

Digital Wireless Microphones

By George Petersen

Just as consoles, signal processing and system control have eased into the benefits of digital, it's little surprise that wireless mics are also making the transition. And wireless audio is ideally suited for the digital domain, whether for the precision of packing more frequencies into smaller bandwidths, applying security encryption or simply taking advantage of transmitting an unaltered digital stream. We looked at some recent offerings and found systems for nearly any application or budget. Speaking of pricing, these are omitted here as systems can vary widely depending on transmitter/receiver options, mic/capsule choices and accessories, such as external antennas. Manufacturer URLs are provided if you need more information.

AKG DMSTetrad

Frequency Bands: (2) 548.1 to 697.9 MHz; 710.1 to 864.9 MHz
Max Channels: 40 simultaneous
Transmitters: DPTetrad bodypack; DHTetrad handheld available with D5, D7 or C5 capsules
Batteries/Life: (2) AA, 7 hours; HR6 rechargeable, 8 hours
Latency: 3.5 mSec

Resolution: 24-bit, 44.1 kHz
RF Output: 10 to 50 mW
Audio Outs: (2) analog XLR and 1/4"; AES/EBU with word clock
Extras: Two-channel receiver with rear BNC antenna mounts; onboard DSP includes HP filter, 3-band EQ, dbx compressor and limiter.
akg.com



Lectrosonics Venue

Frequency Bands: (9) 25.5 MHz blocks from 470 to 691 MHz
Max Channels: 16 simultaneous per 25.5 MHz block
Transmitters: HH handheld; HM plug-on and LMa bodypack
Batteries/Life: (2) AA; 5.5 hours
Latency: 3.2 mSec
Resolution: 24-bit, 88.2 kHz

RF Output: 50 or 100 mW
Audio Outs: Six XLR analog
Extras: Compander-free Digital Hybrid design; 1U chassis can house up to six receiver modules; HH transmitter accepts capsules from six different manufacturers.
lectrosonics.com



Line 6 XD-V75

Frequency Bands: 2.4 GHz
Max Channels: 14 simultaneous
Transmitters: Numerous handheld models and bodypacks with lavalier and headworn options.
Batteries/Life: (2) AA; 8 hours
Latency: 2.9 mSec
Resolution: 24-bit, 44.1 kHz

RF Output: 3.3 mW or 10 mW
Audio Outs: XLR and 1/4" analog; USB digital
Extras: Onboard DSP mic modeling of well-known mics; interchangeable capsules, including V75-40V handheld with Earthworks WL40V capsule.
line6.com



Audio-Technica System 10

Frequency Bands: 2.4 GHz
Max Channels: 8 simultaneous
Transmitters: ATW-T1001 UniPak bodypack; ATW-T1002 handheld cardioid
Batteries/Life: (2) AA; 7 hours
Latency: n/a

Resolution: 24-bit, 48.1 kHz
RF Output: 10mW
Audio Outs: XLR or 1/4" analog
Extras: Compact single-channel receiver
audio-technica.com



Avlex MIPRO ACT-828

Frequency Bands: 480 to 544 MHz; 540 to 604 MHz; 636 to 698 MHz
Max Channels: 24 simultaneous (32 in low-power mode)
Transmitters: ACT-80H condenser handheld; ACT-80T bodypack
Batteries/Life: Rechargeable, 8 to 12 hours
Latency: 2.7 mSec

Resolution: 24-bit, 44.1 kHz
RF Output: 10 mW or 50 mW
Audio Outs: (2) XLR and 1/4" analog; S/PDIF digital
Extras: Single-channel ACT 818 receiver also available; SmartEQ™ with capsule emulation; full-color vacuum fluorescent display.
avlex.com



Sabine SACOM DS8800

Frequency Bands: 902 to 928 MHz
Max Channels: 16 simultaneous
Transmitters: DS-80-H handheld; DS-80-T bodypack
Batteries/Life: (2) AA or rechargeable; 5 hours
Latency: 3 mSec
Resolution: 24-bit, 48 kHz

RF Output: 1, 10, 25 or 50 mW
Audio Outs: XLR analog
Extras: DS-8800 has eight receivers in 1U chassis, similar DS-8400 model with four channels; Audix capsule option on handhelds.
sacomusa.com



Sennheiser System 9000

Frequency Bands: Three banks from 470 to 798 MHz
Max Channels: 40 simultaneously
Transmitters: SKM 9000 handheld; SK 9000 bodypack
Batteries/Life: Rechargeable battery; 5.5 hours
Latency: 3.2 mSec
Resolution: 24-bit; up to 96kHz

RF Output: 10 or 50 mW (HD mode); 25 or 50 mW (LR mode)
Audio Outs: Analog and AES-3 output modules offered
Extras: 8-channel modular receiver system; built-in spectrum analyzer; 12 capsules (including Neumann) offered for handheld.
sennheiserusa.com



Behringer ULTRALINK ULM202MIC

Frequency Bands: 2.4 GHz
Audio Outs: (2) XLR and 1/4" analog
Extras: Includes two handheld transmitters; also offered in single-channel versions: ULM200MIC with single handheld and ULM200LAV with lavalier bodypack. Note: New model for upcoming release in first half of 2014; some specs unavailable at press time.
behringer.com



Beyerdynamic TG 1000 Dual Receiver

Frequency Bands: Five blocks within the 470 to 789 MHz range
Max Channels: 24 simultaneous
Transmitters: TG 1000 handheld; TG 1000 bodypack
Batteries/Life: (2) AA; 8 hours
Latency: 2.1 ms

Resolution: 24-bit
RF Output: 10 or 50 mW
Audio Outs: (2) XLR and TRS analog
Extras: Dual-channel receiver; five interchangeable capsules available for handheld, including TG V90w ribbon model.
north-america.beyerdynamic.com



Shure ULX-D

Frequency Bands: 470 to 534, 572 to 636, 632 to 696 MHz
Max Channels: 60, 14 on a single 6 MHz TV channel
Transmitters: ULXD1 bodypack or ULXD2 handheld
Batteries/Life: (2) AA, 11 hours @ 10 mW

Latency: 2.9 mSec
Resolution: 24-bit/48kHz
RF Output: 1, 10, 20 mW
Audio Outs: XLR (line/mic level switchable); also Dante networking
Extras: ULXD4 single- or ULXD4D dual-channel receivers available.
shure.com



Sony DWZ Series

Frequency Bands: 2.4 MHz
Max Channels: 6 simultaneous
Transmitters: ZTX-M02RC handheld or ZTX-B02RC bodypack
Batteries/Life: (2) AA, 10 hours
Latency: n/a

Resolution: 24-bit/48kHz
RF Output: 24-bit/48 kHz
Audio Outs: One XLR and two 1/4" TS
Extras: Interchangeable capsules on handhelds.
pro.sony.com

