

# FNV-RM

## REMOTE MICROPHONE

### INSTALLATION INSTRUCTIONS

The FNV-RM is a supervised remote microphone panel for use with the FNV 25/50/100 voice evacuation system. The purpose is to allow emergency voice messages to be made over the system speakers from another location remote from the FNV 25/50/100.

The FNV-RM connects via 3 pair shielded cable to the FNV-SC supervisory card, which is mounted within the FNV 25/50/100. Fault conditions in the wiring or in the remote microphone circuitry are reported to the FACP through the same supervisory path as the FNV 25/50/100.

#### OPERATION

When the FNV-RM microphone is keyed during an alarm condition, the alarm signal and digital message will be interrupted and live voice messages can be broadcast. In normal standby the microphone can be keyed to make announcements at any time. Any time an FNV-RM is keyed the In-Use LED will light on all other FNV-RMs, the other units will be disabled. This is to insure that only one operator is able to page over the system. If the master microphone in the FNV 25/50/100 is keyed it will override any remote microphone.

#### INSTALLATION

Installer must insure that all wiring and devices installed in system meet the following standards:

- National Electrical Code (NFPA 70)
- NFPA Standard 72
- Life Safety Code (NFPA 101)

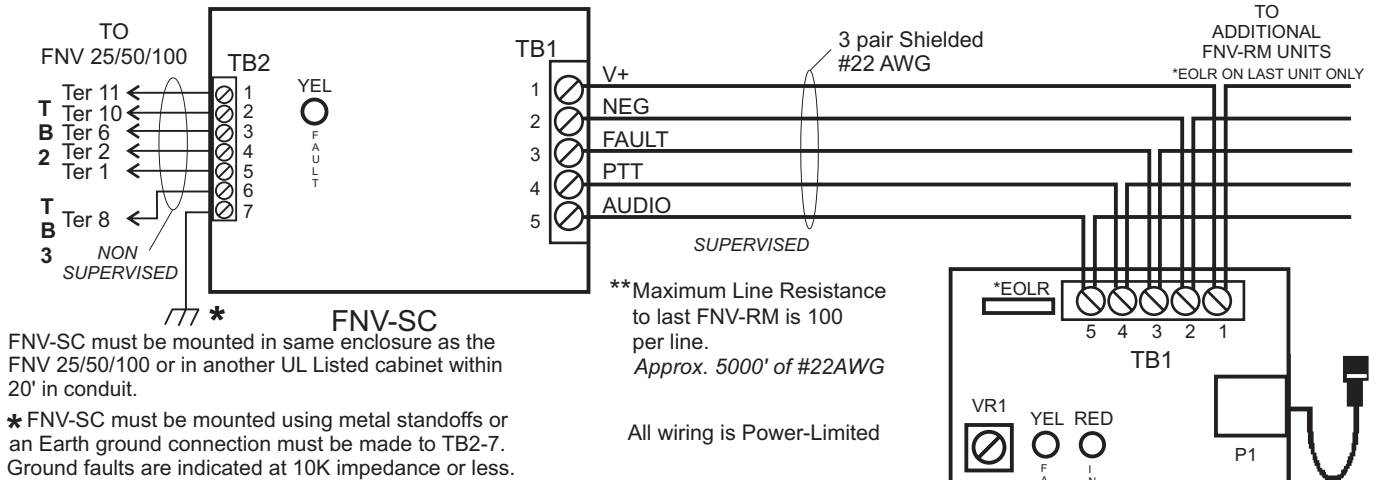
Install equipment in a clean, dry environment, avoid installation where equipment could be subjected to vibration. Remove electronic assemblies from the enclosure prior to any drilling or punching of the enclosure. Where possible, make all cable entries from the rear or sides. Before making any modifications to the enclosure, be certain that they will not interfere with assemblies.

Insure all power is off before making any wire connections.

