

# WPS2800 Series



## Mass Notification Warning Systems

### Alert and Inform

The most effective way to warn the public is to issue a siren warning and follow it with a clear, deliberate and powerful voice message. This two-step approach, alert and inform, will eliminate confusion, restore order and most importantly, save lives. Our WPS2800 Series accomplishes this in two ways. One is to alert, the other is to inform through omni-directional voice and siren warning. The WPS2800 Series delivers siren warning and broadcasting of unequalled clarity at uniform power levels (+/- 1dB) throughout 360°.

Ten models serve a wide variety of applications as shown here in ratio to a person's size.



TYPE II ELECTRONIC CABINET



TYPE III ELECTRONIC CABINET



# WPS2800 Series

## High-Power Voice and Siren Systems...

### SYSTEM FEATURES

- Choice of 1 to 10 Omni-Directional Speaker Cells Assembled in a Vertical Column
- Ten Models, 108dBc to 126dBc @ 100'
- 50' Cable Included
- Pole Top Mounting Bracket Included
- Two or Three Compartment (Type II or III)\* Natural Finish Aluminum Cabinet
- Public Address Capability
- Battery Powered, Minimum of 30 Minutes of Full Power Output with Batteries of Our Recommendation
- AC Temperature Compensated 10 Amp Battery Charger
- Local Controls or Remote Controls
- Power Amplifiers
- Electronic Siren Controller
- Tone Generator
- Timer
- Local Control Push Buttons
- Battery Switch
- Low Battery Alarm
- SI TEST®
- Battery Tray
- Lightning Arrestor
- Six Standard Public Warning Tones - Wail, Whoop, Attack, Hi-Lo, Alert, Airhorn

### SYSTEM OPTIONS

- SBC240, SBC260 - Solar Power<sup>1</sup>
- WPSBATT - Delco S2000 or Interstate Workaholic 31-MHD Batteries
- WPSNCMIC - Noise Cancelling Microphone
- Alternate Tone Set
- RDVM - Digital Voice Message Capability<sup>2</sup>

#### NOTES:

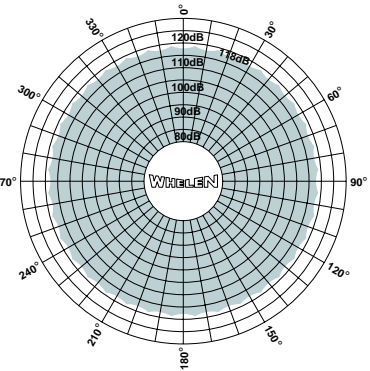
- (<sup>1</sup>) Solar power option.  
2 - 40 watt panels or 2 - 60 watt panels, mounting bracket and regulator.
- (<sup>2</sup>) RDVM - 1-16 message capability with 240 or 480 seconds available for recording.



All of our WPS-2800 Series speaker arrays are custom made to fulfill your specific requirements.

### COVERAGE CHART

UNIFORM COVERAGE +/- 1dB 360°

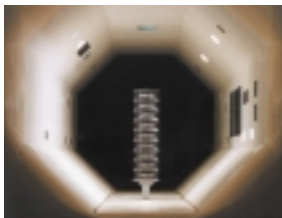


### SYSTEM OPTIONS

Whelen's Super-Power 400 watt speaker driver and a standard 100 watt speaker driver. The Whelen driver is used in the WPS4000 and WPS2800 Series High-Power Voice and Siren Systems.



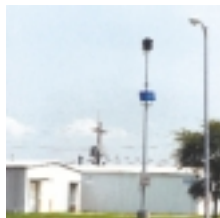
Whelen Siren 400 Watt Speaker Driver shown with Standard 100 Watt Speaker Driver..



Whelen WPS2800 Series siren systems are wind-tunnel tested to insure performance and reliability in the most trying conditions.



Our electronics assembly area is staffed with the most dedicated professionals in the industry.



Whelen siren with Solar Regulator in the field.



Type II Electronics Assembly detail.

### SIX STANDARD WARNING TONES

TONE	TONE SYMBOL	FREQUENCY	SWEEP RATE
WAIL		410 - 675	4 sec/1 sec
ALERT		465	Steady
HI/LO		465/650	.8 sec/.8 sec
ATTACK		410 - 490	1 sec/1 sec
AIR HORN		465 - 650	Modulated/1.6 sec
WHOOP		300 - 465	3

Performance chart footnotes: \*All 100' performance levels listed represent repeatable results with +/- 2dB to stated levels under free field conditions when warning systems are maintained to factory specification and tested according to published guidelines. Estimated 70dB and 60dB perimeters are based on the Federal Emergency Management Agency's -10dB per distance doubled path model, discussed in FEMA publication CPG 1-17, "Guide to Outdoor Warning Systems."

