

AV Connectivity, Distribution And Beyond...

VIDEO WALLS VIDEO PROCESSORS VIDEO MATRIX SWITCHES EXTENDERS SPLITTERS WIRELESS CABLES & ACCESSORIES

IP Controller for HDM-C6VWIP-SET AND 3RD PARTY CONTROLLERS







© 2013 Avenview Inc. All rights reserved.

The contents of this document are provided in connection with Avenview Inc. ("Avenview") products. Avenview makes no representations or warranties with respect to the accuracy or completeness of the contents of this publication and reserves the right to make changes to specifications and product descriptions at any time without notice. No license, whether express, implied, or otherwise, to any intellectual property rights is granted by this publication. Except as set forth in Avenview Standard Terms and Conditions of Sale, Avenview assumes no liability whatsoever, and claims any express or implied warranty, relating to its products are is strictly prohibited.

Product Application & Market Sectors



Corporate



House Of Worship



Military



Residential



Education



Industrial



Medical



Aviation



TABLE OF CONTENTS

١.	. GETTING STARTED	I
	I.I IMPORTANT SAFEGUARDS	
	1.3 REGULATORY NOTICES FEDERATION COMMUNICATIONSCOMISSION (FCC)	
-		
2.	INTRODUCTION	
	2.2 BEFORE INSTALLATION	
	2.2 BEFORE INSTALLATION	
	2.4 PANEL DESCRIPTION	
	2.4.1 Front Panel (CTRLPRO-VWIP)	
	2.4.2 Rear Panel (CTRLPRO-VWIP)	
R	INSTALLATION (CTRLPRO-VWIP)	
5.	3.1 ACCESSING THE CTRLPRO-VWIP WEB INTERFACE	
4.	BASIC OPERATION	
	4.1 Matrix Switching Command	
	4.2 TX/RX Settings	
	4.3 IP Setup	
	4.4 Alias	
	4.5 Commands	
	4.6 System Settings	
	4,7 IP Setup (TX and RX communication)	
	4.8 vIP Setup (telnet/browser communication)	
	4.9 Web Password	
	4.10 Debug Log	
	4.11 Commands	12
5.	CUSTOMISING THE UI	13
6.	CTRLPRO-VWIP CONTROL PROTOCOL	15
7.	INSTALLATION REFERENCE LOG	20



SECTION I: GETTING STARTED

I.I IMPORTANT SAFEGUARDS

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
- Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
- Repair or attempted repair by anyone not authorized by us.
- Any damage of the product due to shipment.
- Removal or installation of the product.
- External causes to the product, such as electric power fluctuation or failure.
- u se of supplies or parts not meeting our specifications.
- Normal wear and tear.
- Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

I.2 SAFETY INSTRUCTIONS

The Avenview CTRLPRO-VWIP, IP Controller function has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the CTRLPRO-VWIP should be used with care. Read the following safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- ▲ Do not dismantle the housing or modify the module.
- ▲ Dismantling the housing or modifying the module may result in electrical shock or burn.
- A Refer all servicing to qualified service personnel.
- ▲ Do not attempt to service this product yourself as opening or removing housing may expose you to dangerous voltage or other hazards
- 1 keep the module away from liquids.
- A Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- A Have the module checked by a qualified service engineer before using it again.
- ⚠ Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.



I.3 REGULATORY NOTICES FEDERATION COMMUNICATIONS COMMISSION (FCC)

This equipment has been tested and found to comply with part 15 of the f CC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment.

Warning symbols	Description
	ONLY USE THE PROVIDED POWER CABLE OR POWER ADAPTER SUPPLIED. DO NOT TAMPER WITH THE EI ECTRICAI PARTS. THIS MAY RESULTS IN ELECTRICAL SHOCK OR BURN.
\bigcirc	DO NOT TAMPER WITH THE UNIT. DOING SO WIII VOID THE WARRANTY AND CONTINUED USE OF THE PRODUCT.
BEWARE this unit contains static sensitive devices	THE VIDEO BOARDS ARE VERY SENSITIVE TO STATIC. PLEASE ENSURE IF RACK MOUNTED OR INSTALLED ON A SURFACE, IT SHOULD BE IN A GROUNDED ENVIROMENT.

