

Extron MAV Plus Series Matrix Switchers User Guide

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MAV Plus Series Matrix Switchers





Matrix Switchers Setup Guide

IMPORTANT

Go to <u>www.extron.com</u> for the complete user guide, installation instructions, and specifications before connecting the product to the power source.

Cross Point 450 Plus Series Cross Point Ultra Series MAV Plus Series Matrix Switchers

Safety Instructions

WARNING: This symbol, when used on the product, is intended to alert the user of the presence of uninsulated dangerous voltage within the product's enclosure that may present a risk of electric shock.

ATTENTION: This symbol, ..., when used on the product, is intended to alert the user of important operating and maintenance (servicing) instructions in the literature provided with the equipment.

For information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the Extron Safety and Regulatory Compliance Guide, part number 68-290-01, on the Extron website, www.extron.com.

NOTE: For more information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the "Extron Safety and Regulatory Compliance Guide" on the Extron website.

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Introduction

NOTES:

- For more information on any subject in this guide, refer to the Cross Point 450 Plus / Cross Point Ultra / MAV Plus User Guide, available on the Extron website (<u>www.extron.com</u>).
- In this manual, the term "Cross Point", when "450 Plus" or "Ultra" is not specified refers to either the Cross Point 450 Plus or the Cross Point Ultra.

About this Guide

This setup guide allows you to easily and quickly set up and configure your matrix switcher. Step by step instructions show you how to connect the hardware. The guide also shows you how to perform basic operations and use both the front panel controls and selected Simple Instruction Set (SIS) commands. This guide also shows you how to load and start up the Windows ® -based Matrix Switchers Control Program. Lastly, this guide shows you how to connect to the built-in HTML pages, which you can use to operate the switcher.

About the Matrix Switchers

The Extron matrix switchers covered in this manual distribute any input to any combination of outputs. The switchers can route multiple input/output combinations simultaneously. The switchers are available in a variety of matrix sizes (the number of inputs and outputs).

The Cross Point switchers are available in HV (RGBHV video) and HVA (RGBHV video and audio) models.

The MAV Plus matrix switchers are available in the following models:

- HDA HDTV/component video and audio
- HD HDTV/component video only
- SVA S-video and audio
- SV S-video only
- AV Composite video and audio
- AV RCA Composite video and audio on RCA connectors (128 size only)
- V Composite video only
- A Audio only

NOTES:

- In this manual, the term "video model" refers to any Cross Point or MAV Plus switcher that switches video.
- In this manual, the term "audio model" refers to any Cross Point or MAV Plus switcher that switches audio.

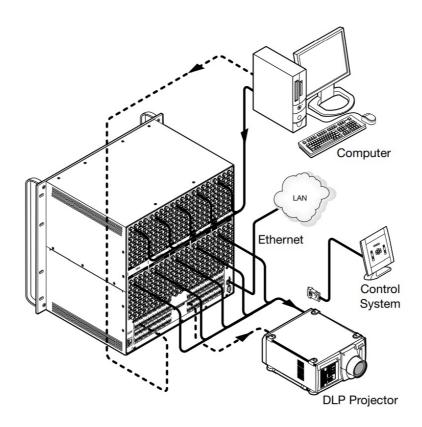


Figure 1. Typical Matrix Switcher Application

Installation

Rear Panel

NOTES:

- The CrossPoint 450 Plus switchers are housed in enclosures that range from 8U to 10U (see figure 2) to support their different video format and matrix sizes.
- The CrossPoint Ultra switchers are housed in enclosures that range from 3U to 6U to support their different video format and matrix sizes.
- Smaller matrix sizes within a form factor have fewer input and/or output connectors. The arrangement of connectors and features in switchers with different form factors is different from what is shown in figure 2.

