

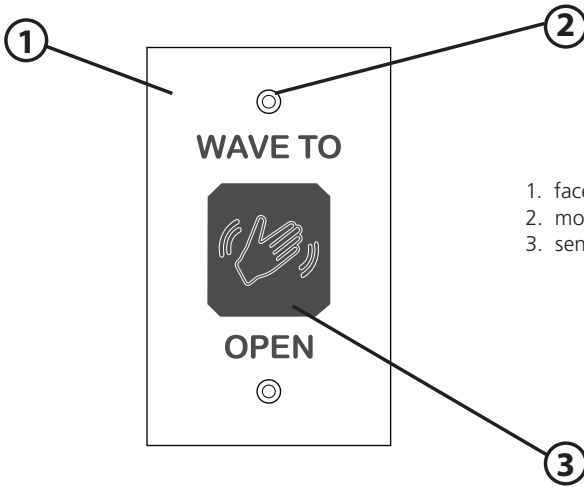
PATENT PENDING

MAGIC SWITCH: MS11



Hardwired, Stainless Steel, Touchless, Activation Sensor*

DESCRIPTION

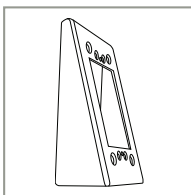


- 1. faceplate
- 2. mounting holes
- 3. sensor window

PRODUCT FAMILY

	SINGLE GANG	DOUBLE GANG	JAMB STYLE
STAINLESS STEEL	10MS11S	10MS11D	10MS11J
WHITE POWDER-COATED STAINLESS STEEL	10MS11SW	10MS11DW	10MS11JW

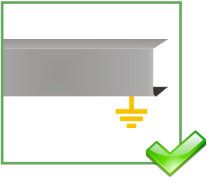
ACCESSORIES



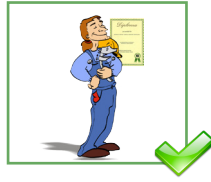
10ABOXSGSMS: Angled, stainless-steel surface, mount box

* Use of the device outside the intended application cannot be guaranteed by the manufacturer.

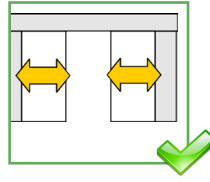
PRECAUTIONS



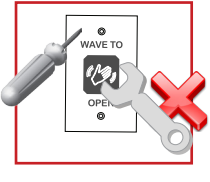
The door control system and the header cover profile must be correctly grounded.



Only trained and qualified personnel are recommended to install and set up the sensor.



Always test the proper operation of the installation before leaving the premises.

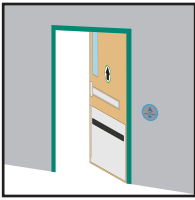


The warranty is invalid if unauthorized repairs are made or attempted by unauthorized personnel.

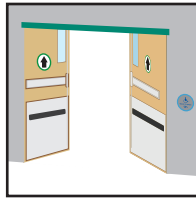
1 INSTALLATION

TIP: Single gang, double gang, or jamb style electrical boxes (ideally, non-metallic) may be used.

APPLICATIONS



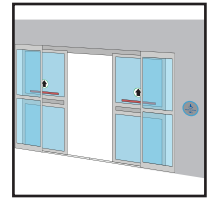
Single Swing Doors



Sim Pair Swing Doors



Dual Egress Swing Doors



Sliding Doors

NOTE: Do not install the sensor within the swing path of the door.

2 WIRING

Description	Wire Color
12-24 VAC/DC	Black
12-24 VAC/DC	Red
COM	White
NO	Green
NC	Yellow

3 SETTINGS & ADJUSTMENTS

DETECTION ZONE – potentiometer

COUNTERCLOCKWISE – decrease (2" minimum)

CLOCKWISE – increase (24" maximum)¹

AUDIBLE CONTROL – 2-pin jumper

ON – jumper removed (or on 1 pin)

