**ECC-LOC Local Operator Console
Product Installation Document**

PN LS10028-000FL-E:B   8/9/2013   13-696

1 Overview

The ECC-LOC is an optional Local Operator Console compatible with the ECC-50/100 Emergency Command Center. The ECC-LOC has a complete operator interface like the ECC-50/100 main console. The LOC 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. Refer to the ECC-50/100 Manual #LS10001-000FL-E for more information.

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

2 Specifications

- Data Bus Input - TB3 - 1(B), 2(A) EIA-485 /
  Data Bus Output - TB4 - 1(B), 2(A) EIA-485

- Operator Interface Power Input - TB3 - 3(+), 4 (-) /
  Operator Interface Power Output - TB4 - 3(+), 4(-)

  – 24 VDC Nominal, Isolated

- Audio Riser Input - TB5 - 3(-), 4(+) /
  Audio Riser Output - TB5 - 5(-), 6(+)

  – Style Y (Class B) or Style Z (Class A) audio connections to external operator interface components

  – Power-limited circuitry (Class 2), supervised

  – Audio signal level: 3.85 V_{RMS}, maximum

  – Frequency range: 800 Hz - 2800 Hz

3 Cabinet Mounting

3.1 Removing the Dress Panel

1. Open the door and lift the door off the pin hinges.

2. Remove the two (2) screws securing the dress panel to the backbox.

3. Open the 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.
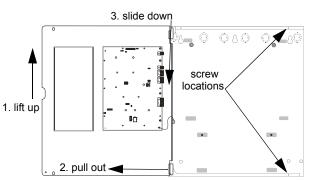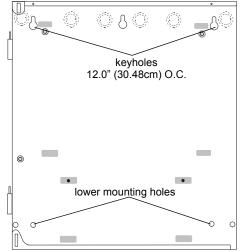

Figure 1 Removing the Dress Panel

3.2 Mounting the Backbox

1. Mark and predrill hole in the wall for the center top keyhole mounting bolt using the dimensions illustrated below.

2. Install center top fastener in the wall with the screw head protruding.

3. Place backbox over the top screw, level and secure.

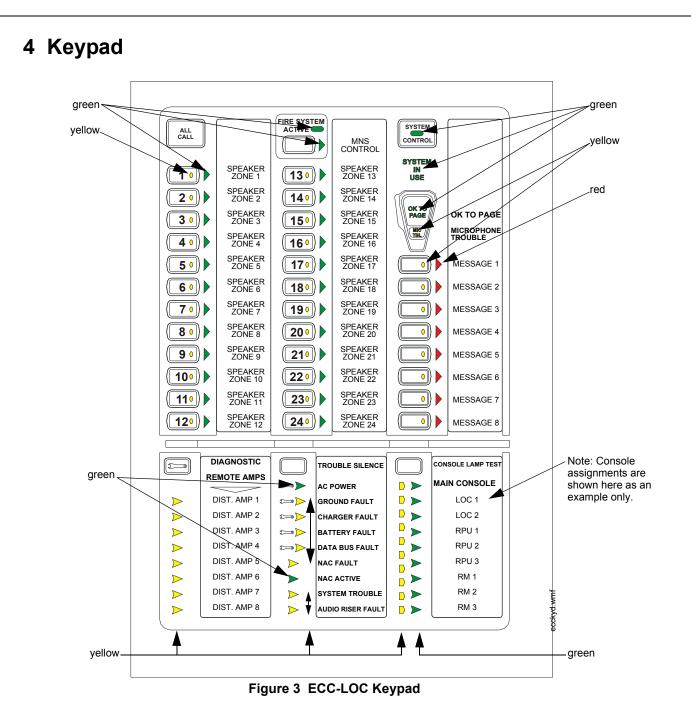4. Mark and drill the left and right upper and lower mounting holes.
   Note: Outer holes (closest to sidewall) are used for 16" O.C. stud mounting.

Figure 2 Backbox Mounting

5. Install remaining fasteners and tighten.

6. Carefully reinstall the dress panel by reversing the steps in Section 3.1. Remember to reattach the ground cable.

7. Reinstall door.

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

4 Keypad

Figure 3 ECC-LOC Keypad

4.1 Switch Functions

All Call Activates all speaker circuits for broadcast.

MNS Control (for systems configured for mass notification operation which has higher priority)

Activates the MNS Active Relay and the onboard NAC. A second press turns these back off. For a combination fire and mass notification system, pressing MNS CONTROL will result in the shutdown of audible FACP NACs and audio system speakers, allowing the system to override the system. Pressing MNS CONTROL again causes the FACP to re-activate audible FACP NACs and audio system speakers.

System Control Manually gains control of the audio system in preparation for an ALL CALL, message activation, or general page. The green LED will turn on steadily to confirm control. A second press is required after paging to relinquish control of the system. The main console will have system priority based upon user programming. In order for the LOC to gain control, the ECC must first relinquish control of the system.

Speaker Select 1-24 Manually activates or deactivates speaker zones (circuits).

Message Select 1-8 Manually activates or deactivates stored messages. 8th button becomes a "shift" for messages 9-14.

Diagnostic Select selects a specific remote amplifier to examine specific trouble conditions for the remote amplifiers. The fault LEDs with wrench graphics represent the amplifier selected.

Trouble Silence Manually silences the local trouble sounder.

Console Lamp Test Tests the local LEDs and sounder.

4.2 LED Indicators

Fire System Active Green LED that turns on steady when the FACP is in alarm.

MNS Control Green LED that turns on steady when an operator has initiated a mass notification event by pressing the MNS Control button or by pressing an MNS message button.

