

ENSA™

MICROWAVE MOTION SENSOR SWITCH

MODEL: ENSA-MS8

www.ensalife.com



USER MANUAL



GENERAL GUIDELINES FOR INSTALLATION

- 1, The sensor should be installed by a qualified electrician, And ensure that the electricity supply is switched off before installing or servicing the product.
- 2, Installation inside a glass or plastic housing will result in a reduction of detection sensitivity. Expect a reduction of approximately 20% for every 3mm of thickness.
- 3, Detection area will be affected by speed of motion, height of installation and volume of moving object.
- 4, Daylight sensor was tested on sunny environment with no lampshade. ambient lux level could be different under different weather, climate, season or environment

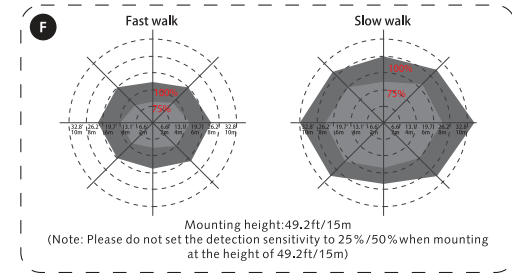
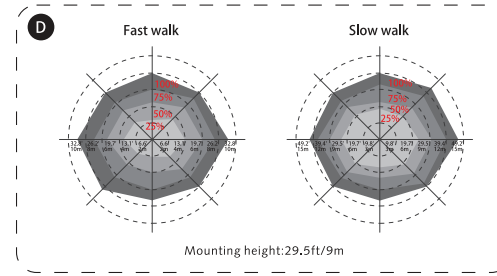
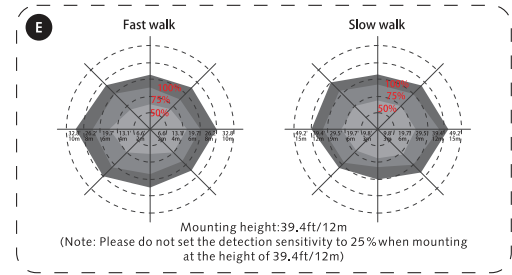
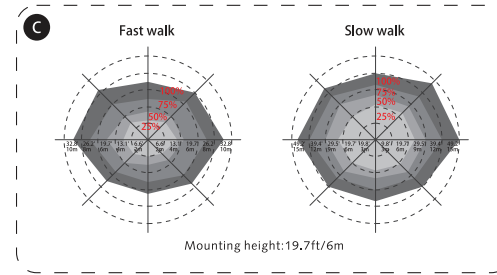
APPLICATION NOTICE

- 1, Sensors settings may need to be adjusted to match installation site, please follow below instructions or contact manufacturer.
- 2, The sensor is designed for indoor use only. Outdoor use for a long time may reduce the waterproof effects. The raining or wind blowing may trigger the microwave sensor even if without human motion when outdoor use.
- 3, The distance between any two sensors should be at least 3m to avoid interference with each other.
- 4, When the microwave sensor is installed in a metal lighting fixture or space with large reflector, for example a warehouse with metal roof, the microwave will be reflected and cause the lights permanently illuminated even if without motion signal. Please reduce the detection area (sensitivity) to solve the problems, or contact the microwave sensor manufacturer to provide technical support.
- 5, Make sure the sensor not close to or be blocked by high density material, such as metal, glass, concrete walls etc. The materials will reduce or block microwave and cause false trigger.
- 6, Make sure there are no fans or other vibrating objects in installation area. The movements will trigger sensor as well.

INITIALIZATION

- 1, ON/OFF function or 3-step dimming function:
After power on, the sensor automatically turns on light at 100% brightness. After 10sec, it completely turns off light.
During the initialization, the sensor is not able to detect movement.
- 2, 2-step dimming function:
After power on, the sensor automatically turns on light at 100% brightness. After 10sec, it dims the light to a low light level (set by stand-by dim level).
During the initialization, the sensor is not able to detect movement.

DETECTION PATTERN



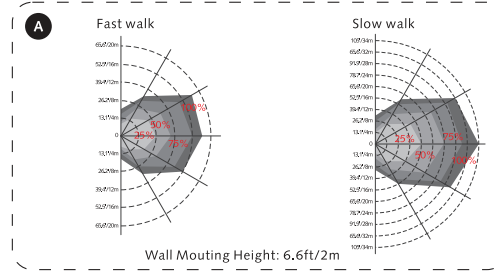
FEATURE

- Sensor parameters can be conveniently set by a remote control.
- Mounting height up to 49.2 ft (15m)max. , suitable for warehouse use.
- Water proof sensor with IP65 rating.
- Automatic dimming when used in combination with 1-10V dimmable control gears.
- Built-in adjustable daylight sensor.
- 1-10V interface can match up with stand-alone daylight sensor and achieve daylight harvesting.

