

FC-RM

Remote Microphone Module

Product Installation Document

PN 51247:C 4/07/2008 07-873

The FC-RM Remote Microphone Module, which is installed in a CAB-RMRF cabinet as illustrated in Figure 1, provides paging capabilities for compatible audio systems such as the ACC-25/50, ACC-25/50ZS, ACC-25/50ZST, ACC-25/50DA, FC-25/50X and FC-25/50DA.

Following is a list of FC-RM features:

- Automatic gain control circuit
- All wiring is power-limited
- Supervised microphone
- All external wiring is supervised
- Power On LED
- Trouble LED
- Pluggable terminal blocks
- Remote location for paging

Power Specifications:

- 6 mA non-fire alarm current
- 30 mA when microphone is activated
- 24 VDC Nominal Operating Voltage

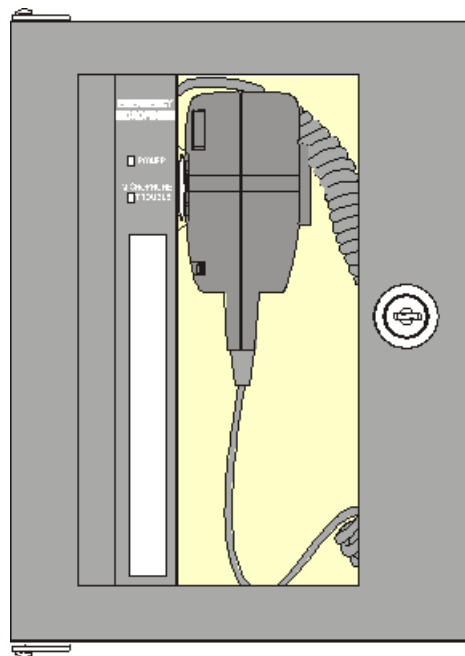


Figure 1: FC-RM in a CAB-RMRF

FC-MIM Microphone Interface Module Installation

The supplied FC-MIM Microphone Interface Module must be installed on the main circuit board of the host audio panel (ACC-25/50, ACC-25/50ZS, ACC-25/50DA, FC-25/50X or FC-25/50DA).



CAUTION: CIRCUITS CONTAIN STATIC-SENSITIVE COMPONENTS

ALWAYS GROUND YOURSELF WITH A PROPER WRIST STRAP BEFORE HANDLING ANY CIRCUITS SO THAT STATIC CHARGES ARE REMOVED FROM THE BODY. USE STATIC SUPPRESSIVE PACKAGING TO PROTECT ELECTRONIC ASSEMBLIES.

■ To install the FC-MIM:

1. Be sure all power (AC and DC) is removed from the panel before installing the FC-MIM
2. Position the connector on the FC-MIM module over the audio panel main circuit board Remote Mic connector and gently press down until the module is properly seated. Be careful not to bend or break any pins on the connector
3. Secure the FC-MIM module to the metal standoff on the main circuit board with the supplied screw

