



# SafePath™ DH97 FRM-AI Presence Sensor

SENSORS & SWITCHES



*SafePath Maximum Pattern Infrared (MPI™) sensors use more beams than other manufacturers—and provide a level of safety not found in other stand-alone infrared sensors.*

## Product Name SafePath™ DH97

featuring FRM-AI technology with Maximum Pattern Infrared™ (MPI™)

## Manufacturer

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## Product Description

### BASIC USE

The SafePath™ DH97 is a 4-row presence sensor designed to provide safety protection for all types of automatic doors.

The DH97 is based on the most reliable active infrared (AI) technology available—Floor Reflection Method (FRM).

*Floor Reflection Method™ (FRM™) sensors with Maximum Pattern Infrared™ (MPI™) provide better safety than other infrared sensors.*

With FRM-AI, up to 36 individual detection zones are precisely reflected off of the floor in a rectangular pattern meeting and exceeding ANSI A156.10 guidelines.

Detection zone density of this sensor actually increases as the pattern width adjusts from 7 ft. to its narrowest setting of 36".

The DH97 is designed for easy field installation and adjustment. The pattern width and depth are both mechanically adjustable. In addition, the depth can be altered electronically from 5 to 2 rows. All adjustments are available without the use of proprietary set-up devices.

A complete swing door safety package also requires a relay lockout (RLM or RL-2) and, with one way traffic, the use of a safety beam. Consult ANSI A156.10.

## Technical Data

- Floor Reflection Method Active Infrared (FRM-AI) Technology
- One Sensor Covers Any Safety Zone Application (Swing, Fold or Slide Doors)
- Up To 32 Detection Zones
- Mount Up To 10' (3m) High
- Mechanical Width Settings (From 36" To Over 7')
- Electronic Depth Adjustment From 4 to 1 Rows (Also 5 Tilt Settings)
- Quick-Connect Wiring (Harness Included)
- Easy To Interface With Any Relay Lockout
- Four Presence Timer And Frequency Settings
- 12V to 24V AC or DC Operation
- Form C Dry Relay Contact (N.O., COM, N.C.)
- Rain Cover Available (DHRC)

## SPECIFICATIONS

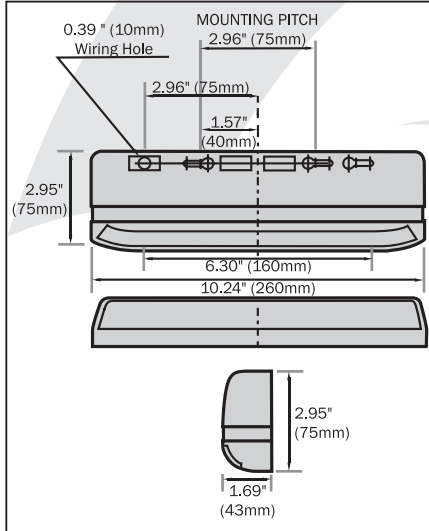
Model	DH97
Detection Method	Floor Reflection Method Active Infrared (FRM-AI)
Max. Installation Height	10 Feet (3m)
Sensitivity Adjustment	Variable (via potentiometer)
Detection Area Adjustment	Pattern Width (36" to over 7') Pattern Depth (4 to 1 Rows + tilt settings of 0° to 10° in 5 steps)
Power Requirements	12V to 24V AC or DC ± 10%
Power Consumption	AC24V-3VA, AC12V-3VA DC24V-75mA, DC12V-150mA
Output Contact	Form C Relay: DC50V 0.1A Resistor Load
Output Holding Time	Approx. 0.5 Seconds
Presence Timer	2, 15, 60 or 180 Seconds Programmable Via Dip Switch
Operation Indication	Red LED = Detection Green LED = Monitoring Area Orange LED = Abnormal Oscillating Between Red/Green=Fault
Enclosure Rating	IP54 (IEC60529)
Temperature Range	-4° F to 140° F (-20° C to 60° C)
Weight	Approx. 0.8 lbs. (0.35 kg)
Cover Color	Black
Accessories	Cable: 10 ft. (3m)

**SafePath™ DH97**  
**FRM-AI Presence Sensor**



SENSORS & SWITCHES

**DIMENSIONS**



**APPLICABLE STANDARDS**

American National Standards Institute (ANSI) - Building Hardware Manufacturers Association (BHMA) - ANSI/BHMA A156.10.

Enclosure Rating IP54 (IEC60529)

**APPROVALS**

CE

**Installation**

**SETUP AND ADJUSTMENT**

The DH97 installs easily. Simple amp connectors make wiring fast. A side lever allows pattern width to be adjusted from wide to narrow and the body of the sensor can be tilted to adjust pattern depth. The indicator LED is clearly visible with the cover on. An 8 position dip switch allows the installer to adjust the presence timer, pattern depth, frequency, monitoring modes.

The DH97-BDB is an optional bracket used to swivel mount the DH97 sensor for unique

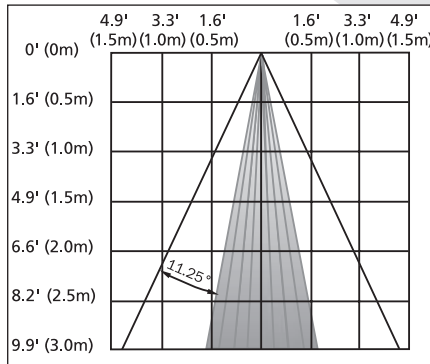


**DH97-BDB**

applications.

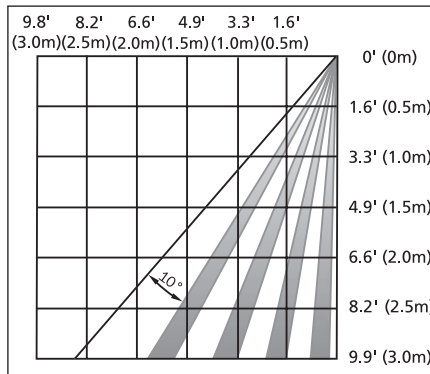
The DH97-MP is an optional mounting plate that will adapt the DH97 for mounting to a 1 3/4" door header.

**COVERAGE PATTERN**



Wide Pattern @ Maximum  
 10' (3m) Wide

Narrow Pattern @ Maximum  
 4' (1.2m) Wide



Wide Pattern @ Maximum  
 6.6' (2m) Deep

Narrow Pattern @ Maximum  
 6.6' (2m) Deep

(These detection patterns are approximate and will vary slightly. Walk-test the unit to assure the pattern desired.)

**Availability & Cost**

**AVAILABILITY**

Available internationally from manufacturer's authorized distributors; contact MS SEDCO for the location of nearest distributor.

**COST**

Cost information on MS SEDCO products is available from the manufacturer's authorized distributors.

**Warranty**

A three year warranty is available from the manufacturer covering defects in materials and workmanship. Contact MS SEDCO for details.

**Maintenance**

MS SEDCO recommends that all maintenance and adjustments be performed by an AAADM Certified Technician.

**Technical Services**

MS SEDCO's staff of factory trained sales and service personnel offer design assistance and technical support. Local distributors are also available to assist in selecting appropriate devices for specific uses and to provide onsite installation.