16
HDBaseTHDMI	The current state of the Video transfer: HDBASE_T_HDMI_NONE                      No video is being transmitted over the link. HDBASE_T_HDMI_ON                      Un-encrypted video is being transmitted over the link. HDBASE_T_HDMI_HDCP_ON                      Encrypted video is being sent over the link. HDBASE_T_HDMI_INDETERMINATE                      Warning, unable to read remote status.

Name	Values																						
HDBaseTLink	<p>Local and remote link status:</p> <table border="0"> <tr> <td>HDBASE_T_LINK_NONE</td> <td>No link established.</td> </tr> <tr> <td>HDBASE_T_LINK_ON</td> <td>Link is established.</td> </tr> <tr> <td>HDBASE_T_LINK_LOW_POWER</td> <td>Link has entered a low power mode.</td> </tr> <tr> <td>HDBASE_T_LINK_ETHER_ONLY</td> <td>Ethernet only mode.</td> </tr> <tr> <td>HDBASE_T_LINK_INDETERMINATE</td> <td>An error condition has occurred.</td> </tr> </table> <p>Note that the remote link and the local link should normally be expected to be in the same state. A difference would indicate an error condition, or a possible incompatibility between the transmitter and the receiver.</p>	HDBASE_T_LINK_NONE	No link established.	HDBASE_T_LINK_ON	Link is established.	HDBASE_T_LINK_LOW_POWER	Link has entered a low power mode.	HDBASE_T_LINK_ETHER_ONLY	Ethernet only mode.	HDBASE_T_LINK_INDETERMINATE	An error condition has occurred.												
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HDBaseTStatus	<p>The status of the HDBaseT module, it consists of a configuration part and a mode part.</p> <p>The current configuration:</p> <table border="0"> <tr> <td>Unknown</td> <td>An error has occurred.</td> </tr> <tr> <td>Auto</td> <td>The link has auto configured. The expected value.</td> </tr> <tr> <td>Manual</td> <td>Not supported</td> </tr> </table> <p>The current mode:</p> <table border="0"> <tr> <td>Standard mode</td> <td>Default, normal operation.</td> </tr> <tr> <td>Disconnect</td> <td>Link is inactive.</td> </tr> <tr> <td>Long reach mode</td> <td>Link is attempting to work over a longer cable.</td> </tr> <tr> <td>Ethernet Fallback</td> <td>Link will pass Ethernet connections but not video.</td> </tr> <tr> <td>Reserved</td> <td>Link is in a reserved state. This will indicate an error condition.</td> </tr> <tr> <td>Powerdown 1</td> <td>The link has entered one of two low power modes</td> </tr> <tr> <td>Powerdown 2</td> <td>The link has entered one of two low power modes.</td> </tr> <tr> <td>HDMI Bypass</td> <td>Link is not being used. Entering this mode will indicate an error of some kind.</td> </tr> </table>	Unknown	An error has occurred.	Auto	The link has auto configured. The expected value.	Manual	Not supported	Standard mode	Default, normal operation.	Disconnect	Link is inactive.	Long reach mode	Link is attempting to work over a longer cable.	Ethernet Fallback	Link will pass Ethernet connections but not video.	Reserved	Link is in a reserved state. This will indicate an error condition.	Powerdown 1	The link has entered one of two low power modes	Powerdown 2	The link has entered one of two low power modes.	HDMI Bypass	Link is not being used. Entering this mode will indicate an error of some kind.
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HDCPDownstream	<p>Status of the HDCP link:</p> <table border="0"> <tr> <td>HoldOn</td> <td>Keep HDCP active</td> </tr> <tr> <td>KeepOff</td> <td>De-activate HDCP</td> </tr> <tr> <td>FollowSource</td> <td>Turns HDCP on or off depending on the source</td> </tr> </table>	HoldOn	Keep HDCP active	KeepOff	De-activate HDCP	FollowSource	Turns HDCP on or off depending on the source																
HoldOn	Keep HDCP active																						
KeepOff	De-activate HDCP																						
FollowSource	Turns HDCP on or off depending on the source																						
HDCPReq	Required, Off																						
HDCPSup	Supported, Off																						
HDCPStatus	None, v1_4, v2_2																						
HDCPVersion	All, v1_4, v2_2																						
InnerGrid	Off, Left, Right, Top, Bottom, All																						



Name	Values
KeyFrame	<p>Key frame properties (property,time,value,mode)</p> <p>property The Property to set</p> <p>time The time in milliseconds from start of Storyboard to this Key Frame.</p> <p>value The value to apply to the Property</p> <p>mode The mode to be used for the interpolation.</p> <p>Interpolation mode</p> <p>Discrete The value is applied at the mid-point between this and the previous Key Frame.</p> <p>Linear The value is applied during the frames between this and the previous Key Frame.</p>
Polarity	<p>N Negative</p> <p>P Positive</p>
Role	Administrator, PowerUser, User, Test
ScanMode	<p>I Interlaced</p> <p>P Progressive</p>
SrcLossColor	Black, Blue, Red, Green, Yellow, Magenta, Cyan, White
StatusEnum	UNKNOWN, OK, INVALID
SystemStatus	Serving, Busy
TestPattern	RGB_100, Black, 8x8_Grid, Dot, 8x8_ChqBrd
TypeChoice	<p>Options for DVI cards:</p> <p>DVI, RGBHV, RGsB, YUV, CV, YC</p> <p>Options for SDI cards</p> <p>SDI</p>
WindowStatus	FREE, ALLOCATED, IN USE, NULL