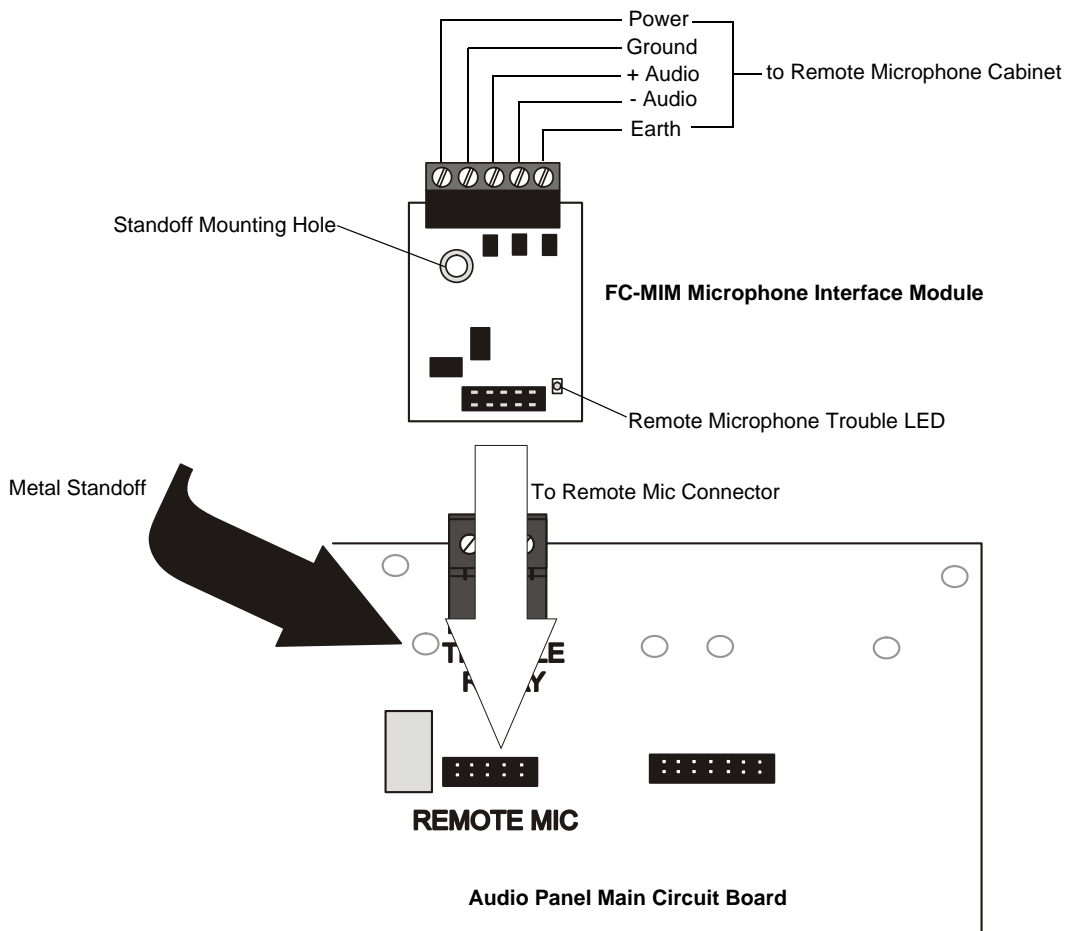


Figure 2: Installing an FC-MIM Module

Installation With ACC-FFT Fire Fighter Telephone Module (ACC-25/50ZST Only)

The FC-RM Remote Microphone module is installed on the ACC-25/50ZST via wiring connections directly to the ACC-FFT Fire Fighter Telephone Module. Note that the supplied FC-MIM module is not used.



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■ To install the FC-RM:

1. Be sure all power (AC and DC) is removed from the panel before connecting the FC-RM to the ACC-FFT
2. Attach wiring to the pluggable terminal blocks and plug onto the ACC-FFT board

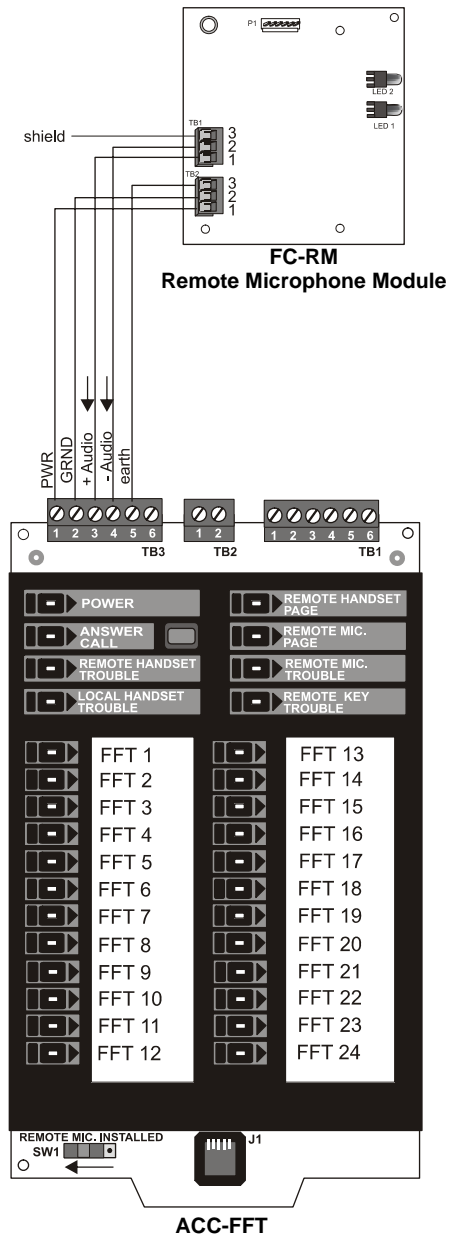
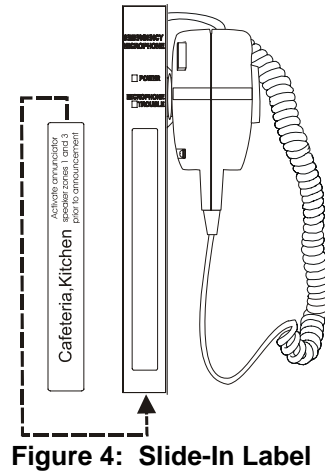


