Quick Start Guide

DBa
Digital Belt Pack Transmitter



Follow Us On:

Fill in for your records:

Serial Number:

Purchase Date:

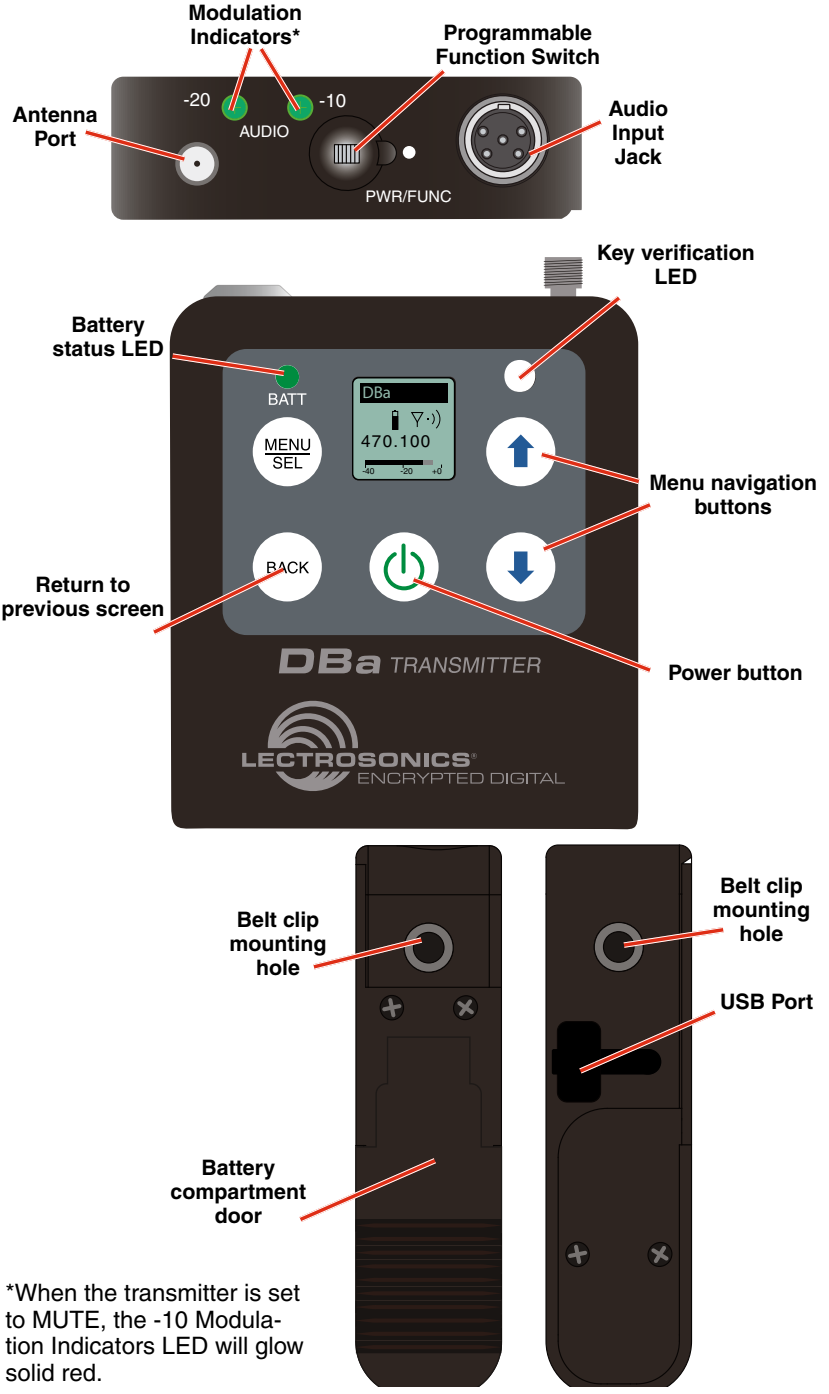
This guide is intended to assist with initial setup and operation of your Lectrosonics product.

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

www.lectrosonics.com

02 March 2016

Controls and Features



*When the transmitter is set to MUTE, the -10 Modulation Indicators LED will glow solid red.

