

PRESIDOR™ ROOM LINKER COMBINER (PRLC-4)

Rev 1.5
April 2021



INTRODUCTION

The PRLC-4 is an intelligent DMX 4 Port Merger that has been designed as the central DMX merging “Hub” for multiple rooms or zones of Presidor™ Wall Stations (PWS). Each room/zone of PWS must contain one Primary Station and a maximum of 15 Secondary Stations when used with a PRLC-4. Each PRLC-4 has 4 isolated DMX inputs each containing their own isolated 48VDC power supply. Each DMX input port has both RJ45 and Phoenix Style breakaway terminals for maximum installation versatility.



Multiple (1-8) PRLC-4's can be easily “cascaded” together to permit up to 25 rooms/zones of PWS control. PRLC's are designed for installation in standard 19” racks. For mid-sized multi-room installations up to 13 rooms, a small 4RU rack is available model #PRLCR-4U for housing 1-4 PRLC-4's.

Front #PRLCR-4U View



Rear Wall Mount #PRLCR-4U View



POWER UP

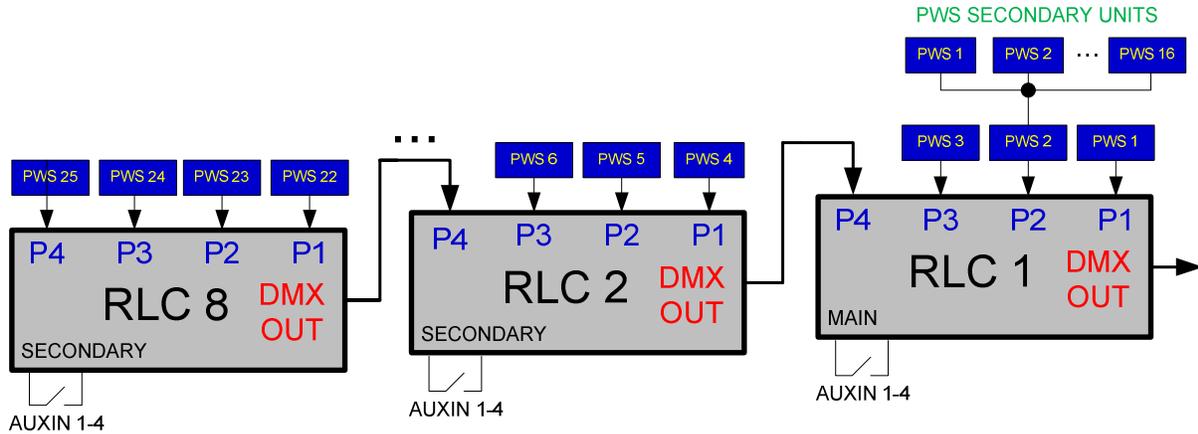
PRLC-4 power supply is 100 – 240 VAC, 1.5A, 50/60 HZ. A standard 3' computer cable is supplied with each PRLC-4. Each PRLC-4 has an illuminated fused switch for maximum safety.

The optional PRLCR-4U mini 19" wall rack comes with a duplex receptacle and single gang electrical backbox installed for ease of interface.

Notes:

- Where more than one PRLC-4 is used, the top of the PRLC-4 chain is referred to as the MAIN unit. All other PRLC-4 units are referred to as SECONDARY units.
- RDU = Remote Display Unit. Designed for capacitive touch "linking" of rooms/zones as an alternative to wired contact closures.

The default state for all PRLCs on power up is MAIN. Any PRLC-4 that receives an Inter-gap Communication (IGC) command on its DMXOUT port will automatically become a SECONDARY. The MAIN PRLC will always be the DMX Output of the system. The DMXOUT rate is approximately 43 times/sec.



On power up, all PRLCs report their connection status to up-stream PRLCs. The MAIN PRLC then automatically assigns Room Numbers to all connected PWSs (Presidor Wall Stations) and PRLC numbers to all down-stream PRLCs.

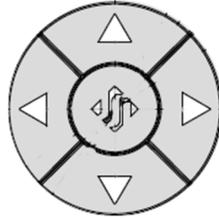


- 1) Shows PRLC MAIN (M) or SECONDARY (S).
- 2) For the MAIN only:
 - a. If an AUXIN switch is activated and there are rooms linked for the AUXIN switch, the screen will display a “*”.
 - b. If the RDU is connected and at least two rooms linked, the screen will display a “#”.

NOTE: The RDU takes priority over the AUXIN switches when connected.

- 3) RLC number – MAIN is always 1
- 4) Firmware version
- 5) Shows last Preset Rnnpp (Rnn = Room Number and pp=Preset) or last AUXIN active state i.e. AUX24.

Use the following navigation keys to navigate the PRLC screens.



[UP][DOWN] [LEFT][RIGHT] OR [CENTER JSI] keys where the CENTER JSI key operates as a select button.

Note: Pressing and holding the [CENTER JSI] key for (5 Seconds) will reboot the unit!

Momentarily pressing the [CENTER JSI] key from the start screen takes you to the main menu screen:

MAIN



SECONDARY



LINK SCREEN (RDU connected to MAIN)



LINK SCREEN (RDU not connected)



The LINK screen allows the user to edit the Link Table for the PRLC rack. The number of AUXIN channels in the Link Table is based on the number of PRLCs x 4.

LINK TABLE EDIT SCREEN



- 1) With the AUXxx menu item selected, use the [^] and [v] keys to select the AUXxx input number.
- 2) Select menu item CLEAR to clear all setting for the selected AUXxx.
- 3) Select the main MENU item to return to the main MENU.
- 4) With the AUXxx menu item selected in the top row, press the [ENTER] key to access the bottom row.
- 5) Use the [<] and [>] navigation buttons to scroll through the ROOMS for the selected AUXxx channel then press the [ENTER] key to toggle the setting for the ROOM between selected (checkmark) and not selected (blank). Note that if a ROOM has already been linked to another AUXxx channel, a "+" sign will appear above the checkmark.

Use the [^], [<] and [>] keys to navigate back to the main menu item (3).

If you have made changes to the Link Table when the main menu item is pressed, the user will be prompted as follows:



If "Y", changes are saved to EEPROM and the new Link Table is sent to all other PRLCs.

NEW SETUP SCREEN- IMPORTANT!

At this time, automatic detection of additional or removal of PRLCs or PWSs after the initial power up has not been implemented. If any changes are made to the PRLC rack, the user must activate the NEW SETUP command in order to reconfigure and re-assign the rack.



Select [Y] to reset the PRLCs and assign new room numbers. Note that this will also clear the LINK table.



STATUS SCREEN



- 1) PORT NUMBER P1-P4
- 2) First AUXIN number for this PRLC
- 3) HOME
- 4) ROOM 01 ASSIGNED to PWS connected to Port P1
- 5) Nothing connected to Room Port P2
- 6) PWS or PRLC was connected to Room Port P3 but was disconnected or is no longer functioning.
- 7) Additional PRLC connected to Room Port P4.
- 8) Each digit shows the status of the AUXIN switches for this RLC starting with AUX01 on the left.

MISCELLANEOUS

A down-stream PRLC must only be plugged into Room Port P4 of the up-stream PRLC. If a down-stream PRLC is plugged into any port other than P4, the following screen will be displayed.

