LECTROSONICS SRC, SRC5P Camera Slot Dual UHF Receiver User Guide

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LECTROSONICS SRC, SRC5P Camera Slot Dual UHF Receiver

Product Information

The Lectrosonics Camera Slot Dual UHF Receiver (model SRC SRC5P) is a high-performance wireless audio receiver designed for professional use. It features a proprietary algorithm that encodes digital audio information

into an analog format, allowing for robust transmission over an analog FM wireless link. The receiver incorporates state-of-the-art filters, RF amplifiers, mixers, and detectors to capture the encoded signal, while a DSP (Digital Signal Processor) recovers the original digital audio. This digital/analog hybrid technique offers several advantages. The digitally encoded information provides superior noise immunity compared to traditional compandor-based systems. The analog transmission format ensures efficient spectrum and power usage, as well as an extended operating range. Even under weak RF conditions, the received signal degrades gracefully, delivering usable audio at maximum range. Additionally, the absence of compandor artifacts reduces pumping and breathing problems.

The receiver comes with a backlit LCD screen that displays RF and audio levels, transmitter battery status, pilot tone status, and diversity activity for both receivers. It also features front panel controls, including a menu/select button, power/back button, up and down buttons, and an IR sync port for quick setup with compatible transmitters. For detailed instructions and comprehensive information on using the Lectrosonics Camera Slot Dual UHF Receiver, please download the most current version of the user manual from the Lectrosonics website: **www.lectrosonics.com/manuals**.

Product Usage Instructions
Quick Start Summary
Before using the receiver, ensure that the following minimum required settings are configured:

- Receiver 1 and Receiver 2 frequencies should not have a difference of 4.2 to 4.8 MHz.
- If the frequencies are set within this range, performance may be degraded. The LCD screen will periodically flash a warning message.

Front Panel Controls and Functions
The front panel of the receiver features various controls and connectors:

- MENU/SELECT Button: Used to select menu items and enter setup screens during initial setup.
- UP and DOWN Buttons: Used for navigation within menus and setup screens.
- POWER/BACK Button: Press to turn the power on/off. Also functions as a back button while navigating menus and setup screens.
- Secondary Audio Output: Provides a second set of outputs through a 5-pin connector, allowing both audio channels to be connected through external cables for cameras with only one audio channel enabled in the slot.
- IR Sync Port: Used for quick setup with compatible transmitters that support infrared synchronization.
- Audio Outputs: In addition to the rear panel outputs, the front panel provides a TA5M connector with two balanced outputs.
- LCD Screen: Backlit graphics-type LCD used to set up and monitor the receiver during normal operation.

Please refer to the user manual for detailed instructions on using each control and connector. This guide is intended to assist with the initial setup and operation of your Lectrosonics product. For a detailed user manual, download the most current version at: **www.lectrosonics.com/manuals**

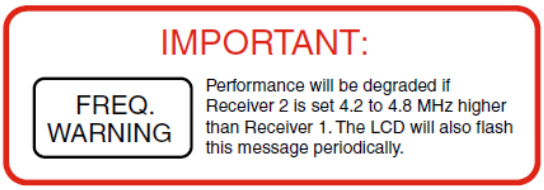
Digital Hybrid Wireless

The Lectrosonics Digital Hybrid Wireless® uses innovative technology to combine the advantages of digital audio with the advantages of analog RF transmission. The result delivers the superior sound quality of a digital system and the excellent range of an analog system. A proprietary algorithm encodes the digital audio information into an analog format which can be transmitted in a robust manner over an analog FM wireless link. The receiver employs state-of-the-art filters, RF amplifiers, mixers, and detectors to capture the encoded signal and a DSP recovers the original digital audio. This digital/analog hybrid technique has some very beneficial properties. Because the information being transmitted is digitally encoded, immunity to noise is much higher than what a

compandor can offer. Because the encoded audio is sent in analog format, spectral and power efficiency and operating range are not compromised. weak RF conditions, the received signal degrades gracefully, like an analog system, delivering as much usable audio as possible at maximum range. Since the audio is free of compandor artifacts, pumping, and breathing problems are also greatly reduced.

Quick Start Summary
The following checklist includes the minimum required settings to start using the receiver.