Battery Installation

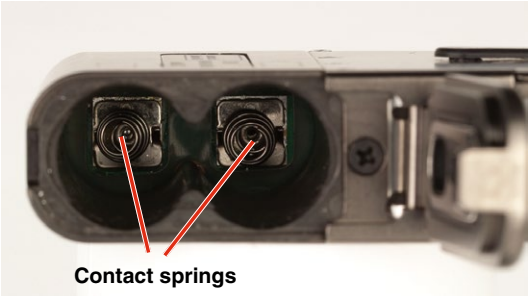
The transmitter is powered by two AA batteries. We recommend using alkaline, lithium, or rechargeable batteries for longest life. Standard zinc-carbon batteries marked “heavy-duty” or “long-lasting” are not adequate.

Push outward on the battery compartment door and lift it to open.





Insert the batteries according to the markings on the back of the housing.



If the batteries are inserted incorrectly, the door will close but the unit will not operate.

The battery contacts can be cleaned with alcohol and a cotton swab, or a clean pencil eraser. Be sure not to leave any remnants of the cotton swab or eraser crumbs inside the compartment.

Belt Clips

The wire belt clip may be removed by pulling the ends out of the holes in the sides of the case. Use pliers to grasp the wire and avoid scratching the surface of the housing. Pliers also help when installing the clip.

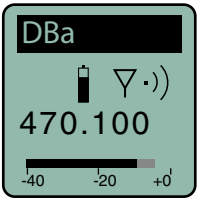
An optional spring-loaded, hinged belt clip (model number BCSLEBN) is also available. This clip is attached by removing the plastic hole cap on the back of the housing and mounting the clip with the supplied screw.

Powering On in Operating Mode

Press and hold the Power Button ⏻ for several seconds until a counter on the LCD progresses from 1 through 3.







When you release the button, the unit will be operational with the RF output turned on and the Main Window displayed.

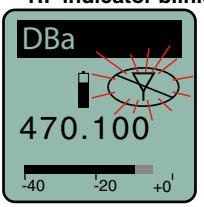
Powering On in Standby Mode

A brief press of the Power Button ⏻, releasing it before the counter has reached 3, will turn the unit on with the RF output turned off. In this Standby Mode the menus can be browsed to make settings and adjustments without the risk of interfering with other wireless systems nearby.



Release Power Button before the counter reaches 3 to enter standby mode

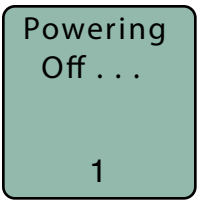
RF indicator blinks



After settings and adjustments are made, press the power button again to turn the unit off.

NOTE: Also see the section entitled ***Power Menu*** for the AutoOn feature.

Powering Off



From any screen, power can be turned off by selecting Pwr Off in the power menu, holding the Power Button ⏻ in and waiting for the countdown, or with the programmable switch (if it is configured for this function).

If the power button is released, or the top panel switch is turned back on again before the countdown is completed, the unit will remain turned on and the LCD will return to the same screen or menu that was displayed previously.