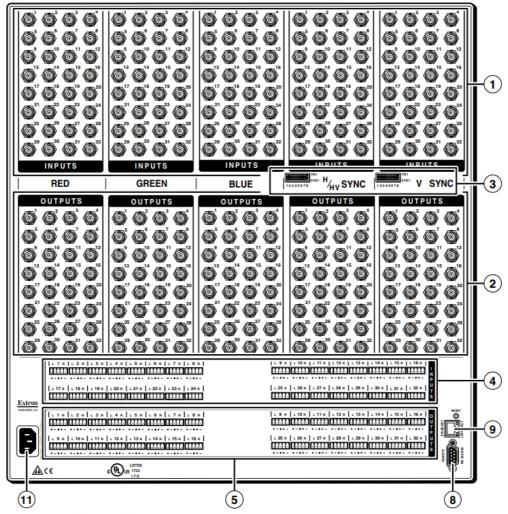


Figure 2. CrossPoint 450 Plus 3232 HVA Rear Panel

NOTE: The MAV Plus switchers are housed in enclosures that range from 8U (see figure 3) to 2U (see figure 4) to support their different video format and matrix sizes. The arrangement of connectors and features in switchers with different form factors is different from what is shown in figure 2.

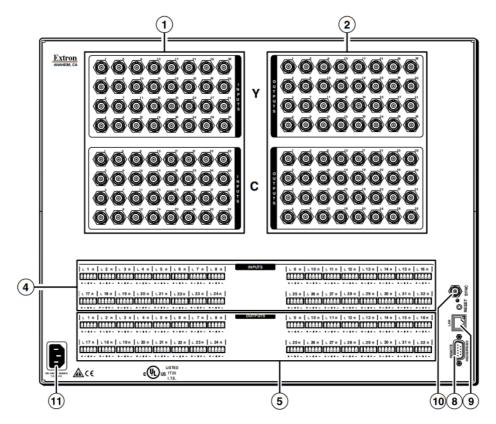


Figure 3. MAV Plus 3232 SVA Matrix Switcher

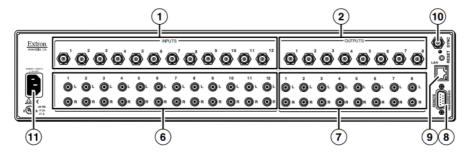


Figure 4. MAV Plus 128 AV RCA Matrix Switcher

Making connections and rear panel settings

WARNING: Turn the in

WARNING: Turn the input and output devices off and unplug their power cords.

NOTE: Video connectors are grouped by video plane. Connect the input or output on each video plane to the corresponding connector in the correct group. Refer to the CrossPoint 450 Plus / CrossPoint Ultra / MAV Plus Switcher Manual to connect the various video formats to and from the various models if you are not sure.



- 1. **Video inputs** Connect RGBHV, RGBS, RsGsBs, RsGsBs, component/HDTV video, S-video, or composite video sources, as appropriate to the video format and matrix size or your switcher model.
- 2. **Video outputs** Connect RGBHV, RGBS, RsGsBs, RsGsBs, component/HDTV video, S-video, or composite video displays, as appropriate to the video format and matrix size of your switcher model's.
- 3. Sync termination switches (CrossPoint switchers) Set the switches as necessary to condition non-TTL sync levels greater than 5 Vp-p. Sync termination enables the sync to be properly passed from input to all selected outputs.

NOTES:

- CrossPoint 450 Plus switchers have Sync termination switches for inputs 1 through 8.
- CrossPoint Ultra switchers have Sync termination switches for inputs 1 through 4.
- The matrix switchers have two sets of sync termination switches; one for horizontal or combined sync and a second set for vertical sync.

510 ohms — The default position, suitable for most video.

75 ohms — Typically required only for an input with non-TTL sync (greater than 5 V p-p).

NOTE: An input that produces an out of sync display, a display that is rolling vertically and/or tearing horizontally, could indicate a non-TTL sync input. If you are not sure, check the specifications in the user manual for the input device.

 Connections for balanced and unbalanced audio inputs (most audio models) — Connect balanced or unbalanced stereo audio inputs to these 5-pole captive screw connectors.

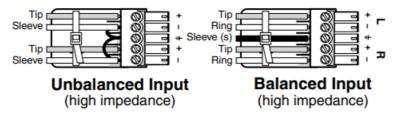


Figure 5. Audio Input Connector Wiring

5. Connections for balanced and unbalanced audio outputs (most audio models) — Connect balanced or unbalanced stereo audio output devices to these 5-pole captive screw connectors.

