

TR-200 BELT-PACK TRANSCEIVER

TECHNICAL INFORMATION

SPECIFICATIONS TR-200

Overall

Power Requirements	6AA cells (Alkaline, NEDA, MN 1500) Nickel Cadmium Optional
Current Drain	typical 65 mA
Temperature Range	-4°F to 130°F (-20°C to 55°C)
Dimensions.....	4.25" W x 4.125" H x 2.0" D (108mm x 105mm x 51 mm)
Weight.....	13 oz (369g) with batteries
Transmit Antenna.....	1/4-wave wire (attached)
Receive Antenna	1/4-wave wire (attached)

Transmit

RF Frequency Range	150-216 MHz
RF Frequency Stability	Crystal Controlled, 0.005%
RF Power Output	50 mW Typical
Modulation	FM, 5000 Hz deviation, 115 micro-seconds Pre-emphasis
Modulation Limiter	Internal Compressor
Modulation Frequency Range	300 to 5000 Hz +/- 2 dB
Microphone Audio Input.....	30 to 3500 ohms
Microphone Input Sensitivity	2 mV Dynamic, 4 mV Electret
Radiated Harmonics and Spurious Emissions.....	-45 dBC, Exceeds FCC Specifications
FCC	Type Accepted Under Parts 90 and 74

Receive

RF Frequency Range	150-216 MHz
RF Frequency Stability	Crystal Controlled, 0.005% Type Dual Conversion Superheterodyne, FM
RF Sensitivity	Less than 0.5 μ V for 12 dB SINAD
IF Selectivity.....	3 dB at 30 kHz (Ceramic Filter)
Image Rejection	70 dB or better
Squelch Quieting	90 dB
Squelch Threshold	3.0 μ V (Internal)
Signal-to-Noise Ratio.....	90 dB
Audio Output	32 mW into 600 ohms (Headset)
Distortion	Less than 1% at Rated Output
FCC	Notification Under Part 15

FEATURES

- Lightweight, small size and is self-contained.
- 2 separate antennas, one for transmit, the other for receive.
- Push-to-Talk with Lock-to-Talk feature switch for the TR-200 and Push-to-Transmit with Lock-to-Transmit feature for the TR-200P.

CONTROLS AND CONNECTIONS

EXTERNAL CONTROLS (Refer To Figure 6)

Volume OFF/ON Control: This thumbwheel control serves as both an off/on switch and as a volume control.

Low Battery and Overmodulation Indicator LED:

Low Battery Indicator: Part of the battery check circuit. When the power switch is placed in the “ON” position the LED will flash one time if the battery is good. A poor battery will cause the LED to illuminate continuously and a bad or unusable battery will not cause any illumination at all.

Overmodulation Indicator: Uses the same LED as the low battery indicator. During the talk mode, if the microphone gain is too high, the LED will illuminate when talking.

Push-To-Talk/Lock-To-Talk Switch: For Model TR-200, this switch enables the talk function. For Model TR-200P, this switch enables the transmit and audio function and otherwise operates as described for TR-200.

Talk LED Indicator: (Labeled “talk”) Will be illuminated whenever the talk function on the TR-200 or transmit function on the TR-200P is enabled.

Headset Jack: A four pin XLR connector for Input/Output. The headset jack will accept six different Telex Model Headsets. See “Recommended Headset” Section for more information. Compatible with other intercom headsets with four pin XLR connectors that are wired as shown in Figure 5.