Read & understand user guide before using this device.

Failure to follow the proper installation instructions could result in damage to the product and preventing expected results.



2. INTRODUCTION

The **Avenview CTRLPRO-VWIP**, IP Controller simply provides communication to our HDM-C6VWIP-SET and third party controllers to communicate, Telnet and RS-232 commands to automate high definition video and high quality audio to many screens. This device can be accessed from a WEB Browser and allow control commands to Avenview Video IP solution allowing connection by the following:-Point to Multi- Point with CAT5/6 requires a Managed/Unmanaged Network Switch (Cisco SG300 & SG500 series) which supports port based IEEE 802.1 VLAN, IGMP v2.0 or above protocol. For large application, we would recommend Dell Networking 5500 series. Matrix Function –with CAT 5/6 cable without any signal loss add multiple Sources to multiple RX which links via LAN by cascading Managed Ethernet switches up to 3 levels, to the Rx connected to the HD Monitors at different locations on the Network. Transporting Full HD 1080p video and internally JPEG video compression adapts to available network bandwidth if needed while retaining vivid picture with 5.1 PCM audio.

Videowall Function with CAT 5/6 cable without any signal loss add multiple Sources to multiple TX and RX to the HD displays to achieve a Multi Input videowall configuration. The device ensures flexibility within any videowall design, layout and configuration. Its modular design allows example 1x2 ,2x2 3x3 up to 16x16. Easily controlled via the Control Software to manage and setup the bezel, input and configuration of the Videowall.

The **CTRLPRO-VWIP** controller has the ability to communicate via telnet or RS232 from third party control systems such as Crestron ,Amx, and Control 4 to perform matrix switching and videowall fucntionality.





2.1 PACKAGE CONTENTS

Before you start the installation of the HDMI Extender, please check the package contents.

I	CTRLPRO-VWIP	ХI	
2	POWER ADAPTER (5V DC 2A) 5.5mm		
2	SERIAL PORT CABLE	XI	
3	USER MANUAL	хι	

2.2 **BEFORE INSTALLATION**

- Put the product in a level and stable location. If the product falls, it may cause damage or malfunction to components within the casing.
- Do not place the product in temperatures under 0°C or over 50°C. High humidity may also cause the unit to malfunction.
- Use the DC power adapter with correct specifications supplied with the unit. If the improper power supply is used, this may result in malfunction of the unit and may cause fire.
- Do not twist or pull by force the ends of the UTP cable. It will cause malfunction.

NOTE

The QUALITY and TRANSMISSION of the video signals depends on the characteristics and quality of the UTP cables. Higher resolutions and longer transmission distances require low skew cables (<25ns/upto 300m) for best performance. Unshielded CAT6 with metal RJ-45 connectors is recommended.



2.3 APPLICATION DIAGRAM





2.4.1 FRONT PANEL (CTRLPRO-VWIP)



I. POWER: Red LED when device is powered on	2. ACTIVITY: BLUE LED: Device working properly RED LED: Device is rebooting
3. RESET: Reset device to factory default settings (press and hold 5 second)	4. IP ADDRES LABEL: Insert label here to identify unit IP address.

