

Quick Start Guide



IFBT4-VHF Transmitter



Digital Hybrid Wireless®

US Patent 7,225,135

Fill in for your records:

Serial Number:

Purchase Date:

This guide is intended to assist with initial setup and operation of your Lectrosonics product.

For a detailed user manual, download the most current version at:

www.lectrosonics.com

23 October 2018

Front Panel Controls and Functions

IFBT4 VHF Front Panel



OFF/TUNE/XMIT Switch

OFF Turns the unit off.

TUNE Allows all functions of the transmitter to be set up, without transmitting. The operating frequency may be selected only in this mode.

XMIT Normal operating position. The operating frequency may not be changed in this mode, though other settings may be changed, as long as the unit isn't "Locked."

Power Up Sequence

When power is first turned on, the front panel LCD display steps through the following sequence.

1. Displays Model number (e.g. IFBT4 VHF).
2. Displays installed firmware version number (e.g. V1.00).
3. Displays the current compatibility mode setting (e.g. COMPAT IFB).
4. Displays the Main Window.

Main Window

The Main window is dominated by an audio level meter, which displays the current audio modulation level in real time. In TUNE mode, a blinking capital "T" is displayed in the lower left corner to remind the user that the unit is not yet transmitting. In XMIT mode, the blinking "T" is replaced by an antenna icon.



XMIT Mode

Audio limiting is indicated when the audio bargraph extends all the way to the right and widens somewhat.



Audio Limiting

The Up and Down buttons are disabled in this Window, but they will display voltage (e.g. 15.4 VOLTS).

Frequency Window

When in TUNE mode, pressing the MENU button once navigates to the Frequency window. The Frequency window displays the current operating frequency in MHz, as well as the standard Lectrosonics hex code for use with receivers equipped with hex switches.

In TUNE mode, the Up and Down buttons may be used to select a new frequency.

The Up and Down buttons navigate in 175 kHz increments. Holding the MENU button+Up and MENU+Down move 2.8 MHz at a time.

Pressing and holding the Up or Down button invokes an autorepeat function, for faster tuning.

In XMIT mode, it is not possible to change the operating frequency.

Audio Input Gain Window

Pressing the MENU button once from the Frequency window navigates to the Audio Input Gain window. This window greatly resembles the Main window, with the exception that the current audio input gain setting is displayed in the upper left corner. The Up and Down buttons may be used to alter the setting while reading the realtime audio meter to set the input level accurately.

The gain range is -18 dB to +24 dB with 0 dB as nominal. The reference for this control can be changed with the rear panel MODE switches. See page 6 for more information on the MODE switches.

Setup Window

Pressing the MENU button once from the Audio Input Gain window navigates to the Setup window. This window contains a menu which permits access to various setup screens.

Initially the active menu item is EXIT. Pressing the Up and Down keys permits navigation among the remaining menu items: COMPAT and ROLLOFF.

Pressing the MENU button selects the current menu item. Selecting EXIT navigates back to the Main window. Selecting any other item navigates to the associated setup screen.

ROLLOFF Setup Screen

The ROLLOFF setup screen controls the low frequency audio response of the IGBT4 VHF. The 35 Hz setting is the default and may be used in the absence of adverse conditions, for a fuller bass response. The 50 Hz setting should be used whenever wind noise, HVAC rumble, traffic noise or other low frequency sounds may degrade the quality of the audio. Press MENU to return to the Setup window.

COMPAT Setup Screen



The COMPAT setup screen selects the current compatibility mode, for interoperation with various types of receivers. The available modes are:

Nu Hybrid - This mode offers the best audio quality and is recommended if your receiver supports it.

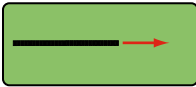
IFB - Lectrosonics IFB compatibility mode. This is the default setting and is the appropriate setting to use with the Lectrosonics IFBR1A or a compatible IFB receiver.

NOTE: If your Lectrosonics receiver does not have Nu Hybrid mode, use Euro Digital Hybrid Wireless® (EU Dig. Hybrid).

Press MENU to return to the Setup window.

