

# WHELEN® 2904 4 Cell Siren

## Mass Notification Warning System

**Whelen's All-Hazard WPS2900 series omni-directional high-power voice and siren systems deliver clear, powerful voice and siren communication.**

### System Features

- **WPS2904** - Four Omni-Directional Speaker Cells Assembled in a Vertical Column
- Two Compartment (Type II) Natural Finish Aluminum Cabinet
- 121dBC @ 100'
- WPS2904 Speaker Cells Include Four High Efficiency 400 Watt EZ-PULL™ Speaker Drivers
- 50' Cable Included
- Pole Top Mounting Bracket Included
- 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
- Four Power Amplifiers
- Electronic Siren Controller
- Tone Generator
- Timer
- Local Control Push Buttons
- Battery Switch
- SI TEST®
- Battery Tray
- Lightning Arrestor
- Six Standard Public Warning Tones - Wail, Whoop, Attack, Hi-Lo, Alert, Airhorn

### System Options

- **SBC280** - Solar Power <sup>1</sup>
- **WPSBATT** - Delco S2000 or Interstate Workaholic 31-MHD Batteries
- **WPSNMCIC** - Noise Canceling Microphone
- Alternate Tone Set
- **RDVM** - Digital Voice Message Capability <sup>2</sup>

### NOTES:

- <sup>1</sup> Solar power option includes 2 - 80 watt panels, mounting bracket and regulator
- <sup>2</sup> RDVM - 1-16 message capability with 240, 480 or 960 seconds available for recording

### Siren Activation Controls

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

- Radio
- Radio Interface
- Tone Squelch
- 2-3dB Gain Omni-Directional Antenna with Bracket

- 35' of RG58 Antenna Cable
- Polyphaser
- SI TEST®
- Low Battery Alarm (Two-Way only)

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 as standard options. Contact factory for special applications.

### 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** - Two-Way Landline Activation
- **C2020H** - 10 Digit DTMF VHF High Band / 150-170 Mhz
- **C2020U** - 10 Digit DTMF UHF / 450-470 Mhz
- **C2020NH** - 10 Digit DTMF VHF High Band Narrow-Band
- **C2020NU** - 10 Digit DTMF UHF Narrow-Band

### Options:

- **FSKXMOD** - Converts the Above Siren Activation Controls to FSK Format
- **STATUS** - Cabinet Window LED Status Indicator
- **PGINT** - Paging Interface to Interface Whelen Tones with Existing Paging Systems
- **INTRU** - Intrusion Alarm (available with two-way only)

Type II  
Electronic  
Cabinet



# WHELEN<sup>®</sup> 2904 Specifications

Component	Height Inches (CM)	Width Inches (CM)	Depth Inches (CM)	Weight Lbs. (KG)
WPS2904 SPEAKER	57.9 (147.1)	33.4 (84.8)	—	254 (115.3)
ELECTRONICS CABINET TYPE II	40.7 (103)	30.0 (76)	10.0 (25.4)	138 (62.6)
POLE TOP BRACKET	30.5 (77)	12.0 (30.5)	See Drawing	71 (32)

## Electrical

- **Battery Charger Input:** 120VAC, 60Hz, 7A Fuse (240 VAC 50/60 Hz available)
- **Battery Charger Output:** 28VDC, 10A (NOMINAL)
- **Batteries:** (2) 12V, 115AH Lead Calcium
- **Standby Current:** 135mA, 24VDC
- **Operating Current:** 89A, 24VDC
- **Power Amplifier Output Power:** Siren: 1600 Watts  
Voice: 2000 Watts

## Environmental

- **Operating Temperature:** -35°C to +60°C
- **Storage Temperature:** -65°C to +125°C
- **Humidity, Non Condensing:** 0 to 95%