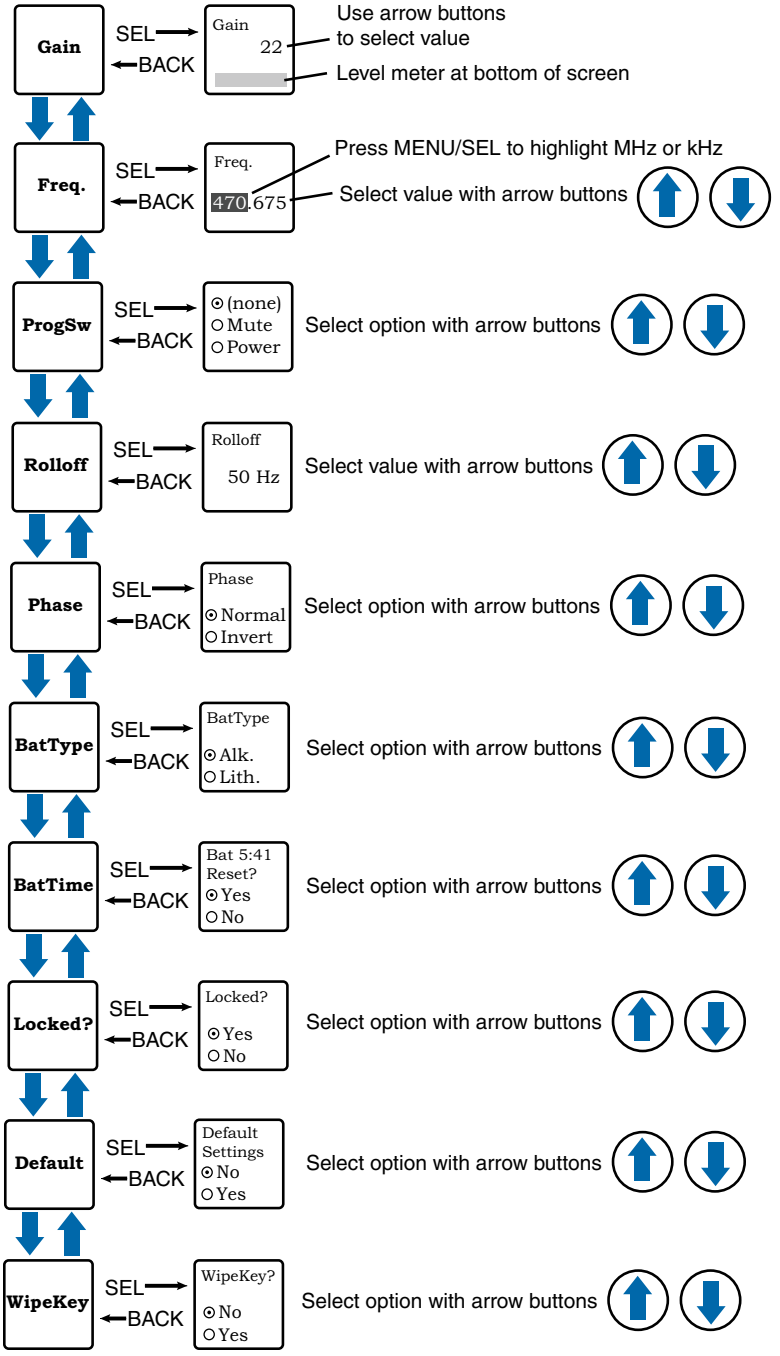
NOTE: If the programmable switch is in the OFF position, power can still be turned on with the power button. If the programmable switch is then turned on, a brief message will appear on the LCD.

Power Menu Options

Press the power button from any menu or screen and a menu will appear with several options. Use the and arrow buttons to highlight menu items. Then press MENU/SEL to execute the item or enter a setup screen. The following options are available:

- **Resume** - returns to the previous mode and screen
- **Pwr Off** - turns the unit off irrevocably
- **Rf On?** - enters a screen to enable the operating or standby modes
- **AutoOn?** - allows the unit to automatically turn back on after a power failure or when fresh batteries are installed (works in the operating mode only)
- **Backlit** - adjusts the duration of the LCD back light to 30 seconds or 5 minutes, or to remain on
- **About** - displays model number and firmware version

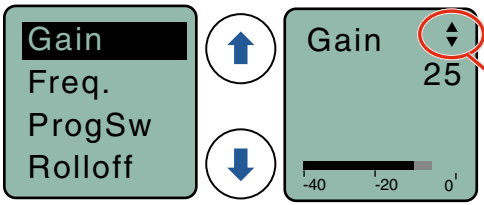
LCD Menu Map


Gain
SEL
BACK
Gain
22
Use arrow buttons
to select value
Level meter at bottom of screen
Freq.
Freq.
470.675
Press MENU/SEL to highlight MHz or kHz
Select value with arrow buttons
ProgSw
(none)
Mute
Power
Select option with arrow buttons
Rolloff
Rolloff
50 Hz
Select value with arrow buttons
Phase
Phase
Normal
Invert
Select option with arrow buttons
BatType
BatType
Alk.
Lith.
Select option with arrow buttons
BatTime
Bat 5:41
Reset?
Yes
No
Select option with arrow buttons
Locked?
Locked?
Yes
No
Select option with arrow buttons
Default
Default
Settings
No
Yes
Select option with arrow buttons
WipeKey
WipeKey?
No
Yes
Select option with arrow buttons

Main Menu and Setup Screen Details

Entering the Main Menu

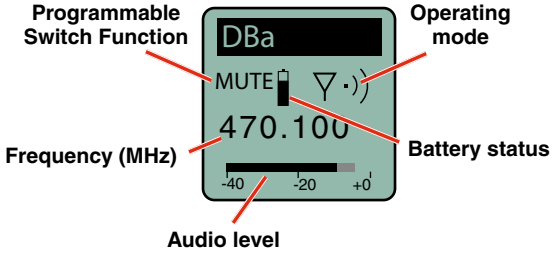
The LCD and keypad interface makes it easy to browse the menus and make the selections for the setup you need. When the unit is powered up in either the operating or the standby mode, press MENU/SEL on the keypad to enter a menu structure on the LCD. Use the ⇧ and ⇩ arrow buttons to select the menu item. Then press the MENU/SEL button to enter the setup screen.