#### WIRING (Refer to wiring and terminal designation diagrams)

1. Use 3-pair shielded wire (#22 AWG min.) from the FNV 25/50/100 to the FNV-RM remote microphone location.
2. Attach snap-track to the FNV 25/50/100 cabinet. Mount FNV-SC Supervisory Card to snap-track. (May be factory mounted and wired)
3. Make wiring connections as shown on WD-1. Where multiple FNV-RM units are used, insure that EOLR is used on last unit only. Apply power to test.
4. Test systems primary microphone. Test the FNV-RM remote microphone. Activate an Alarm. Retest FNV 25/50/100 to insure that tone and message are broadcast.

Wiring Detail Fig.1



FNV-SC must be mounted in same enclosure as the FNV 25/50/100 or in another UL Listed cabinet within 20' in conduit.

\* FNV-SC must be mounted using metal standoffs or an Earth ground connection must be made to TB2-7. Ground faults are indicated at 10K impedance or less.

**TERMINAL DESIGNATIONS**

**FNV-SC**

**TB2**

- Ter. 1 - MIC PTT +24 10mA
- Ter. 2 - V+ 24 VDC 0.10A
- Ter. 3 - PTT +24V 10mA
- Ter. 4 - Audio 1Vrms 10mA
- Ter. 5 - Ckt Neg.
- Ter. 6 - Fault +24V 10mA
- Ter. 7 - Earth Ground

**TB1**

- Ter. 1 - V+ 24 VDC
- Ter. 2 - Ckt Neg.
- Ter. 3 - Fault
- Ter. 4 - PTT
- Ter. 5 - Audio 1Vrms

**LED 1**

Fault (Yellow)

**FNV-RM**

**TB1**

- Ter. 1 - V+ 24 VDC 0.044A
- Ter. 2 - Ckt Neg.
- Ter. 3 - Fault +24V (Pull Down 10mA)
- Ter. 4 - PTT +24V 10mA
- Ter. 5 - Audio 1Vrms

**LED1**

Fault (Yellow)

**LED2**

In Use (Red)

**VR1**

Mic Gain (clockwise to increase)

**P1**

6 position modular jack (connect to microphone)

**FNV-RM**

\*EOLR is a 6/3 SIP 10K Resistor Network to be installed on last FNV-RM only.

\*\*Maximum line resistance is dependent on # of devices loading the line.

- 2 FNV-RM - 100 Max. Line Resistance
- 3 FNV-RM - 80 Max. Line Resistance
- 4 FNV-RM - 65 Max. Line Resistance
- 5 FNV-RM - 50 Max. Line Resistance

More than 5 FNV-RMs is not recommended

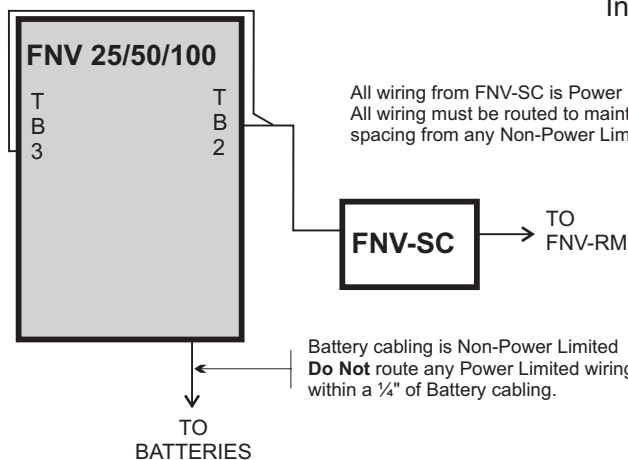
**SPECIFICATIONS**

**FNV-SC**

- Input Voltage - 24 VDC
- Input Current - 0.033A DC Standby  
0.044A DC Active

**FNV-RM**

- Input Voltage - 24 VDC
- Input Current - 0.033A DC Standby  
- 0.044A DC Active

