

# HSS

**ENGINEERING**  
WARNING SYSTEM SOLUTIONS



Two Compartment Electronics Cabinet



*The TWS-290 siren series is the most reliable warning siren system on the market for both warning tones and voice communication*

## ALL HAZARD HIGH-POWER SIREN SYSTEM TWS-293

The combination of high efficiency and the delivery of a clear (plus intelligible) voice, ensures an excellent warning during any emergency and helps the operator to notify and direct a warning to the affected population. The superior design of this speaker cluster provides a true 360° high sound output throughout the entire frequency range.

The TWS-290 series, with its high-efficiency amplifiers and durable 400-Watt EZ-PULL speaker drivers, provides an alarm for a minimum of 30 minutes, at full output power, solely from its batteries. Everything is built into a high-quality corrosion resistant aluminium cabinet.

This makes the TWS-290 siren series the preferred siren by our customers worldwide.

### FEATURES

- 3 Omni-Directional Speaker Cells assembled in a vertical column
- Aluminum Cabinet with separate Battery compartment
- 119 dB(C) @ 100'
- TWS-293 Speaker includes 3 pcs high efficiency 400 Watt EZ-PULL™ speaker drivers
- 15 m speaker cable included
- Battery Powered, minimum of 30 minutes of full power output with batteries of our recommendation
- 3 Stage Switching Mode Battery Charger temperature compensated
- Local Controls or Remote Controls
- 3 pcs High Efficiency Power Amplifiers
- Electronic Siren Controller
- Tone Generator
- Timer
- SI TEST®
- Low Battery Alarm
- IP 66 rating of electronic enclosure
- Antenna Lightning Arrestor
- Six Standard Public Warning Tones – Wail, Whoop, Attack, Hi-Lo, Alert, Airhorn

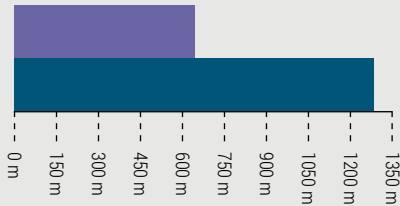


## ACOUSTIC PERFORMANCE

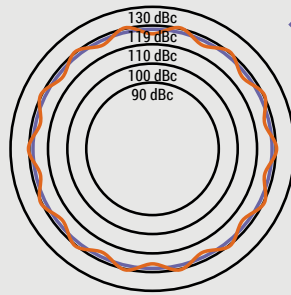
**SPL @ 30 m:** 119dB(C)

**Estimated 80dB range:** 457 m

**Estimated 70dB range:** 914 m



Note: 30 m performance levels listed represent repeatable results within +/-2 dB to stated levels. Estimated 80 dB perimeter is based on the Federal Emergency Management Agency's (FEMA) -10 dB per distance doubled path model.



The superior design of the speaker cluster provides a true 360° high sound output throughout the entire frequency range.

## ENVIRONMENTAL

**Operating Temperature** -35° C to +60° C

**Storage Temperature** -65° C to +125° C

**Humidity, Non-Condensing** 0 to 95%

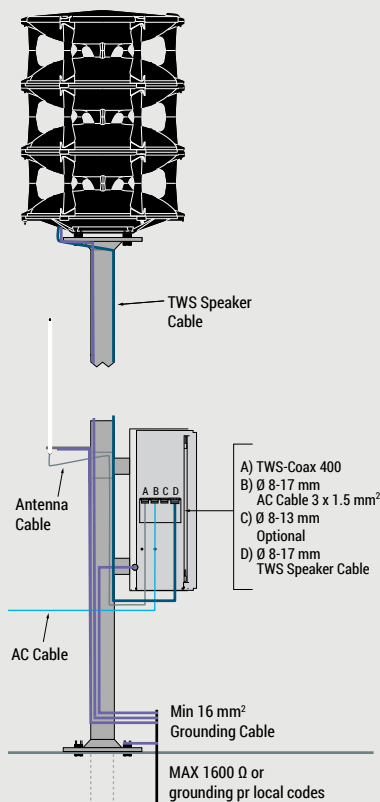
## ELECTRICAL

|                                     |  |
|-------------------------------------|--|
| <b>Battery Charger Input</b>        | Option of 120/240 VAC or 50/60 Hz                |
| <b>Battery Charger Output</b>       | 28 VDC, 10A*                                     |
| <b>Batteries</b>                    | 2 pcs 12 V, AGM sealed. 100 AH. Sold separately  |
| <b>Standby Current</b>              | 82 mA, 24 VDC                                    |
| <b>Operating Current</b>            | 67 A, 24 VDC                                     |
| <b>Power Amplifier Output Power</b> | 1200 Watts during tone / 1500 Watts during voice |

# U.L. Recognized Component

| Component                  | Height cm (inches) | Width cm (inches) | Depth cm (inches) | Weight kg (lbs.) |
|----------------------------|--------------------|-------------------|-------------------|------------------|
| <b>TWS-293 Speaker</b>     | 115,3 (45,4)       | 84,8 (33,4)       |                   | 93 (205)         |
| <b>Electronics Cabinet</b> | 84,5 (33,3)        | 58,0 (22,8)       | 35,0 (13,8)       | 36,4 (80,1)*     |

\* Less batteries. Two batteries: 12 V, sealed, lead-calcium, add 24 kg pr. battery. Less optional radio kit. Add 2,5 kg, if this option is selected.



## ORDERING INFORMATION

| Product Description  | Order No.      |
|--|----------------|
| Speaker Assembly & Electronics Cabinet   | TWS-293        |
| <b>Options</b>   |                |
| Auxiliary Activation/ Status Control Board for Contact Closure Activation and Status                         | AUXCS          |
| Auxiliary Activation Board for Contact Closure   | AUXIN          |
| High efficient AC Direct Power Supply Unit   | TWS-AC-PSU     |
| GSM Module   | GV-GSM-RTU     |
| Tetra Module   | GV-TETRA-RTU   |
| Giant Voice® Two Way Landline Control / Status Monitoring  | GV-LLM         |
| High standard radios in both analogue and digital versions with wide frequency range within both VHF and UHF | TWS-RADIO      |
| Omni-directional Visual Lighting   | TWS-VISUALERT  |
| Top Mounted Strobe Light   | TWS-TL31R      |
| Giant Voice® Paging Interface to Interface Whelen Tones with Existing Paging Systems                         | GV-PGINT       |
| Intrusion Alarm  | TWS-INTRU      |
| Solar Power  | TWS-SBC100     |
| Two Pairs of Batteries   | TWSBATT        |
| Sun Shield for Electronic Cabinet  | TWS SUN SHIELD |

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