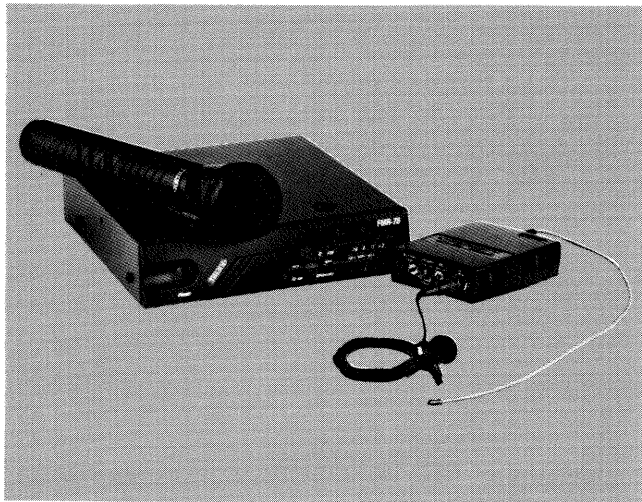


# Telex Technical Data

## Model FMR-70 WIRELESS RECEIVER



### General Description

The Telex Model FMR-70 True Diversity 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 high-performance single-channel Pos-i-Phase™ True Diversity FM Receiver operates on selected VHF frequencies from 165-216 MHz. Ten stock frequencies are available for immediate delivery, and at least six systems can be used simultaneously on separate channels.

The FMR-70 may be powered from either 115 Vac, 50/60 Hz or 13.6 Vac/Vdc. The unit is rack-mountable, and up to two units may be mounted in only one rack space.

### Design Features

The chassis and cover are painted aluminum which provides 100% shielding. Circuit boards are 0.062-inch (1.57 mm) thick, glass-epoxy composition. The Receiver features a compander in the audio section for noise reduction and expanded dynamic range. The Receiver incorporates patented\* Pos-i-Phase diversity circuitry, which eliminates dropouts caused by signal cancellation. The 1/4-wave antennas are removable, and accessory 5/8-wave antennas are available for rack mounting configurations. The power supply is a wall type, UL and CSA listed design, with a heavy-duty strain relief.

### Operating Features

Front panel controls and indicators include a pushbutton power switch, two LED's to indicate the phase of the received signal (also doubles as a power indicator), a transmitter carrier LED, and a four-segment bar graph display for peak audio VU level. Rear panel controls and connectors include two PL-259 (UHF type) connectors for the supplied 1/4-wave antennas, an XLR-3M connector for balanced audio output, an output level control, and a 2.5 mm AC/DC power jack.

