

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

## MODEL HT-100 HANDHELD WIRELESS MICROPHONE/TRANSMITTER

### GENERAL DESCRIPTION

The Telex Model HT-100 Handheld Wireless Microphone Transmitter, used with a Telex Wireless Microphone Receiver, is ideal for sound reinforcement applications in broadcast, theaters, auditoriums, and houses of worship. The single-channel, crystal-controlled transmitter operates on selected VHF frequencies from 150-216 MHz. Ten stock frequencies are available for immediate delivery and at least fifteen systems may be operated simultaneously on separate channels.

The HT-100 operates on a standard 9-volt alkaline battery. A nickel-cadmium battery may be used provided it is at least an 8.4-volt type (such as the Varta or Saft products). Battery life varies depending on the situation; however, one can expect six to eight hours on an alkaline and two to three hours on a nickel-cadmium.



### OPERATING FEATURES

The power on/off switch and low battery indicator are located on the bottom of the unit. The low battery indicator illuminates a red LED when battery power has reached critical condition. The microphone mute switch is located at the head of the microphone and is recessed to prevent inadvertent use. The microphone gain potentiometer is located on the outside of the unit at the base of the mute switch. There is a compander in/out switch on the inside of the unit which allows the user to defeat the compander. The HT-100 Transmitter is available with four different microphone cartridges: the Telex TE-10 unidirectional studio quality condenser, the Telex TD-11 unidirectional dynamic, the Shure SM-58 unidirectional dynamic, and the Shure SM-87 super cardioid condenser. Since each cartridge exhibits unique characteristics, the user should consult the specifications for more information. The transmitter utilizes a defeatable, internal compander circuit that assures maximum dynamic range and noise reduction. All controls are clearly marked as to function. The HT-100 is fully compatible with all Telex receivers and is type-accepted under FCC rules, parts 74 and 90.

### DESIGN FEATURES

The unit is housed in a unique grooved, tubular case made of ABS resin providing outstanding durability and isolation from mechanical vibration. The battery is accessed by a removable door concealed at the bottom of the unit. The battery mechanism is a proprietary metal device that automatically adjusts for any size 9-volt battery. This specially designed battery compartment makes it difficult to load the battery backwards. Circuit boards are 0.062-inch (1.57 mm) thick, glass-epoxy composition. The HT-100 incorporates an efficient, internal transmit antenna which does away with protruding whips from the base of the unit.