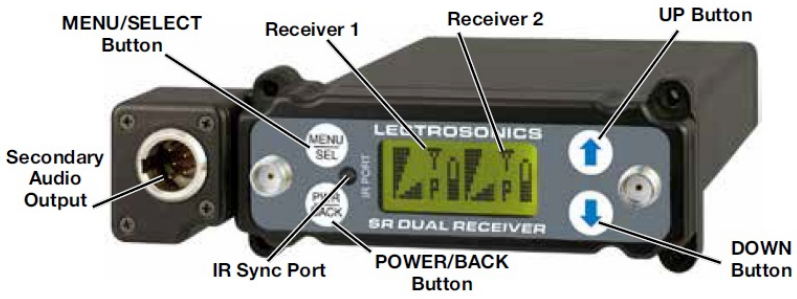
- Install either a battery sled or camera slot adapter kit (see pages 5-6).
- Connect power to the receiver (see pages 6-7).
- Set the DIVMODE for single or dual-channel operation (see pages 8-9).
- Set the COMPAT (compatibility) mode for the transmitters to be used (see pages 8-9).



- Find clear operating frequencies for one or both receivers (see page 10).
- Set transmitters on the matching frequencies (see transmitter manual).
- Verify transmitters are set to the same compatibility mode as the receiver (see transmitter manual).
- Adjust transmitter input gain to match voice level and mic position (see transmitter manual).
- Adjust the receiver output level as needed for the camera or mixer input level desired (see pages 8-9).

IMPORTANT: Performance will be degraded if Receiver 2 is set 4.2 to 4.8 MHz higher than Receiver 1. The LCD will also flash this message periodically.

Front Panel Controls and Functions



Audio Outputs
In addition to the audio outputs on the rear panel, the front panel of the receiver provides a second set of outputs through a 5-pin connector. This allows both audio channels to be connected through external cables for cameras with only one audio channel enabled in the slot. The TA5M connector provides two balanced outputs with the following pinouts:

- Pin 1 Pin 2 Pin 3 Pin 4 Pin 5
- Shields CH1 + CH1 – CH2 + CH2 –

LCD Screen
A backlit, graphics-type LCD is used to set up and monitor the receiver. The Main Window shown above is used during normal operation, to display RF and audio levels, transmitter battery status, pilot tone status an diversity activity for both receivers.

MENU/SEL Button
This button is used to select menu items and enter setup screens during setup.

IR (Infrared) Sync
An IR Sync Port is used for quick setup with transmitters that offer this feature. Settings for frequency, step size, compatibility mode, and talkback are transferred from the receiver to the transmitter via the IR ports.
NOTE: Selected compatibility mode and talk back will only sync if they are available options on the transmitter you are syncing with.

PWR/BACK Button
Press the PWR/BACK switch to turn the power on. Press and hold it until the display goes blank to turn the power off. It also functions as a “back” button while navigating the various menus and setup screens to return to the previous screen or menu item. The firmware “remembers” whether the receiver was turned on or off after power is disconnected, and it returns to that state when power is restored. This allows the receiver to power up and down as the camera or external supply is turned on and off. Press the PWR/BACK button from the Main Window to briefly display the external power voltage.

UP/DOWN Arrow Buttons
The UP and DOWN arrow buttons are used to select various options and adjust values in the setup screens, and provide secondary functions such as locking out the panel to guard against accidental changes.

Installing Rear Panel Adapters

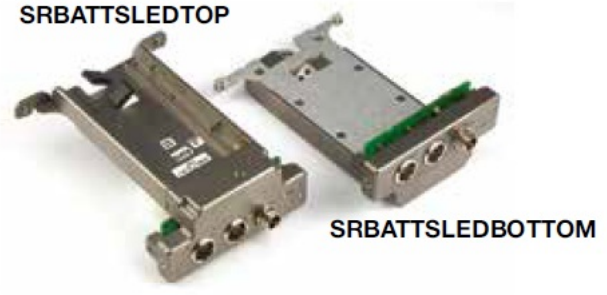
Panels are held in place by two Phillips head screws on the sides of the housing.

Connections between the panel and main circuit board are made via miniature mating connectors.

Align the mating connectors and slide the panel straight into the housing until the screw holes align with the housing.

Installation of the rear panel output/power adapters is the same for all models.