\* Patent No. 4,293,955

### Specifications

**RF Frequency Range:** 165 to 216 MHz

**Frequency Response:** 50 Hz to 15 kHz  $\pm 2$  dB

**IF Selectivity:** 7 pole ceramic filter

**Squelch Quieting:** 90 dB

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

**Signal-To-Noise Ratio:** 94 dB typical

**Antenna Input Impedance:** 50 ohms nominal

**Hum and Noise:** 90 dB

#### Audio Outputs:

Mic: 200 ohms, -10 dBm maximum

Mic Level Adj. (Vol): -60 dBm minimum

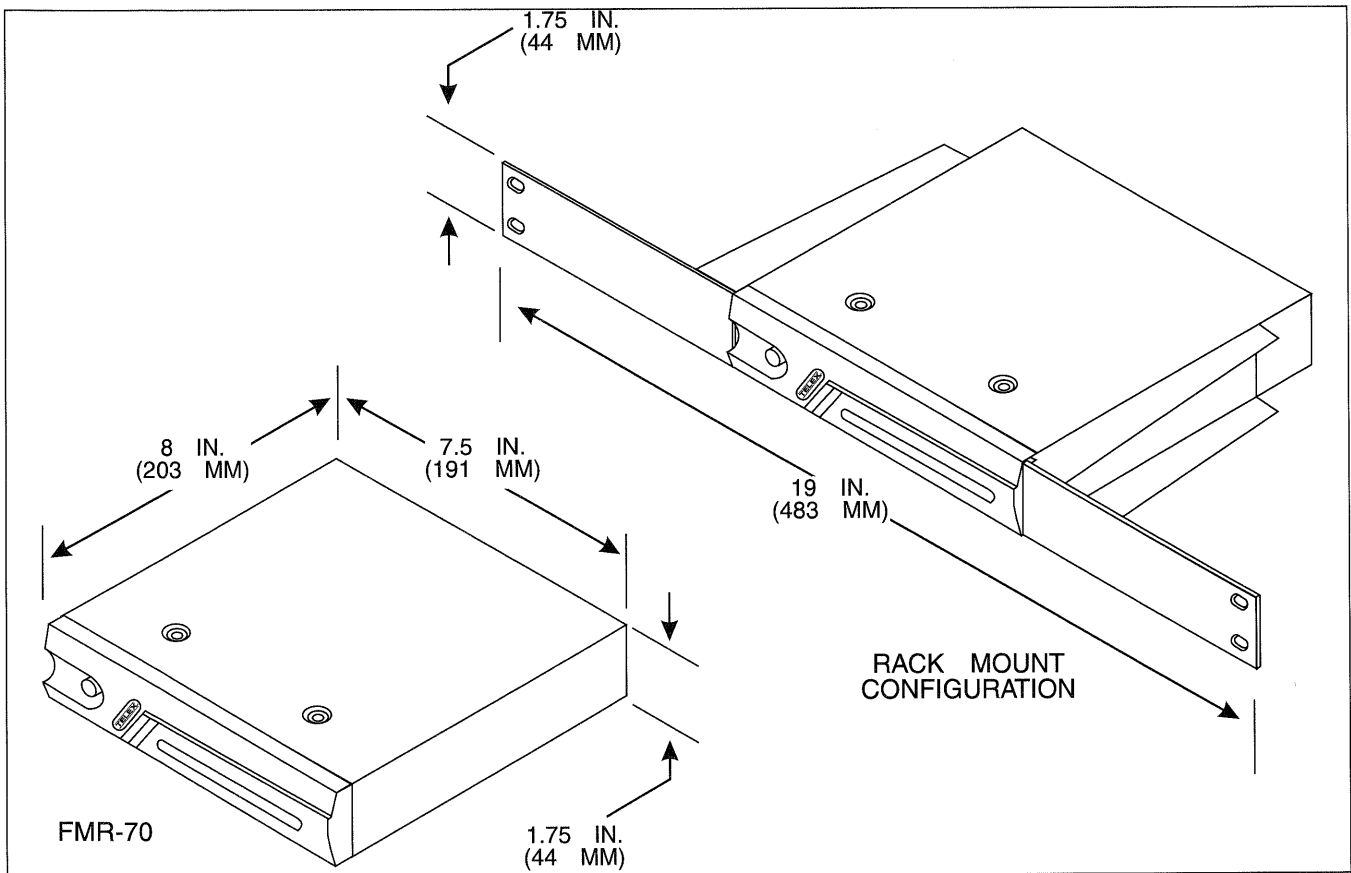
**Input Power:** 13.0 Vac RMS with supplied adaptor or 12 to 14 Vdc

**Temperature Range:** -4°F to 130°F (-20°C to 55°C)

**Weight:** 1.5 lbs (675 grams)

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# TELEX®



Dimension Drawing

**Specifications (Continued)**

**RF Sensitivity:** Less than 0.5  $\mu$ V (12 dB SINAD)

**Ultimate Quieting:** 90 dB

**Image Rejection:** Better than 75 dB

**Dimensions:** 7-1/2 in. W x 8 in. D x 1-3/4 in. H (191 mm x 203 mm x 44 mm)

**Architect's and Engineer's Specifications**

The Telex Model FMR-70 Wireless Microphone Receiver shall be a single-channel, crystal-controlled device, operating on selected frequencies from 165-216 MHz. The receiver shall incorporate Pos-i-Phase™ diversity circuitry to eliminate phase cancellation and dropouts. The Receiver shall have

a highly selective IF section and allow for at least six simultaneous systems on separate channels. The Receiver shall incorporate a compander system to assure maximum dynamic range and noise reduction. The Receiver shall be powered either by 115 Vac, 50/60 Hz, or 13.6 Vac/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 have an all-metal enclosure. The Receiver shall use 1/4-wave removable antennas, and remote 5/8-wave antennas with PL-259 (UHF type) connectors shall be available as an option for rack-mount systems. The Receiver shall incorporate a four-segment LED bar graph display for AF level and LEDs for carrier indication and diversity operation. The Receiver shall provide an adjustable microphone-level output through a 3-pin XLR connector. The Receiver shall be notified under FCC rules, Part 15, and DOC certified under RSP 121. The Receiver shall be a Telex Model FMR-70 Wireless Receiver.

**Ordering Information**

Telex Model FMR-70 Wireless Microphone Receiver . . . . . Catalog No. 71061-XXX

