

All Hazard High-Power Siren System

Whelen's VORTEXR4 Series All Hazard High Power Sirens provide an economical alternative for powerful siren communication without compromising quality.

SYSTEM FEATURES

- VORTEXR4 - Speaker with Four Speaker Cells Active
- Two Compartment (Type I) Natural Finish Aluminum Cabinet
- 129dB @ 100'
- VORTEXR4 Speaker Includes Four High Efficiency 400 Watt Speaker Drivers
- 50' Cable Included
- Battery Powered, Minimum of 15 Minutes of Full Power Output with Batteries of Our Recommendation
- AC Temperature Compensated 5 Amp Battery Charger
- Local Controls or Remote Controls
- Four Tone-Only Power Amplifiers
- Gear Driven Rotor
- Electronic Siren Controller
- Tone Generator
- Timer
- Local Control Push Buttons
- Rotor Relay Control
- SI TEST®
- Low Battery Alarm
- Battery Tray
- Lightning Arrestor
- Six Standard Public Warning Tones - Wail, Whoop, Attack, Hi-Lo, Alert, Airhorn

SYSTEM OPTIONS

- VSBC80 - Solar Power ❶
- BSETVOR - 2ea Whelen Approved Batteries
- VPTB - Speaker Pole Top Bracket
- Alternate Tone Set

NOTES:

- ❶ Solar power option. 2 - 80 watt panels, mounting bracket and regulator..

SIREN ACTIVATION CONTROLS

Our VHF High and UHF 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®

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.



VORTEXR4 cell speaker housing mounted on rotor.

ONE-WAY CONTROLS

- VAUXIN - Auxiliary Board for Contact Closure Activation
- VD2020LL - 10 Digit DTMF Landline Activation
- VD2020H - 10 Digit DTMF VHF High Band / 150-170 Mhz
- VD2020U - 10 Digit DTMF UHF / 450-470 Mhz
- VORTT - Two-Tone Sequential Option

TWO-WAY CONTROLS

- VAUXCS - Two-Way Contact Closure Activation and Status Board
- VC2020LL - Two-Way Landline Activation
- VC2020H - 10 Digit DTMF VHF High Band / 150-170 Mhz
- VC2020U - 10 Digit DTMF UHF / 450-470 Mhz
- VC2020NH - 10 Digit DTMF VHF High Band Narrow-Band
- VC2020NU - 10 Digit DTMF UHF Narrow-Band

Options:

- VFSKXMOD - Converts the Siren Activation Controls to FSK Format
- VSTATUS - Cabinet Window LED Status Indicator
- VPGINT - Paging Interface to Interface Whelen Tones with Existing Paging Systems
- VINTRU - Intrusion Alarm (available with two-way only)



TYPE I ELECTRONIC CABINET (with service door open shows control panel and battery tray with optional batteries).

VORTEXR4

Specification Data

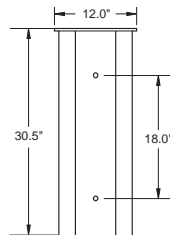
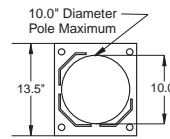
Component	Height Inches (CM)	Width Inches (CM)	Depth Inches (CM)	Weight Lbs. (kg)
VORTEXR4 Speaker & Rotor	49.0 (124.5)	28.5 (72.4)	56.0 (142.2)	234 (106.1)
Electronics Cabinet - Type I	32.5 (82.6)	22.5 (57.2)	10.5 (26.7)	83 (37.7)*
Pole Top Bracket (Optional)	30.0 (76.2)	12.0 (30.5)	10.0 (25.4)	71 (32.3)

* Less batteries. Two batteries, Delco DC74, add 90 Lbs. (40.9kg)

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Pole Top Bracket (Optional VPTB)

ELECTRICAL

- **Battery charger input:** 120VAC, 60Hz, 7A Fuse
 - **Battery charger output:** 28VDC, 5A#
 - **Batteries:** 2-12V, 60AH Lead Calcium (user supplied)
 - **Standby current:** 40mA,
 - **Rotor motor:** <1A, 24VDC
 - **Operating current:** 88A, 24VDC
 - **Power amplifier output power:** 1600 Watts
- # UL recognized component

ENVIRONMENTAL

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

ORDERING INFORMATION

BASIC SYSTEM INCLUDES ALL OF THE FOLLOWING:

- **VORTEXR4** - Speaker Assembly & Electronics Cabinet
- OPTIONS:**
- **VAUXIN** - Auxiliary Board for Contact Closure Activation
 - **VAUXCS** - Auxiliary / Status Control Board for Contact Closure Activation and Status
 - **VD2020LL - VD2020H, VD2020U** - One-Way Radio Control ①
 - **VC2020LL, VC2020H, VC2020U** - Two-Way Radio Control / Status Monitoring, COMM/STAT™ ①
 - **VC2020NH, VC2020NU** - Two-Way Narrow-Band Radio Control / Status Monitoring, COMM/STAT™ ②
 - **VORTT** - Two-Tone Sequential
 - **VFSKXMOD** - FSK Format
 - **VSTATUS** - Cabinet Window LED Status Indicator
 - **VPGINT** - Paging Interface to Interface Whelen Tones with Existing Paging Systems
 - **VINTRU** - Intrusion Alarm
 - **VSBC80** - Solar Power ②
 - **VPTB** - Speaker Pole Top Bracket
 - **BSETVOR** - One Pair of Batteries

NOTES

- ① 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.
- ② Solar power option includes 2 - 80 watt panels, mounting bracket and regulator
- ③ Contact Factory

Acoustic Performance

SPL @ 100': 129dB

Estimated 70dB range: 6,000'

Estimated 60dB range: 12,000'

Note: 100' performance levels listed represent repeatable results within +/-2dB to stated levels.

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