Battery Adapters
Battery sled adapters configure the receiver for standalone use or to provide battery backup power. Several options are available:



- SRBATTSLEDTOP
- SRBATTSLEDBOTTOM
- SR9VBP (inserts into the SLED adapters)

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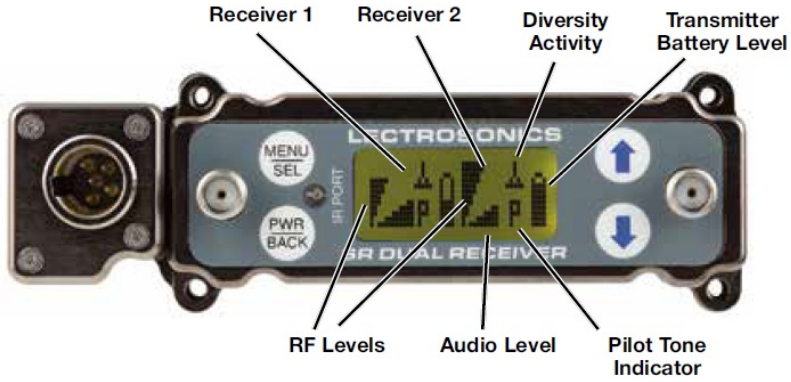
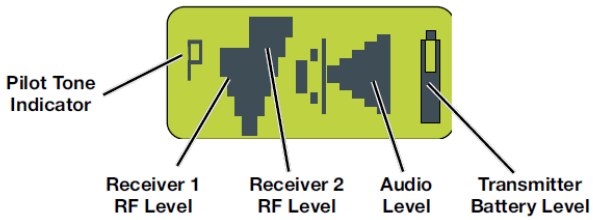
The battery sled adapters do not include charging circuitry. Batteries must be charged with their respective chargers. The adapters include an integral circuit that automatically selects between the battery and the external source, whichever delivers the highest voltage.

External Power Supply
DCR12/A5U AC power supply with interchangeable blades/posts for use in Europe, the UK, Australia, and the USA; 100-240 V, 50/60 Hz input; 12 VDC (regulated), 0.3 A max. output, 6.0 W. Sold separately.

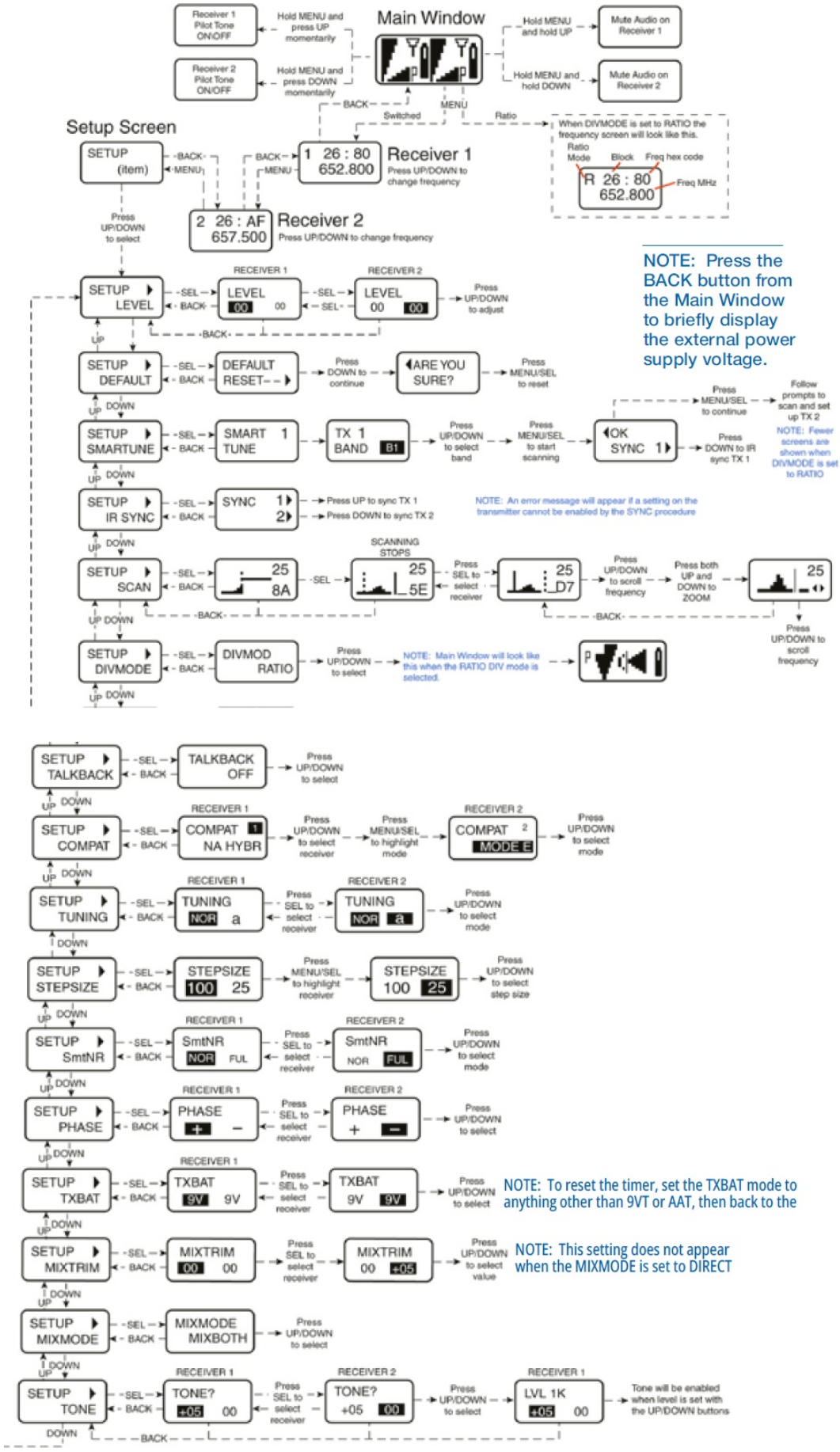
Main Window (LCD)
The Main Window displays information concerning the condition of the Pilot Tone, antenna phase, RF and audio signal levels, and battery conditions for both the receiver and the associated transmitter.
NOTE: When the RATIO DIVERSITY mode is selected, both receivers are combined to pick up the same transmitter, so the Main A window will display a single audio channel. Pressing the MENU/SEL button accesses the menus and screens for setting up the receiver and searching for clear frequency channels.



