ECC-RPU Remote Page Unit
Product Installation Document

PN LS10030-000FL-E:B   8/9/2013   13-696

1 Overview

The ECC-RPU is an optional Remote Page Unit compatible with the ECC-50/100 Emergency Command Center. The ECC-RPU provides 8 message select buttons. The 9th button can be used to activate an MMF-300 monitor module mounted inside the cabinet. The RPU requires an external data bus connection, an external audio riser connection, and an external operator interface power connection (24 volts DC) from the ECC-50/100 main console. ALL CALL paging can be broadcast over the speaker circuits by depressing the microphone's push-to-talk switch. Refer to the ECC-50/100 Manual, LS10001-000FL-E, for more information.
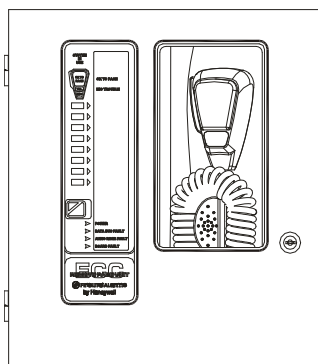

Figure 1 ECC-RPU

NOTE: Installation and wiring of this device must be done in accordance with NFPA 72 and local ordinances.

2 Installation

2.1 Removing the Dress Panel

1. Open the door and lift the door off the pin hinges.
2. Loosen the screw securing the dress panel to the backbox.
3. Open dress panel and disconnect the ground wire from the back.
4. Lift up dress panel and pull out lower pivot flange. Slide the upper pivot flange down to completely remove the dress panel from cabinet. Store in a safe location.
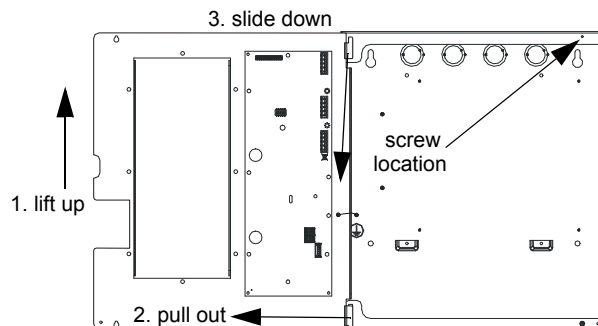

Figure 2 Removing the Dress Panel

2.2 Mounting the Backbox

1. Mark and predrill holes for the top two backbox keyhole mounting bolts using the dimensions shown.
2. Install two upper fasteners in the wall with the screw heads protruding.
3. Using the upper 'keyholes', mount the backbox over the two screws.
4. Mark and drill the lower two holes.
5. Install the remaining fasteners and tighten all fasteners to complete backbox mounting.
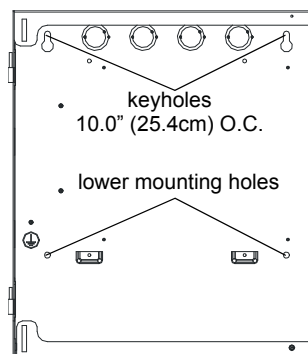

Figure 3 Backbox Mounting

6. Carefully reinstall the dress panel by reversing the steps in Section 2.1. Remember to reattach the ground cable.
7. Reinstall door.

A trim ring, TR-6-R, is available for semi-flush mount installations.

2.3 Mounting/Wiring an Optional Monitor Module

An MMF-300 monitor module may be mounted inside the cabinet. This can be used for HVAC shutdown applications when the monitor module is connected to the FACP SLC polling loop. The monitor module is wired to TB4 on the RPU and is activated by the 9th button on the RPU keypad. The module's LED is visible through the keypad next to the 9th button.

1. Remove the two (2) keps nuts that secure the RPU board to the dress panel using a 5/16" socket.

2. Set the SLC address on the MMF-300. Remove the four (4) break-away tabs from the monitor module. See Figure 4.

3. Insert the bottom of the monitor module (SLC address dials facing inward) into the mounting tabs on the left side of the RPU. The RPU mounting screws will go through the top of the monitor module. Situate the LED on the front of the module over the hole in the PC board.

4. Replace the keps nuts over the mounting screws to secure the monitor module to the board.

5. Connect the SLC wiring to the module terminals 1 (–) and 2 (+). Refer to the *SLC Wiring Manual* for more information.