### SPECIFICATIONS

**RF Output Power:** 50 mW max

**Modulation:** 54F3, 12 kHz deviation, 50 microseconds pre-emphasis

**Radiated Harmonic & Spurious Emissions:**  
Greater than 30 dB below carrier

**Modulation Limiter:** Internal compressor (defeatable)

**Antenna:** Internal

**Battery:** 9-volt alkaline or 8.4-volt nickel-cadmium

**Battery Life:** Typically 6-8 hours on alkaline, 2-3 hours on nickel-cadmium

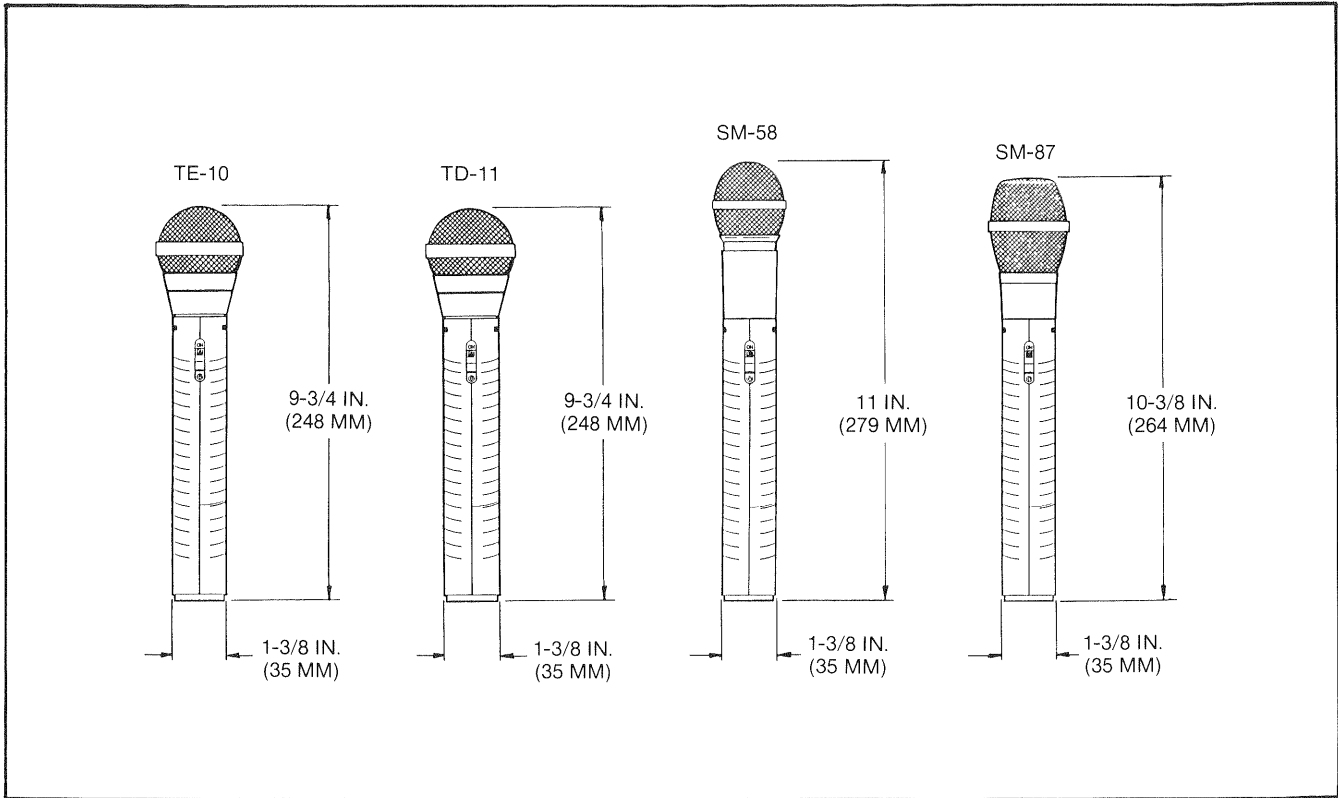
**Current Drain:** 35 mA

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

**Range:** 500 ft adverse, 1320 ft line of sight

Microphone	TE-10 Head	TD-11 Head	SM-58 Head	SM-87 Head
<b>Element Type:</b>	Condenser	Dynamic	Dynamic	Condenser
<b>Frequency Response ±1 dB:</b>	85-15,000 Hz	50-15,000 Hz	50-15,000 Hz	85-15,000 Hz
<b>Directional Pattern:</b>	Cardioid	Cardioid	Cardioid	Super Cardioid
<b>Max SPL:</b>	140 dB	140 dB	140 dB	140 dB
<b>Length:</b>	9¾ in.	9¾ in.	11 in.	10¾ in.
<b>Weight:</b>	9 oz	12 oz	13 oz	9 oz

## DIMENSIONS



## ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

The Telex Model HT-100 Wireless Handheld Transmitter shall be a single-channel, crystal-controlled oscillator design, operating on selected VHF frequencies from 150-216 MHz. The Transmitter shall have separate power on/off and microphone mute switches. The power switch shall be located on the bottom of the unit, and the mute switch shall be located at the base of the microphone cartridge. The Transmitter shall have a microphone gain control accessible from the outside of the unit. The Transmitter shall use a standard 9-volt battery, and the contacts shall be keyed for error-free

loading. The Transmitter shall have a low battery LED. The Transmitter shall have either the Telex TE-10, TD-11, or Shure SM-58 or SM-87 microphone cartridge. The Transmitter shall incorporate a compander circuit for maximum dynamic range and noise reduction. The compander shall be defeatable from an internal switch. The Transmitter shall use an internal transmit antenna. The Transmitter shall comply with FCC rules, parts 74 and 90. The Transmitter shall be a Telex Model HT-100 Wireless Handheld Transmitter.

## ORDERING INFORMATION

Telex Model HT-100 with TE-10 Head .....	Catalog No. 70660-XXX
Telex Model HT-100 with TD-11 Head .....	Catalog No. 70661-XXX
Telex Model HT-100 with SM-58 Head .....	Catalog No. 70662-XXX
Telex Model HT-100 with SM-87 Head .....	Catalog No. 70663-XXX