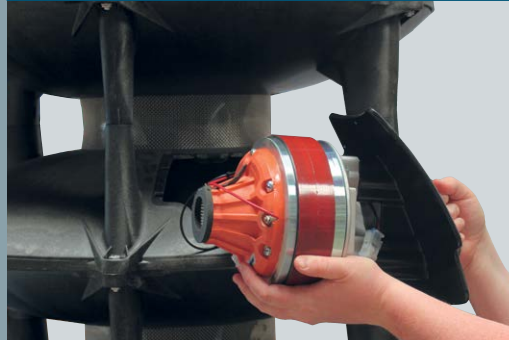




Two compartment electronics cabinet

# HSS

**ENGINEERING®**  
WARNING SYSTEM SOLUTIONS



*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-294

The combination of powerful high efficiency alarm tones and clear, intelligible voice broadcast ensures an excellent warning during any emergency. This enables the operator to notify and direct a warning to the affected population. The superior design of the TWS speaker cluster provides a true 360° sound output throughout the entire frequency range. The TWS-290 series, with its high-efficiency amplifiers and durable EZ-PULL™ speaker drivers, can provide continuous warning for a minimum of 30 minutes at full output power, solely from battery power. All electronics are built into a high-quality corrosion resistant aluminum cabinet.

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

### FEATURES



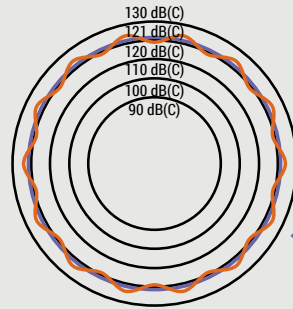
- 4 omni-directional speaker cells assembled in a vertical column
- IP 66 rated aluminum cabinet with separate battery compartment
- 121 dB(C) @ 100' / 30 m
- TWS-294 speaker includes 4 pcs high efficiency EZ-PULL™ speaker drivers
- 600 Watts per speaker driver rated max. output power for superior durability
- 15 m speaker cable included
- Battery powered, minimum of 30 minutes of full power output with batteries of our recommendation
- Temperature compensated 3-stage switch mode battery charger
- Local or remote control / status
- 4 pcs high efficiency power amplifiers
- Electronic siren controller featuring SI TEST® - Silent self-test / diagnostics
- Alarm tone generator, automatic and live voice broadcast
- Full status monitoring including low battery alarm, amplifier / speaker status
- AC lightning arrestor included (antenna lightning arrestor included with TWS-RADIO option)
- Six standard warning tones – Wail, Whoop, Attack, Hi-Lo, Alert, Airhorn
- Optional customized warning tones

## ACOUSTIC PERFORMANCE

|                                    |           |
|------------------------------------|-----------|
| <b>SPL @ 1 m:</b>                  | 151 dB(C) |
| <b>SPL @ 30 m:</b>                 | 121 dB(C) |
| <b>70dB range ISO 13475-1*:</b>    | 1,710 m   |
| <b>70dB range FEMA standard**:</b> | 1,067 m   |

\* ISO: 6 dB sound pressure reduction pr. doubling of distance (as per ISO 13475-1)

\*\* FEMA: 10 dB sound pressure reduction pr. doubling of distance (as per FEMA guidelines)



## ENVIRONMENTAL

|                                 |                    |
|---------------------------------|--------------------|
| <b>Operating temperature</b>    | -35° C to + 70° C  |
| <b>Storage temperature</b>      | -65° C to + 125° C |
| <b>Humidity, non-condensing</b> | 0 to 95 %          |

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

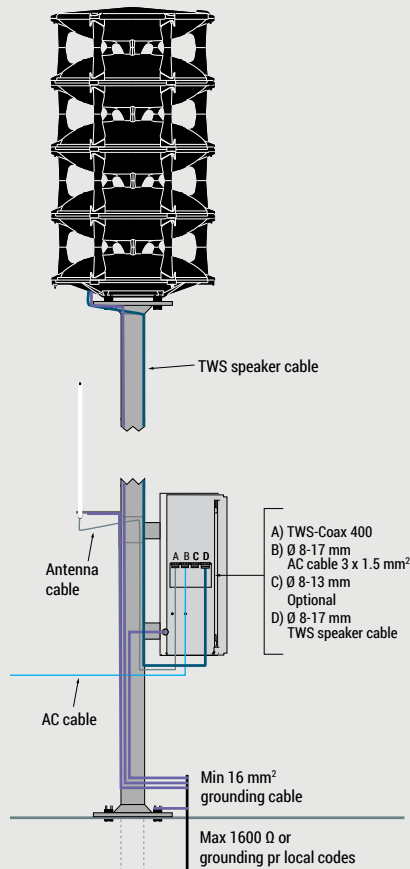
## ELECTRICAL

|                                      |   |
|--------------------------------------|---|
| <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>             | 23 A, 24 VDC                                    |
| <b>Normal amplifier output power</b> | 400 Watts during tone / 500 Watts during voice  |
| <b>Rated total max. output power</b> | 2400 Watts                                      |

# U.L. recognized component

| Component                  | Height cm (inches) | Width cm (inches) | Depth cm (inches) | Weight kg (lbs.) |
|----------------------------|--------------------|-------------------|-------------------|------------------|
| <b>TWS-294 speaker</b>     | 147.1 (57.9)       | 84.8 (33.4)       |                   | 115.3 (254)      |
| <b>Electronics cabinet</b> | 84.5 (33.3)        | 58.0 (22.8)       | 35.0 (13.8)       | 39.7 (87.6)*     |

\* 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 and electronics cabinet   | TWS-294        |
| <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     |
| Ethernet control / status interface  | GV-IP          |
| 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 TWS warning 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 |
| Customized warning tones   | GV-TONES       |

REV. F

# HSS



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