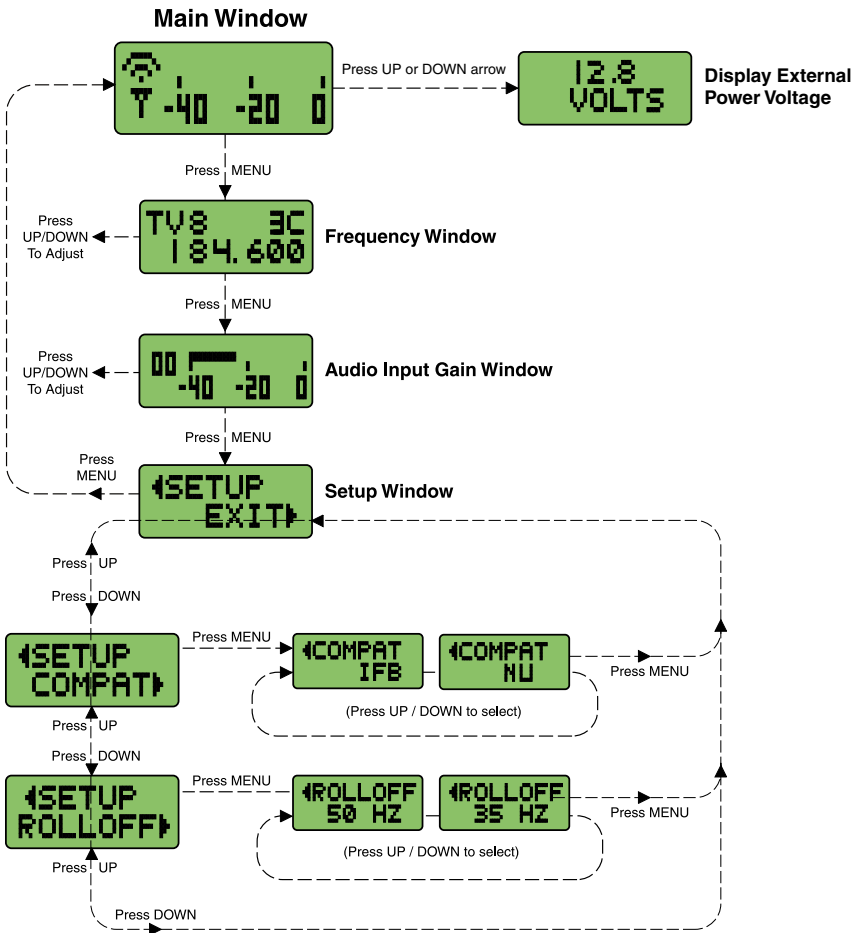
Lock/Unlock Panel Buttons

To enable or disable the control panel buttons, navigate to the Main Window and press and hold the MENU button for about 4 seconds. Continue holding the button as a progress bar extends across the LCD.



When the bar reaches the right side of the screen, the unit will toggle to the opposite mode and LOCKED or UNLOCKED will flash briefly on the screen.

IFBT4 VHF Menu Diagram



Rear Panel Controls and Functions

IFBT4 VHF Rear Panel



XLR Jack

A standard XLR female jack accepts a variety of input sources depending on the setting of the rear panel MODE switches. XLR pin functions can be changed to suit the source depending on the positions of the individual switches. For detailed information on the setting of these switches see the owner's manual.

MODE Switches

The MODE switches allow the IFBT4 VHF to accommodate a variety of input source levels by changing the input sensitivity and the pin functions of the input XLR jack. Marked on the rear panel are the most common settings. Each setting is detailed below.

Switches 1 and 2 adjust the XLR pin functions while switches 3 and 4 adjust the input sensitivity.

Name	Switch Positions				XLR Pins	Balanced	Input Sensitivity
	1	2	3	4			
CC	▼	▼	▼	▲	3 = Audio 1 = Common	No	-10 dBu
MIC	▲	▲	▲	▼	2 = Hi 3 = Lo 1 = Common	Yes	-42 dBu
LINE	▲	▲	▼	▼	2 = Hi 3 = Lo 1 = Common	Yes	0 dBu
RTS1	▲	▼	▼	▼	2 = Hi 1 = Common	No	0 dBu
RTS2	▼	▼	▼	▼	3 = Hi 1 = Common	No	0 dBu

Power Input Connector

The IFBT4 VHF is designed to be used with the DCR12/A5U (or equivalent) power source. The nominal voltage to operate the unit is 12 VDC, although it will operate at voltages as low as 6 VDC and as high as 18 VDC.