Figure 3: Installing an FC-RM Module

FC-RM Installation

■ Slide-in Label

A slide-in label (part number 51146) is provided with each FC-RM assembly. Enter the location of the microphone speakers on this label along with any instructions for speaker activation, then slide the label into the label slot at the bottom of the assembly. (See Figure 4).



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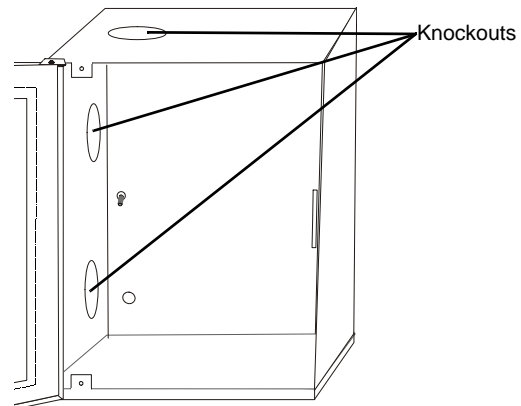
■ FC-RM Installation to the CAB-RMRF Cabinet



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1. Be sure all power (AC and DC) is removed before installing the FC-RM .
2. Pull the required wiring into the CAB-RMRF cabinet through the knockouts provided.
3. Attach wiring to the pluggable terminal blocks and plug onto the FC-RM board
4. Carefully slide the board into the cabinet until it rests in the slots on the back wall of the box.
5. Secure the FC-RM in the cabinet with the two self-tapping screws provided.



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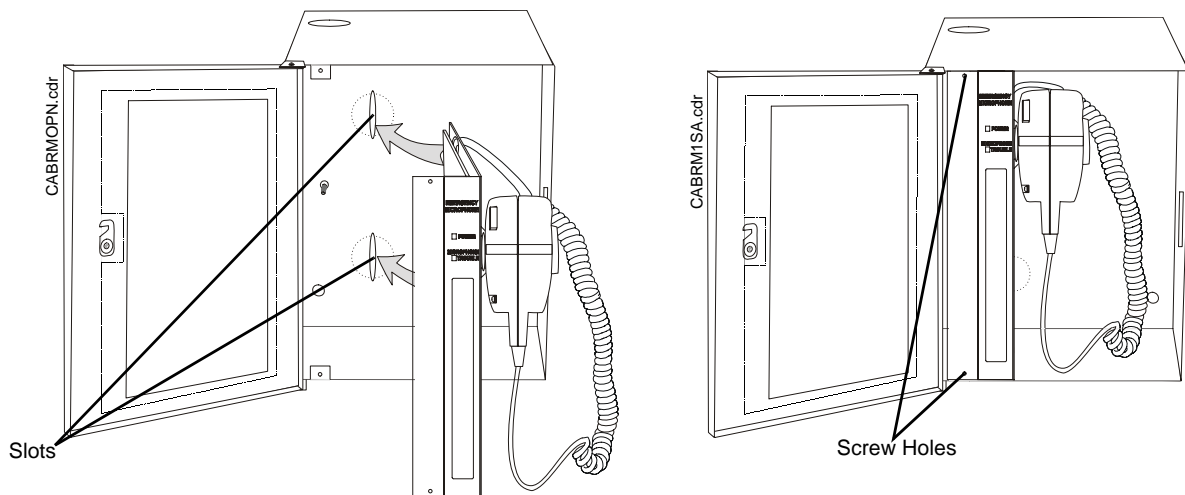


