



THOR GUARD Model L75

LIGHTNING PREDICTION SYSTEM

THOR GUARD leads the world in the manufacture of lightning prediction and lightning warning systems. Since 1972, THOR GUARD has utilized our proprietary atmospheric electrostatic analysis to produce a variety of lightning prediction systems to meet the technical and budgetary demands of various customer groups.

THOR GUARD's Model L75 is our first upgradeable base prediction and warning system control center. Customers can now have an entry level system, automatic or manual, capable of providing audible and visual warning for a single site. The L75 is fully upgradeable, so that at any time in the future, you can provide warning for remote locations up to 1 1/4 miles away.



FEATURES

- Easy to Read Large Blue Vacuum Fluorescent Display.
- 40 segment "Energy Level" LED Display to show instantaneous energy migrations.
- "Field Collapse Count" indicator shows lightning discharges during storm activity.
- Unique "Activity Detector" displaying projected time until resumption of safe operations.
- Instant Lightning Hazard Level (LHL) and Dynamic Index (DI) continuously displayed.
- All Clear, Caution, Warning, Red Alert, each distinct warning level clearly displayed.
- Multiple range options available for different geographic areas and user applications.
- User adjustable Red Alert level for increased storm notification time.
- Programmable sensor self-test every 24 hours at user selected time.
- Separate Test key provided to manually verify sensor operation.
- Connects to THOR GUARD's ThorPCX visual display and storm storage software.
- Two (DB9) RS232 ports and 1 USB port to run THOR GUARD'S ThorPCX (Optional)
- Two hazard levels of local audio alarm with user adjustable volume control.
- Option provided for user to mute local audio during storms.
- Auto / Manual mode manages alarms for monitored or unmonitored operations.
- Option to manually sound **All Clear** or **Red Alert** alarm horns by user.
- Self-powered Internal Storm Buffer maintains recent storm times and hazard levels.
- User-selectable hours of alarm operation or 24-hour continuous operation.
- System diagnostics to facilitate and maintain correct operations.
- Compact design and robust construction, sealed tactile feedback membrane panel.
- Access to **All Clear** & **Red Alert** signal using dry closure contacts relay.
- Wall or table mounting.
- Interfaces with **THOR GUARD WEATHER** (Optional).
- Optional software for use at Airport locations.
- Can be upgraded to the THOR GUARD GUARDIAN EMERGENCY NOTIFICATION SYSTEM.

SELECTED SPECIFICATIONS

Models: L75T, L75B, L75I, L75R

Model Specifications: L75T Local Hazard Output, +12 Volt DC
L75B Local THOR GUARD VOT Base Horn
L75I 2 Separate Dry Closure Relays
L75R Local THOR GUARD VOT Base Horn & Remote Horns

Safety Specification: TÜV (NTRL), CE

Power Requirement: Voltage: 120 Volts AC, 60 Hz, Single Phase
Power: .25A, 30 Watts

Power Supply: 3-Plug, Wall Mounted, Grounded
120 VAC, 60 Hz
Dimensions: 2.68" W x 2.19" D x 3.45" H
Safety Specifications: UL, CSA
Power Cord: 6 ft. Weight: 1.5 Lbs.

Console: Dimensions: 7.25" L x 8.75" W x 1.75" H
Weight: 2 Lbs.

Lightning Prediction Sensor: Dimensions: 12" L x 6" W x 14" H
(Maintenance-free) Weight: 2 Lbs. (Excludes Cable)
Mounting: 1" Diameter Threaded Pipe

Sensor Cable: West Penn 5992 (Optional Plenum Cable)
3/8" Dia. Double Shielded Triaxial with Teflon Core
Standard Lengths Available 75ft., 125ft., 150 ft. (200 ft. Max. Length)

Vot Comm-Link Cable: West Penn ACQ 3186 UL Listed Nec Type CL3 (Optional Plenum Cable)
5/16" Dia. Shielded 6 Conductor PVC Jacket.
Standard Lengths Available 75 ft., 125 ft., 150 ft. (200 ft. Max. Length)