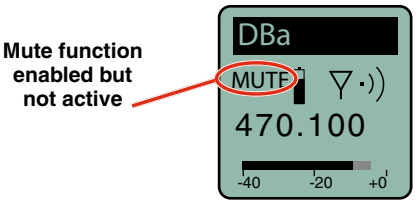
The prompt in the upper right corner may display one or both arrows, depending upon what adjustment can be made. If the changes are locked, a small padlock symbol will appear.

Main Window Indicators

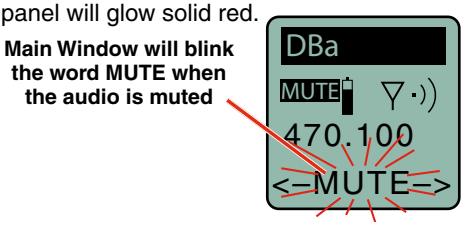
The Main Window displays programmable switch function, Standby or Operating mode, operating frequency, audio level and battery status.



If the programmable switch function is set for Mute, the Main Window will indicate that the function is enabled.



When the switch is turned on, the mute icon appearance will change and the word MUTE will blink at the bottom of the display. The -10 LED on the top panel will glow solid red.



Connecting the Signal Source

Microphones, line level audio sources and instruments can be used with the transmitter. Refer to the section entitled ***Wiring Hookups for Different Sources*** for details on the correct wiring for line level sources and microphones to take full advantage of the Servo Bias circuitry.

Adjusting the Input Gain

The two bicolor Modulation LEDs on the control panel provide a visual indication of the audio signal level entering the transmitter. The LEDs will glow either red or green to indicate modulation levels as shown in the following table.

Signal Level	-20 LED	-10 LED
Less than -20 dB	Off	Off
-20 dB to -10 dB	Green	Off
-10 dB to +0 dB	Green	Green
+0 dB to +10 dB	Red	Green
Greater than +10 dB	Red	Red

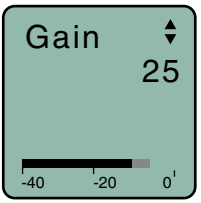
NOTE: Full modulation is achieved at 0 dB, when the "-20" LED first turns red. The limiter can cleanly handle peaks up to 30 dB above this point.

It is best to go through the following procedure with the transmitter in the standby mode so that no audio will enter the sound system or recorder during adjustment.

1) With fresh batteries in the transmitter, power the unit on in the standby mode (see previous section ***Powering On in Standby Mode***).

2) Navigate to the Gain setup screen.





3) Prepare the signal source. Position a microphone the way it will be used in actual operation and have the user speak or sing at the loudest level that occur during use, or set the output level of the instrument or audio device to the maximum level that will be used.

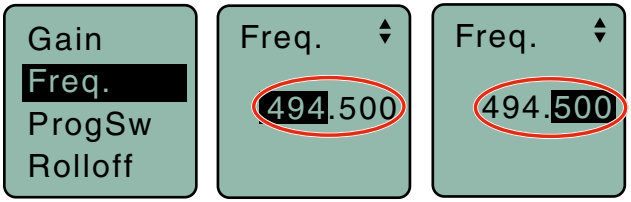
4) Use the ⇧ and ⇩ arrow buttons to adjust the gain until the **–10 dB** glows green and the **–20 dB** LED starts to flicker red during the loudest peaks in the audio.

5) Once the audio gain has been set, the signal can be sent through the sound system for overall level adjustments, monitor settings, etc.

6) If the audio output level of the receiver is too high or low, use only the controls on the receiver to make adjustments. Always leave the transmitter gain adjustment set according to these instructions, and do not change it to adjust the audio output level of the receiver.

Selecting Frequency

The setup screen for frequency selection offers two ways to browse the available frequencies.

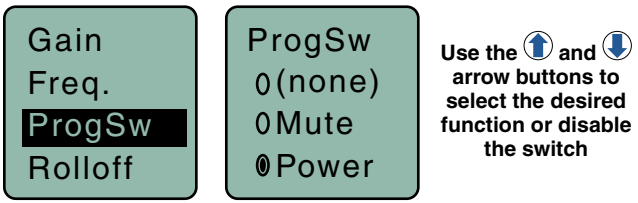


Hit the MENU/SEL button to select each field. Use the ⬆ and ⬇ arrow buttons to adjust the frequency. Each field will step through the available frequencies in a different increment.

