



CUT THE CORD

X2 Digital Wireless XDS95 and XDR95 wireless systems

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WIRELESS SYSTEMS ARE popular with guitarists because

it's great to roam the stage without being shackled by a cable. But cables remain popular for at least one very good reason: their sound. I don't know too many tone-loving players who'd ditch an old-fashioned cable in favor of wireless in any situation where tone was more important than mobility.

So I was a little lukewarm to the idea of testing another wireless guitar rig. Yeah, it works from across the room, through the walls and so on. *Next!* But then I read up on the systems from X2 Digital Wireless, which use digital technology that's designed to deliver the best possible sound quality. And I found out that, in addition to making a traditional-style rack-mounted receiver, X2 makes a stomp-box-sized receiver that easily fits on a pedal board. This was starting to look interesting.

FEATURES

X2 SENT ME two systems to test. The XDS95 consists of the XDT1 transmitter and the stomp-box-style XDR1 receiver, while the XDR95 uses the more upscale XDT4 transmitter and a rackmount receiver. Although the XDR system uses slightly more sophisticated technology, the two rigs share some key features. Both are housed in polycarbonate shells, which X2 claims can withstand a six-foot drop and being rolled over by a truck. I didn't put these claims to the test, but the units did appear to be quite rugged.

The big news is audio quality: both models use 24-bit digital audio processing that avoids the tone-coloring compression/expansion—"compansion"—processing found on most wireless systems. The

transmitter digitizes the guitar's signal and beams it to the receiver, which converts it back to analog with as little alteration as possible. X2 calls these devices "future proof," which is a cute way of saying that their ultra-high-frequency signals, which use proprietary bandwidths, won't conflict with other digital gadgets.

The transmitters are light and easy to set up, with a minimum of controls—just an on/off button and a switch that toggles among the five available channels. The guitar connects via the included 1/4-inch-to-mini cable, which screws securely onto the transmitter. A five-position LED shows which channel is in use and doubles as an audio-signal meter and battery power gauge (the transmitters run on nine-volt batteries).

The receivers are similarly streamlined. The XDS has a 1/4-inch stereo output (one side can feed a tuner, the other your amp), an on/off switch, a channel select switch and a meter like that on the transmitter. The rackmount XDR has two external antennas, detachable rack ears, XLR and 1/4-inch outputs, and a more elaborate metering system that delivers a constant reading on guitar signal strength, active channel and the transmitter's battery life. In addition to the power switch, the unit has two arrow-shaped buttons with which to select among its five available frequency channels. Neither unit has a volume control, a minor omission, though I can see some situations where it would be good to match the receiver's output level to that of an amp or PA.

Aside from size, there are some significant differences between the two systems. The XDS95 has an operating range of greater than 150 feet; the XDR95 has an arena-friendly range up to 300 feet. In addition, the XDS95 features a microprocessor

X2 DIGITAL WIRELESS XDS95 AND XDR95 WIRELESS SYSTEMS

LIST PRICES: XDS95, \$499.00; XDR95, \$899.00

MANUFACTURER: X2 Digital Wireless, x2digitalwireless.com

XDS95 WIRELESS SYSTEM:

FREQUENCY RESPONSE: 10Hz–12kHz

AUDIO DYNAMIC RANGE: Greater than 117dB

CARRIER FREQUENCY: 902–928MHz

SELECTABLE FREQUENCIES: Five

OPERATING RANGE: Greater than 150 feet line-of-sight (may vary with local conditions)

D/A CONVERSION: 24-bit Delta Sigma, 128 times oversampling

RECEIVER CONNECTIONS: 1/4-inch unbalanced TRS stereo output

TRANSMITTER CONNECTIONS: 1/8-inch unbalanced locking connector

XDR95 WIRELESS SYSTEM:

FREQUENCY RESPONSE: 10Hz–20kHz

AUDIO DYNAMIC RANGE: Greater than 118dB

CARRIER FREQUENCY: 902–928MHz, dual-frequency transmission

SELECTABLE FREQUENCIES: Five

OPERATING RANGE: 300 feet line-of-sight (may vary with local conditions)

D/A CONVERSION: 24-bit Delta Sigma, 128 times oversampling

RECEIVER CONNECTIONS: 1/4-inch unbalanced stereo TRS out, XLR balanced out

TRANSMITTER CONNECTIONS: 1/8-inch TRS locking connector

that continuously selects among four "Q-Diversity" internal antennas to find the strongest signal, a technique that combats radio-frequency (RF) interference and eliminates dropouts. The rack version's "Q-DiversityPLUS" system doubles the processing power, making it even less prone to RF interference.

PERFORMANCE

I WAS ESPECIALLY impressed with the ease of setting up both of the X2 systems: It was as near to plug-and-play as wireless is likely to get. One benefit from a testing standpoint was that I was able to A/B the two systems against each other and also against a hard-wired connection to the amp.

With the XDS95, my guitar was lively and dynamic. There were no artifacts on quiet passages, no signal loss, and the tonal balance was very close to that of the cable connection. There was a subtle difference in the lower mids, with the wireless sounding slightly phasey compared to the sound from the hard-wired connection.

The XDR95 rack unit, on the other hand, blew me away. The sound was fat, dynamic and capable of delivering the most subtle performance nuances. The guitar really came to life, to the point where I didn't want to go back to the cable.

THE BOTTOM LINE

THE X2 SYSTEMS are tough and user friendly, with sound that's *thisclose* to that of a regular cable. If you've wanted to roam the stage but found wireless wanting in the past, one of these systems might let you cut the cord for good. 🌟

PRO	CON
EASY SETUP; GOOD (XDS) TO EXCELLENT (XDR) SOUND; RELIABLE SIGNAL; DURABLE PACKAGING; AFFORDABLE	NO ONBOARD VOLUME CONTROLS TO MATCH THE RECEIVER'S OUTPUT LEVEL TO THAT OF AN AMP OR PA.