Halco.

# PRODUCT SPECIFICATION

PRODUCT

# 12VDC Microwave & PIR Interchangeable Sensor

MODEL NO





















On/Off Control

Detection Area

Daylight Sensor

Hold Time

Warranty

Stand-by period

Stand-by dimming level Remote Control

# Technical Data

# **Basic Information** -

Operating Voltage DC Input: 10.5-15V Current >50mA Dimming Control
ON/OFF 0-10V Dimmable

Operating Temperature -40°C ~ +70°C IP Rating IP65 Warranty **5 years** 

# Sensor Function -

Sensitivity Setting 25%/50%/75%/100%

Standby Period Os/10s/30s/1min/5min/10min/30min/60min/+∞

Daylight 2Lux/10Lux/30Lux/50Lux/80Lux/120Lux/Disable Holdtime 5s/30s/1min/3min/5min/10min/20min/30min

Standby Dimming 10%/20%/30%/50%

Microwave Sensor –			
Operating Voltage DC Input: 10.5-15V	Detection Distance Radius 3-7m/9.84-22.96ft	Mounting Height Max 6m/19.68ft Max 15m/49ft	Applications /
Detection Angle Without Glass Cover	How to perform Daylight Priority Daylight threshold is on 30Lux/50Lux/80Lux/120Lux;Standby period is +∞ ; Standby dimming level is on 10%/20%/30%.		

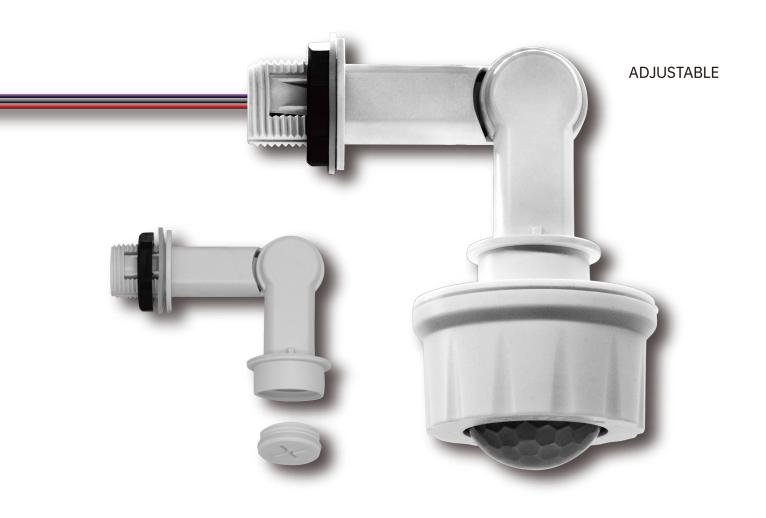
#### PIR Sensor -

Operating Voltage DC10.5-15V >30mA Detection Distance Radius 3-6m/9.84-19.68ft Mounting Height ≤**12m/39.37ft** 

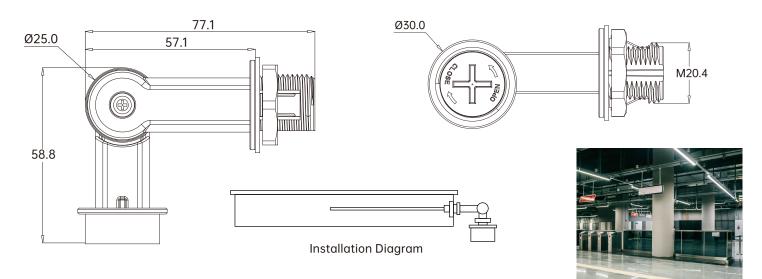
Applications

Detection Angle <120° Fresnel Lens How to perform Daylight Priority Daylight threshold is on 30Lux/50Lux/80Lux/120Lux;Standby period is +∞; Standby dimming level is on 10%/20%/30%.