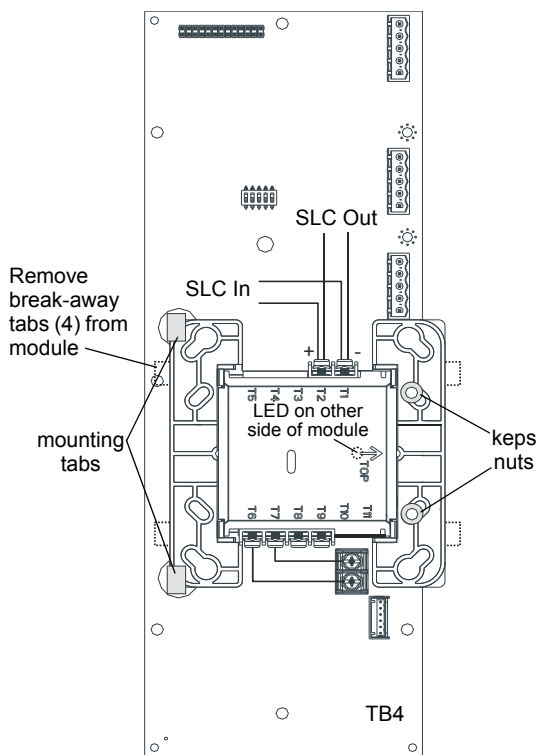6. Wire TB4 on the RPU to T6/T7 on the monitor module as shown below. No ELR is required as it is built into TB4.

Figure 4 Wiring an MMF-300 to the RPU

3 Wiring

Connections are made from TB24, TB12, and TB22 on the ECC-50/100 main control board to TB1, TB3, and TB2 on the RPU. If the ECC-RPU is the last device on the audio and data bus chain, signal terminations are required. For the last device on the external data bus, a removable jumper must be on pins 1 and 2 of JS4. If the ECC-RPU is not the last device, the jumper must be on pins 2 and 3 of JS4 as shown below. For the external audio riser, termination (15K ohm resistor) must be connected to pins 4 and 5 on TB2. A ferrite clamp (P/N: 50116546-001) must be installed around all wires in both the input and output wire runs inside the RPU cabinet as shown below.
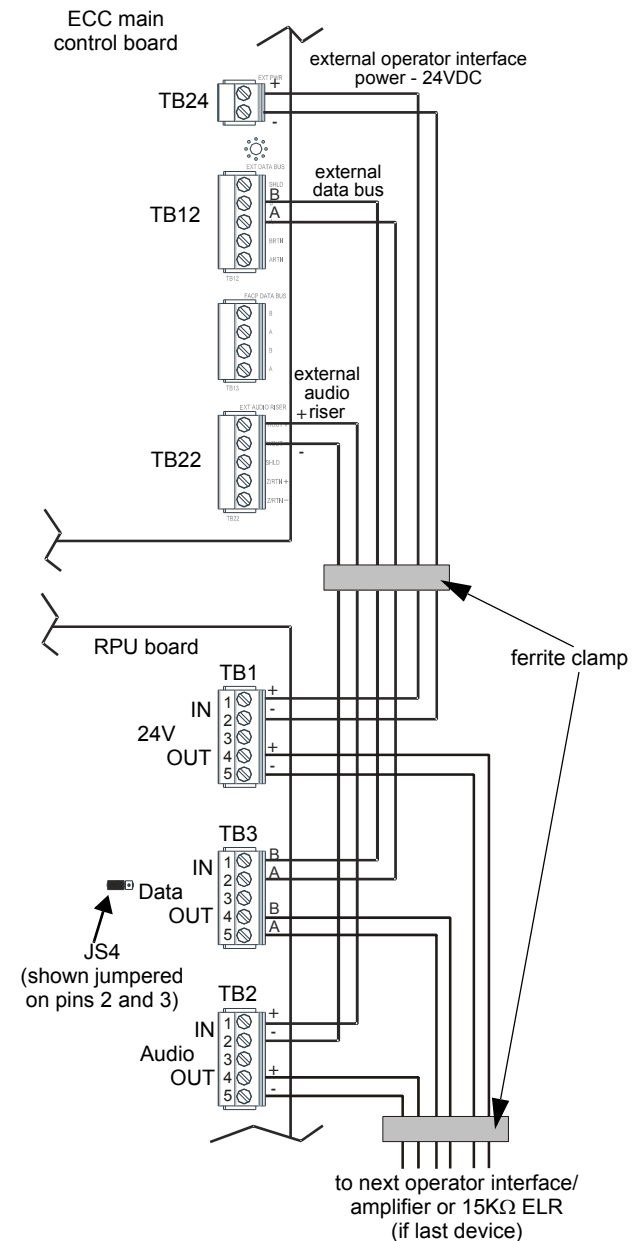