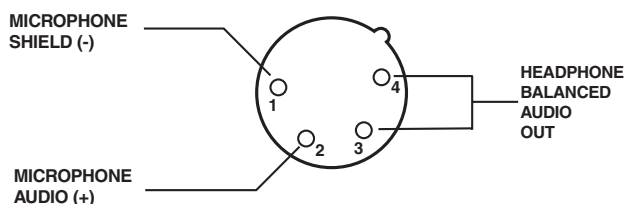
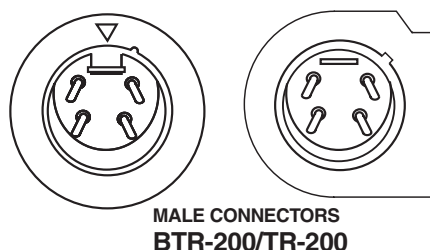


Figure 5
Headset XLR Connector Wiring

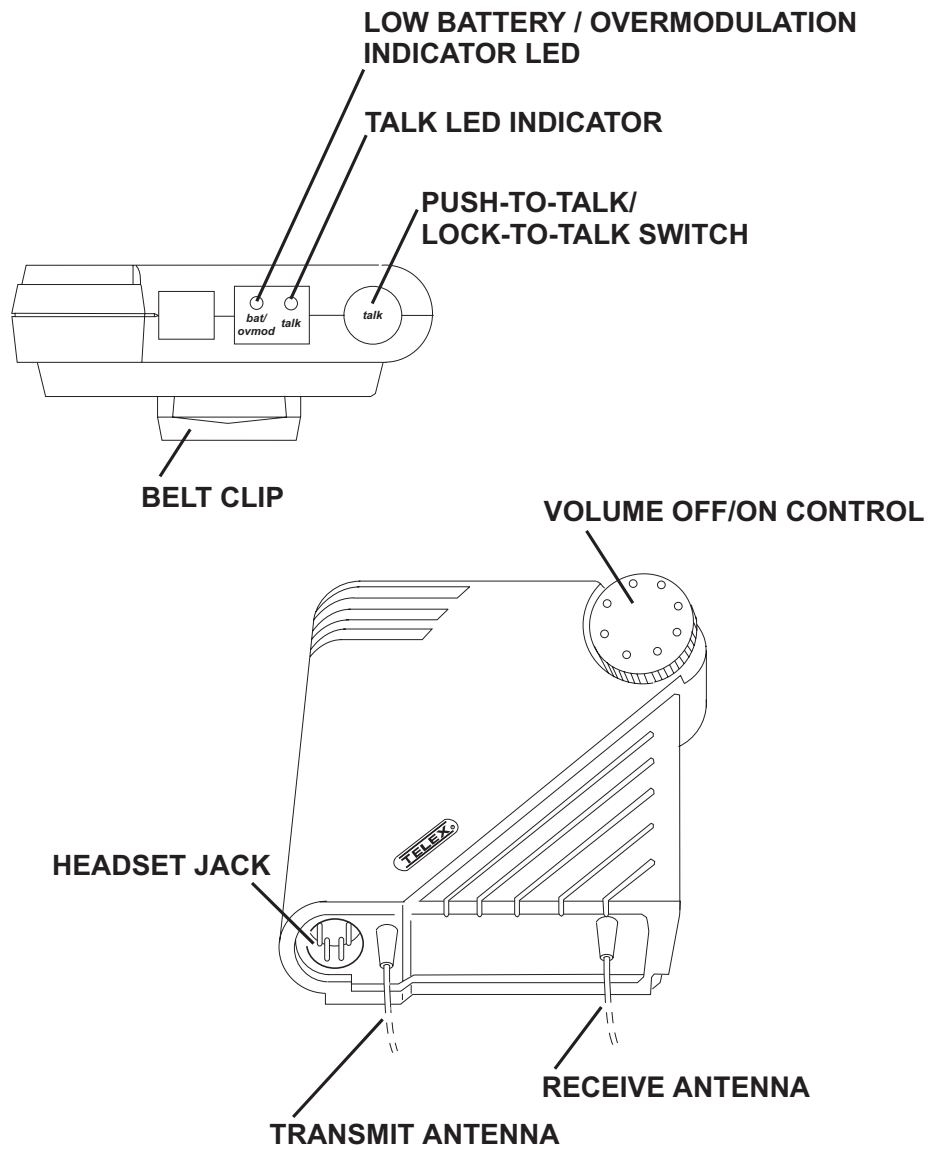


Figure 6
External Controls, TR-200