

TELEX COMMUNICATIONS, INC.  
9600 Aldrich Ave. So., Minneapolis, MN 55420 U.S.A.

## MODEL FMR-50 WIRELESS RECEIVER

### GENERAL DESCRIPTION

The Telex Model FMR-50 Wireless Microphone Receiver, used with a Telex Belt-Pack or Handheld Transmitter, is designed for use in theatres, auditoriums, houses of worship, and live sound reinforcement applications. The single-channel FM receiver operates on selected VHF frequencies from 150-216 MHz. Ten stock frequencies are available for immediate delivery, and at least fifteen systems can be used simultaneously on separate channels.

The FMR-50 may be powered from either 115 Vac, 50/60 Hz or 13.6 Vdc. The unit is rack-mountable, in single or double configurations, and occupies only one rack space.

### DESIGN FEATURES

The chassis and cover are painted steel which provides 100% shielding. Circuit boards are 0.062-inch (1.57 mm) thick, glass-epoxy composition with liberal use of 5% tolerance capacitors and metal film resistors. The highly selective IF section features a specially designed 9-pole linear phase filter system which helps to eliminate out-of-band interference without distorting the phase of the audio signal. The receiver features a compander in the audio section for increased dynamic range and noise reduction. Pos-i-Squelch™, a special noise sensing squelch circuit, is used to eliminate annoying squelch breaks from spurious RF noise. The power cord is secured to the chassis with a heavy-duty strain relief.

### OPERATING FEATURES

The front panel has a ten-segment, multi-color bar graph LED display for peak VU level and an LED for carrier indication. There is a two-position, push-type, power on/off switch with an LED indicator. The rear panel has a PL-259 (UHF type) antenna connector for the supplied ¼-wave antenna. The audio output is a microphone-level balanced XLR with a volume attenuator. The level is adjustable from -20 dBm max to -60 dBm. There is a 2.5 mm remote power jack on the rear panel that will accept between 12 to 14 Vdc. All control designations are clearly silk-screened on the unit.