2.4.2 REAR PANEL (CTRLPRO-VWIP)



I. ETHERNET: RJ45 Port	2. SERVICE: RS232 Debug Only
3. POWER: 5V/2A DC Power Supply Unit	



3. INSTALLATION (CTRLPRO-VWIP)

To setup Avenview CTRLPRO-VWIP please follow these steps for connecting to a device:

- I. Turn off all devices including monitors / TV
- 2. Connect a HDMI source (such as a Blu-Ray Disc player or pC) to the Transmitter HDM-C6VWIp-S
- 3. Connect u SB cable to the pC (only if pC is the source and your extending kVM function)
- 4. Connect IR Blaster to device if applicable to the source IR Eye and 3.5mm male to TX
- 5. Connect CAT5/6 from TX to RX CAT5/6 port HDM-C6VWIp-R 330 feet away
- 6. Connect Combo u SB keyboard and Mouse Wireless dongle to control pC at Display end 330 feet away.
- 7. Connect IR Receiver to device if applicable to any visible surface and 3.5mm male to RX
- 8. Ensure all cable connections are secure and not loose
- 9. plug in 12V DC power (supplied).
- 10.power on HDMI Source
- I I.power on the HDMI display



Required ONly in Extending Dektop or laptop

3.1 ACCESSING THE CTRLPRO-VWIP WEB INTERFACE

Follow steps below to access the web interface of the CTRLPRO-VWIP

1. Enter 192.168.11.243 into a web browser. For optimal performance, we recommend use of the latest versions of Firefox, Opera, Safari, Internet Explorer 11 or Chrome.

Attention The default IP address of the CTRLPRO-VWIP is 192.168.11.243. To connect you must have a network configured that allows this subnet or must set your PC to a 192.168.11.xxx address to connect. The IP address of the IP Control Box can be changed through the System Settings page.

2. Enter a password ("admin" by default) and click Login to access the device.

Firefox *			
IP Control Box System	+		
(192.168.11.243	🕞 🏫 📕 🤜 🧟 🖓 Google <ctrl- td="" 🔎="" 🔻<="" 🖬=""><td>+ 1</td><td>5-</td></ctrl->	+ 1	5-
🔊 Most Visited 🗍 Gettin	g Started 🛄 Suggested Sites 🛄 Web Slice Gallery		
	Welcome to IP Control Box Web System		
	welcome to IP control Box web system		
	Password: Login		



NOTE If you receive a 'server unavailable' system message after entering this address into your browser, ensure your PC is on the same subnet as the CTRLPRO-VWIP box by following these steps:

- I Click Start menu, go to Control Panel > Network and Sharing center > Change Adapter Settings > Local Area Connection. Right click and choose Properties.
- Local Area Connection Network cable unplused Disable Status Diagnose Bridge Connections Create Shortcut Delete Rename Properties
- 2 Highlight Internet Protocol Version 4 (TCP/IPv4) then click Properties

Networking	Sharing			
Connect us	ing:			
💇 Real	tek PCle GBE	Family Controlle	r	
			Co	onfigure
This conne	ction uses the	following items:		
🗹 🌁 Cli	ent for Microso	oft Networks		
	S Packet Sch			
		haring for Micro		s
		Version 6 (TCP		
1		Version 4 (TCP		
		ogy Discovery I		river
l	k-Layer Topol	ogy Discovery I	lesponder	
Insta		Uninstall	Pr	operties
Descriptio				
		rotocol/internet	Protocol The	default
wide area	a network prot	ocol that provid	es communica	
across di	verse intercon	nected network	S.	

3 Check Use the following IP address, for the IP address enter 192.168.11.x (if unsure use 192.168.11.5) Enter subnet mask number 255.255.0.0 Click OK, then click OK again.

Internet Protocol Version 4 (TCP/IPv4)	Properties		? ×		
General					
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.					
Obtain an IP address automatical	/				
Use the following IP address:					
IP address:	192.168.	11 .	5		
Subnet mask:	255.255.	0.	0		
Default gateway:					
Obtain DNS server address autom	atically				
Use the following DNS server addr	esses:				
Preferred DNS server:					
Alternate DNS server:					
🕅 Vaļidate settings upon exit			Ad <u>v</u> anced		
		К	Cancel		

4. Return to your browser and try entering the default IP again (192.168.11.243)



4. BASIC OPERATION

4.1 Matrix Switching Commands

Tabs at the top of the Home Screen page are used to access settings for Matrix, TX/RX Settings and System Settings.