### WPS2800 Series Performance Chart

MODELS	PERFORMANCE SPL @ 100'*	RANGE
WPS2801	108	
WPS2802	114	
WPS2803	115	
WPS2804	118	
WPS2805	119	
WPS2806	121	
WPS2807	123	
WPS2808	124	
WPS2809	125	
WPS2810	126	

## Public and Industrial Warning for Every Application

### SIREN ACTIVATION CONTROLS

Our VHF High and UHF siren activation control packages include the following:

- Radio and Radio Interface
- Tone Squelch
- 2-3dB Gain Omni-Directional Antenna with Bracket
- 35' of RG58 Antenna Cable
- Polyphaser
- SI TEST

Other features are dependant upon one or two-way controls. Whelen equipment can be interfaced with many different types of two-way radio communications products and systems including 800Mhz trunking, Motorola's MOSCAD, FSK, Narrow-Band and VHF Low Band. The following is available:

#### ONE-WAY CONTROLS

- **AUXIN** - Auxiliary Board for Contact Closure Activation
- **D2020LL** - 10 Digit DTMF Landline Activation
- **D2020H** - 10 Digit DTMF VHF High Band / 150-170 Mhz
- **D2020U** - 10 Digit DTMF UHF / 450-470 Mhz
- **WPSTT** - Two Tone Sequential Option

#### TWO-WAY CONTROLS

- **AUXCS** - Two-Way Contact Closure Activation and Status Board
- **C2020LL** - 10 Digit DTMF Two-Way Landline Activation
- **C2020H** - 10 Digit DTMF VHF High Band / 150-170 Mhz
- **C2020U** - 10 Digit DTMF UHF / 450-470 Mhz

#### Options:

- **FSKXMOD** - Converts the Above Siren Activation Controls to FSK Format
- **STATUS** - Cabinet Window LED Status Indicator (Monitors Siren Conditions)
- **PGINT** - Paging Interface to Interface Whelen Audio, Voice and Tones with Existing Paging Systems
- **INTRU** - Intrusion Alarm (Available with Two-Way only)

### RADIO CONTROL

Whelen offers both one-way radio controls, D2020 Series, and two-way radio control/status monitoring systems, COMM/STAT™, for the WPS2800 Series.

### REMOTE STATION DIGITAL VOICE

Up to sixteen pre-recorded, digital voice messages may be stored at the remote station using Whelen's Remote Station Digital Voice Module. Messages are factory set for optimum power and clarity. A brief radio command (less than one second) may be used to activate the variable length messages.

### SI TEST®

Only Whelen's Diagnostic Silent Test, SI TEST®, fully exercises the siren system without disturbing the public. Diagnostic SI TEST®. Information includes:

- AC Power On/Off.
- DC Power At Operational Levels.
- Partial Speaker Driver/Power Amplifier Operation.
- Full Speaker Driver/Power Amplifier Operation.

Whelen Products are Pre-Assembled, Pre-Wired and Tested at our Facility to Ensure Product Quality and Reliability!