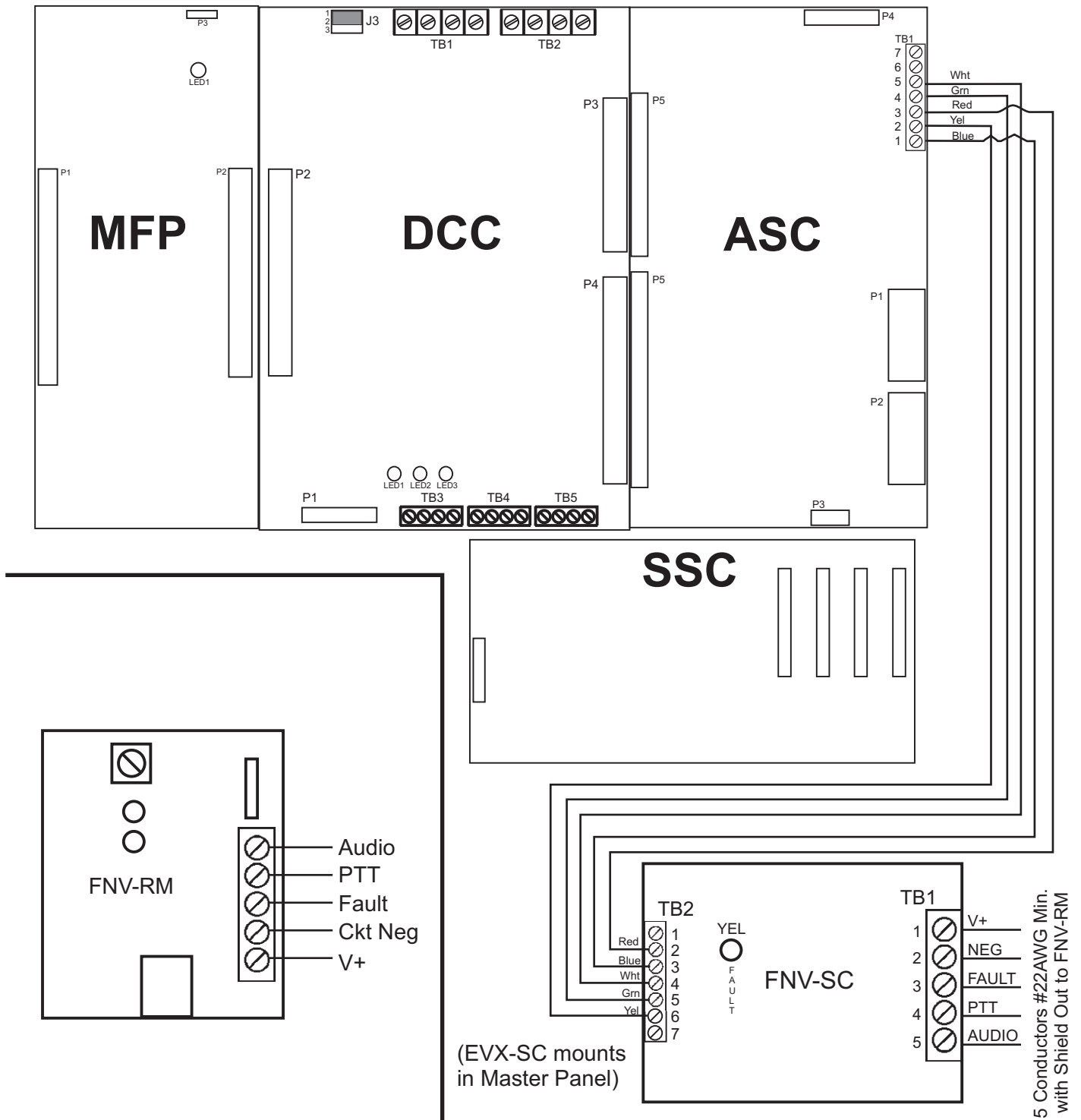


NOTE: When circuits are Power Limited, use Power Limited cable as detailed in the National Electrical Code, Article 760, such as FPL or FPLP type cabling.

