



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-292

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.

FEATURES

- · 2 omnidirectional modular speaker cells assembled in a vertical column
- IP66 rated aluminum cabinet with separate battery compartment
- SPL 115 dB(C) @ 100' / 30 m
- TWS-292 speaker includes 2 pcs high efficiency EZ-PULL™ speaker drivers
- Amplifier and speaker driver superior quality
- 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
- 2 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
- Type of amplifiers Class D
- Made of non corrosive carbon fiber reinforced polymer. Non metallic material
- STI intelligibility index 0,99. Clear voice capability with high quality frequency response



ACOUSTIC PERFORMANCE

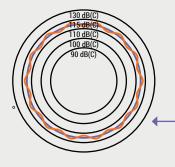
 SPL@ 1 m:
 145 dB(C)

 SPL@ 30 m:
 115 dB(C)

 70dB range ISO 13475-1*:
 5,860 m

 70dB range FEMA standard**:
 731 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

Operating temperature	-35° C to + 70° C
Storage temperature	-65° C to + 125° C
Humidity, non-condensing	0 to 95 %

The superior design of the speaker cluster provides a true 360° high sound output throughout the entire frequency range. SPL +/-1 dB decrease in 360°

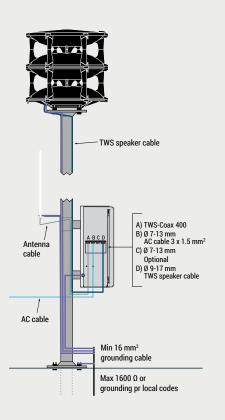
ELECTRICAL

Battery charger input	Option of 120/240 VAC or 50/60 Hz	
Battery charger output	28 VDC, 10A*	
Batteries	2 pcs 12 V, AGM sealed. 100 AH. Sold separately	
Standby current	82 mA, 24 VDC	
Operating current	23 A, 24 VDC6	
Output power per driver	(typical / max) 400 Watts / 600 Watts	
Total output power	(typical / max) 800 Watts / 1200 Watts	

U.L. recognized component

Component	Height cm (inches)	Width cm (inches)	Depth cm (inches)	Weight kg (lbs.)
TWS-292 speaker	83.6 (32.9)	84.8 (33.4)		70.8 (156)
Electronics cabinet	84.5 (33.3)	58.0 (22.8)	35.0 (13.8)	33.0 (72.8)*

^{*} 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.



Product Description	Order No.
Speaker assembly and electronics cabinet	TWS-292
Options	
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-SBC200
Two pairs of batteries	TWSBATT
Sun shield for electronic cabinet	TWS SUN SHIELD
Customized warning tones	GV-TONES