Testing Station



2800 Series Speakers Assembly



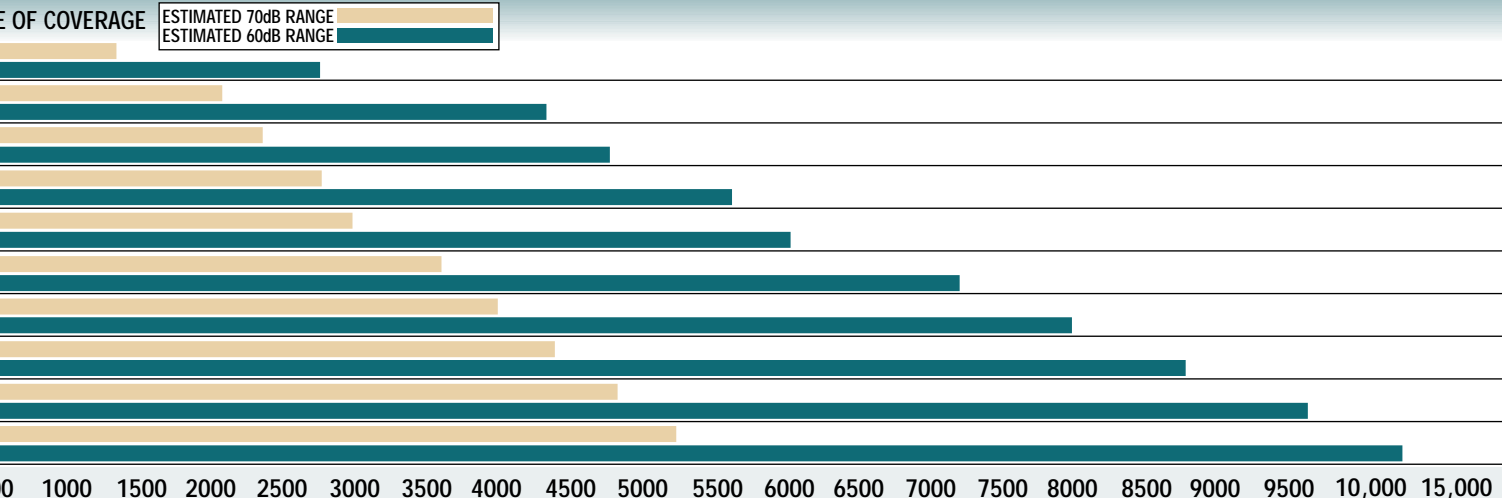
Type II Cabinet Assembly



Type III Cabinet Assembly

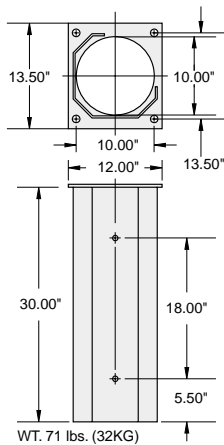
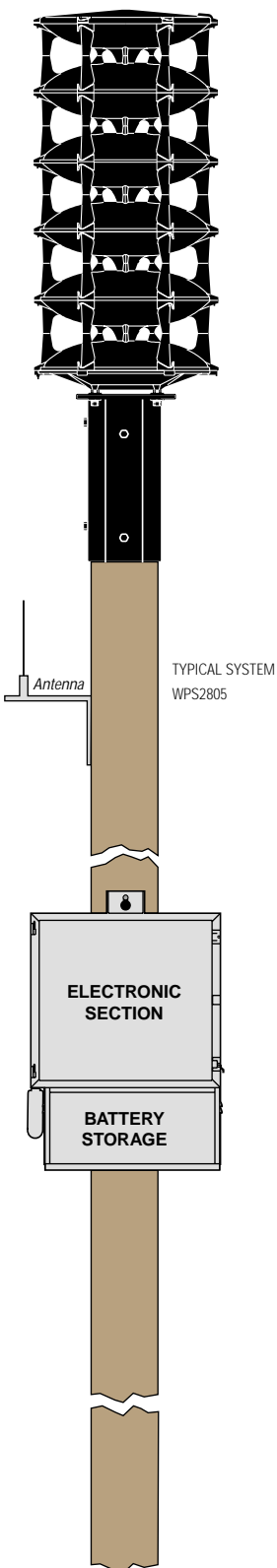


Repair Facility



# WPS2800 Series

## Specification Data



### POLE TOP BRACKET

The pole top bracket for the WPS2800 Series is furnished in a natural finish, core-ten steel. The pole top bracket will accept a utility pole having a 10" top diameter.

### Product Support

At Whelen Engineering, we not only design and manufacture the best warning systems available, we stand behind every product we make. For a copy of our warranty, write to us at our main office in Chester, Connecticut.

If you're interested in the most reliable, the most up-to-date warning systems - and the service that comes with them - give us a call. Find out why Whelen Engineering is the first name in public warning. A product specification sheet with installation details is available for each WPS2800 Series High-Power Voice and Siren Systems.



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### WPS2800 Series Specifications

MODEL	SPL @ 100'	SYSTEM WATTAGE		HEIGHT Inches (CM)	WIDTH Inches (CM)	DEPTH Inches (CM)	SPEAKER ASSEMBLY WEIGHT lbs. (kg.)	ELECTRONIC CABINET WEIGHT lbs. (kg.)
		SIREN AUDIO	VOICE AUDIO					
WPS2801	108dBc	400	500	18.7 (47.5)	32.5 (82.5)	—	116 (52.6)	233 (105.9)
WPS2802	114dBc	800	1000	31.1 (79)	32.5 (82.5)	—	162 (73.5)	240 (109.1)
WPS2803	115dBc	1200	1500	43.5 (110.5)	32.5 (82.5)	—	208 (94.4)	247 (112.3)
WPS2804	118dBc	1600	2000	56.0 (142)	32.5 (82.5)	—	254 (115)	254 (115.4)
WPS2805	119dBc	2000	2500	68.4 (173.7)	32.5 (82.5)	—	300 (136)	261 (118.6)
WPS2806	121dBc	2400	3000	80.8 (205)	32.5 (82.5)	—	370 (168)	424 (192.7)
WPS2807	123dBc	2800	3500	93.2 (237)	32.5 (82.5)	—	416 (188.7)	431 (195.9)
WPS2808	124dBc	3200	4000	105.6 (268)	32.5 (82.5)	—	462 (209.5)	438 (199.1)
WPS2809	125dBc	3600	4500	118.1 (300)	32.5 (82.5)	—	508 (230.4)	445 (202.3)
WPS2810	126dBc	4000	5000	130.5 (331.4)	32.5 (82.5)	—	560 (254)	452 (205.5)
Electronics Cabinet <sup>1</sup> (WPS2801 to 5)	—	—	—	40.7 (103)	30.0 (76)	10.0 (25.4)	—	—
Electronics Cabinet <sup>1</sup> (WPS2806 to 10)	—	—	—	64.4 (164)	30.0 (76)	10.0 (25.4)	—	—
Pole Top Bracket	—	—	—	30.5 (76)	12.0 (30.5)	10.0 (25.4)	71 (32)	—

EQUIPMENT IS CONFIGURED FOR 120 VAC INPUT POWER, OTHER INPUT VOLTAGES SUPPLIED UPON REQUEST.  
<sup>1</sup> A 6.00" WIDE MOUNTING CHANNEL ADDS 3.50" IN HEIGHT AND 2.00" IN DEPTH.