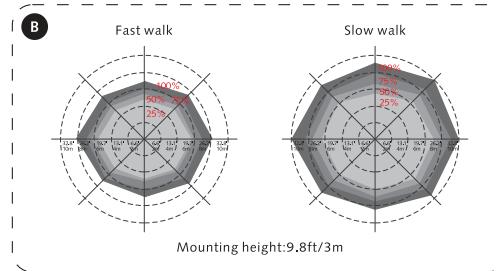
SPECIFICATIONS

Input voltage	220-240Vac, 50/60Hz(AUS/EURO) 120/277Vac, 50/60Hz(USA)
Rated load (EURO/AUS)	800W-Inductive 1E4 1200W-Resistive 1E4
Rated load (USA)	120Vac 50/60Hz 4A E-ballast 277Vac 50/60Hz 3A E-ballast
Surge current of load	50A (50% Ipeak, twidth=500uS, 277Vac full load, cold start); 80A (50% Ipeak, twidth=200uS, 277Vac, full load, cold start)
Detection area	100% / 75% / 50% / 25%
Hold time	5S/30S/1min/3min/5min/10min/20min/30min
Daylight sensor	5lux/15Lux/30Lux/50Lux/100lux/150lux/Disable
Stand-by period	0s/10S/1min/3min/5min/10min/30min/+∞
Stand-by dimming level	10% / 20% / 30% / 50%
Sensor principle	Microwave motion detector
Microwave frequency	5.8GHz±75MHz, ISM wave band
Mounting height	49.2 ft (15m) Max.
Detection angle	150°(Wall installation), 360°(Ceiling installation)
Motion detection	1.6-3.3 ft/s(0.5-1 m/s)
Operating temperature	-35°C-55°C
IP rating	IP65 (INDOOR USE ONLY)
Factory Setting	Detection area:75% ,Hold time:5s, Stand-by Period: 0s, Stand-by dim level:10% , Daylight Sensor: Disable
Overvoltage Category	4000V
Control Type	Operating type 1.B
Software	Class A
Pollution Degree	- 2

DETECTION PATTERN(FOR WALL MOUNTING)

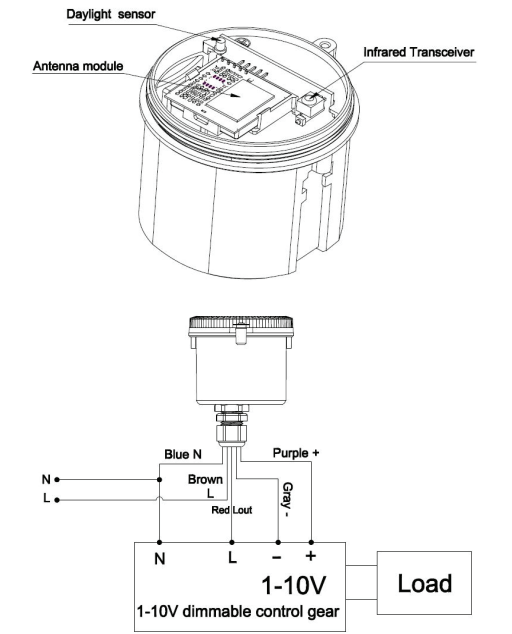
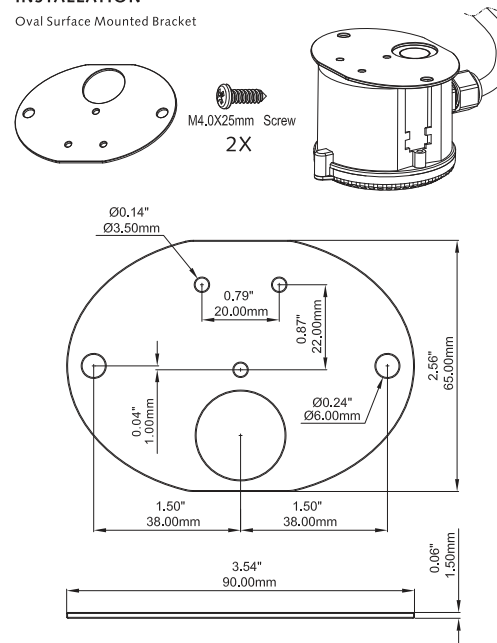