All pages display Telnet API boxes where commands can be entered from the CTRLPRO-VWIP API.

Firefox *		100 100 100			x
P Control Box System +					
€ @ 192.168.11.243		🕞 🏫 📱 🔻 🥙 🔀 🕶 Google <ctrl+k></ctrl+k>	۰ 🖸 ۲	+ +	· () -
Most Visited Getting Started Suggested Sites Web Slice	allery				
					-
Matrix TX/RX Settings System Settings					
Load Matrix					
					- 11
Tolact ADI Commend					
Teinet API Command					
			(Apply	
Log					- II

Click the Load Matrix button, and the table of devices will appear with TX units across the top and the RX down the left hand side.

Press the box that links each TX & RX to test switching of the video to each RX. Devices who's names starts with EX131 are transmitters where as devices that start EX141 are receivers

Matrix TX/R	X Settings System Setting	32		
Load Matrix	\supset			
RX\TX		EX131-341B2280009C	EX131-341B22800072	
EX141-341B228000C3				
EX141-341B228000C4				
-	141-341B228000B5			
Device online Device offline				
	A green bar represents corresponding TX and RX are connected. Clicking the green bar changes colour to			
	clear to signify the corresponding TX and RX are disconnected.			
	A red bar denotes TX/RX connection is being processed			
A clear bar signifies corresponding TX and RX are not connected. Click to connect.				

To remove unwanted TX or RX units from the matrix the CTRLPRO-VWIP must be factory reset.



4.2 TX/RX Settings

The TX/RX Settings section enables IP settings and alias of each TX and RX to be configured as well as rebooting the system

and factory resetting the devices.

Get started by selecting the device to be configured from the list displayed and configure options as below:



4.3 IP Setup

Device Settings	ystem Settings	
Devices: 《 EX141-341B228000B5	©EX141-341B228000C3 ©EX141-341B228000C4 ©EX131-341B22800072 ©EX141-3	41B228000AD 🔘
Select a device you want to co	nfigure. (If the device list is empty, it means no device is available online.)	Reload
ID Satur		
IP Setup		
IP Mode:	® Auto IP [®] DHCP [®] Static	
IP Mode:		
	169.254.5.175	
IP Address:	169 254.5.175 255 255.0.0	
IP Address: Subnet Mask:	169 254.5.175 255 255.0.0	

GUI Element	Description
Auto IP	Obtain IP address automatically
DHCP	IP address assigned by DHCP server
Static	IP address manually configured
IP Address	IP address of TX/RX
Subnet Mask	Subnet mask of TX/RX
Default Gateway	Default gateway of TX/RX.

4.4 Alias

Alias' can be used in conjunction with API commands to simplify and shorten programming.

GUI Element	Description	
Alias		Apply

Note: Alias cannot contain any of the following symbols or combinations of letters/numbers: ',' ';' '_' '@', '*', '&', 'EX131', 'EX363', 'EX373', 'EX383', 'EX393', 'TX', 'EX141', 'EX403', 'RX'



Alias

Rename TX/RX alias for easier identification and use from API commands

4.5 Commands

```
Commands
Factory Default Reboot
```

GUI Element	Description
Factory Default	Restore TX/RX to factory default settings
Reboot	Reboot TX/RX

4.6 System Settings

System Settings contains the settings for the IP control box itself, comprising of two separate network connections for communication with RX/TX devices and communication to the PC/control system.

Each setting must be on the same subnet as other devices to enable communication between all devices.

The default Auto IP setting is recommended for RX & TX communication - devices will use Bonjour to discover each other.