System Control Green LED that turns on steady when the main console has control of the audio system.

System in Use Green LED text that turns on steady when the main console, an LOC, an RPU, or an RM has control of the audio system.

Speaker Zones 1-24 Green LED per speaker circuit button that turns on steady when a speaker circuit has been selected and is active. Yellow LED per speaker circuit button that turns on steady when a speaker circuit fault exists or when the speaker circuit has been turned off after having been automatically turned on by the FACP.

OK to Page Green LED text that turns on steady when the system is ready for paging.

Microphone Trouble Yellow LED text that turns on steady to indicate a microphone wiring fault.

Messages 1-8 Red LED per message button that turns on steady when the message has been selected and blinks when the message has been overridden. Yellow LED per message button that turns on steady when no message has been recorded or there is an associated command input fault. All eight message button LEDs will turn on steady to indicate a message generator fault. 8th button "shift" key red off when viewing messages 1-7 and on steady when viewing messages 8-14. Yellow LED will turn on indicating a message trouble in the group of messages not currently being viewed.

Remote Amplifiers 1-8 Fault Yellow LED per remote amplifier that turns on steady when an amplifier has a fault.

LOC/RPU/RM 1-8 Fault Yellow LED per remote console that turns on steady when a remote console has a fault. Green LED per remote console that turns on steady when a remote console is active.

Main Console Fault Yellow LED that turns on steady when the main (or primary operator) console has a fault.

AC Power Green LED that turns on steady when AC power is present.

Ground Fault Yellow LED that turns on steady when a ground fault exists in the system.

Charger Fault Yellow LED turns on steady when the battery charger voltage is too high or low.

Battery Fault Yellow LED turns on steady when battery voltage is too low.

Data Bus Fault Yellow LED that turns on steady when the main and remote console(s) cannot communicate.

NAC Fault Yellow LED that turns on steady when the onboard NAC wiring is open or short-circuited.
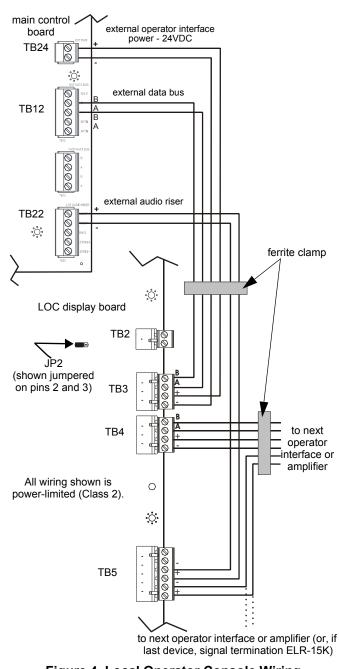
NAC Active Green LED that turns on steady when the NAC output is on.
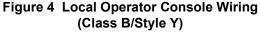
System Trouble Yellow LED that turns on steady when any fault exists in the system.

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

5 Wiring

Wiring for the Local Operator Console is accomplished between TB24, TB12, and TB22 on the ECC-50/100 main control board to TB3, TB4, and TB5 on the LOC. If the ECC-LOC is the last device on the audio and data bus chain, signal terminations are required. For the external data bus, a removable jumper must be on pins 1 and 2 of JP2. If the ECC-LOC is not the last device, the jumper must be on pins 2 and 3 of JP2 as shown below. For the external audio riser, termination (15K ohm resistor) must be connected to pins 5 and 6 on TB5. A ferrite clamp (P/N: 50116546-001) must be installed around all wires in both the input and output wire runs inside the ECC-LOC cabinet as shown below. Refer to the ECC-50/100 Manual #LS10001-000FL-E for more information.
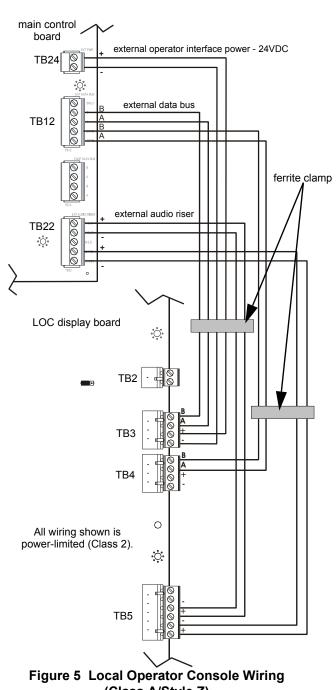
Figure 4 Local Operator Console Wiring (Class B/Style Y)

Figure 5 Local Operator Console Wiring (Class A/Style Z)

6 Operating Instructions

Normal Standby Operation

1. Green AC POWER indicator lit steadily.
2. Yellow TROUBLE indicators off.
3. Green speaker zone indicators off.

Alarm Condition

1. Green speaker zone indicator(s) lit steadily.
2. Green SYSTEM IN USE indicator lit steadily.
3. Audio message plays.
4. Green FIRE SYSTEM ACTIVE indicator lit steadily (when FACP is in alarm).
5. Green MNS CONTROL indicator lit steadily and relay activated (for mass notification events).

Alarm Reset After locating and correcting a fire alarm condition at the FACP, the system will return to Normal Standby Operation. After correcting a mass notification event, press the MNS CONTROL button to clear the system and return to Normal Standby Operation.

Trouble Condition Activation of trouble signal under normal operation indicates a condition that requires **immediate** attention. Contact your local service representative. Silence the audible signal by pressing the TROUBLE SILENCE switch. The trouble indicator will remain illuminated.