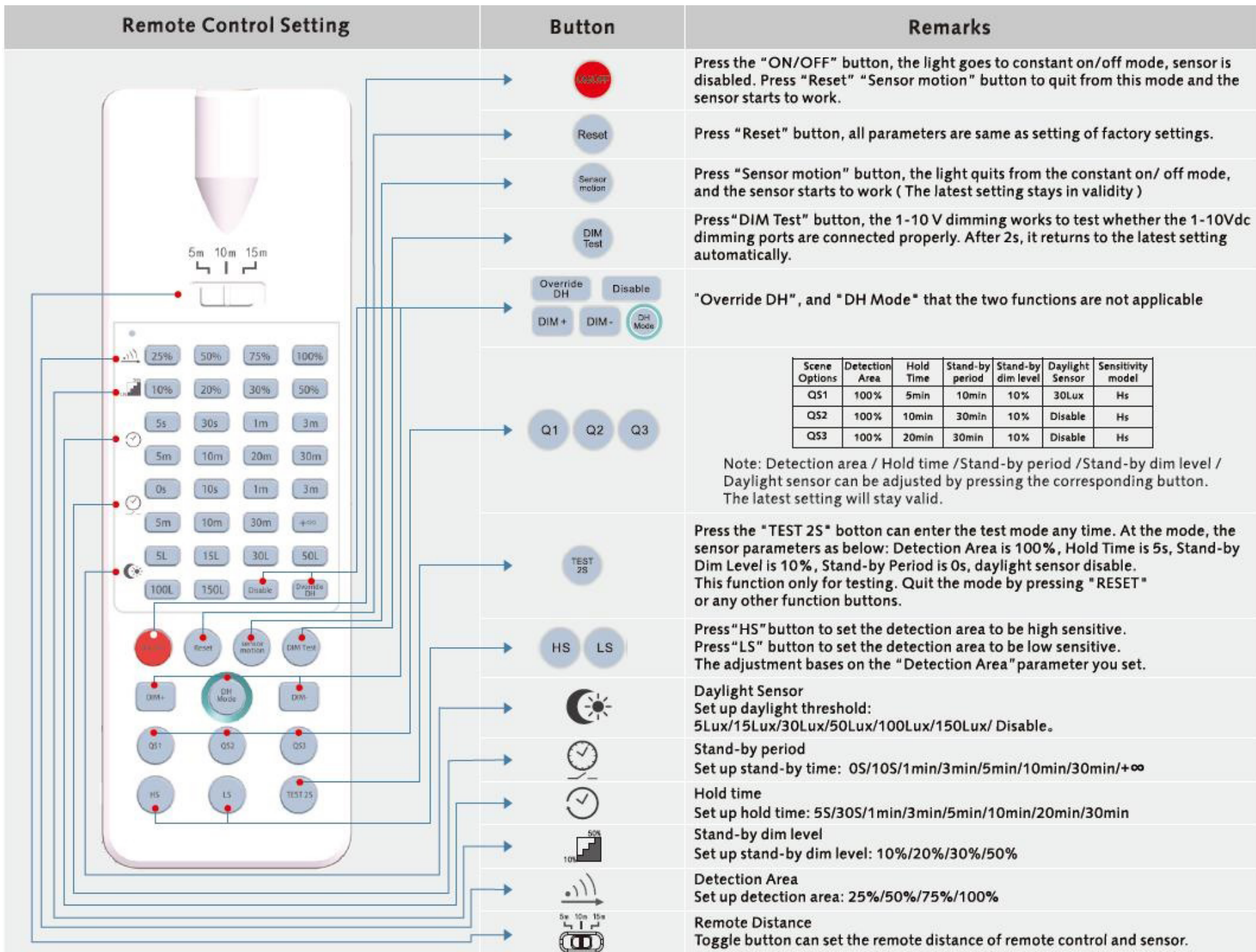
DETECTION PATTERN(FOR CEILING MOUNTING)



INSTALLATION

Oval Surface Mounted Bracket





Remote Control Setting

Button

Remarks



Press the "ON/OFF" button, the light goes to constant on/off mode, sensor is disabled. Press "Reset" "Sensor motion" button to quit from this mode and the sensor starts to work.



Press "Reset" button, all parameters are same as setting of factory settings.



Press "Sensor motion" button, the light quits from the constant on/ off mode, and the sensor starts to work (The latest setting stays in validity)



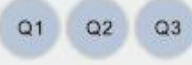
Press "DIM Test" button, the 1-10 V dimming works to test whether the 1-10Vdc dimming ports are connected properly. After 2s, it returns to the latest setting automatically.



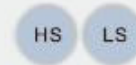
"Override DH", and "DH Mode" that the two functions are not applicable

Scene Options	Detection Area	Hold Time	Stand-by period	Stand-by dim level	Daylight Sensor	Sensitivity model
Q1	100%	5min	10min	10%	30Lux	Hs
Q2	100%	10min	30min	10%	Disable	Hs
Q3	100%	20min	30min	10%	Disable	Hs

Note: Detection area / Hold time /Stand-by period /Stand-by dim level / Daylight sensor can be adjusted by pressing the corresponding button. The latest setting will stay valid.



Press the "TEST 2S" button can enter the test mode any time. At the mode, the sensor parameters as below: Detection Area is 100%, Hold Time is 5s, Stand-by Dim Level is 10%, Stand-by Period is 0s, daylight sensor disable. This function only for testing. Quit the mode by pressing "RESET" or any other function buttons.



Press "HS" button to set the detection area to be high sensitive. Press "LS" button to set the detection area to be low sensitive. The adjustment bases on the "Detection Area" parameter you set.



Daylight Sensor
Set up daylight threshold:
5Lux/15Lux/30Lux/50Lux/100Lux/150Lux/ Disable.



Stand-by period
Set up stand-by time: 0S/10S/1min/3min/5min/10min/30min/+∞



Hold time
Set up hold time: 5S/30S/1min/3min/5min/10min/20min/30min



Stand-by dim level
Set up stand-by dim level: 10%/20%/30%/50%



Detection Area
Set up detection area: 25%/50%/75%/100%



Remote Distance
Toggle button can set the remote distance of remote control and sensor.