IP Setup [TX and RX com	munication
IP Address:	169 254 1 1
Ir Address.	
Subnet Mask:	255.255.0.0
Default Gateway:	169.254.1.254
	oly, this IP control box will automatically reboot for the settings to take effect. Apply
	oly, this IP control box will automatically reboot for the settings to take effect. Apply
IP Setup [A telnet client a	192.168.11.243

4.7 IP Setup (TX and RX Communication)

IP Address:	169.254.1.1		
Subnet Mask:	255.255.0.0		
Default Gateway:	169.254.1.254		

GUI Element	Description		
IP Address	IP address for TX and RX communication		
Subnet Mask	Subnet mask for TX and RX communication		
Default Gateway	Default gateway for TX and RX communication		

4.8 IP Setup (Telnet/Browser communication)

IP Setup [A telnet client :	nd a browser communication	1	
in Setup py temet chent	ind a browser communication	u	
IP Address:	192.168.11.243		
Subnet Mask:	255 255 0 0		
Subilet Mask.	233.233.0.0		
Default Gateway:	192.168.11.1		
(Attention) After pressing Ap	by this IP control box will automat	ically reboot for the settings to take effect.	Apply
(Attention) Arter pressing Ap	iy, and i control box will automat	ically reboot for the settings to take effect.	Apply



GUI Element	Description		
IP Address	IP address for Telnet client and web		
Subnet Mask	Subnet mask for Telnet client and web		
Default Gateway	Default gateway for Telnet client and web		

4.9 Web Password

Web Password	
	Apply

GUI Element	Description	
Web Password	Login password for Web UI management page	
Default password	"admin" can be used to restore to factory settings if the user password is unknown	

4.10 Debug Log

Debug Log	
	Apply

NOTE: Debug files can only be used with the guidance of **AVENVIEW** support.

4.11 Commands

Commands				
Factory Default	Reboot	Shutdown		

GUI Element Description	
Factory Default	Restore IP Control Box to factory default settings
Reboot Reboot IP Control Box	
Shutdown	Shutdown IP Control Box

5. CUSTOMISING THE UI

The CTRLPRO-VWIP web interface supports the creation of custom banners, page names & icons to be added to

specific pages.

To customise the UI, enter http://IPaddress/custom into a browser to display the page below.

Customizati	D n	
Banner		Browse
Icon(32*32 ico)	Browse
System name	IP Control Box System]
	Change	
Restore cust	om settings	
Restore		

Click the Browse button in the Banner column to change the main banner (marked in red box below).

HDIP System
Matrix TX/RX Settings System Settings
Load Matrix
Telnet API Command
Apply
Log
14.40.25 receive:devicelist is EX383-9E3C17F39F07 EX373-341B22800304 EX373-341B228000B5 EX373-9EC92F86B65D
14.40.24 receivelipsetting2 is:lp4addr 192.168.11.243 netmask 255.255.0.0 gateway 192.168.11.1
14:40:24 receive.ipsetting is:ip4addr 169:254.1.1 netmask:255:255.0.0 gateway 169:254.1.254
14:40:24 result code:1, Welcome to use.
14:40:21 Info: WebSocket connection opened.

Click the Browse button in the lcon column to change the icon in the upper left corner of the browser (marked in red box below). You may need to clear the cache so that the icon can be displayed.



- System name is the web page title IP Control Box System by default.
- 2 Click Change to save the changes. Refresh the page to see the change take effect in the UI.
- 3 Restore button at the bottom restores to factory default settings.



6. CTRLPTO-VWIP CONTROL PROTOCOL

The Telnet protocol can be used to send configuration settings, matrix switching and video wall commands to the CTRLPRO-VWIP system.

Commands can only be issued to the CTRLPRO-VWIP by IP using **port 23**. The default IP address of the CTRLPRO-VWIP is **192.168.11.243** – in default configuration commands should be sent to this IP address.

