



**FEDERAL SIGNAL**

Safety and Security Systems / Industrial

*Advancing security and well-being.*



**MODEL EWP ECHO INTERCOMS**

**INSTALLATION AND SERVICE INSTRUCTIONS**

**FOR**

**MODEL EWP ECHO INTERCOMS**

2561955A

REV. A0 1013

Printed in U.S.A.



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FOR  
MODEL EWP ECHO INTERCOMS**



**SAFETY MESSAGE TO INSTALLERS, USERS AND MAINTENANCE PERSONNEL**

It is important to follow all instructions shipped with this product. This device is to be installed by a trained electrician who is thoroughly familiar with the Country Electric Codes and will follow the guidelines as well as local codes.

The selection of mounting location for the device, its controls and the routing of the wiring is to be accomplished under the direction of the facilities engineer and the safety engineer. In addition, listed below are some other important safety instructions and precautions you should follow:

- Read and understand all instructions before installing or operating this equipment.
- Disconnect intercom from the power supply before any installation or maintenance is performed.
- Power is only to be provided from the Central Control. This intercom is not for stand-alone use.
- After installation, test the intercom system to ensure that it is operating properly.
- After testing is complete, provide a copy of this instruction sheet to all operating personnel.
- Establish a procedure to routinely check the intercom installation for integrity and proper operation.
- The product nameplate, which may contain cautionary or other information of importance to maintenance personnel, should not be obscured in any way.

Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death.

**I. INSTALLATION.**

**A. Unpacking.**

After unpacking the light, examine it for damage that may have occurred in transit. If the equipment has been damaged, do not attempt to install or operate it. File a claim immediately with the carrier stating the extent of the damage. Carefully check all envelopes, shipping labels, shipping labels and tags before removing or destroying them.

**B. Mounting and Wiring.**

The EWP ECHO intercoms are designed for mounting on a flat horizontal or vertical surface.

## Surface Mounting.

1. Loosen the four M6 fixing screws to access the mounting holes. The cover opens right to left.
2. Disconnect the AUDIO DIST and KEYPAD wire looms from the printed circuit board (located in the lower moulding) to avoid straining internal wiring connections during installation.
3. Mount the unit through the four corner M6 fixing holes located on the lower moulding. Mounting hardware is to be user supplied.
4. The lower moulding is supplied with three M20 cable entries for connection of the following cables:
  - Data/Power (from Central Control)
  - External Loudspeaker
  - Relay Switched Output – N.O. contact
5. Removable screw terminal socket blocks are provided for field wiring. These terminals are rated for the following wire ranges:  
24-12 AWG (.25 - 4 mm<sup>2</sup>)
6. Terminate wires as follows:
  - TB2 LINE – Connect wire pair from Central Control (Non-Polar).
  - TB3 SPEAKER – Connect wire pair from external loudspeaker.
  - TB4 RELAY – Connect wire pair for switched N.O. relay contact (250 Vac, 3 A max.).
  - CHASSIS – Connect earth wire (Faston tab provided).
7. Re-connect AUDIO DIST and KEYPAD wire looms.
8. Refit cover ensuring that cables are correctly routed to avoid damage to conductors. Secure M6 screws to ensure weather-tightness.

## II. MAINTENANCE.



### SAFETY MESSAGE TO MAINTENANCE PERSONNEL

Listed below are some important safety instructions and precautions you should follow:

- Read and understand all instructions before operating this system.
- Any maintenance to the intercom system must be done with the power turned off. Power to relay contact must also be disconnected as this is externally supplied.
- Any maintenance to the intercom system must be performed by a trained electrician in accordance with Country Electrical Guidelines and local codes.
- Never alter the unit in any manner. Safety may be endangered if additional openings or other alterations are made to units.
- The nameplate, which contains cautionary or other information of importance to maintenance personnel, should not be obscured.
- After performing any maintenance, test the intercom system to ensure that it is operating properly.

#### A. Keypad Replacement.

The keypad is to be replaced as an assembly consisting of the keypad, LED, and buzzer. See the list below for the replacement part number.

1. Loosen the four M6 fixing screws from the cover and open the unit right to left.
2. Disconnect the 10-way IDC connector from the keypad and the 2-way socket block on the buzzer leads.
3. Remove the eight M4 screws from the clamping plate and remove both items.
4. Fit the new keypad assembly into position and ensure that the fascia is firmly seated to the sealing gasket in the moulded cover. Tighten the clamping plate with the eight M4 screws.
5. Re-connect the 10-way connector and 2-way socket block and re-install cover.
6. Test unit for proper operation after replacement is complete.