Navigating the LCD
Note: Press the BACK button from the Main Window to briefly display the external power supply voltage.



Accessing Block 606
NOTE: Block 606 is ONLY AVAILABLE in Bands B1 and C1 Available from any setup screen that displays the two receiver selection options next to each other, press and hold the DOWN arrow and simultaneously press PWR/BACK. Using the DOWN arrow, toggle between B1/C1 and Block 606.

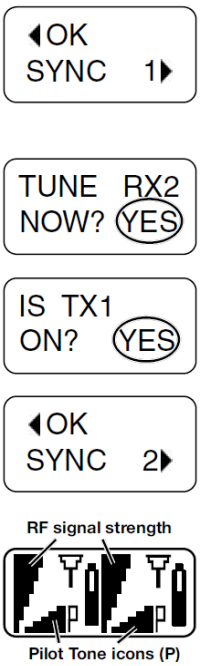


COMPACT

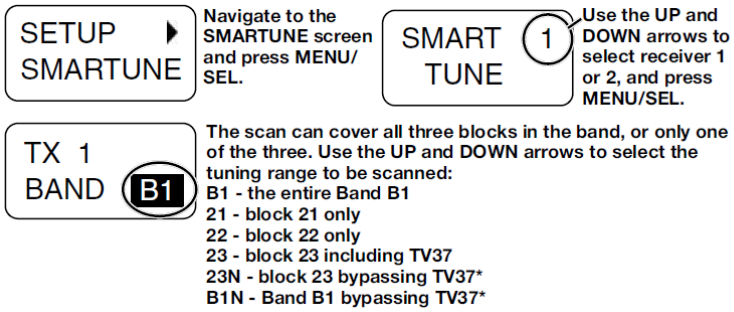
Compatibility modes adjust the FM deviation and audio processing (companding) to match other Lectrosonics models and some models from other manufacturers.

