Luxi Presenter™ HDMI Transmitter RS-232 LU-TPR-110CR



	Command				
	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
System information					
Query system size	q	Max Tx= <u>M</u> ¶ Max Rx=N ¶ Me=Txm or Me=Rx <u>n</u> ¶			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.
Signal routing commands					
Send video and audio from source <u>m</u> to display <u>n</u>	<u>m*n</u> s	AV Tx <u>m</u> live ¶ AV Rx <u>n</u> live ¶	AV Tx <u>m</u> live ¶ AV Rx <u>n</u> live ¶	AV Tx <u>m</u> live ¶ AV Rx <u>n</u> 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	<u>m</u> *s	AV Tx <u>m</u> live ¶	AV Tx <u>m</u> live ¶	AV Tx <u>m</u> 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 $\underline{R} \times n1$, $\underline{n2}$, $\underline{n3}$ and $\underline{n4}$ to be on the Audio Sink Distribution List	<u>n1</u> , <u>n2</u> , <u>n3</u> , <u>n4</u> S	Audio Sink Rx <u>n1</u> , <u>n2</u> , <u>n3</u> , <u>n4</u> live¶	Audio Sink Rx <u>n1</u> ,n2 ,n3 ,n4 live ¶	Rx <u>n1 ,n2 ,n3 ,n4</u> 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™ ½ sending to the external device connected to Presenter™	<u>х</u> * <u>у</u> {ххххх}Q		XXXXXX		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.
<u>y</u> to control the functions of that external device		 			
The external device connected to Presenter™ <u>y</u> 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 considerted 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™ ½ sending to Presenter™ ½ to control the functions of that Presenter™	<u>х</u> * ұ (ххххх)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™ <u>x</u>		rrrrr			

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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 20.

	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
Product information					
Query device part number	р	хх-ххх-хх ¶			Numeric and dash only
Query device firmware version	Р	ж.ж .¶			Numeric and dash only
System information commands					
Query current live source and display	*s	AV Txm live ¶ AV Rxn live ¶			Numeric and dash only
Query current live audio sinks	S	Audio Sink Rxn1,n2,n3,n4 live ¶			If in AV broadcast mode (one source to all displays), no need for this response
EQ value reading	E	ж			Input EQ value reading

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

Note: - The italic and underlined letters represent decimal numeric numbers

-¶ is CR/LF (carriage return/line feed) (HEX value OD OA)