

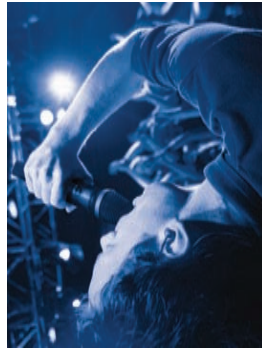
Wireless Personal Monitor Systems

By Bill Evans

Your intrepid FOHers have covered personal monitors (also known as "speakers in your head") from that end of the signal chain a couple of times. But no matter how good your earpieces are, they are of no real use unless you have a wireless IEM trceiver package that is at least as good as your earmolds. And in the post-700 world, doing more in less bandwidth is just something wireless guys have to deal with. Here is some of the cooler stuff we have seen to help that happen. **FOH**



Shure PSM 700



AKG IVM4



Lectrosonics IFB Receiver RT1a/T4

Audio-Technica M3T UHF stereo transmitter



Sennheiser EW 300 IEM G3



Hear Technologies Freedom Back

Company and Model	Transmitter Channels	Transmitter Form Factor	Transmitter Output Power	Transmitter Frequency	Additional Controls	Save Individual Programs?	Receiver Output Power	Receiver Diversity	Effective Distance	Audio Input	Maximum Input Level	Options
AKG USA IVM4	4 groups with 14 pre-calculated intermod free channels	Half rack	10,20,50, 100 mW adjustable	1200 possible frequencies per band, frequency bands 500-530 MHz, 580-600 MHz	Hi Pass filter, 8 settings of EQ, 8 settings of Compression, and 8 settings of Binaural Room Simulation, Mono, Stereo, and Dual modes	No	N/R	No	100 meters	2 X combined XLR/1/4" jacks, balanced,	10dBV max	Note: IVM4 employs an AKG exclusive Digital MPX circuit that provides flat frequency response at any output level
Audio-Technica U.S. M3 Wireless In-Ear Monitor System	16 channels per band	Metal chassis 1/2 rack with included rack ears	10 mW/50 mW (switchable), 50 ohms	Band L: 575,000 to 608,000 MHz (1321 frequencies); Band M: 614,000 to 647,000 MHz (1321 frequencies)	2-channel mix control with stereo option; ambient mic input with mute control; scan control	Yes. Allows programming of custom frequency groups	65 mW (at 32 ohms)	no	300 ft	XLR/1/4" combo (x2)	+26 dBu	Multiple accessories, earphones, antennas available; see www.audio-technica.com for more information
Carvin EM900	961	Half rack	10 mW	470-960MHz	Stereo/Mono switchable	Yes	60mW	yes	300ft	TRS, XLR	-10dB	EM901 - extra receiver EM902 - extra ear buds EM-DR rack mount kit
Hear Technologies Freedom Back	120 - Four UHF Channels	Half rack	100 mW	Band A and Band B	Front Panel HP on TX, 12 dB Pad for Input on Transmitter	Yes	100 mW	No	About 300 feet depending on conditions	Combos	+ 4	Transmitter can be rack mounted, receiver has pouch or belt clip option.
Lectrosonics IFBR1a/T4	256 per block	Stand alone	250mW	9 blocks from 470 - 692 MHz	Mic/line, Comtek, Clearcom inputs	Yes	20mW, mono	No	up to 1200 ft.	XLR	+20 dBu	BA2015 rechargeable battery
Sennheiser USA EW 300 IEM G3	1680	Rack mountable	10/30 mW	various: 516-865 MHz	Infrared sync, advanced limiter, high frequency boost, EQ, built in Ethernet for computer control via WSM	Yes. 6 user banks with 16 programmable channels each	100 mW audio output power	Yes. New adaptive diversity utilizes the headphone cable as a secondary antenna	+300 feet	Combo TRS/XLR Neutrik jacks with additional TRS pass-through ports	+22 dBu max	L2015G2 charging station Stereo or MixMode control for custom mixes, 10 compatible wireless frequencies, compatible with all Shure wireless systems (country dependent)
Shure PSM 600	2	Half rack	100 mW	626 - 862 MHz (country dependent)	Transmitter: input level, headphone volume Receiver: output volume, balance/MixMode	No	N/R	No	300 feet	XLR and 1/4 inch	+25 dBu	
Shure PSM 700	32	Half rack	100 mW	524 to 952 MHz (country dependent)	Transmitter: input level, headphone volume Receiver: output volume, balance/mixmode	No	N/R	No	300 feet	XLR and 1/4 inch	+25 dBu	Stereo or MixMode control for custom mixes, 16 compatible frequencies, compatible with all Shure wireless systems (country dependent)