Using SmartTuneTM

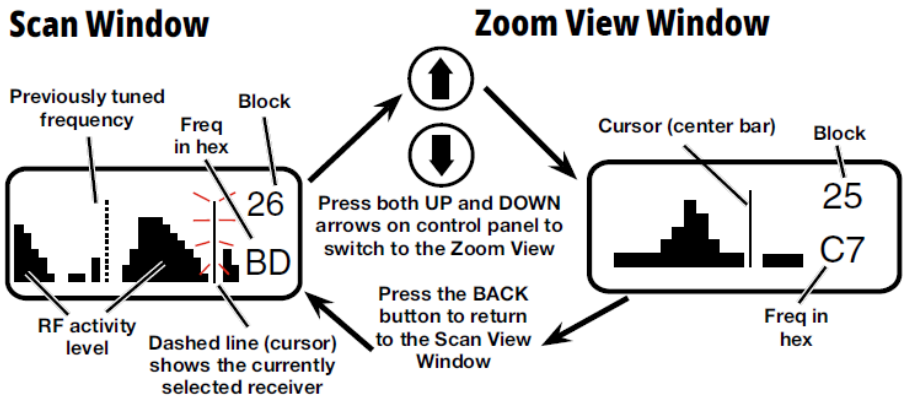
SmartTune is the easiest and fastest way to scan the local RF spectrum and find clear operating frequencies.



NOTE: 23N and B1N (“N” refers to North America) scans skip past TV Channel 37 (608 to 614 MHz) since it is reserved for radio astronomy in North America.



After the scanning is complete, the newly discovered frequency will be set automatically. The LCD will then prompt to SYNC the frequency to the matching transmitter via the IR port (DOWN ARROW), or to continue by pressing OK (MENU/SEL). After leaving the SYNC screen, the LCD will ask about setting up the other receiver. Use the UP and DOWN arrows to select YES to tune the other receiver, then press MENU/SEL to continue. Turn on the transmitter that matches the first receiver that was tuned. Use the UP and DOWN arrows to select YES and press MENU/SEL. After the scanning is complete, the newly discovered frequency will be set automatically. The LCD will then prompt to SYNC the frequency to the matching transmitter via the IR port (DOWN ARROW), or to continue by pressing OK (MENU/SEL). Press the BACK button several times to return to the Main Screen and verify that both transmitters show a strong RF signal strength and that the Pilot Tone icons are NOT blinking.



Manual Scanning

Scan Window

First, turn off all of the transmitters you intend to use with the receiver. Navigate to the SETUP/SCAN screen and press the MENU/SEL button to start the scanner. The display will switch to the Scan Window (see illustration above) and start scanning immediately. Allow the receiver to scan across the entire tuning range at least once, then press the MENU/SEL button to stop the scanning. Scroll through the screen with the UP and DOWN buttons and find a frequency where no (or very weak) RF signals are present. Press the PWR/BACK button to set the receiver to this new frequency. Press both the UP and DOWN buttons at the same time to switch to the Zoom View Window (see illustration above). In this view, the cursor remains fixed in the center of the screen, and the background scrolls behind it. The frequency can be stepped up and down in 100 kHz increments using the UP and DOWN arrow buttons.

When the receiver is configured for SWITCHED diversity (dual chan- nel mode), two cursors will appear when the scanning is stopped. Press MENU/SEL to toggle between the two receivers. The cursor for the selected receiver will be a dashed rather than a solid line. Select each receiver and use the UP and DOWN buttons to locate a frequency with no (or very weak) RF activity. Keep the frequencies of the two receivers at least 700 kHz apart to minimize de-sensing (short-range) issues. This spacing is a “worst case” approximation assuming the transmitters are about 25 feet from the receiver antennas. Data gathered during a scan is stored until it is intentionally erased or the power is turned off. Previous data will remain and subsequent scans can be made to search for additional signals or to accumulate higher peaks. To clear the scan memory and screens, press the back button several times to return to the Main Window, then press and hold the PWR/BACK button briefly. As soon as Powering off… appears on the display, release the button. The receiver will remain turned on, and the scan data will be erased.

LIMITED ONE-YEAR WARRANTY

The equipment is warranted for one year from the date of purchase against defects in materials or workmanship provided it was purchased from an authorized dealer. This warranty does not cover equipment that 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 ELECTRONICS, 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 ELECTRONICS, INC. HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL THE LIABILITY OF ELECTRONICS, 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.

Documents / Resources

	LECTROSONICS SRC, SRC5P Camera Slot Dual UHF Receiver [pdf] User Guide SRC, SRC5P, SRC SRC5P Camera Slot Dual UHF Receiver, Camera Slot UHF Receiver, Dual UHF Receiver, UHF Receiver, Receiver, Camera Slot Dual UHF Receiver, SRC Camera Slot Dual UHF Receiver, SRC5P Camera Slot Dual UHF Receiver

References

- Lectrosonics: Quality wireless microphone, encrypted digital wireless and DSP audio processing systems
- Manuals