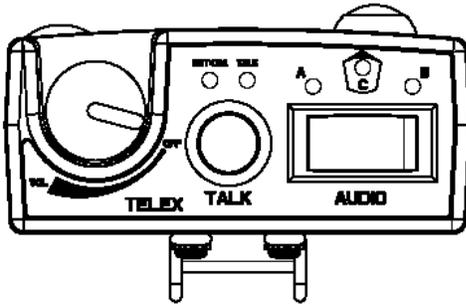


Telex Model TR-1 Beltpack



Owners / Users Manual (Preliminary Information)

General Description:

The Telex model TR-1 beltpack transceiver is a component of the BTR-1 wireless intercom system. The TR-1 is intended for use as a belt worn wireless full duplex mobile intercom radio for use in a professional installation such as television or cinema production.

Each BTR-1 base station can be used with one TR-1. The TR-1 transmits within the 614 to 746 MHz range (TV Channels 38-59). It receives in the 482 to 608 MHz range (TV Channels 16-36). The TR-1 transmitter operates on a single frequency within an 18 MHz wide section of the transmit frequency range. The receiver also operates on a single frequency within an 18 MHz wide section of the receiver frequency range.

Typical transmitter conducted output Power is 50 mW. The TR-1 transmit power can be set to automatically reduced when the unit is close-in to the base station to aid in intermodulation reduction and unnecessary transmit power.

Operating frequencies can be selected from pre-set groups or the user can select special operating frequencies within the 18 MHz wide allotments.

The LCD display and buttons plus the talk function switch, is located on the back panel.

From the LCD display and buttons the following menus may be obtained:

- Group and Channel
- Transmit Frequency
- Receive Frequency
- Battery Life
- Microphone Gain

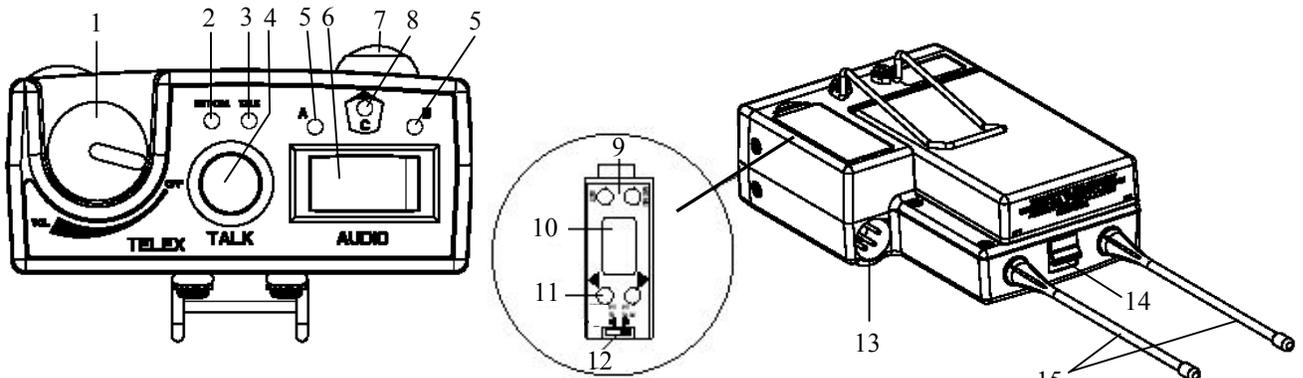
The on/off/volume control, talk button, talk light, low battery indicator, microphone level indicator, A/B audio rocker switch and lights, are located on the top panel.

The C audio button is located on the front panel.

Transmit and receive antennas are attached to the TR-1. Either or both unscrew for field replacement but are not coaxial connectors.

The TR-1 beltpack can be powered by AA Alkaline or a Nickel-Metal Hydride Battery pack.

Controls and Connections



1. **On/Off & Volume Control** – Turns the beltback power on and controls headset volume.
2. **BAT/O.M. Light** –
 Battery - Light flashes once on power up = Battery OK
 Light on continuously = Battery Low
 Light does not flash or come on = Battery Dead

 Microphone Lvl: Light flashes on loudest speech = Gain OK
 Light flashes on all speech = Gain too High
 Light never flashes on loudest speech = Gain too Low
3. **Talk Light** – Light on if talk button active.
4. **Talk Button** – Press to enable the audio path from the headset.
 Software Selectable modes: Push-to-Talk
 Push-to-Latch
5. **A and B Lights** – “A” light is on if Selection Switch in A position.
 “B” light is on if Selection switch in B position.
6. **Selection Switch** – Switches between base station presets A or B.
7. **“C” Pushbutton** – Press to enable the base station “C” presets.
 Software Selectable modes: Push-to-Talk
 Push-to-Latch
 Off
8. **“C” Button Light** – “C” light is on if “C” pushbutton active.
9. **[MENU] and [SET] buttons** – Used to select menus and set options on the LCD.
10. **LCD display.**
11. **[UP] and [DOWN] buttons** - Used to select menus and set options on the LCD.
12. **Push-to-Talk/Push-to-Transmit Switch** –
PT TALK (Push-to-Talk) – The transmitter is always on.
 No audio is sent unless the talk button is active.
 Recommended position.

PT TX (Push-to-Transmit) – The transmitter and audio path are off except when the talk button is active.
13. **Headset Connector** – XLR Plug for Telex units, XLR Receptacle for RTS units.
14. **Battery Latch** – Press down to enable the battery pack to be released. While the latch is held down, slide the battery pack about 1/8 inch back, toward the latch, until it stops, then lift out.
15. **Receive and Transmit Antennas** – The antennas are screw type, ¼ wave, replaceable antennas. The color dot on the screw end of the antenna must match color dot on antenna receptacle.

Specifications:

General:

Input Power.....9.0 VDC Alkaline or NiMH.
Antennas.....Attached
TX / RX.....One TX, one RX
Frequency agile, 25 KHz steps,
within 18MHz wide allotments.
Frequency Range
TX.....614 – 746 MHz
RX.....482 – 608 MHz
(within 18MHz wide allotments)
TX / RX Data Rate.....150 kbps

Transmitter:

RF Power Output.....50 mW typical
(terminated)
Modulation type.....GMSK
Audio Frequency Response.....100 Hz to 7 kHz
Microphone Sensitivity7.75 mV

Receiver:

Sensitivity.....<0.8uV for 12 dB SINAD Typical
Audio Frequency Response....100 Hz to 7 KHz
Audio Output (headset).....40 mW, 600 Ohms
(1% Distortion)