### SPECIFICATIONS

**Frequency Response:** 50 Hz to 15 kHz  $\pm 1$  dB

**Squelch Quieting:** 125 dB

**Squelch Level:** 1  $\mu$ V, internally adjustable

**Antenna Impedance:** 50 ohms nominal

**Hum and Noise:** -125 dB

**Audio Controls:**

Mic: 200 ohms, -20 dB maximum

Mid Adj: -20 dB, -60 dB minimum

**Power:** 115 Vac, 50/60 Hz, 3 watts, or 13.6 Vdc

**Temperature Range:** 0° F to 130° F  
(-18° C to 55° C)

**Weight:** 2 lbs 4 oz (1 kg)

**RF Sensitivity:** Less than 0.7  $\mu$ V (12 dB SINAD)

**Ultimate Quieting:** 100 dB (A weighted)

**Image Rejection:** Greater than 75 dB

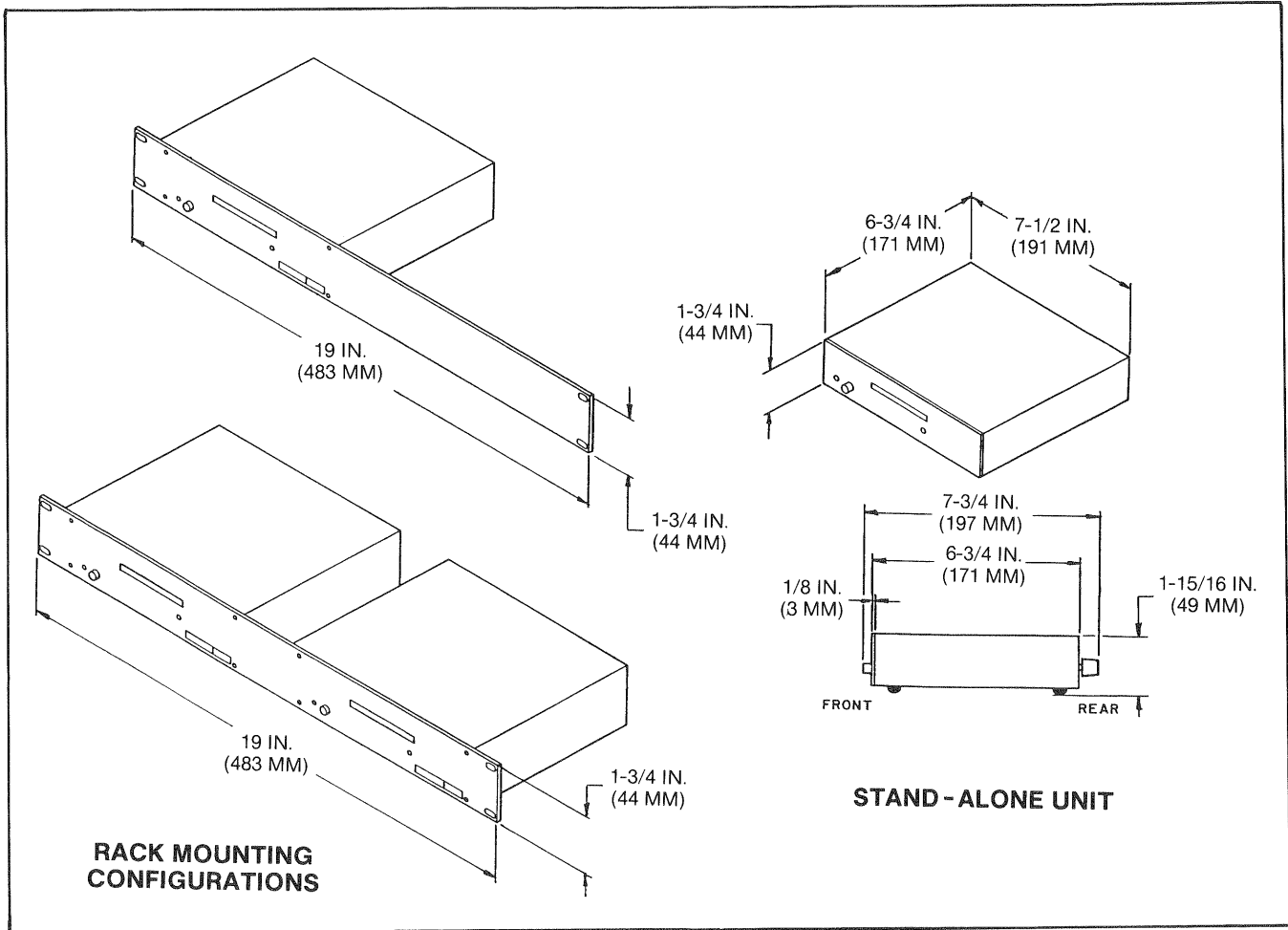
**Signal-To-Noise Ratio:** 92 dB typical  
(98 dB A weighted)

**Dimensions:** 7½ in. W x 6¾ in. D x 1¾ in. H  
(191 mm x 171 mm x 44 mm)

**TELEX**<sup>®</sup>

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WIRELESS RECEIVER

## DIMENSIONS



## ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

The Telex Model FMR-50 Wireless Microphone Receiver shall be a single-channel, crystal-controlled oscillator operating on selected frequencies from 150-216 MHz. The Receiver shall incorporate 9-pole linear phase filters in the RF circuitry for maximum selectivity and allow operation of at least fifteen simultaneous systems on separate channels. The Receiver shall incorporate a compander system to assure maximum dynamic range and noise reduction. The Receiver shall have a Pos-i-Squelch™ signal sensing squelch circuit which will not open the squelch for spurious RF noise. The Receiver shall be powered either by 115 Vac, 50/60 Hz, or 13.6 Vdc, and a 240 Vac version shall be available for overseas operation. The Receiver shall be rack-

mountable in one rack space. The Receiver shall use a ¼-wave removable antenna, and remote ⅝-wave antennas with PL-259 (UHF type) connectors shall be available as an option for rack-mount systems. The Receiver shall incorporate a ten-segment LED bar graph display for VU level and an LED for carrier indication. The Receiver shall provide a microphone-level balanced output through a male XLR connector. The microphone output level shall be adjustable with a variable attenuator. The Receiver shall be certified under FCC rules, Part 15, and DOC certified under RSP 121. The Receiver shall be a Telex Model FMR-50 Wireless Receiver.

## ORDERING INFORMATION

Telex Model FMR-50 Wireless Microphone Receiver ..... Catalog No. 64256-XXX