Figure 5: Installing the FC-RM

Wiring the FC-RM and FC-MIM

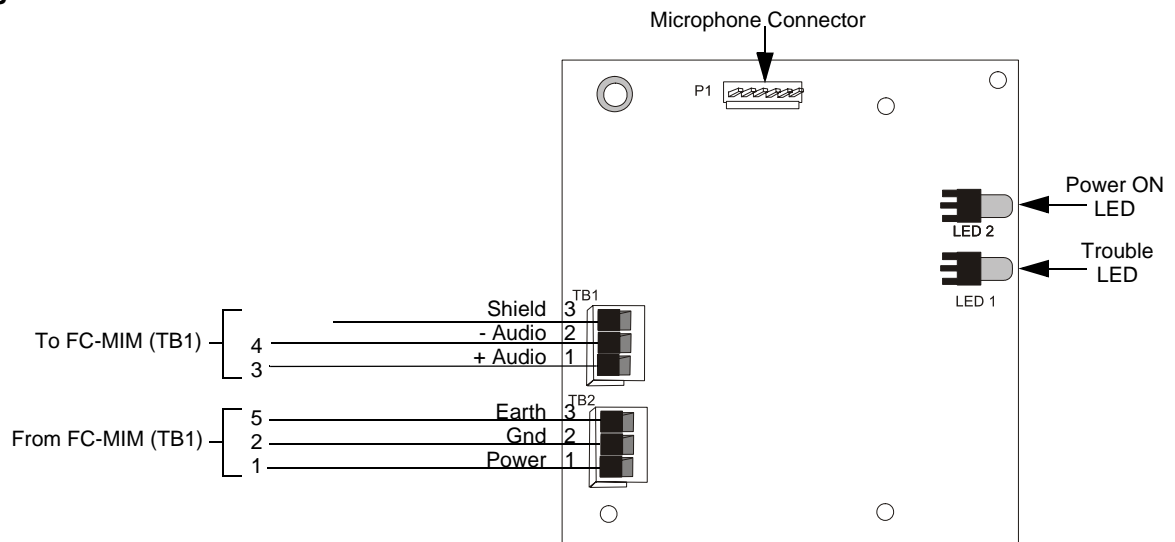


Figure 6: FC-RM Wiring

■ TB1: FC-RM OUTPUT

The FC-RM audio output terminals [TB1 Terminals 1 (+) and 2 (-)] provide an audio level when activated by the microphone PTT (Push-To-Talk) switch. When the PTT is not activated, a +2 VDC voltage is present at the output of the FC-RM. The output of the FC-RM connects to the Microphone Interface Module located in the host audio panel as illustrated in Figure 6.

■ TB2: INPUT POWER SUPPLY

The FC-RM is powered by the host audio panel via the FC-MIM. The FC-MIM supplies +24 VDC to the FC-RM via the PWR (1) and GND (2) terminals. The FC-MIM also supplies Earth and analog grounds to the FC-RM. Refer to Figure 7.

LED 1 - This yellow LED will light when the FC-RM microphone is disconnected.

LED 2 - This green LED will light when the FC-RM is powered.

The FC-RM can be remotely connected to the host audio panel with the FC-MIM. Refer to the following table for wiring distance limitations. It can be connected with a negligible amount of noise and distortion when the distances shown in the table are not exceeded. The wiring configuration is shown in Figure 7.