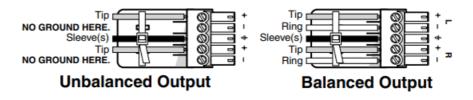


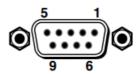
Figure 6. Audio output connector wiring

ATTENTION:

- For unbalanced audio, connect the sleeves to the ground contact. DO NOT connect the sleeves to the negative (-) contact.
- 6. Connections for unbalanced audio inputs

(MAV Plus 126 AV RCA) — Connect unbalanced stereo audio inputs to each pair (left and right) of female RCA onnectors. ● R

- 7. Connections for unbalanced audio outputs (MAV Plus 126 AV RCA) Connect unbalanced stereo audio output devices to each pair (left and right) of female RCA connectors.
- 8. Remote port If desired, connect a control system or computer to the rear panel Remote RS-232/RS-422 port.



NOTE: Serial port defaults: RS-232, 9600 baud, no parity, 8-bit, 1 stop bit, no flow control.

RS-232			l	RS-422			
					Matrix Sizes:		
	All	Models	MA\	/ Plus 248 / 328 A	241	2 — 3232	
Pin#	Pin	Function	Pin	Function	Pin	Function	
1	_	Not used	_	Not used	TX+	Transmit +	
2	TX	Transmit	TX-	Transmit –	TX-	Transmit -	
3	RX	Receive	RX-	Receive -	RX+	Receive +	
4	_	Not used	_	Not used	RX-	Receive -	
5	Gnd	Ground	Gnd	Ground	Gnd	Ground	
6	_	Not used	_	Not used	_	Not used	
7	_	Not used	RX+	Receive +	_	Not used	
8	_	Not used	TX+	Transmit +	_	Not used	
9	_	Not used	_	Not used	_	Not used	

 LAN port — If desired, connect a network WAN or LAN hub, a control system, or computer to the Ethernet RJ-45 port.

Network connection — Wire as a patch (straight) cable.

Computer or control system connection — Wire the interface cable as a crossover cable.

NOTE: The factory default IP address is 192.168.254.254.

10. External Sync (MAV Plus) — If desired, attach an external sync timing device to the external sync connector.

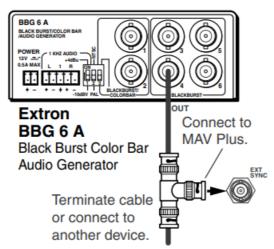


Figure 7. External Sync Connection

11. **Power** — Plug the switcher into a grounded AC source.

Front Panel Configuration Port (Matrix Sizes up to 1616, MAV Plus 32 A, and MAV Plus 248 A)

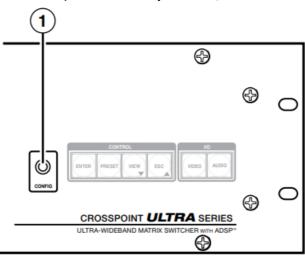


Figure 8. Front Panel Configuration Port

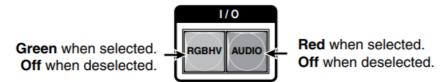
1. **Configuration port** — If desired, connect a control system or computer to the front panel Configuration (RS-232) port. Use an optional Extron 9-pin D to 2.5 mm mini jack TRS RS-232 cable.

Operation

NOTE: The video selection button is labeled "RGBHV" on the CrossPoint switchers and "Video" on the MAV Plus switchers. The two labels are used interchangeably in this guide.

Creating a Tie

- 1. Press and release the Esc button to clear any input button, output button, or control button indicators that may be lit.
- 2. Press and release the Video button, Audio button, or both to select or deselect video, audio, or both, as desired.



NOTE: Audio or video can be broken away (tied by itself) by selecting only the Video button or only the Audio button.

3. Press and release the desired input button.

The button lights to indicate the selection.



4. Press and release the desired output button(s).

Amber indicates RGBHV/video and audio tie. Green indicates RGBHV/video only tie. Red indicates audio only tie.

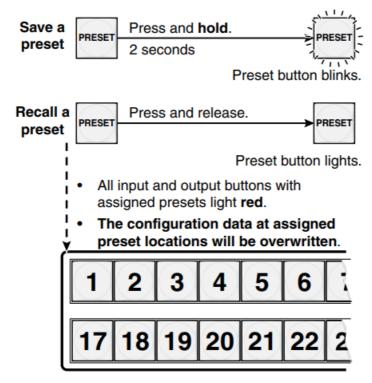


Green indicates the need to confirm the change.