#### B. Stubby Microphone Replacement.

1. Loosen the four M6 fixing screws from the cover and open the unit right to left.
2. Disconnect the 2-way microphone socket block from the audio distribution board.

3. Remove the three M4 nuts that retain the microphone to the fascia.
4. Fit new microphone by reversing the above procedure. Ensure that the sealing gasket is fitted properly between the microphone base and the fascia.
5. Re-connect the 2-way socket block and re-install cover.
6. Test unit for proper operation after replacement is complete.

C. Gooseneck Microphone Replacement.

1. Loosen the four M6 fixing screws from the cover and open the unit right to left.
2. Disconnect and remove the 2-way microphone socket block from the audio distribution board.
3. Unscrew the gooseneck microphone assembly from the front cover and withdraw the cable.
4. Fit new microphone by reversing the above procedure. Ensure that the sealing washer is fitted properly between the microphone base and the enclosure.
5. Re-install and connect the 2-way socket block and re-install cover.
6. Test unit for proper operation after replacement is complete.

D. Handset Replacement.

1. Loosen the four M6 fixing screws from the cover and open the unit right to left.
2. Disconnect and remove the 4-way handset socket block from the audio distribution board.
3. Unscrew the handset gland from the front cover and withdraw the cable.
4. Fit the new handset by reversing the above procedure. Ensure that the sealing washer is fitted properly between the handset gland and the enclosure.
5. Re-install and connect the 4-way socket block and re-install cover.
6. Test unit for proper operation after replacement is complete.

### E. Replacement Parts.

Description	Part No.
Relay, 250 V, 3 A	K131240
PCBA, Micro-Processor	K2001908
Headset	K137200-01
Stubby Microphone	K137164
Gooseneck Microphone, 150 mm	K137165
Gooseneck Microphone, 330 mm	K137165-01
Handset, 1 m stainless steel cord	K8601248
Handset, 1.8 m curly cord	K8601249
Handset, 10 m curly cord	K8601249-01
Keypad Assy.	K8601267

### III. SERVICE.

The Federal factory will service your equipment or provide technical assistance with any problems that cannot be handled locally.

Any units returned to Federal Signal for service, inspection, or repair must be accompanied by a Return Material Authorization. This R.M.A. can be obtained from a local Distributor or Manufacturer's Representative.

At this time a brief explanation of the service requested, or the nature of the malfunction, should be provided.

Address all communications and shipments to:

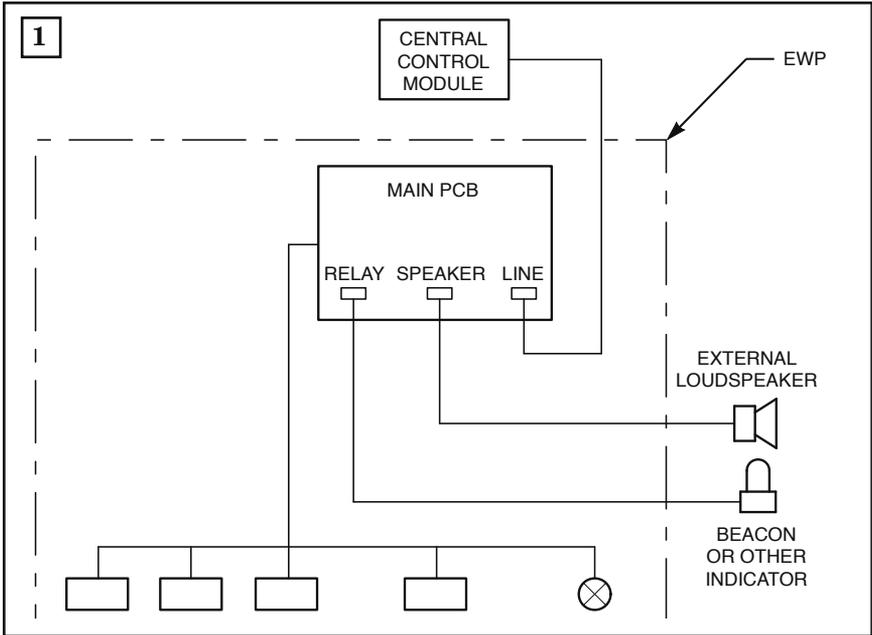
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