## Ordering Information

### BASIC SYSTEM INCLUDES ALL OF THE FOLLOWING:

- WPS2904 - Speaker Assembly & Electronics Cabinet

### OPTIONS:

- RDVM - Remote Station Digital Voice <sup>1</sup>
- AUXIN - Auxiliary Board for Contact Closure Activation
- AUXCS - Auxiliary / Status Control Board for Contact Closure Activation and Status
- D2020LL, D2020H, D2020U - One-Way Radio Control <sup>2</sup>
- C2020LL, C2020H, C2020U - Two-Way Radio Control / Status Monitoring, COMM/STAT <sup>2</sup>
- C2020NH, C2020NU - Two-Way Radio Control / Status Monitoring, COMM/STAT <sup>2</sup>
- WPSTT - Two-Tone Sequential
- FSKXMOD - FSK Format
- STATUS - Cabinet Window LED Status Indicator
- PGINT - Paging Interface to Interface Whelen Tones with Existing Paging Systems
- INTRU - Intrusion Alarm
- SBC280 - Solar Power <sup>3</sup>

### NOTES

- RDVM - 1-16 message capability with 240, 480 or 960 seconds available for recording
- 10 digit DTMF Controls • Landline • VHF High Band / 150-170 Mhz • UHF / 450-470 Mhz  
Our VHF High and UHF siren activation control packages include tone squelch, radio, radio interface, 2-3dB gain omni-directional antenna with bracket, 35' of RG58 antenna cable and polyphaser.
- Solar power option includes 2 - 80 watt panels, mounting bracket and regulator

## Acoustic Performance

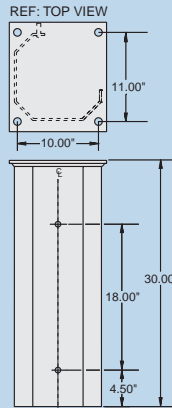
SPL @ 100': 121dB

Estimated 70dB range: 3,500'

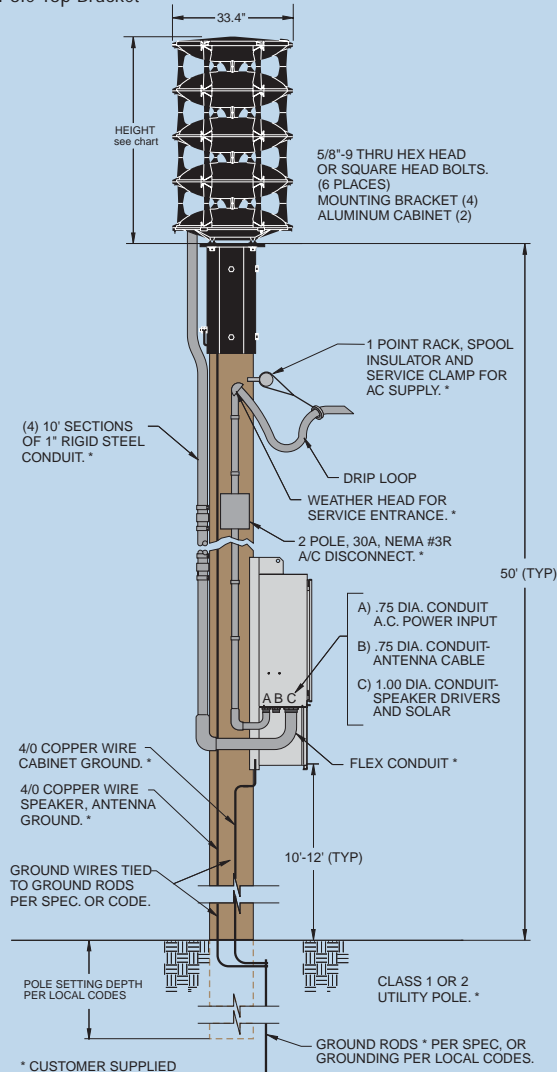
Estimated 60dB range: 7,000'

Note: 100' performance levels listed represent repeatable results within +/-1dB to stated levels.

Estimated 70dB perimeter is based on the Federal Emergency Management Agency's (FEMA) -10dB per distance doubled path model.



Pole Top Bracket



**WHELEN<sup>®</sup>**  
ENGINEERING COMPANY, INC.

PUBLIC WARNING PRODUCTS

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