

Telex®

FMR-450 UHF Wireless Microphone System



Professional UHF sound only from Telex.

The Telex FMR-450 UHF Wireless Microphone System delivers the ultrapure performance you get only from a UHF system.

The Telex FMR-450 system avoids the interference and congestion common in VHF systems by operating in the UHF band between 524 MHz and 746 MHz. That means broadcast-quality audio with up to 50 systems operating all at once — in one location.

With Telex's patented Pos-i-Phase™ true diversity circuitry, the FMR-450 system operates over long distances reliably — so microphone users can roam freely with complete confidence.

Plus, the FMR-450 system provides a greater degree of integrity in maintaining overall system quieting with Telex's exclusive Pos-i-Squelch II™ system. Innovations like its new compandor design and Pos-i-Squelch II, a true noise type squelch circuit, give the FMR-450 UHF Wireless Microphone System flawless RF performance and uncompromised audio quality.

FMR-450 UHF Wireless Microphone System

General Features

- Specially matched, 1/2-wave collinear ground independent antenna system offers substantial gain improvement over 1/4-wave designs. The receiver measures 1/2 rack space wide by 1 rack space high. Two receivers fit in 1 rack space with optional rack kit.
- FMR-450 receiver features 5 segment RF and audio level indicators, and a diversity phase indicator. The receiver also features a transformer isolated

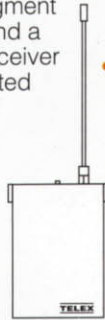
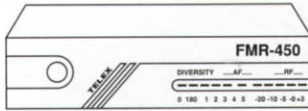
balanced microphone level output with attenuation control.

- HT-450 hand-held transmitter is available with a choice of 4 microphone head options; silent on switch and audio mute; low battery LED and a special captive battery compartment that adjusts to most 9-volt batteries.
- WT-450 micro-pack has a silent on switch and separate audio mute; overload/low battery indicator;

removable, flexible, pigtail antenna and a gold-plated LEMO microphone connector.

- WT-450 micro-pack operates on a standard 9-volt alkaline battery for up to 12 hours or a 8.4-volt NICAD battery for up to 4 hours. The transmitter comes equipped with convenient charging pins for use with the optional drop-in BC-80 pulse charger.

Specifications



FMR-450 Receiver

RF Frequency Ranges: 524-608 MHz and 614-746 MHz

Frequency Response: 50-15,000 \pm 1dB

RF Sensitivity: < 0.5 μ v, 12 dB SINAD

Squelch Quieting: 125 dB

Squelch Level: 1 μ v

Ultimate Quieting: 116 dB (A weighted)

Antenna Input Impedance: 50 ohms nominal

Image Rejection: Better than 75 dB

Hum and Noise: -125 dB

Audio Outputs: Microphone 200 ohms, -10 dBm maximum
Mic level adj (vol.) -60 dBm minimum

Signal-to-Noise Ratio: 110 dB, typical

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

Input Power: 13.0 VAC RMS with supplied adapter or 12 to 14 VDC

Size: Approximately W: 7.5 in. (19.2 cm) D: 8 in. (20.5 cm) H: 1.75 in. (4.5 cm)

WT-450 Micro-pack Transmitter

RF Frequency Range: 524 to 608 MHz and 614 to 746 MHz

RF Power Output: 50 mW maximum, 45 mW typical

RF Frequency Stability: 0.005% crystal controlled

Modulation: FM, \pm 40 KHz Deviation

Pre-Emphasis: 50 μ Sec

Frequency Response: 50 to 15,000 Hz \pm 1dB

Microphone Input: Low impedance, 100-10K ohm, Dynamic or Electret (+ 6V DC electret bias pin 3)

Current Drain: 50 mA typical

Battery Life: 12 hours alkaline typical, 4 hours 8.4-volt NICAD typical

FCC: Type accepted under FCC Part 90 and 74H

FCC ID: B5DB103

HT-450 Transmitter

Battery: 9-volt alkaline (NEDA 1604 or equivalent or 8.4-volt NICAD type)

Battery Life: 8 to 10 hours alkaline typical, 1 to 2 hours NICAD typical on 1 charge

Current Drain: 55mA

Modulation Limiter: Internal compressor

Antenna: External to unit, omnidirectional

RF Power Output: 25mW typical

Range: 1,000 ft. (300) open field conditions typical, 250 ft. (76m) adverse conditions typical.

Audio: 50 - 15,000 Hz \pm 1dB without head

Radiated Harmonic and Spurious Emission Minimum: 30 dB below carrier

Modulation: \pm 40 KHz Deviation, 50 μ Sec pre-emphasis

FCC: Type accepted under Parts 90 and 74

Frequency Range: 450-608 MHz and 614-806 MHz

Microphone Heads

HT-450/65 ELE — Telex 65 ELE

Element Type: Condenser
Directional Pattern: Cardioid
Frequency Response: 85-15,000 Hz \pm 1dB*

Maximum SPL: 140 dB

HT-450/SM-87 — Shure SM-87

Element Type: Condenser
Directional Pattern: Cardioid
Frequency Response: 85-15,000 Hz \pm 1dB*

Maximum SPL: 140 dB

HT-450/EV-757 — Electro-Voice N/D757

Element Type: Dynamic
Directional Pattern: Cardioid
Frequency Response: 50-18,000 Hz \pm 1dB*

Maximum SPL: 144 dB

HT-450/SM-58 — Shure SM-58

Element Type: Dynamic
Directional Pattern: Cardioid
Frequency Response: 50-15,000 Hz \pm 1dB*

Maximum SPL: 140 dB

*1dB radio performance with respect to microphone element

Ordering Information

The Telex FMR-450 receiver is available in various system configurations. Choose from systems with hand-held microphone/transmitters or micro-pack

transmitters with lapel microphones. All FMR-450 systems are backed by a full, three-year warranty.

For price and product information call Telex today to find the FMR-450 UHF Wireless Microphone System dealer near you.

Telex

THE WIRELESS INNOVATOR.

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