5. Press and release the Enter button. All button indicators turn off.

Saving or Recalling a Preset

Save a preset — Press and hold the Preset button until it flashes.
 Recall a preset — Press and release the Preset button.



2. Press and release the desired input or output button.

The button blinks **red** to indicate that this **preset** is selected to save or recall.



3. Press and release the Enter button.

Setting the Front Panel Locks (Executive Modes)

The matrix switcher has three levels of front panel security lock that limit the operation of the switcher from the front panel. The three levels are:

Lock mode 0 — The front panel is completely unlocked.

Lock mode 1 — All changes are locked from the front panel (except for setting Lock mode 2). Some functions can be viewed.

Lock mode 2 — Basic functions are unlocked. Advanced features are locked and can be viewed only. **Basic** features consist of:

- · Making ties
- · Saving and recalling presets
- Setting input audio gain and attenuation
- · Changing Lock modes

Advanced features consist of:

- Setting video and audio output mutes
- · Setting audio output volume

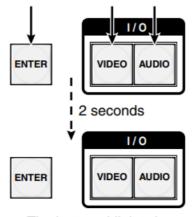
NOTE: The switcher is shipped in Lock mode 2.

Selecting Lock mode 2 or toggling between mode 2 and mode 0 NOTES:

- If the switcher is in Lock mode 0 or mode 1, this procedure selects mode 2.
- If the switcher is in Lock mode 2, this procedure selects mode 0 (unlocks the switcher).

Toggle the lock on and off by pressing and holding the **Enter** button, the Video button, and the **Audio** button for approximately 2 seconds.

Press and hold simultaneously.

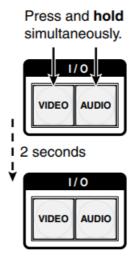


The buttons blink twice. Release the buttons.

Selecting Lock mode 2 or toggling between mode 2 and mode 1 NOTES:

- If the switcher is in Lock mode 0 or mode 1, this procedure selects mode 2.
- If the switcher is in Lock mode 2, this procedure selects mode 1.

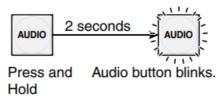
Toggle the lock on and off by pressing and holding the Video button and the Audio button for approximately 2 seconds.



The buttons blink twice. Release the buttons.

Viewing and Adjusting the Audio Level

1. Press and hold the Audio button until it flashes.



- 2. Press an input or output button. Refer to the CrossPoint 450 Plus / CrossPoint Ultra / MAV Plus Switcher Manual, chapter 3, "Operation", to read the displayed value.
- 3. Increase/decrease the level or volume by pressing the Esc (▲) and View (▼) buttons.
- 4. Press and release the Audio button to exit.

Viewing and Adjusting the Audio Level

1. Press the View button. Output buttons light for outputs that have no ties established.

NOTES:

- If the Audio button blinks, audio is broken away (switched separately from video).
- If an output button blinks, that output is muted. To toggle mute on and off, press and hold the output button for 2 seconds.
- 2. Press an input button. The buttons for all tied outputs light (amber for video and audio, green for video only, and red for audio only).
- 3. Press an output button. The buttons for the tied input and all tied outputs light.
- 4. Press the View button. All input and output buttons return to an unlit state.

Remote Control

Selected SIS Commands

The switchers have Simple Instruction Set commands that you can use for operation and configuration. You can run these commands from a PC connected to either of the serial ports of the switcher or the Ethernet port. See **8**, **9** on page 7 and a on page 8, for connection information.

Establishing a network (Ethernet) connection

Establish a network connection as follows:

1. Open a TCP socket to port 23 using the switcher IP address.

NOTE: The factory default IP address is 192.168.254.254.

The switcher responds with a copyright message including the date, the name of the product, firmware version, part number, and the current date and time.

NOTES:

- If the switcher is not password-protected, the device is now ready to accept SIS commands.
- If the switcher is password-protected, a password prompt appears.
- The factory configured passwords for all accounts on this device have been set to the device serial number. In the event of a complete system reset, the passwords convert to the default, which is no password.
- 2. If the switcher is password protected, enter the appropriate password.

