

Telex Model XO-1 Beltpack



General Description:

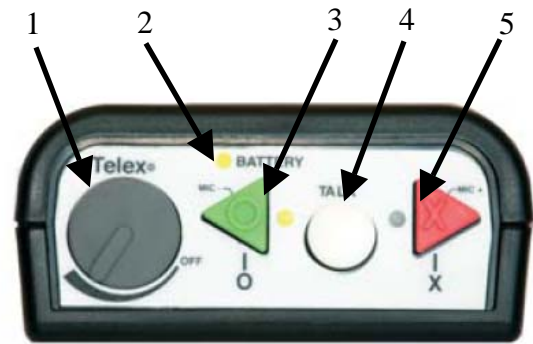
The Telex model XO-1 beltpack transceiver is intended for use as a belt worn wireless full duplex intercom radio. Multiple XO-1 beltpacks can be used with a XO-AP access point to communicate with each other over-the-air.

The XO-1 uses 802.11 technology to receive / transmit within one channel of the 1 – 11 (2.412 to 2.462 GHz) channels of the 2.4 GHz ISM band. Its operation is license free.

The transmit and receive antenna are internal to the beltpack so the unit has a smaller profile and the antennas are protected from possible damage.

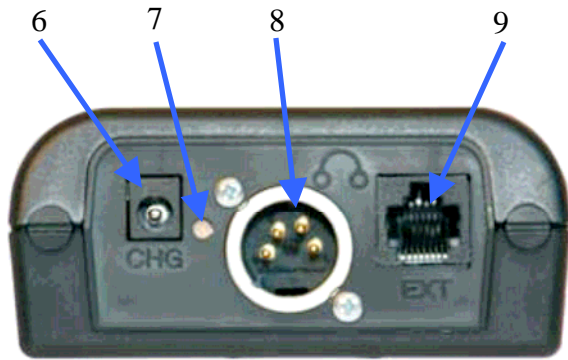
The XO-1 is powered via an internal Li-Ion battery that will provide up to 8 hours of run time at room temperature.

The top panel provides on/off/volume control, channel select buttons and lights, talk button and battery status light.



Top View

1. **On/Off & Volume Control** – Turns the beltpack power on/off and controls headset volume.
2. **Battery Light** –
 - a. GREEN - Battery OK
 - b. RED - Battery Low (needs charged)
3. **Offense Button and Light** – Selects the “Offense” intercom channel. The light next to the button will light when selected.
4. **Talk Button** – When pressed the microphone path is enabled.
 - a. **Momentary** – Pressed and hold for over ½ second.
 - b. **Latch on/off** – Tap button and the microphone path is enabled. Tap again to turn off.
5. **Defense Button and Light** – Selects the “Defense” intercom channel. The light next to the button will light when selected.



Bottom View

6. **Charge Jack** – Used to charge the internal battery. Accepts a 5.5mm x 2.5mm plug with the center positive. Must be supplied with a 12VDC regulated power supply with at least a 400mA current capacity.
7. **Charge Light.**
 - a. RED = Beltpack battery is charging.
 - b. GREEN = Beltpack battery is charged.
8. **Headset Connector** – Standard 4-pin XLR connector.
 - a. Pin 1 = Microphone GND
 - b. Pin 2 = Microphone HOT
 - c. Pin 3 = Headphone +
 - d. Pin 4 = Headphone –
9. **Programming Jack** – This RJ-45 jack is used to update programming in the unit if ever needed.

Operation

Once the XO-AP is running the XO-1 may be switch on at anytime.

Normal Start

1. Turn on the unit. The battery light will turn green immediately indicating power.
2. After 20 seconds, the “O” button light will activate indicating the unit has finished booting.
3. Use as normal.

Wired Only Start (Programming Only)

1. Press and hold the “X” button.

2. Turn on the unit as holding the “X” button. The battery light will turn green immediately indicating power.
3. When the unit finishes booting the radiocard will be inactive, but the RJ-45 jack will be active.
4. Connect a standard or crossover Ethernet cable to the beltpack.
5. Update flash if needed.

Wireless Master Start

1. Press and hold the “O” button.
2. Turn on the unit as holding the “O” button. The battery light will turn green immediately indicating power.
3. When the unit finishes booting the beltpack will be in AP master mode.
4. Use as a normal beltpack, however, the beltpack will be acting as an AP for any other beltpacks in the system.

Microphone Gain Adjust

Once the unit has booted-up, press and hold the talk button. Then press the “O” button for less gain, the “X” for more gain. Each audible “click” is a microphone gain step. There are 16 levels. Release talk and hit the “O” button to exit microphone adjust mode.

Specifications

Technology.....	2.4 GHz, IEEE 802.11b
Power.....	Internal Li-Ion 7.2V, 2000mAh, Battery. Typical battery life of 8 hours.
Current Draw.....	250mA typical with radio card active
RF Frequency Range.....	802.11 Channels 1 – 11 (2.412 to 2.462GHz)
Modulation Technology.....	DBPSK, DQPSK, CCK
Antennas.....	Internal dipoles
RF Output Power (Terminated).....	70mW
Data rates.....	2 and 5.5 Mbps
Sensitivity (Worst case).....	5.5Mbps 10-5 BER @ -83dBm
Frequency Response.....	500 Hz to 3900 Hz
Audio Output (headset).....	40mW, 600 Ohms (1% Distortion)
Belpack Size.....	5.25L x 3.75W x 1.68H inches
Belpack Weight.....	14 oz
FCC License.....	No License Required

Regulatory Information

This device complies with Part 15 of FCC rules and Canada RSS-210. Operation is subject to the following conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.
3. This device must not be co-located or operated in conjunction with any other antenna or transmitter.

To assure continued compliance with FCC regulations, any change in modification not expressly approved by the party responsible for the compliance of the equipment is prohibited. It is the responsibility of the user to operate this equipment.