Wire Gauge	Max. Distance
12	6,000 ft (1,825 m)
14	3,840 ft (1,170 m)
16	2,400 ft (731 m)
18	1,500 ft (450 m)

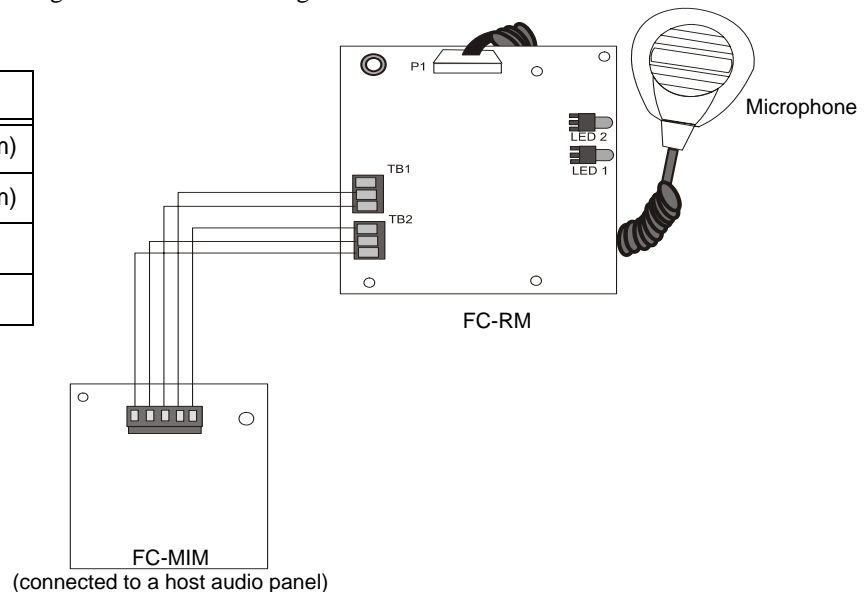


Figure 7: FC-MIM Wiring

PSM - Push-to-Talk Switch Monitor
AGC - Automatic Gain Control
PSC - Power Save Circuit

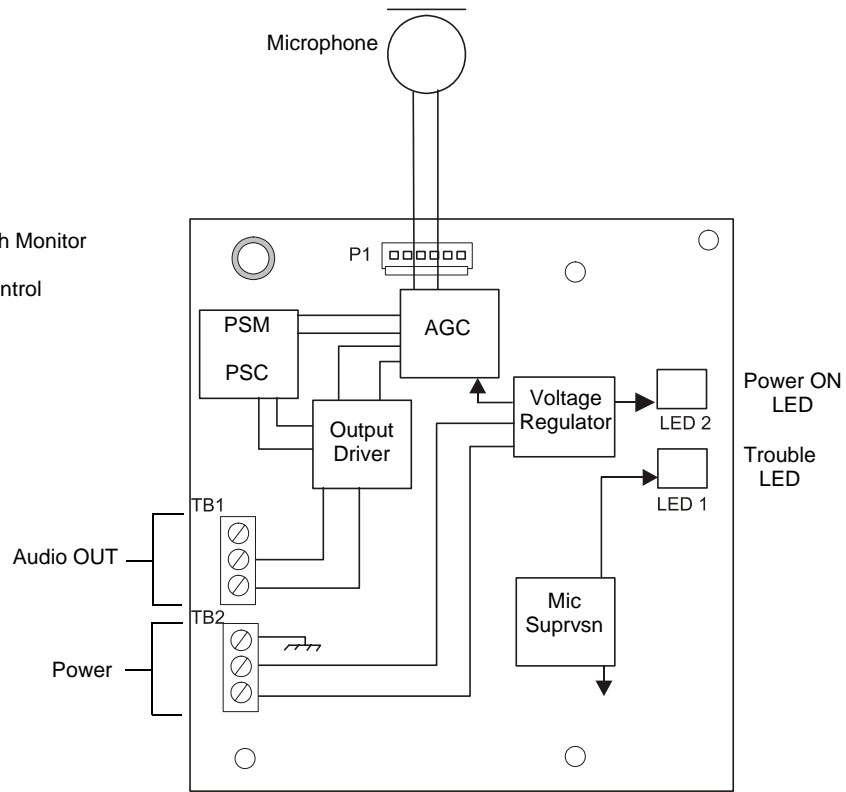


Figure 8: FC-RM Block Diagram