Matrix Switching Control

Command	Matrix set TX1 RX1 RX2, TX2 RX3 RX4,	
Return	Matrix set: TX1 RX1 RX2, TX2 RX3 RX4,	
Note	Route one or Multiple TX on one or Multiple RX. Each individual TX and its routed RX or RX's compose a re- cord, and should be separated by a commas. Use NULL after a TX and any RX units from this TX will discon- nect. Matrix commands cannot be sent when an RX is in video wall mode, first remove the RX from the video wall or use the vw change command E.g.: "matrix set Source I Screen I Screen 2" sends TX with alias Source I to RX's with alias' Screen 1 & Screen 2	

Command	matrix get
Return	the connected TX/RX information with below format matrix information: TX1 RX1 TX2 RX3 TX2 RX4
Note	Obtain matrix information. Based on current TX/RX in the network, re-construct the network topology and feedback to the third-party controller.

Video-Wall

Command	vw add vw-name n m tx		
Return	videowall item vw-name create and assign tx to it		
Note	Create a video wall configuration, n and assign a TX. E.g.: "vw add wall I 2 2 Source I" creates a 2x2 video wall named "wall I" on the TX with the alias Source I.		
Command	vw add vw-name n m tx		
Return	videowall item vw-name removed		
Note	Remove a video wall configuration. E.g.: "vw rm wall!" removes wall! configuration from the		
Command	vw add vw-name tx I x y rx2 x y		
Return	videowall item vw-name configuration added: rx1 posion1 rx2 posion2 		
Note	Configure the video wall vw-name and add the corresponding RX's in the given positions, this will set up many RX and at once. Position (format): x y, represents a location, such as a 2 x 2 video-wall with 2 rows, and 2 columns. E.g.: "vw add wall! Screen! I I Screen2 I 2 Screen3 2 I Screen4 2 2" Sets the RX units with alias' Screen I to 4, to the noted x y positions in the video wall. Note a video wall by the name of wall! must have already been created using "vw add wall! I 2 tx!" before this command can be used.		



Command	vw add vw-name layout n m TX RXII RXI2 RXI3 RXIm RX2I RXnm		
Return	videowall vw-name layout n m tx rx11 rx12 rx13 rx1m rx21 rxnm		
Note	 Add a video wall layout n rows and m columns, subsequently the RX are automatically assigned positions in the video wall in order. The Parameter RX could be a '0', indicating there is no change to the corresponding RX. E.g.: "vw add wall I layout 2 2 Source I Screen I Screen 2 Screen 3 Screen 4" Note this is a faster way to configure a video wall as it does not require a vw add command previously but is not as flexible as the previous command. 		
Command	vw change rx tx		
Return	videowall config change: rxhostname moved from vw-name and connect to txhostname		
Note	Set RX to full-screen display of TX. Used for matrix switching in configurations that use video wall mode or to remove an individual RX from the video wall and display a different or identical TX. E.g.: "vw change Screen I Source4"		
Command	vw change vw-name tx-name		
Return	videowall vw-name tx connect to txhostname		
Note	Set all RX in the video wall to display another TX. E.g.: "vw change wall I input I		
Command	vw bezelgap vw-name ow oh vw vh		
Return	videowall vw-name's bezelgap: xx xx xx		
Note	Set the size of TV frame (video edge) to correct for large bezel screens. units are in mm (0.1cm). ow & oh = overall width & height of display including the bezel, vw & vh = screen width and height. E.g.: "vw bezelgap wall1 16100 9100 16000 9000"		
Command	vw pictureparam vw-name h-shift v-shift h-scale v-scale tearing-delay rx l rx2 rx3		
Return	set videowall vw-name's pictureparam: xx xx xx xx to rx1 rx2 rx3		
Note	Configure the rx1/rx2/rx3 image shift. 1 unit = 8 pixels, a negative number indicates to move left or up). Scale units = 1 Row or Columns / tearing delay units: μ s, values between 10000~16000). If a parameter is 0 it will not be changed. E.g.: "vw pictureparam wall1 2 1 3 3 12500 Screen3 Screen4" will shift the image on screen 3 and 4 16 pix-els down, 8 pixels right, whilst over-scaling by 3 rows and 3 columns and setting the tearing delay to 12500 μ s.		
Command	vw get		
Return	video wall information: vw- name I TX I row-number1 RX I I RX I 2 row-number2 RX 2 I RX 2 2 vw-name2 TX 2 row-number1 RX I I RX I 2		

Note Obtain video wall information and feedback video wall configurations.



