C. Duplex, Repeater, and Repeating Models
The VOX switch is on the top of the Belt-Pak / the PTT button is on the front. You can select "Continuous Transmit" (VOX OFF, PTT ineffective) or "VOX with PTT Over-ride" (VOX ON, PTT provides manual over-ride) as your two modes of operation.

D. Simplex and Half Duplex Model
The VOX switch is on the top of the Belt-Pak / the PTT button is on the front. You can select "VOX mode" (VOX ON, PTT provides manual over-ride) or "PTT MODEL" (VOX OFF, PTT must be pressed to transmit) as your two modes of operation.

SPECIFICATIONS

GENERAL

Performance specifications are nominal unless otherwise specified and are subject to change without notice.

General Frequency Range	72-76 MHz
Operation mode	Simplex, Duplex, or Repeating
Power Supply	3.6V NiMh internal rechargeable battery system/1800 mah
Charger	6vdc @500ma output into 3.5mm jack, 120 vac@7.5w input
Weight	Approximately 20.6 Oz.
Dimensions	6 1/2" x 3 1/24" x 2 3/8"
,System hum and noise	-50 dB

TRANSMITTER

RF Output	200 mw Simplex, 100mw all other modes
Spurious & Harmonics	-75 dB
Modulation	16 K0F3E
Frequency Stability	(-30° C to +50° C) .005%
Voice Compressor	Attack, <1 ms; Delay, 130 ms
VOX Threshold	6 dB below full modulation
VOX Characteristics	Attack, <1 ms; Delay, 750 ms

RECEIVER

Receiver Circuit	Dual conversion, 1st IF Frequency 10.7 MHz, 4 Pole Quartz Filter; 2nd IF 455 kHz, 4 Pole Ceramic Filter
Sensitivity	0.4µV for 12 dB SINAD
Modulation Acceptance	15 kHz
Selectivity	30 kHz from center frequency -55dB
Spurious & Image	-47dB
Intermodulation Response	-70 dB
Frequency Stability	(-30° C to +50° C) .005%

APPROVALS AND AUTHORIZATIONS

FEDERAL COMMUNICATIONS COMMISSION

All Belt-Paks have been type accepted and certificated by the FCC for operation in Part 90 (Private Land Mobile Services) in the 72-76 MHz band. All transmitters, including Repeater Stations operate in the 72-76 MHz band with a power of 100 mW and modulation characteristics 16K0F3E. Type approval numbers are on each unit. FCC rules require licensing by the purchaser. Requests for application forms or information may be obtained from the FCC, Gettysburg, PA 17325.

REVISED 08/2015

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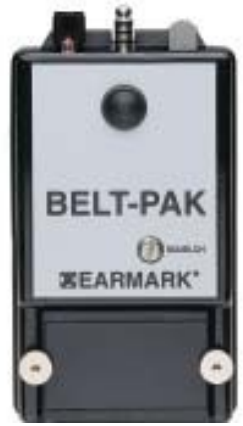
400068

OWNERS MANUAL

OPERATING INSTRUCTIONS FOR SERIES 5 BELT-PAK ™ RADIO

I DESCRIPTION AND GENERAL INFORMATION



Your new Earmark, Series 5 Belt-Pak Radio provides you with hands-free, FM communications to suit harsh working conditions. Your radio contains Earmark's latest innovations in hands-free, wireless technology for tough environments like high noise or Class A, protective equipment. VOX130 provides self-adjusting VOX that responds only to the human voice and not to machinery noise. The front mounted PTT button is easy to find without looking for it. Simple external controls mean you spend less time fussing and more time getting the job done, quickly. The easy access Volume Control Knob makes it easy to go from high noise to low noise and back again, without interruption.

Earmark manufactures Belt-Pak radios in a variety of models. Before going any further, please check the name plate label on the back of the Belt-Pak and find out which of the models below listed you have. Make certain your model number matches the type of network in which you'll be working.

