

# **4 Channel Digital Receiver**



- · Four-channel, half-rack design
- Continuously tunable tracking filters covering 470.100 - 614.375 MHz
- Compatible with DSW, Duet and Digital Hybrid Wireless® transmitters
- Built-in wideband antenna multicoupler with loop-thru for additional receivers
- Antenna bias power enabled from the front panel (fused and over-temperature protected)
- IR bi-directional port for transmitter setup
- Analog and Dante® audio outputs with TalkBack (in applicable RX modes)
- Ethernet and USB interface
- Offline full-system frequency coordination

The DSQD Half Rack Receiver with analog and digital Dante® network audio outputs utilizes the Lectrosonics signature digital architecture with remarkable audio quality and ultra-low latency. The receiver includes an extended operating range rivaling the best analog and Digital Hybrid Wireless® systems with continuously tunable tracking filters covering 470.100 -614.375 MHz.

The DSQD Receiver is a four-channel design with a host mainframe that contains the DSP, microprocessor, antenna multicoupler and control interface.

Antenna ports on the rear panel accept input from remote antennas, with a "loop-thru" output to another mainframe using the internal multicoupler. A kit is also available to mount antenna inputs (BNC connectors) on the front panel.

# **DSQD Front Panel**

## **Headphone Monitor**

Monitor any individual audio channel, or a stereo mix between pairs. Volume knob recesses into front panel.

## **LCD Control Panel**

Easy navigation of all setup parameters is provided by a full color, backlit, LCD screen and membrane push buttons. The high resolution display provides fantastic monitoring of all receiver parameters.

## 2-Way IR

A bidirectional IrDA interface allows quick syncing of settings and encryption keys to transmitters with the push of a button.

#### **USB Port**

Easily interface to Wireless Designer or third-party software via the standard USB port, greatly accelerating setup time and expanding system monitoring capabilities.

## **LED Indicators**

Two LEDs provide positive indication of antenna bias power state.







# **DSQD Rear Panel**

#### **Antenna Ports**

Antenna inputs and outputs to an additional DSQD allow "stacking" of up to three mainframes with a single pair of antennas.

## **Audio Outputs**

Four full-size XLR jacks provide analog outputs.

### **Dante® Ethernet Ports**

Dual Dante Ethernet ports provide the ability to daisy chain multiple DSQDs onto a Dante Audio Network.

#### **Ethernet Port**

Easily interface to Wireless Designer or third-party software via the control Ethernet port, greatly accelerating setup time and expanding system monitoring capabilities.

# **Power Supply Input**

The DSQD is powered by 7 to 18 VDC from an external source capable of 2.5 amps.

# **Summary of Dante® Benefits**

- Plug-and-play technology automatic discovery and simple signal routing
- Reduced Cost & Complexity No special skills required to set up audio networking
- Sample accurate playback synchronization
- Lowest latency available from any networking technology
- Add/remove/rearrange components at will
- Deterministic latency throughout the network
- Support mixed bit depths and mixed sample rates over one network
- Scalable, flexible network topology supporting a large number of senders and receivers
- Supports 1Gbps networks

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- Supports a single integrated network for audio, video, control, monitoring
- Uses inexpensive, off-the-shelf computer networking equipment

# **Specifications**

Operating Spectrum: 470.100 - 614.375 MHz

Frequency Adjustment Range: 25 kHz steps Sampling Size and Rate: 24-bit, 48 kHz

Digital Modulation: 8PSK with Forward Error Correction

Data Encoding: Proprietary ADPCM Encryption: AES 256-CTR

(per FIPS 197 and FIPS 140-2)

Latency:

Digital Source: 1.0 ms plus Dante network

Analog Source: <1.4 ms

Audio Performance:

Frequency Response: 20 Hz - 20 KHz, +\-1 dB

THD+N: 0.05% (1 KHz @ -10 dBFS)

Dynamic Range: 108 dB A-wtd, NR=NORMAL

Adjacent Channel Isolation: >85 dB

Diversity Technique: Noiseless antenna switching

Sensitivity: -98 dBm for 10<sup>-5</sup> BER

Antenna Inputs/Outputs: Dual BNC female, 50 ohm impedance

**Audio Outputs:** 

XLR: Balanced, -35 to +8 dBu Headphone: 1/4 inch phone iack

Dante: RJ45

External DC Power: 7 to 18 VDC; 2.5A (max)
Weight: 1.95 lbs.; 880 grams
Dimensions: 8.375 x 1.75 x 7.375 in.
213 x 44.5 x 187 mm.

Specifications subject to change without notice.