If the password is accepted, the switcher responds with Login User or Login Administrator.

If the password is not accepted, the Password prompt reappears.

Connection timeouts

The Ethernet link times out and disconnects after a designated period of time of no communications. By default, this timeout value is set to five minutes but the value can be changed. See the Set Connection Timeout command on page 20.

NOTE: Extron recommends leaving the default timeout at five minutes and periodically issuing the Query (Q) command to keep the connection active or disconnecting the socket and reopening the connection when necessary.

Number of connections

A switcher can have up to 200 simultaneous TCP connections, including all HTTP sockets and Telnet connections. When the connection limit is reached, the switcher accepts no new connections until some have been closed. No error message or indication is given that the connection limit has been reached. To maximize performance of your switcher, the number of connections should stay low and unnecessary open sockets should be closed.

Verbose mode

Telnet connections to a switcher can be used to monitor for changes that occur on the switcher, such as front panel operations and SIS commands from other Telnet sockets or a serial port. For a Telnet session to receive change notices from the switcher, the Telnet session must be in verbose mode 3. See the Verbose Mode command on page 20. In verbose mode 3, the Telnet socket reports changes in messages that resemble SIS command responses.

Host-to-switcher instructions

The switcher accepts SIS commands through either serial port. SIS commands consist of one or more characters per command field.

They do not require any special characters to begin or end the command character sequence. Each switcher response to an SIS command ends with a carriage return and a line feed (CR/LF = <-), which signals the end of the response character string. A string is one or more characters.

NOTE: The table that begins on the next page is a partial list of SIS commands. For a complete listing, see the CrossPoint 450 Plus / CrossPoint Ultra / MAV Plus Switcher User Guide, chapter 4, "Programmer's Guide".

Command	SIS command (host to switcher)	Response (switcher to host)	Aditional information		
Create and view ties					
NOTES:					
Commands can be entered back-to-back in a string, with no spaces. For example: 1*1!02*02&003*003%4*24\$.					
 The matrix switchers support 1-, 2-, 	and 3-digit numeric en	tries (1*1!, 02*02&, or 003*0	003%).		
 The & tie command for RGB and the 	% tie command for vi	deo can be used interchang	eably.		
The & read tie command for RGB and	d the % read tie comm	nand for video can be used	interchangeably.		
Tie input to output X2, video and audio	X1]*X2!	OutX2•InX1•All←	Tie input X1 video and audio to output X2.		
Example:	1*3!	Out03°In01°Al1	Tie input 1 video and audio to output 3.		
Tie input X1 to output X2, RGBHV only	X1*X2&	Out X2 •In X1 •RGB←	Audio breakaway.		
Example (see 3rd NOTE bullet, above):	10*4&	Out04°In10°RGB←	Tie input 10 RGB to output 4.		
Tie input X1 to output X2, video only	X1*X2%	OutX2•InX1•Vid←	Audio breakaway.		
Example (see 3rd NOTE bullet, above):	7*5%	Out05•In07•Vid ←	Tie input 7 video to output 5.		
Tie input X1 to output X2, audio only	X1*X2\$	Out X2 In X1 Aud	Audio breakaway.		
Example:	24*04\$	Out04•In24•Aud ←	Tie input 24 audio to output 4.		
Read RGB output tie	X2&	X1 ←	RGBHV input X1 is tied to output X2.		
Read video output tie	X2%	X1	Video input X1 is tied to output X2.		

X1**←**

00 – (maximum number of inputs for your model) (00 = untied) 01 – (maximum number of outputs for your model)

Audio input X1 is tied to output X2.