External power sources must be able to supply 200 mA continuously.

Antenna

The ANTENNA connector is a standard 50 ohm BNC connector for use with standard coaxial cabling and remote antennas.

Accessories

DCR12/A5U

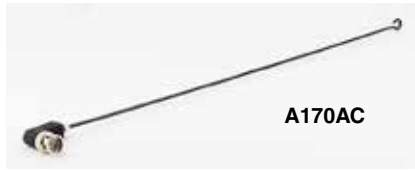
AC power supply for IFBT4 transmitters; 100-240 V, 50/60 Hz, 0.3 A input, 12 VDC regulated output; 7-foot cord with LZR threaded locking plug and interchangeable blades/posts for use in Europe, UK, Australia and USA (sold separately).



DCR12/A5U

A170AC

VHF straight whip antenna; right angle BNC connector



A170AC

ARG15

A 15 foot antenna cable of standard RG-58 coax cable with BNC connectors at each end. Loss of 1 to 2 dB with 0.25" diameter.

ARG15
ARG25
ARG50
ARG100



ARG25/ARG50/ARG100

An antenna cable of Belden 9913F low-loss coax cable with BNC connectors at each end. Double shielded, flexible, 50 Ohms, with a foamed polyethylene dielectric. Lower loss (1.6 to 2.3 dB) with somewhat less weight than standard RG-8 with the same 0.400" diameter. Available in 25, 50 and 100 foot lengths.

RMP195

4 channel rack mount for up to four IFBT4 transmitters. Rocker switch included to work as a master power switch if desired.



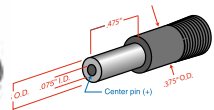
RMP195

21425

6 ft. long power cord; coaxial to stripped & tinned leads. Coaxial plug: ID-.080"; OD-.218"; Depth-.5". Fits all compact receiver models that use CH12 power supply.



21425

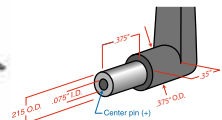


21472

6 ft. long power cord; coaxial to stripped & tinned leads. Right angle coaxial plug: ID-.075"; OD-.218"; Depth-.375". Fits all compact receiver models that use CH12 power supply.



21472

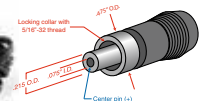


21586

DC16A Pigtail power cable, LZR stripped & tinned.



21586



LIMITED ONE YEAR WARRANTY

The equipment is warranted for one year from date of purchase against defects in materials or workmanship provided it was purchased from an authorized dealer. This warranty does not cover equipment which has been abused or damaged by careless handling or shipping. This warranty does not apply to used or demonstrator equipment.

Should any defect develop, Lectrosonics, Inc. will, at our option, repair or replace any defective parts without charge for either parts or labor. If Lectrosonics, Inc. cannot correct the defect in your equipment, it will be replaced at no charge with a similar new item. Lectrosonics, Inc. will pay for the cost of returning your equipment to you.

This warranty applies only to items returned to Lectrosonics, Inc. or an authorized dealer, shipping costs prepaid, within one year from the date of purchase.

This Limited Warranty is governed by the laws of the State of New Mexico. It states the entire liability of Lectrosonics Inc. and the entire remedy of the purchaser for any breach of warranty as outlined above. NEITHER LECTROSONICS, INC. NOR ANYONE INVOLVED IN THE PRODUCTION OR DELIVERY OF THE EQUIPMENT SHALL BE LIABLE FOR ANY INDIRECT, SPECIAL, PUNITIVE, CONSEQUENTIAL, OR INCIDENTAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THIS EQUIPMENT EVEN IF LECTROSONICS, INC. HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL THE LIABILITY OF LECTROSONICS, INC. EXCEED THE PURCHASE PRICE OF ANY DEFECTIVE EQUIPMENT.

This warranty gives you specific legal rights. You may have additional legal rights which vary from state to state.



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