**Field wiring connections:**

- #6-32 wire clamp screw 14-18 AWG
- #8-32 wire clamp screw 12-18 AWG
- Horizontal wire entry terminal 18-26 AWG
- Wire gauge determined by circuit load

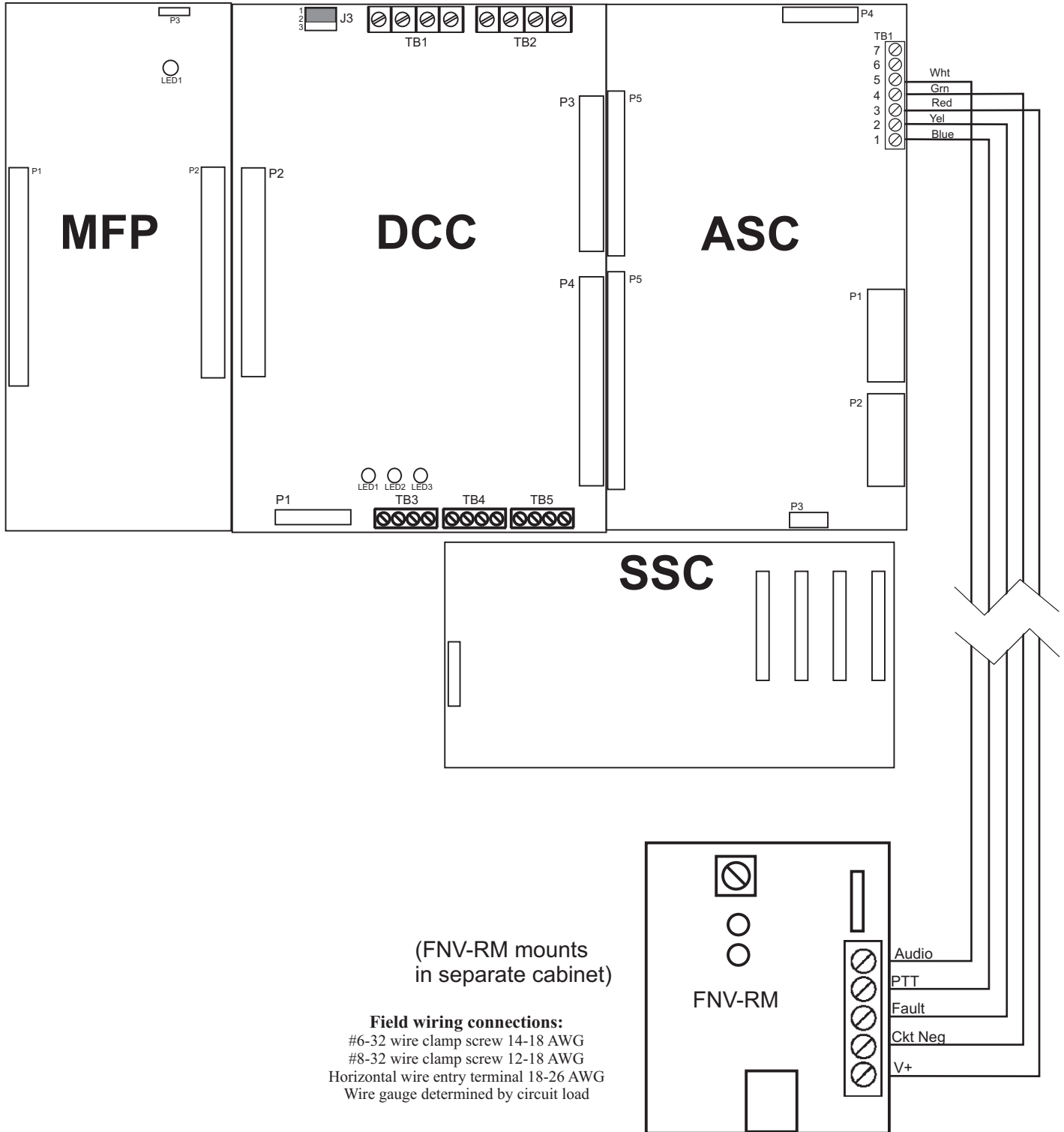
# ASC to FNV-SC Wiring Detail



Wire colors are for factory wired systems and used reference

**Field wiring connections:**  
 #6-32 wire clamp screw 14-18 AWG  
 #8-32 wire clamp screw 12-18 AWG  
 Horizontal wire entry terminal 18-26 AWG  
 Wire gauge determined by circuit load

# ASC to FNV-RM (unsupervised) Wiring Detail



Wire colors are for factory wired systems and used reference