X2\$

Read audio output tie

KEY:

X1 = Input number X2 = Output number

Command	SIS command (host to switcher)	Response (switcher to host)	Aditional information	
Video and audio mute commands				
RGB or video mute	X2 *1B	Vmt X2 *1 ←	Mute output X2 RGB (video off).	
RGB or video unmute	X2 *0B	Vmt X2 *0 ←	Unmute output 2 RGB (video on).	
Read RGB or video mute	X2B	X3 ←	1 = mute on, 0 = mute off.	
Global RGB or video mute	1*B	Vmt1 ←	Mute all RGB outputs.	
Global RGB or video unmute	0*B	Vmt0 ←	Unmute all RGB outputs.	
Audio mute	X2 *1Z	AmtX2*1◀┛	Mute output 区 audio (audio off).	
Audio unmute	X2 *0Z	Amt X2 *0 ←	Unmute output 🔀 audio (audio on).	
Read audio mute	X2 7	X3 ←	1 = mute on, $0 = $ mute off.	
Global audio mute	1*Z	Amt1 ←	Mute all audio outputs.	
Global audio unmute	0*Z	Amt0 ←	Unmute all audio outputs.	
View output mutes	EscVM←	X4 ¹, X4 ², X4 ° ←	Each 4 response is the mute status of an output, starting from output 1. n = the maximum number of outputs for this model.	
Example: CrossPoint 450 Plus 3232 HVA	EscVM←	Mut022020000000000	Mut022020000000000000000000000000000000	
			Output 2, 3, and 5 audio is muted. All other outputs are unmuted.	
NOTE: The Mut portion of the response appears only when the switcher is in Verbose mode 3. See the Verbose mode command on page XX.				
KEY: $\boxed{X2}$ = Output number 01 – (maximum number of outputs for your model) $\boxed{X3}$ = Mute 0 = off (unmuted) 0 = on (muted)			uted)	
x4 = Video/audio mute: 0 :	no mutes 1 = video mute		mute 2 = audio mute	

Command	SIS command (host to switcher)	Response (switcher to host)	Aditional information
Audio output volume			
Set the audio volume to a specific value	X2*X5 _V	OutX2•VolX5	
Example:	1*50v	Out01•Vol50←	Set output 1 volume to a value of 50 (79% of max volume, 14 dB of attenuation).
Increment volume	X2+V	Out X2 Vol X5	Increase volume by 1 step.
Example:	1+V	Out01•Vol51◀┛	
Decrement volume	X2 -V	OutX2•VolX5	Decrease volume by 1 step.
Read output volume	X2 _V	X5 ←	
Save and recall presets			
NOTES: If you try to recall a preset that is not s The following characters are invalid in	,	•	rror code E11.
Save current configuration as a global preset	X6,	Spr <mark>X6</mark> ←	Command character is a comma.
Example:	9,	Spr09◀┛	Save current ties as preset 9.
Recall a global preset	X6.	Rpr <mark>X6</mark> ←	Command character is a period.
Example:	5.	Rpr05◀┛	Recall preset 5, which becomes the current configuration.

01 – (maximum number of outputs for your model) 0 – 64 (1 dB/step except for 0-to-1, which is 22 dB) (default = 64 [0 dB]) 00 – 32 (00 = current configuration)

X2 = Output number X5 = Volume X6 = Preset number

KEY:

Command	SIS command (host to switcher)	Response (switcher to host)	Aditional information
Lock (executive) modes			
NOTE: See Setting the front pa	nel locks (Executive r	nodes) on page 19 for more	e information on the Lock modes.
Lock all front panel functions	1X	Exe1 ←	Enable <i>Lock</i> mode 1.
Lock advanced front panel functions	2X	Exe2	Enable <i>Lock</i> mode 2.
Unlock all front panel functions	0X	Exe0 ←	Enable <i>Lock</i> mode 0.
View lock status	X	X7 ←	
Information requests			
Information request	I	√ X8 X X9 •A X8 X X9 ◆	VX8XX9 is the video matrix size. AX8XX9 is the audio matrix size
Example: MAV Plus 3216 HDA	I	V32X16•A32X16 ←	
Request part number	N	X10 ←	
Query controller firmware version	Q	X11 ←	
Example:	Q	1.23◀┛	The factory-installed controller firmware version is 1.23 (sample value only).
X7	0, 1, or 2 Total number of inputs for Total number of outputs 68-nnnn-nn ber to second decimal pla	for this switcher	

