

## All Hazard High-Power Siren System

Whelen's VORTEXR3 Series All Hazard High Power Sirens provide an economical alternative for powerful siren communication without compromising quality.

### SYSTEM FEATURES

- VORTEXR3 - Speaker with Three Speaker Cells Active
- Two-Compartment (Type I) Natural Finish Aluminum Cabinet
- 127dBC @ 100'
- VORTEXR3 Speaker Includes Three High Efficiency 400 Watt Speaker Drivers
- 15 m 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
- Three 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
- 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
- 15 m of RG213 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 radiocommunications products and systems including 800Mhz trunking, Motorola's MOSCAD, FSK, narrow-band and VHF low band. The following is available as standard options. Contact



VORTEXR3 cell speaker housing mounted on rotor.

factory for special applications.

#### 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

#### 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).

# VORTEXR3

## Specification Data

Component	Height CM (Inches)	Width CM (Inches)	Depth CM (Inches)	Weight KG (Lbs.)
VORTEXR3 Speaker & Rotor	124.5 (49.0)	72.4 (28.5)	142.2 (56.0)	96.2 (212)
Electronics Cabinet - Type I	82.6 (32.5)	57.2 (22.5)	26.7 (10.5)	34.5 (76)*

\*Less batteries. Two batteries, CTV-80A 2-12V, 80AH Sealed Lead Calcium (user supplied, add 23.3kg)

**WHELEN**<sup>®</sup>  
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### ELECTRICAL

- **Battery Charger Input:** 120VAC, 60Hz, 7A Fuse or 240 VAC 50Hz 5A fuse
  - **Battery Charger Output:** 28VDC, 5A#
  - **Batteries:** 2-12V, 80AH sealed lead calcium (user supplied)
  - **Standby Current:** 40mA,
  - **Rotor Motor:** <1A, 24VDC
  - **Operating Current:** 66A, 24VDC
  - **Power Amplifier Output Power:** 1200 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:

- **VORTEXR3** - 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<sup>1</sup>
  - **VC2020LL, VC2020H, VC2020U** - Two-Way Radio Control / Status Monitoring, COMM/STAT™<sup>1</sup>
  - **VC2020NH, VC2020NU** - Two-Way Narrow-Band Radio Control / Status Monitoring, COMM/STAT™<sup>2</sup>
  - **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<sup>2</sup>
  - **VTXKIT** - Upgrade Kit to Upgrade VORTEXR3 into a VORTEXR4
  - **BSETVOR** - One Pair of Batteries

#### NOTES

- <sup>1</sup> 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, 15 m of RG213 antenna cable and polyphaser.
- <sup>2</sup> Solar power option includes 2 - 80 watt panels, mounting bracket and regulator
- <sup>3</sup> Contact Factory

### Acoustic Performance

SPL @ 100': 127dBC

Estimated 70dB range: 5,400'

Estimated 60dB range: 10,800'

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.

