

# **Handheld Transmitter**

# **Preliminary**



- Digital Hybrid Wireless® Technology
- Standard thread-on capsules
- Membrane switch and LCD interface
- AA battery power
- Selectable RF power at 50 and 100 mW
- Talkback feature

The HH Digital Hybrid Wireless handheld transmitter represents an elegant solution for a variety of wireless microphone applications including live performance, broadcast, AV rental and houses of worship. The HH incorporates many advanced features to provide high-quality speech and vocal reinforcement. Along with providing peerless audio quality with wide frequency response and dynamic range in native 400 Series mode, the technology used in the HH includes compatibility modes for Lectrosonics 200 Series, 100 Series and IFB receivers, and some systems from other top manufacturers. (Contact Lectrosonics for details.)

## **Interchangeable Capsules**

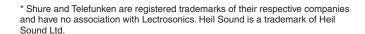
Lectrosonics offers the HHC cardioid condenser capsule. Thread-on capsules from other manufacturers using a 1.25" opening and 28 thread pitch can also be used, including those from manufacturers such as EV, Shure®, Heil Sound™, Telefunken® and others.\*

## **Digital Hybrid Wireless®**

Digital Hybrid Wireless® is a revolutionary design that combines digital audio with an analog FM radio link to provide both outstanding audio quality and exemplary, noise-free RF performance. Using a patented algorithm to encode 24-bit digital audio information in the transmitter into an analog format, the encoded signal is then transmitted over an analog FM wireless link. At the receiver, the signal is then decoded to restore the original digital audio. This process eliminates compandor artifacts and produces an audio frequency response flat to 20 kHz.

(US Patent 7,225,135)









### **Selectable RF Transmission Power**

The HH transmitter allows the user to select from among two power settings<sup>†</sup> depending on the needs of the situation. The lower RF power setting uses slightly less current, thus battery life is enhanced. The higher power setting provides greater range and resistance to dropouts. Selecting the RF power is accomplished using the control menu.



#### **Mute and Talkback Functions**

The button on the back of transmitter below the head can be used to actuate an audio mute condition. This button can also be disabled using the control panel inside the battery compartment. An alternative function that can be actuated by this button is a talkback function. In this state, the transmitter sends a signal to the Venue receiver when the button is pushed - the receiver then switches the audio to a second output which can be routed differently.

This function can be used for talkback, cueing or other purposes depending on the application.

This functionality requires a Venue receiver with firmware version X.XX or later.

## **Specifications**

Operating frequencies: †

Block 470	470.100 - 495.600	Block 23	588.800 - 614.300
Block 19	486.400 - 511.900	Block 24	614.400 - 639.900
Block 20	512.000 - 537.500	Block 25	640.000 - 665.500
Block 21	537.600 - 563.100	Block 26	665.600 - 691.100
Block 22	563 200 - 588 700		

Frequency selection: 256 frequencies in 100 kHz steps (except block 23)

RF Power output: Selectable at 50 or 100 mW

**Pilot tone:** 25 to 32 kHz frequency (400 Series only);

5 kHz deviation

Frequency stability:  $\pm$  0.002% Deviation:  $\pm$  75 kHz (max) Spurious radiation: 90 dB below carrier Operating temperature range:  $-30^{\circ}$  C to  $+60^{\circ}$  C

Input compressor:

Dual envelope compressor, >30 dB range

45 dB; semi-log menu-driven control; 1 dB steps

Modulation indicators:

Dual bicolor LEDs indicate modulation
of -20, -10, 0 and +10 dB referenced to full
modulation, LCD bar-graph indicator

Frequency response 40 Hz to 20 kHz (+/- 1dB)

Low frequency roll-off: -3 dB @35, 50 and 70 Hz; selectable; 36 dB/octave

Controls:

**External:** Programmable mute/talkback button

Battery compartment: Power, mute disable, menu/select, back and up/down arrow buttons for menu selection and settings.

Battery: 2x AA with polarity protection and battery ejector
Battery life: At 100mW: 5.5 hours (alkaline); 8-10 hours (lithium)

At 100mW: 5.5 hours (alkaline); 8-10 hours (lithium (The HH transmits battery status to Lectrosonics 200 or 400 Series receivers.)

Capsule Interface: 1.25" opening and 28 thread pitch

Power available: 5V, 25 mA max Input impedance: 1000 Ohms

Weight: 11.4 oz. with lithium batteries and HHC capsule Dimensions: 9.5" long x 1.97" diameter at largest point

Emission Designator: 180KF3E

Specifications subject to change without notice.

Consumer Alert for US Users - FCC Order DA 10-92

Most users do not need a license to operate this wireless microphone system. Nevertheless, operating this microphone system without a license is subject to certain restrictions: the system may not cause harmful interference; it must operate at a low power level (not in excess of 50 milliwatts); and it has no protection from interference received from any other device. Purchasers should also be aware that the FCC is currently evaluating use of wireless microphone systems, and these rules are subject to change. For more information, call the FCC at 1-888-CALL-FCC (TTY: 1-888-TELL-FCC) or visit the FCC's wireless microphone website at www.fcc.gov/cgb/ wirelessmicrophones. To operate wireless microphone systems at power greater than 50mW, you must qualify as a Part 74 user and be licensed. If you qualify and wish to apply for a license go to: http://www.fcc.gov/Forms/Form601/601.html

<sup>&</sup>lt;sup>†</sup> Not all frequency blocks available in all countries. Consult your local representative or contact Lectrosonics for more information.