Video-Wall 2

The vw2 is a special command set used for multi-host mode if the tearing delay command fails to resolve the tearing on a video wall.

Command	vw2 add vw-name n m tx1 tx2 txn		
Return	videowall2 item vw-name(n*m) create and assign tx1 tx2 txn to it		
Note	Create a video wall configuration, and assign a TX for each row. E.g.: "vw add wall I 2 2 Source I Source2" Creates a 2x2 video wall using RX I for row one and TX2 for row 2.		
Command	vw2 add vw-name rx1 position rx2 position		
Return	videowall2 item vw-name(n*m) configuration added: rx1 position1 rx2 position2 		
Note	Configure the video wall vw-name and add the corresponding TX and RX. E.g.: "vw2 add wall1 Screen1 1 Screen2 1 2 Screen3 2 1 Screen4 2 2" Sets the RX units with alias' Screen 1 to 4, to the noted x y positions in the video wall. Note a video wall by the name of wall1 must have already been created using "vw2 add wall1 2 2 tx1 tx2" before this command can be used.		
Command	vw2 add vw-name layout n m TX1 RX11 RX12 RXnm TX2 RX21 RX22 RXnm		
Return	videowall2 vw-name layout n*m tx1 rx11 rx12 rxnm rx1 tx2 rx21 rxnm		
Note	Add a video wall layout n*m, subsequently the RX based on display order. The Parameter Rx could be char- acter '0', indicates no need to change the corresponding RX. E.g.: "vw2 add wall1 layout 2 2 Source1 Screen1 Screen2 Source2 Screen3 Screen4" Creates a 2x2 video wall using RX1 for row one and TX2 for row 2.		
Command	vw2 rm vw-name		
Return	videowall2 item vw-name removed		
Note	Remove a video wall configuration E.g.: "vw2 rm wall!" removes wall! configuration from the		
Command	vw2 rm vw-name rx1 rx2 rx3		
Return	videowall2 config change:remove rx1 rx2 rx3 hostname from vw-name		
Note	Remove one or multiple rx from video wall. E.g.: "vw2 rm wall1 Screen1" removes Screen1 from the video wall		
Command	vw2 change vw-name tx1 tx2 tx3 txn		
Return	videowall2 vw-name config change: row1 tx1 row2 tx2		
Note	Change the selected input or inputs of a video wall, replacing a tx alias with 0 means no change. E.g.: "vw2 change wall1 Source1 0 Source3" Changes Wall1 inputs for row1 & row3 to rx1 & rx3		
Command	vw2 reset tx		
Return	videowall2 reset tx		
Note	Remove the video wall configuration of this tx and display a complete picture. (If this tx is in video wall mode, it will only display part of the picture.)		

Command	vw2 bezelgap vw-name ow oh vw vh [TX/RX1 TX/RX2]		
Return	videowall2 vw-name's bezelgap: xx xx xx XX/RX1 TX/RX2		
Note	Set the size of TV frame (video edge). TX/RX1, TX/RX2 are optional, if null, the whole video wall is corrected, otherwise individual one or a selection TX/RX units are corrected. E.g.: "vw bezelgap wall1 16100 9100 16000 9000"		
Command	w2 pictureparam vw-name h-shift v-shift h-scale v-scale [TX/RX1 TX/RX2]		
Return	set videowall2 vw-name's pictureparam: xx xx xx TX/RX1 TX/RX2		
Note	Configure the rx1/rx2/rx3 image shift. 1 unit = 8 pixels, a negative number indicates to move left or up). Scale units = 1 Row or Columns / tearing delay units: μ s, values between 10000~16000). If a parameter is 0 it will not be changed. TX/RX1, TX/RX2 are optional, if null, the whole video wall is corrected, otherwise individual one or a selection TX/RX units are corrected. E.g.: "vw2 pictureparam wall1 2 1 3 3 12500 Screen3 Screen4" will shift the image on screen 3 and 4 16 pixels down, 8 pixels right, whilst over-scaling by 3 rows and 3 columns and setting the tearing delay to 12500 μ s.		
Command	vw2 get		
Return	videowall2 information is: vw-name1 row-number1 TX1 RX11 RX12 row-number2 TX2 RX21 RX22 vw-name2 row-number1 TX3 RX11 RX12		
Note	Obtain video wall information from IP Control Box.		