MODEL	NETWORK DESCRIPTION
PDB-5	**DUPLEX** UNIT FOR USE IN TWO MAN DUPLEX NETWORKS ONLY
PSB-5	**SIMPLEX** UNIT FOR USE IN SIMPLEX NETWORKS
PRB-5	**DUPLEX REPEATER** UNIT: USE WITH REPEATER BASE STATION (TRBS-1/x)
PHB-5	**HALF-DUPLEX** UNIT FOR USE IN HALF-DUPLEX NETWORKS
PGB-5	**REPEATING** UNIT FOR USE AS TOUR MASTER OR HALF-DUPLEX MASTER

II SETUP

A. BATTERIES

Your Earmark Belt-Pak operates with built-in rechargeable NiMh batteries. This power system should last 12-40 hours before needing a charge, depending on network system purchased (PSB longest lasting, PDB shortest).

To recharge your Belt Pak, plug the power supply that came with your unit into the charging jack on the side of the Belt Pak. A charge session of 7-8 hours should completely charge your batteries. The amber LED next to the charging jack will stay lit as long as the charger is attached and is functioning.

B. CHANGING FREQUENCIES

Your Series 5 Belt-Pak comes with 10 sets of frequencies loaded. You can easily choose a different frequency combination by turning the rotary switch located on the side of the Belt Pak to the frequency channel number that you want (0-9). When you do this, the Belt Pak will begin operating at the new frequency combination immediately.

C. COMFORT FEATURES

TheBelt-Pak comes with an industrial strength wire bale used to attach the Belt-Pak to your belt.

D. HEADPHONE CONNECTION

When you purchased your Earmark Belt-Pak, you selected one of several available headphones. All these connect to the Belt-Pak by snapping the Nexus headphone connector onto the pin on the top of the Belt-Pak. *No adjustments are necessary*. The Strain and bend relief are integral with the connector. Do not attempt to tighten or loosen this assembly. The following headphones are available as accessories for Earmark Series 5 Belt-Paks:

Headphone cord pin connector

Description	Model No.
Noise Reducing Headphone with Boom Microphone	BH-5
Light Weight, Behind Head, Dual Muff with Boom Microphone	FC-4
Light Weight, Single Muff with Boom Microphone	FC-41
Light Weight, Wire-form with Boom Mic	SP-5

BH-5

FC-41

SP-5

FC-4

E. SQUELCH

Squelch is a receiver setting that determines how strong a radio signal must be before your radio will recognize it. If squelch is wide open, you will hear all the random atmospherics as a loud, annoying, background hiss. If you set squelch too tight, the radio will be insensitive to weak signals. Setting squelch too tight reduces the effective range of your Earmark radios.

Squelch is preset at the factory and should rarely need readjustment. If it does require readjustment for any reason, the process is quite simple. Remove the sealing screw on the face of the Belt-Pak. Using a small screwdriver, gently rotate the internal potentiometer clockwise, until you hear the squelch noise. Turn the "pot" back, counterclockwise, until the noise just stops. Please replace the sealing screw when you're done. Setting the Squelch requires breaking the Belt-Pak's external seal. Make this adjustment in an area that does not require intrinsic safety.

F. VOX OPERATION

Your new Earmark Belt-Pak radio has Earmark's unique technical innovation, VOX130. VOX130 is fully automatic, continuously monitoring whether you are speaking and turning the microphone on automatically when it detects voice. If you have trouble using your radio in VOX mode, call Earmark on our toll-free help line.

Hints for easy VOX operation:

- When using a Boom Microphone, always close-talk your microphone. Keep the microphone within 1/4 inch of yourlips.
- Earmark Boom Microphones are noise canceling. Each microphone has one side that you talk into and one side that must point away from you. Always talk into the red side of the microphone!
- Speak louder than usual, in level tones. Don't let your voice's volume fall off at the end of a word or sentence. If you let your voice fall off VOX may drop out before you're finished.

III CONTROLS and OPERATION

A. On/Off/Volume Switch (All Models)

The knob on top of the Belt-Pak is an On/Off/Volume control. Off is counterclockwise. To turn the Belt-Pak On, rotate the knob clockwise. Continue to rotate clockwise for greater volume.

B. Battery Condition (All Models)

The red light on the Belt-Pak shows Battery Condition. As long as the LED stays lit, the battery is adequately charged. When the battery charge degrades too much, the LED will go out and you will hear a clicking noise in your headphone. This means you only have a few minutes of power left and should recharge your Belt Pak.