Luxi Presenter TPR-150CR RS-232 commands

Rev 1.21

Daisychain commands

Function	Command External host to MCU	Response Local box MCU to external host	Response Destination box MCU to external host	Response All other boxes MCU to external host	Notes
System information commands					
Query system size	q	Max Tx=*M*¶ Max Rx=N¶ Me=Tx*m*¶ or Me=Rx*n*¶			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 sync the UART port
Signal routing commands					
Send video and audio from source *m* to display *n*	*m***n*s	AV Tx*m* live¶ AV Rx*n* live¶	AV Tx*m* live¶ AV Rx*n* live¶	AV Tx*m* live¶ AV Rx*n* 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 Tx*m* to all displays and audio from source Tx*m* to audio sinks on the Audio Sink Distribution List, same behavior for 'Show Me' button when pressed from Tx*m*	*m**s	AV Tx*m* live¶	AV Tx*m* live¶	AV Tx*m* 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 Rx*n1*,*n2*,*n3*,*n4* live¶	Audio Sink Rx*n1*,*n2*,*n3*,*n4* live¶	Audio Sink Rx*n1*,*n2*,*n3*,*n4* live¶	This list needs to be setup repeatedly at each Tx device locally. Use pass thru 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 send to all Tx and Rx boxes
Pass thru commands					
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 charactors 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 seconds 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 thru command in line 22

Function	Command External host to MCU	Response Local box MCU to external host			Notes
Product information commands					
Query device part number	p	74-018-01¶			Numeric and dash only
Query rear PCB MCU firmware version	P	x.xx¶			Numeric only
Query front PCB MCU firmware version	1P	x.xx¶			Numeric only; local only, no pass thru
Query front PCB scaler firmware version	2P	x.xx¶			Numeric only; local only, no pass thru
Query front PCB splitter firmware version	3P	x.xx¶			Numeric only; local only, no pass thru
Front panel scaler firmware update	2u	Firmware upgrade OK¶			Local only, no pass thru
System information commands					
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

Scaler commands

Function	Command	Response Local box			Notes	Factory default settings
Reset command						
Reset to factory defaults	r	Txm reset			This command requires system power recycle after at least 10 seconds. Do not use it during presentation.	
Tx input selection commands						
Select local input x of Tx*m* device	*x*s	Tx*m* Input *x* live¶			From Tx*m* device	
Set auto sw on on Tx*m* device	0s	Tx*m* auto sw on¶			From Tx*m* device	
Query local input status	s	Tx*m* Input *x* live¶ (or) Txm auto sw on¶			From Tx*m* device	2s (HDMI input)
Defeat Show Me sw on Tx*m* device	0A	Tx*m* Show Me sw off¶			From Tx*m* device	
Allow Show Me sw on Tx*m* device	1A	Tx*m* Show Me sw on¶			From Tx*m* device	1A (Show Me sw allowed)
Query Show Me sw status on Tx*m* device	A	Tx*m* Show Me sw on¶ (or) Tx*m* Show Me sw off¶			From Tx*m* device	
Scaler commands						
Initiate auto image on Tx*m* device	a	Tx*m* auto image on¶			From Tx*m* device	
Set output format to 720p on Tx*m* device	1o	Tx*m* output format 720p¶			From Tx*m* device	1o (output 720p)
Set output format to 1080p on Tx*m* device	2o	Tx*m* output format 1080p¶			From Tx*m* device	
Set output format to 1080p on Tx*m* device	3o	Tx*m* output format pixel to pixel¶			From Tx*m* device; Only supports 5 preset resolutions: 720p, 1080p, 1024x768, 1280x800, 1366x768	
Query output format on Tx*m* device	o	Tx*m* output format 720p¶ (or) Tx*m* output format 1080p¶ (or) Tx*m* output format pixel to pixel¶			From Tx*m* device	
Set zoom level on Tx*m* device	*x*z	Tx*m* zoom level *x*¶			From Tx*m* device; x has 6 possible values, 1 thru 6	1z (zoom level 1)
Query zoom level on Tx*m* device	z	Tx*m* zoom level *x*¶			From Tx*m* device	
Audio commands					From Tx*m* device	
Audio mute on	0M	Tx*m* audio mute on¶			From Tx*m* device	
Digital audio pass thru	1M	Tx*m* digital audio pass thru¶			From Tx*m* device	1M (digital audio pass thru)
Audio mixing and embedding	2M	Tx*m* audio mixing and embedding¶			From Tx*m* device	
Query audio mode	M	Tx*m* audio mute on¶ (or) Tx*m* digital audio pass thru¶ (or) Tx*m* audio mixing and embedding¶			From Tx*m* device From Tx*m* device From Tx*m* device	