Selecting Programmable Switch Functions

The programmable switch on the top panel can be configured using the menu to provide several functions:

- **(None) -** disables the switch
- **Mute** - mutes the audio when switched on
- **Power** - turns the power on and off

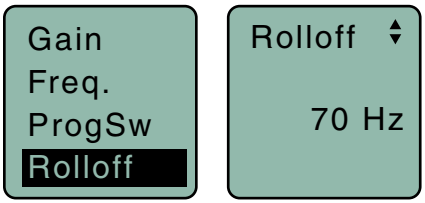


NOTE: The programmable switch will continue to operate whether or not keypad changes are locked.

Selecting the Low Frequency Roll-off

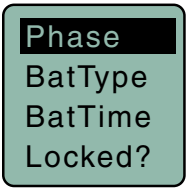
The low frequency audio roll-off is adjustable to optimize performance for environmental conditions or personal preference.

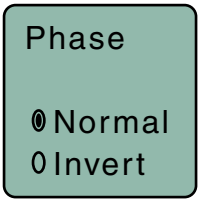
Low frequency audio content may be desirable or distracting, so the point at which the roll-off takes place can be set to 35, 50, 70, 100, 120 and 150 Hz.



Selecting Audio Polarity (Phase)

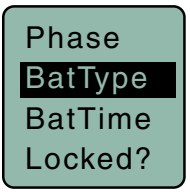
Audio polarity can be inverted at the transmitter so the audio can be mixed with other microphones without comb filtering. The polarity can also be inverted at the receiver outputs.





Selecting Battery Type

The voltage drop over the life of different batteries varies by type and brand. Be sure to set the correct battery type for accurate indications and warnings. The menu offers alkaline or lithium types.

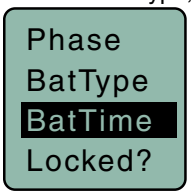


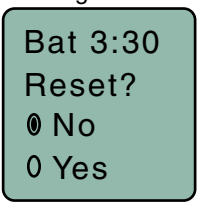


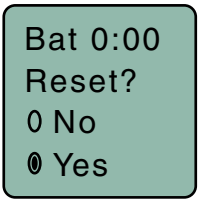
If you are using rechargeable batteries, it is better to use the timer function on the receiver to monitor the battery life rather than the indicators on the transmitter. Rechargeable batteries maintain a fairly constant voltage across the operating time on each charge and stop working abruptly, so you will have little or no warning as they reach the end of operation.

BatTime

A built-in timer can be used with any battery type, but it is especially valuable with rechargeable batteries such as NiMH types. The voltage remains fairly constant across the discharge time of a rechargeable battery, then drops quickly near the end of the operating time. The most accurate way to determine runtime status is by testing the time provided by a particular battery brand and type, then using a timer to determine remaining runtime.

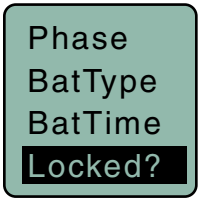


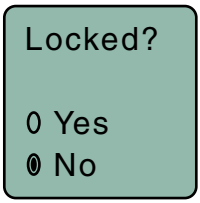


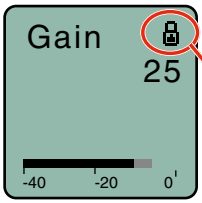


Locking/Unlocking Changes to Settings

Changes to the settings can be locked to prevent inadvertent changes being made.





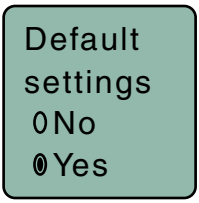


A small padlock symbol will appear on adjustment screens when changes have been locked.

When changes are locked, several controls and actions can still be used:

- Settings can still be unlocked
- Menus can still be browsed
- Programmable switch still works
- Power can still be turned off by using the power menu or removing the batteries.

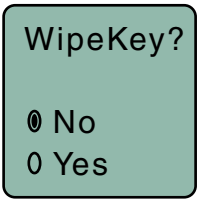




Restoring Default Settings

This is used to restore the factory settings.





Wipekey

The encryption key can be erased with this setup screen.

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 liablility 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.

LECTROSONICS®

Made in the USA by a Bunch of Fanatics

581 Laser Road NE • Rio Rancho, NM 87124 USA • www.lectrosonics.com
(505) 892-4501 • (800) 821-1121 • fax (505) 892-6243 • sales@lectrosonics.com