

Daisychain commands	Command		Response		
	Local box		Destination box	All other boxes	
Function	External host to MCU	MCU to external host	MCU to external host	MCU to external host	Notes
<b>System information commands</b>					
Query system size	q	Max Tx=M ¶ Max Rx=N ¶ Me=Txm or Me=Rxn ¶			Handled locally at daisy chain FW from local device list.
Unsolicited message when system status changes		Reset ¶	Reset ¶	Reset ¶	Host to send "q" after receiving this "Reset" from the device; this happens after device detects any changes in the daisy-chain or after daisy chain IC reboots and syncs the UART port.
<b>Signal routing commands</b>					
Send video and audio from source m to display n	m*s	AV Txm live ¶ AV Rxn live ¶	AV Txm live ¶ AV Rxn live ¶	AV Txm live ¶ AV Rxn live ¶	Any device can send, daisy chain req is sent to Txm and Rxn to create the video stream. The response is sent to all Tx and Rx boxes.
Send video from source Txm to all displays and audio from source Txm to audio sinks on the Audio Sink Distribution List, same behavior for "Show Me" button when pressed from Txm	m*s	AV Txm live ¶	AV Txm live ¶	AV Txm live ¶	Any device can send, daisy chain req is sent to Txm to broadcast to all Rx. The response is sent to all Tx and Rx boxes. The next broadcast command will change the source but maintain the audio distribution list. The broadcast will be turned off by the next point to point route command in row 13.
Define devices Rxn1, n2, n3 and n4 to be on the Audio Sink Distribution List	n1, n2, n3, n4 S	Audio Sink Rxn1, n2, n3, n4 live ¶	Audio Sink Rxn1, n2, n3, n4 live ¶	Audio Sink Rxn1, n2, n3, n4 live ¶	This list needs to be setup repeatedly at each Tx device locally. Use pass through command in row 18 to send to each Tx one by one if setup is done from an external controller at one location. The MCU of each Tx will then send the command locally to the daisy chain IC. The current list will be replaced by the next (new) list command. If not defined, Rx1, Rx2, Rx3, Rx4 will be the default list. The response is sent to all Tx and Rx boxes.
<b>Pass through commands</b>					
The external host connected to Presenter™ x sending to the external device connected to Presenter™ y to control the functions of that external device	x*y {xxxxx}Q		xxxxx		Add a leading "0" in front of any number associated with a Rx device to distinguish from the Tx number. Response send back to the host device. Maximum 25 characters in bracket.
The external device connected to Presenter™ y sending the response back to the external host connected to Presenter™ x		rrrrr	rrrrr		Any message comes in to the RS-232 port on box y within 1 second from the command in row 19 is considered a response to command 19 and will be sent back to box x. MCU in box y will end the response reception mode when seeing 1st carriage return or 1s timer ending whichever happens first.
The external host connected to Presenter™ x sending to Presenter™ y to control the functions of that Presenter	x*y (xxxxx)Q				Add a leading "0" in front of any number associated with a Rx device to distinguish from the Tx number. Response send back to the host device.
Presenter y sending response back to the external host connected to Presenter x		rrrrr			

All commands below are local commands when the control host is connected directly to the Presenter™ device. To control a Presenter™ device remotely, place the local commands and responses below into pass through command in line 22.

Product information					
Query device part number	p	74-018-01 ¶			Numeric and dash only
Query device firmware version	P	x.xx ¶			Numeric and dash only

Function	Command		Response			Notes	Factory default settings
	Local box		Destination box	All other boxes			
	External host to MCU	MCU to external host	MCU to external host	MCU to external host	MCU to external host		
<b>System information commands</b>							
Query current live source and display	*s	AV Txm live ¶ AV Rxn live ¶				If in AV broadcast mode (one source to all displays), no need for this response	
Query current live audio sinks	S	Audio Sink Rxn1,n2,n3,n4 live ¶					
EQ value reading	E	xx				Input EQ value reading	
<b>Daisychain commands</b>							
<b>Reset command</b>							
Reset to factory defaults	r	Reset				If in AV broadcast mode (one source to all displays), no need for this response	
<b>Tx input selection commands</b>							
Select local input x of Txm device	<u>x</u> s	<u>Txm</u> Input <u>x</u> live ¶				From <u>Txm</u> device	
Set auto sw on on Txm device	0s	<u>Txm</u> auto sw on ¶				From <u>Txm</u> device	
Query local input status	s	<u>Txm</u> Input <u>x</u> live ¶ (or) <u>Txm</u> auto sw on ¶				From <u>Txm</u> device	2s (HDMI input)
Defeat Show Me sw on Txm device	0A	<u>Txm</u> Show Me sw off ¶				From <u>Txm</u> device	
Allow Show Me sw on Txm device	1A	<u>Txm</u> Show Me sw on ¶				From <u>Txm</u> device	1A (Show Me sw allowed)
Query Show Me sw status on Txm device	A	<u>Txm</u> Show Me sw on ¶ (or) <u>Txm</u> Show Me sw off ¶				From <u>Txm</u> device	
<b>Scaler commands</b>							
Initiate auto image on Txm device	a	<u>Txm</u> auto image on ¶				From <u>Txm</u> device	
Set output format to 720p on Txm device	1o	<u>Txm</u> output format 720p ¶				From <u>Txm</u> device	1o (output 720p)
Set output format to 1080p on Txm device	2o	<u>Txm</u> output format 1080p ¶				From <u>Txm</u> device	
Set output format to 1080p on Txm device	3o	<u>Txm</u> output format pixel to pixel ¶				From <u>Txm</u> device	
Query output format on Txm device	o	<u>Txm</u> output format 720p ¶ (or) <u>Txm</u> output format 1080p ¶ (or) <u>Txm</u> output format pixel to pixel ¶				From <u>Txm</u> device	
Set zoom level on Txm device	<u>x</u> z	<u>Txm</u> zoom level <u>x</u> ¶				From <u>Txm</u> device	1z (zoom level 1)
Query zoom level on Txm device	z	<u>Txm</u> zoom level <u>x</u> ¶				From <u>Txm</u> device	
<b>Audio commands</b>							
Audio mute on	0M	<u>Txm</u> audio mute on ¶				Numeric and dash only	
Digital audio pass through	1M	<u>Txm</u> digital audio pass through ¶				Numeric and dash only	1M (digital audio pass through)
Audio mixing and embedding	2M	<u>Txm</u> audio mixing and embedding ¶				If in AV broadcast mode (one source to all displays), no need for this response	
Query audio mode	M	<u>Txm</u> audio mute on ¶ (or) <u>Txm</u> digital audio pass through ¶ (or) <u>Txm</u> audio mixing and embedding ¶				From <u>Txm</u> device	

RS-232 baud rate and protocol 9600 baud, 8 data bits, 1 stop bit, no parity  
RS-232 port pin confi1 = Tx, 2 = Rx, 3 = GND

Note: - The italic and underlined letters represent decimal numeric numbers  
- ¶ is CR/LF (carriage return/line feed) (HEX value 0D 0A)