Serial

Pass-through the serial command.

Command	serial -b param -r {on off} "command-string" hostname1 hostname2		
Return	serial command received: <cr> serial -b param -r {on off} "command-string" hostname1 hostname2</cr>		
Note	Configure devices hostname I, hostname2 to pass through serial command. Command-strings cannot con-tain "&". -b param, configure the RS232 format of TX/RX and connected peripherals, including Baud rate, Data bits, Parity and Stop bits. E.g.: -b 115200-8n1. -r {on off}, to turn on & off Carriage Return following the command-string. hostname1 hostname2, indicates the destination, could be multiple. E.g.: "serial -b 9600-8n1 -r on !PWR01! Screen1 Screen2 Screen3" Sends the command !PWR01! to Screens I, 2 & 3 with a carriage return at 9600 baud - 8 data bits, No parity, I Stop bit.		

Command device-name message-body Message Pass-through.

Command	Command device-name message-body	
Return	Reply: the device process the command feedback	
Note	Third-party controller or web ui pass through message-body to RX/TX.	

Notification commands send by the CTRLPRO-VWIP Notification of.

Command	N/A	
Return	notify endpoint {+ -} tx/rx tx/rx {- +} tx/rx tx/rx	
Note	Notify the third-party controller if any TX/RX is dropped out or added.	



7. INSTALLATION REFERENCE LOG

	HDM-C6VWIP-S			
TX#	IP ADDRESS	ALIAS	ADDITIONAL INFO	
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				



HDM-C6VWIP-R			
TX#	IP ADDRESS	ALIAS	ADDITIONAL INFO
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			









AV Connectivity, Distribution And Beyond...

TECHNICAI Supp ORT



USA Head Office

Office Avenview Corp. 275 Woodward Avenue kenmore, Ny 14217 phone: +1.716.218.4100 ext223 f ax: +1.866.387-8764 Email: info@avenview.com

Canada Sales

Avenview

151 Esna park Drive, u nit 11 & 12 Markham, Ontario, 1 3R 3B1 phone: 1.905.907.0525 f ax: 1.866.387.8764 Email: info@avenview.com

Avenview Europe

Avenview Europe Demkaweg I I 3555 HW u trecht Netherlands phone: +31 (0)85 2100- 613 Email: info@avenview.eu

Avenview Hong Kong

u nit 8, 6/f., k wai Cheong Centre, 50 k wai Cheong Road, k wai Chung, N.T. Hong kong phone: 852-3575 9585 Email: wenxi@avenview.com

Disclaimer

While every precaution has been taken in the preparation of this document, Avenview Inc. assumes no liability with respect to the operation or use of Avenview hardware, software or other products and documentation described herein, for any act or omission of Avenview concerning such products or this documentation, for any interruption of service, loss or interruption of business, loss of anticipatory profits, or for punitive, incidental or consequential damages in connection with the furnishing, performance, or use of the Avenview hardware, software, or other products and documentation provided herein.

Avenview Inc. reserves the right to make changes without further notice to a product or system described herein to improve reliability, function or design. With respect to Avenview products which this document relates, Avenview disclaims all express or implied warranties regarding such products, including but not limited to, the implied warranties of merchantability, fitness for a particular purpose, and non-infringement.