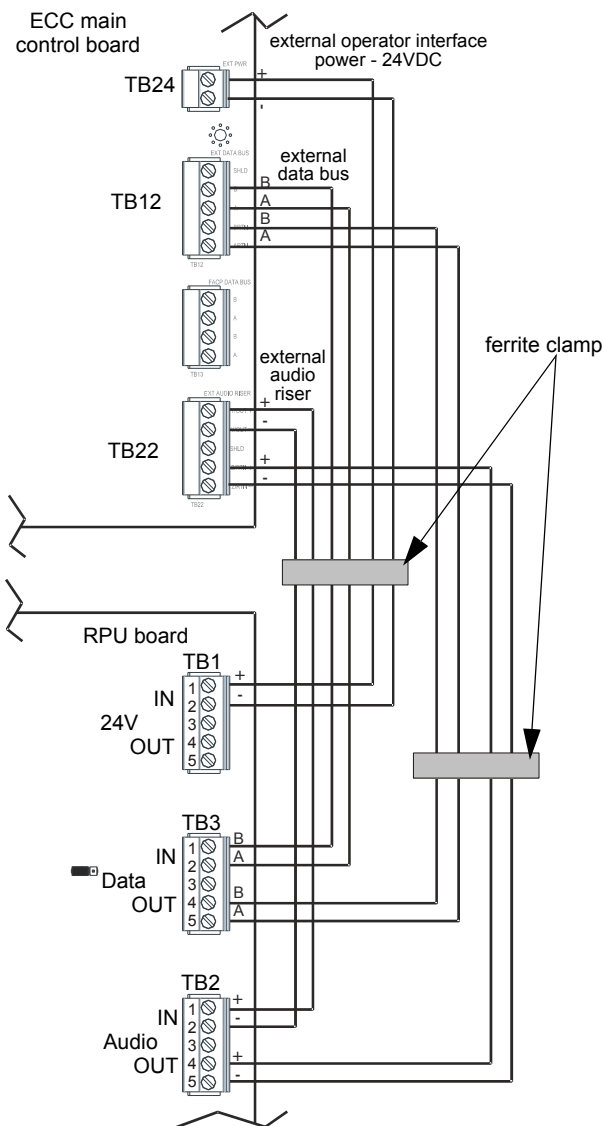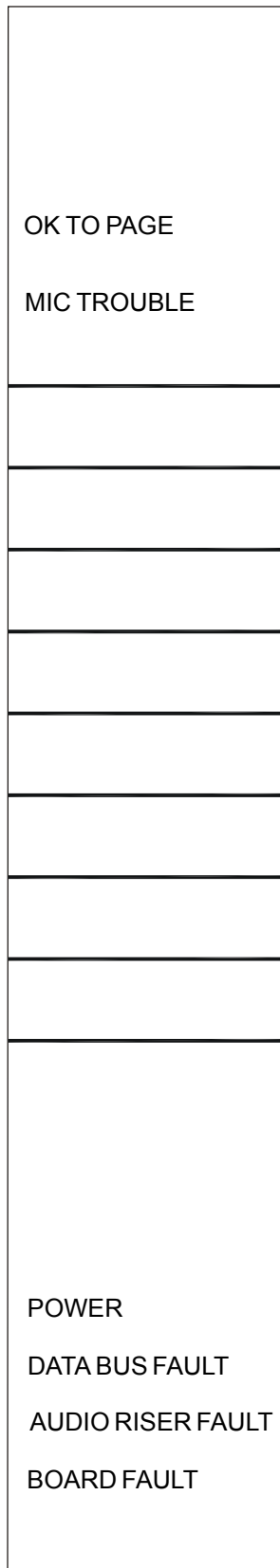**Figure 5 Remote Page Unit Wiring (Class B/Style Y)**

5 Slide-in Label

Carefully cut along the outside of the label. Identify keypad buttons as desired and slide the label upwards through the slot at the bottom of the keypad.

ECC main control board

TB24 — external operator interface power - 24VDC

TB12 — external data bus

external audio riser

ferrite clamp

TB22

RPU board

TB1
IN
24V
OUT

TB3
IN
Data
OUT

TB2
IN
Audio
OUT

Figure 6 Remote Page Unit Wiring (Class A/Style Z)

4 LED Indicators

OK to Page A green LED that turns on steady to instruct the operator that he/she may start paging.

Mic Trouble A yellow LED that turns on steady to indicate a microphone wiring fault.

Power A green LED that turns on steady when DC power is present.

Data Bus Fault A yellow LED turns on steady when the main console and RPU cannot communicate.

Audio Riser Fault A yellow LED that turns on steady when the audio riser wiring is open or short-circuited.

Board Fault A yellow LED that turns on steady when a critical issue has been detected with the board. There are no serviceable parts. Contact service personnel to replace the unit.

Label:

OK TO PAGE

MIC TROUBLE

POWER

DATA BUS FAULT

AUDIO RISER FAULT

BOARD FAULT