

Military PA Comparison: Technomad MilPA4 vs. Whelen WPS2805

Sources: published data from Technomad and Whelen

Logistics	Technomad	Whelen
Total System Weight	495 lbs.	632 lbs.
Is this a complete system?	Yes - system is shipped complete and ready to use.	No - Whelen weight does not include telephone pole, stands, or other structure required for mounting loudspeakers. Technomad system includes deployable tripods.
Heaviest Subcomponent in System	95 lbs.	300 lbs.
Can 1 person set up the System?	Yes	No
Typical System Setup Time	15 minutes	Unknown
Is system deployable?	Yes. All elements of Technomad system are built into Hardigg Mil-Spec rotationally molded flight cases with handles and protective covers.	No - Whelen horns are fiberglass devices which are not "ready to travel" - they require cases. The Whelen electronics cabinet part of the system is a simple aluminum enclosure not suitable for transport.
Is system palletizable?	Yes	No
System Uses	Technomad	Whelen
System Primary Function:	Multipurpose PA: speech paging, warning tones, music	Siren Playback, passable speech paging.
Speech Quality?	Excellent	Very poor - horn distortion and wireless encoding reduces clarity
Music Quality?	Excellent	Very poor - playback has obvious harmonic distortion, little bass, little treble.
Warning tone quality	Excellent	Excellent
Range / Coverage	Technomad	Whelen
Maximum Useful Range (Siren)	5,280 ft. radius circle (57 dB at edge of circle)	6000 ft. radius circle (60 dB at edge of circle - data from Whelen.com)
Maximum Useful Range (Voice)	5,280 ft. radius circle (57 dB at edge of circle)	3500 ft. (Technomad estimate)
Important Technical Note: high-efficiency horn-based systems such as the Whelen induce high levels of distortion and phase shift in the output signal. This is acceptable for warning tones, but degrades speech intelligibility by a significant amount.		
Coverage Pattern	Adjustable from 120 degrees to full 360 degree circular coverage. Useful for avoiding "spill" onto areas where you don't want sound.	Fixed, 360 degree circular coverage pattern. This can be a problem when combining multiple PA systems, as there is no way to prevent their output from overlapping.
Wireless Control / Multiple System Use	Technomad	Whelen
Can multiple systems be controlled by wireless signal?	Yes.	Yes.
Signal Type	2.4GHz Frequency Hopping Microwave	UHF, VHF, Narrowband.
Audio Quality of Wireless Signal	CD-quality	Poor. Speech noticeably degraded.
Can warning tones and live speech be output simultaneously from multiple PA systems?	Yes. "live" audio (warning tones, speech, music) can be distributed to multiple PA systems with negligible delay.	No. A significant "encoding" delay occurs when making live voice announcements wirelessly to Whelen systems, and warning tones (which are stored in each Whelen cluster and played back) are often played out of sync.
Included Features	Technomad	Whelen
Hand-held, switched microphone	Yes.	No.
CD-Player	Yes.	No.
Tape Deck	Yes.	No.
Integrated Mixer	Yes.	No.
Integrated 19" rack-mount case	Yes. 8-rackspace design with 1U available slot for warning tone generator or other options.	No.
Expandability	Technomad	Whelen
Is the system compatible with off-the-shelf audio technology?	Yes.	No.
Can standard audio devices be plugged into the system? (I.e. warning tone generators, computers, mp3 players, CD players, etc.)	Yes. Technomad Military PA systems provide standard inputs for consumer and professional audio devices, warning tone generators, and computers generated audio.	No. Whelen is a closed-box, proprietary design.
GSA Price	Technomad	Whelen
	\$ 12,518.00 COMPLETE	\$ 9,208.00 NOT COMPLETE (lacks control system, microphone, speaker mounting structure, flight cases, etc)