Command	SIS command (host to switcher)	Response (switcher to host)	Aditional information	
IP setup				
Set IP address	Esc X13CI ←	Ipi <mark>X13</mark> ←		
Read IP address	Esc CI ←	X13 ←		
Set subnet mask	Esc X13CS ←	Ips <mark>X13</mark> ←		
Read subnet mask	EscCS←	X13 ←		
Set gateway IP address	Esc X13 CG ←	Ipg <mark>X13</mark> ←		
Read gateway IP address	EscCG←	X13 ←		
Set DHCP on or off	Esc X14DH←	Idh <mark>X14</mark> ←		
Read DHCP on/off status	EscDH←	X14 ←		
Set verbose mode	Esc X15CV←	VrbX15		
Read verbose mode	EscCV←	X15 ←		
Configure current port timeout	Esc 0*X16 TC ←	Pti0* <mark>X16</mark> ←		
Read current port timeout	Esc 0TC ←	X16 ←		
Configure global IP port timeout	Esc 1*X16TC ←	Pti1* <mark>X16</mark> ←		
Read global IP port timeout	Esc 1TC ←	X16 ←		
KEY: X13 = IP address	###.###.####			
X14 = DHCP	0 = off, 1 = on			
X15 = Verbose mode	0 = clear/none (default for	Telnet connection)		
<u> </u>	1 = verbose mode (default for RS-232/RS-422 connection)			
	2 = tagged responses for queries			
	3 = verbose mode and tag	•		
X16 = Port timeout interval	1 (= 10 seconds) - 65000		seconds = 5 minutes)	

Installing and Starting the Control Program

You can also operate the switcher via the Windows ® -based Matrix Switchers Control Program. This program is available on the Extron website, www.extron.com. Run this program on a PC connected to either of the switcher's serial ports or the Ethernet port. See **8**, **9** on page 7 and a on page 8, for connection information.

NOTE: For details on operating the program, refer to the CrossPoint 450 Plus / CrossPoint Ultra / MAV Plus Switcher User Guide, chapter 5, "Matrix Software".

Installing the program

1. Go to <u>www.extron.com</u> and hover the cursor over the Download tab (1). The Find Software & Downloads link appears (2).



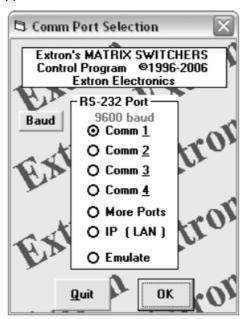
- 2. Click the Software (3) link. The main download page opens.
- 3. Click the M filtering letter (M) to jump to the page of downloads nearest the program.
- 4. Click Download for the Matrix Switchers Control Program (4).



- 5. Follow the on-screen instructions. The installation program creates a C:\Program Files\Extron\Matrix Switchers directory and an "Extron Electronics\Matrix Switchers" group folder. It installs the following four programs:
 - MATRIX Switcher+ Control Program
 - MATRIX Switcher+ Help
 - Uninstall MATRIX Switcher
 - Check for Matrix Updates

Starting the program

Click Start > Programs > Extron Electronics > Matrix Switchers > MATRIX Switcher + Control Pgm.
 The Comm Port Selection window appears.



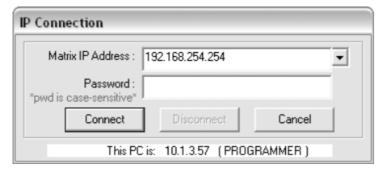
2. Choose the comm (serial) port that is connected to the switcher or IP [LAN].

NOTE: For a comm port, check the baud rate displayed in the comm port selection window. If you need to change the baud rate, click the Baud button and DoubleClick the desired baud rate.

3. Click OK.

If you selected a serial port in step 2, the Matrix Switchers Control Program is ready for operation.

4. If you selected IP [LAN] in step 2, the IP Connection window appears.



a. Examine the Matrix IP Address field, which displays the last Matrix IP address entered. If necessary, enter the correct IP address in the field.

NOTE: 192.168.254.254 is the factory-specified default value for this field.

b. If the switcher is password protected, enter the appropriate administrator or user password in the Password field.

NOTE: The factory configured passwords for all accounts on this device have been set to the device serial number. In the event of a complete system reset, the passwords convert to the default, which is no password.

c. Click Connect. The Matrix Switchers Control Program is ready for operation

Accessing the HTML Pages

Another way to operate the switcher is via its factory-installed HTML pages, which are always available and cannot be erased or overwritten. The switcher HTML pages are accessible through its LAN port, connected via a LAN or WAN, using a web browser such as Microsoft Internet Explorer. See 1 on page 8, for connection information.

