DSQD

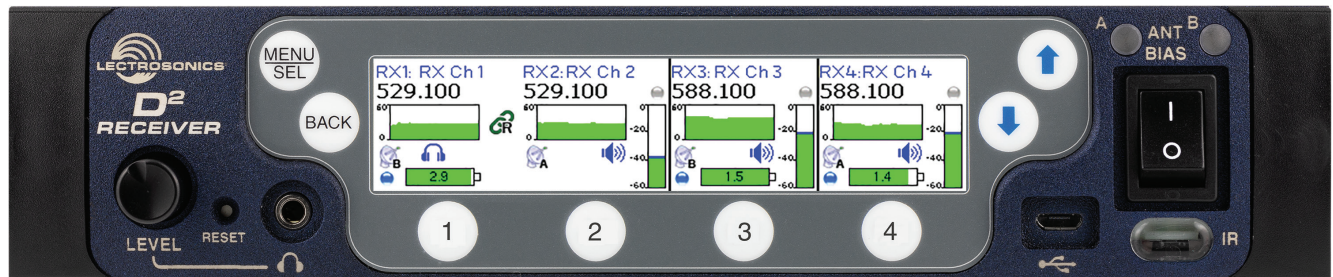## 4 Channel Digital Receiver
DSQD, DSQD/AES3

- **Four-channel, half-rack design**
- **Continuously tunable tracking filters covering 470.100 - 614.375 MHz**
- **Compatible with stereo and mono digital transmitters, 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® or AES3 digital audio outputs (model dependant)**
- **Ethernet and USB interfaces for control**

The DSQD Half Rack Receiver with analog and digital 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 update firmware or interface to Wireless Designer or third-party software via the standard USB micro-B port, greatly accelerating setup time and expanding system monitoring capabilities.

Ethernet Port
Connect DSQD units via network to Wireless Designer software for monitoring and control.

LED Indicators
Two LEDs provide positive indication of antenna bias power state.

LECTROSONICS®

Rio Rancho, NM, USA
www.lectrosonics.com

Dante® version

AES-3 version

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

AES3 Ports (DSQD/AES3 version)
AES3 outputs on two TA3M jacks (in place of the two Dante ports shown)

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.

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)
System Latency:	
Digital Output:	D2 mode: 1.4 ms plus Dante Duet mode: 1.4 ms plus Dante Hybrid modes: 2.0 ms plus Dante
Analog Output:	D2 mode: 1.9 ms Duet mode: 1.9 ms Hybrid modes: 2.5 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^{-5} BER
Antenna Inputs/Outputs:	Dual BNC female, 50 ohm impedance
Audio Outputs:	
XLR:	Balanced, -35 to +8 dBu
Headphone:	1/8 inch phone jack
Dante model only:	RJ45 Gigabit Ethernet
AES3 model only:	TA3M
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.
Origin:	Designed and manufactured in the USA

Specifications subject to change without notice.

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

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