OFF – jumper over both pins

OUTPUT TIME – potentiometer

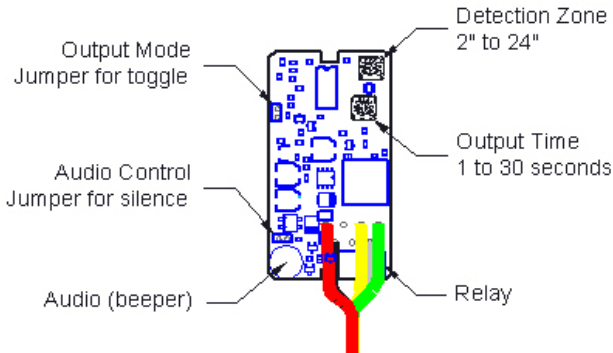
COUNTERCLOCKWISE – decrease (1 s minimum)

CLOCKWISE – increase (30 s maximum)

OUTPUT MODE – 2-pin jumper

TIMED – jumper removed (or on 1 pin)

TOGGLE – jumper over both pins



NOTES:

1. Maximum Detection Zone will vary depending on size (area), orientation, and speed of object as well as environmental conditions.

FUNCTIONALITY

AUDIBLE ALERT	When Audible Alert is ON, it sounds for 0.5 seconds when detection occurs.
TIMED MODE	<i>Recommended for automatic door applications.</i> In Timed Mode, a detection activates the relay and the relay holds for a predetermined amount of time adjusted by the Output Time potentiometer (1 – 30 seconds, counterclockwise to decrease, clockwise to increase).
TOGGLE MODE	<i>Recommended for switch applications.</i> In Toggle Mode, a detection activates the relay and a second detection deactivates the relay. The relay will hold indefinitely until a second detection occurs.

4 SET-UP & OPERATION

When first powered, the backlit hand symbol will alternate between blue and green for approximately 5 seconds. Allow at least 15 seconds for the sensor to complete start-up.

During normal operation, when a detection occurs, the hand symbol will momentarily change from blue to green and the audible alert will sound (if enabled).



TROUBLESHOOTING

Sensor does not seem to detect	Bad or no power	Check power supply.
	Detection range too short	Adjust detection zone potentiometer.
	Incorrect wiring	Check wiring.
Sensor stays in detection	Environmental conditions	Remove moving objects from around sensor.
	Incorrect wiring	Check wiring (NO and NC).
	Wrong output mode	Switch output mode to pulse.

TECHNICAL SPECIFICATIONS

Technology	microwave - doppler radar (24.125 GHz)	
Detection Mode	motion (bi-directional)	
Supply Voltage	12 – 24 VAC/VDC	
Current Consumption	< 2.8W	
Temperature Range	-22 – 158 °F	
Enclosure Rating	NEMA 4	
Sensing Zone	2 – 24 inches (adjustable)	<i>Sensing Zone is dependent upon size (area) of object, orientation of object, speed of object, and environmental conditions.</i>
Relay	1-Form C Solid State Relay 1A 30 VAC/VDC (max)	
Dimensions (Overall) [faceplate = 0.16" (T)]	Single Gang: 4.5" (H) x 2.75" (W) x 0.98" (T) Double Gang: 4.5" (H) x 4.5" (W) x 0.98" (T) Jamb Style: 4.5" (H) x 1.68" (W) x 0.98" (T)	
Wire Harness Length	12 inches	
Material	stainless steel (faceplate)	

*Specifications are subject to change without prior notice.
All values measured in specific conditions.*

FCC

FCC: G9B-21019

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by BEA Incorporated could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

BEA INSTALLATION/SERVICE COMPLIANCE EXPECTATIONS

BEA, the sensor manufacturer, cannot be held responsible for incorrect installations or inappropriate adjustments of the sensor/device; therefore, BEA does not guarantee any use of the sensor outside of its intended purpose.

BEA strongly recommends that installation and service technicians be AAADM-certified for pedestrian doors, IDA-certified for doors/gates, and factory-trained for the type of door/gate system.

Installers and service personnel are responsible for executing a risk assessment following each installation/service performed, ensuring that the sensor system installation is compliant with local, national, and international regulations, codes, and standards.

Once installation or service work is complete, a safety inspection of the door/gate shall be performed per the door/gate manufacturer recommendations and/or per AAADM/ANSI/DASMA guidelines (where applicable) for best industry practices. Safety inspections must be performed during each service call – examples of these safety inspections can be found on an AAADM safety information label (e.g. ANSI/DASMA 102, ANSI/DASMA 107, UL 325).

Verify that all appropriate industry signage and warning labels are in place.