Loading the start-up page NOTES:

- If your Ethernet connection to the matrix switcher is unstable, try turning off the proxy server in your Web browser. In Microsoft Internet Explorer, click Tools > Internet Options > Connections > LAN Settings, uncheck the Use a proxy server... box, and then click OK.
- For details on operating the switcher via HTML pages, refer to the CrossPoint 450 Plus / CrossPoint Ultra / MAV Plus Switcher User Guide, chapter 6, "HTML Operation".
- 1. Start the web browser program.
- 2. Click in the Address field of the browser.
- 3. Enter the Matrix IP **address** in the Address field of the browser.

NOTE: 192.168.254.254 is the factory-specified default value for this field.

4. Press the keyboard <Enter> key. The switcher checks to see if it is password protected.

NOTE: The factory configured passwords for all accounts on this device have been set to the device serial number.

In the event of a complete system reset, the passwords convert to the default, which is no password.

If the switcher is not password protected, it checks and downloads the HTML start-up page. The switcher is ready for operation via HTML remote control.

If the switcher is password protected, the switcher downloads the Enter Network Password page.



NOTE: A User name entry is not required.

Enter the appropriate administrator or user password in the Password field and click OK.

5. The switcher downloads the HTML start-up page. The switcher is ready for operation via HTML remote control.

Extron Warranty

Extron Electronics warrants this product against defects in materials and workmanship for a period of three years from the date of purchase. In the event of malfunction during the warranty period attributable directly to faulty workmanship and/or materials, Extron Electronics will, at its option, repair or replace said products or components, to whatever extent it shall deem necessary to restore said product to proper operating condition, provided that it is returned within the warranty period, with proof of purchase and description of malfunction to:

USA, Canada, South America, and Central America: Extron Electronics 1230 South Lewis Street Anaheim, CA 92805 U.S.A.	Asia: Extron Asia Pate Ltd 135 Joon Seng Road, #04-01 PM Industrial Bldg. Singapore 368363 Singapore	Japan: Extron Electronics, Japan Kyodo Building, 16 Ichibancho Chiyoda-ku, Tokyo 102-0082 Japan
Europe: Extron Europe Hanzeboulevard 10 3825 PH Amersfoort The Netherlands	China: Extron China 686 Longhua Road Songjiang District Shanghai 201611 China	Middle East: Extron Middle East Dubai Airport Free Zone F13, PO Box 293666 United Arab Emirates, Dubai

Africa:

Extron South Africa South Tower 160 Jan Smuts Avenue Rosebank 2196, South Africa

This Limited Warranty does not apply if the fault has been caused by misuse, improper handling care, electrical or mechanical abuse, abnormal operating conditions, or if modifications were made to the product that were not authorized by Extron.

NOTE: If a product is defective, please call Extron and ask for an application engineer to receive an RA (return authorization) number. This will begin the repair process.

USA: 714.491.1500 or 800.633-9876

Asia: 65.6383.4400 **Europe:** 31.33.453.4040 **Japan:** 81.3.3511.7655

Units must be returned insured, with shipping charges prepaid. If not insured, you assume the risk of loss or damage during shipment. Returned units must include the serial number and a description of the problem, as well as the name of the person to contact in case there are any questions.

Extron Electronics makes no further warranties either expressed or implied with respect to the product and its quality, performance, merchantability, or fitness for any particular use.

In no event will Extron Electronics be liable for direct, indirect, or consequential damages resulting from any defect in this product even if Extron Electronics has been advised of such damage.

Please note that laws vary from state to state and country to country, and that some provisions of this warranty may not apply to you.



Worldwide Headquarters: Extron USA West, 1025 E. Ball Road, Anaheim, CA 92805, 800.633.9876

Documents / Resources



Extron MAV Plus Series Matrix Switchers [pdf] User Guide MAV Plus Series Matrix Switchers, MAV Plus Series, Matrix Switchers, Switchers

References

- <u>Manual-Hub.com Free PDF manuals!</u>
- E Extron The AV Technology Leader
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