VOT Air Horn Cluster: Manufacture: THOR GUARD
Material: ASA; Dome & Horn Mounting Plate
Weight: 8 Lbs. (Excludes Cable)
Cable: General Cable 234600 12AWG (UL) Type TC-ER
Sound Output: 113db @ 10ft., 700 Yard Radius, Typical Coverage

Strobe Light: Manufacture: Whelen 51 Series (UL) Listed
Dimensions: 3.90"H x 5.2" Dia. Weight: 1 Lb.
Light Output: LED High Intensity Multi-Flash, Amber
Cable: West Penn AQ224, 18AWG 2-Conductor
Length: Standard 12 ft., 40 ft. (Additional Lengths Available)

RF Specifications: Frequency: 27.255MHZ FSK
Power: 4W and 12W
Cable: Judd Wire C1401140, RG-58, UL, CL2

(Specifications & features subject to change without notice)



Lightning Prediction Sensor
(Maintenance-free)



**VOT BD
or
VOT RC**



VOT Horn



**LED Strobe
Light**



THOR GUARD VOT

LIGHTNING ALARM SYSTEM

The THOR GUARD VOT lightning alarm system is utilized to provide a unique audible warning pattern when the area THOR GUARD is monitoring has become susceptible to a lightning strike. Simultaneously during the hazard time, LED strobe lights can be utilized to provide a continued visible notification of the impending hazard. THOR GUARD allows for a base horn with the remotes, either electric or solar powered, being controlled using THOR GUARD's dedicated RF system. When combined with the Guardian Emergency Notification System, a special 1-minute pattern is generated to provide for any unexpected emergency.



VOTBD & VOTRCS / VOTRCE

System Safety Rating:	TÜV (U8 09 04 69398 001)
Enclosure Technical	
Material:	Sealed Gray Fiberglass Enclosure
Manufacture:	Stahlin Enclosures
Dimensions:	14" W x 12" L x 7 1/2" H
Safety Requirement:	UL, CSA, Nema Type 4X
Mounting:	3/8 Ubolt or 1/4 - 5/16 lag bolt
RF Specifications	
Manufacture:	THOR GUARD
Frequency:	27.255MHZ FSK
FCC Certifications:	Part 15 and Part 95
Antenna:	Fiberglass - 3FT Tuned
RF Power:	4.0 Watts or 12.0 Watts
Battery:	Energys Odyssey PC545 (12V) Seal Lead Battery (12.6 Lbs.)
AC Voltage:	(VOTRCE Only) 120VAC .5A
VOT Relay Bracket	
Manufacture:	THOR GUARD
Protection:	20A Horn Circuit Breakers

WIRE SPECIFICATIONS

Comm - Link Cable:	West Penn ACQ 3186 UL Listed Type CL3 (18AWG) 6 - Conductor
RF Antenna Cable:	Judd Wire C1401140, RG-58, UL, CL2, Polyvinyl Chloride Jacket
Horn Cable:	General Cable 234600, UL Listed Type TC-ER (12AWG) 4 - Conductor
Strobe Cable:	West Penn AQ224 ,(UL) or (ETL)us Listed – Direct Burial (18AWG), 2 - Conductor

SELECTED SPECIFICATIONS

VOTBD & VOTRC Horn Specifications

Manufacture: THOR GUARD
Material: Fiberglass Dome & Horn Mounting Plate
Mounting: 1" PVC Threaded Bushing (Included)
Weight: 13 Lbs. (Excludes Cable)
Horn Manufacture: Stebel, Italy
Horn Material: PVC
Compressor Rating: 12V DC
Sound: 3 - Frequencies
Output: 113db @ 10ft
700 Yard Radius, Typical Coverage



VOT Horn



VOT Solar Remote

VOTRC Solar Panel Specifications

Manufacture: Sunwize; FM Approved, Class 1
BP Solar; ETL, CE Approved, Class 1
Rating: 30 Watts
Mounting: Aluminum Mounting Bracket Supplied

STROBE LIGHT Specifications

Manufacture: Whelen 51 Series (UL Listed)
Dimensions: 3.90" x 5.2" Dia.
Mounting: Square Metal Plate (Attaches to RF Antenna Bracket)
Power: 12VDC (Supplied by System Battery)
Light Output: LED High Intensity Multi-Flash, Amber



LED Strobe Light