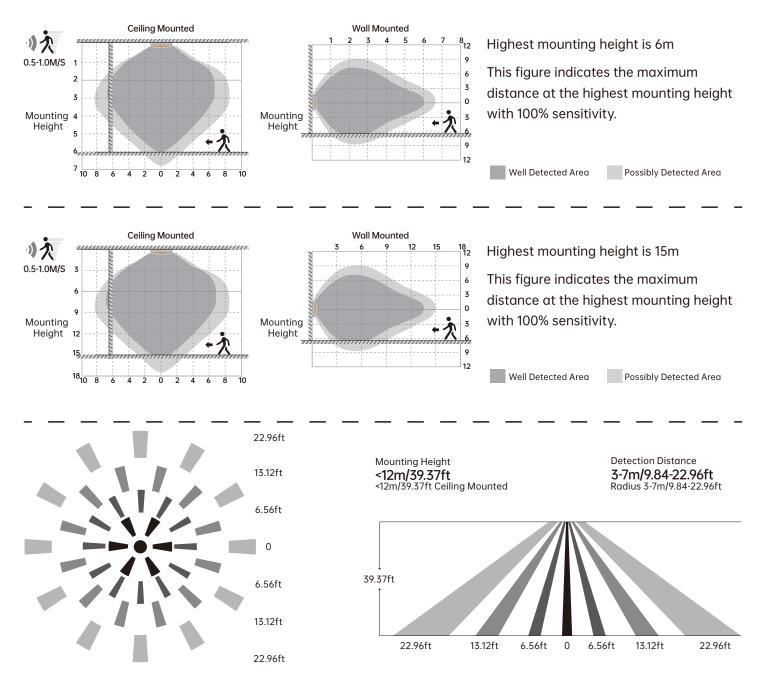




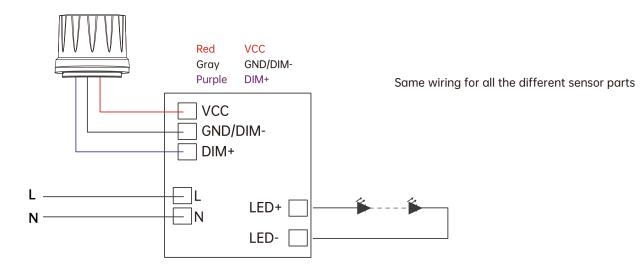
# Dimensions Unit:mm







#### Wiring Diagram







1. Please read the instructions carefully before using this product and keep it well for all users to read at any time.

2. The sensor should be installed by qualified electrician and ensure power is off before the installation.

3. We reserve the right to modify any incorrect text, image and necessary technical parameters.

4. Any unauthorized modification is forbidden, otherwise all guarantees will be immediately invalid.

# Installation precautions

- 1. Microwave sensor can be installed in any lamp except the one with full metal shell.
- 2. The detected surface cannot be shielded by metal objects.
- 3. Make sure the microwave module is completely exposed outside.
- 4. The detection surface of the sensor module shall be installed facing the detection area.
- 5. Should be kept away from the driver to avoid interference generation and lamp flashing.
- 6. Wiring must be strictly in accordance with the wiring diagram to avoid short circuit.

### **Application Environment**

1. Suitable for indoor installation to avoid false triggering due to external factors such as rain, wind or tree swing.

2. Shall not be installed in the place with all four metal shelters and small space (such as galvanized-iron roof).

3. Shall note be mounted installation, so as to avoid false trigger caused by the lamp itself shaking.

4. Shall not be installed next to large operating machines such as ventilator/ceiling fan to avoid false triggering caused by machine vibration.

#### **User Notes**

1. Microwave can penetrate walls or glass thinner than <20mm and attenuate if thicker than <20mm.

- 2. The driver voltage shall be stable and float within 10%.
- 3. Detection area will be affected by speed of motion, mounting height and movement volume.
- 4. Conduct test on sunny days without the lampshade which will affect the tested lux value.

# SCREEN DISPLAY, MEMORY & APPLY FUNCTION, OPTIONAL SCENES

#### **Briefing of Button Functions**

Buttons	Function	Performance	
Ċ	ON/OFF	Turn ON or OFF the sensor.	
MW/PIR	MW/PIR	Daylight learning button, press it and light flickers 3 times and light on, it means ambient brightness learnt.	
Scene	Reset	Press it to start detection programming; before pressing any other buttons, the screen shows default programming (Detection Area 100%, Holdtime 5S, Daylight Disable, Standby Dimming 10% Standby Period 0S)	
Start	Start	Press it before you try to memorize program into the remote; After pressing it, S on the screen will blink and keeping blinking while making the program.	
Memory	Memory	Press it after programming, the blinking S will become a solid M, thatmeans the program has been well memorized.	
Apply	Apply	Press it to deliver the preset program to the specific sensors; every presswill make the whole screen blink gently.	
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Detection area	Also known as "sensitivity", 100% means the highest sensitivity and longest distance. Press it, specific icon on the screen will blink and press the + - buttons to adjust.	
	Hold time	The period that light will stay illuminated 100% after no motion's detected; Press it, specific icon on the screen will blink and press the +- buttons to adjust.	
	Daylight Threshold	The preset lux level to compare with ambient brightness when motion gets detected; Press it, specific icon on the screen will blink and press the + - buttons to adjust.	
$(\mathfrak{G})$	Stand-by period	The period after holdtime, during which the light keeps standby dimming level; Press it, specific icon on the screen will blink and press the + - buttons to adjust.	
×ې:	Stand-by dimming level	After holdtime, the light will dim from 100% to optional standby dimming levels; Press it, specific icon on the screen will blink and press the + -buttons to adjust.	
+	UP	The main functional buttons to adjust the factors to wanted level.	
Ţ	DOWN		
POWER %	POWER	Supports to manually change dimming output in detection mode; Press it, specific icon on the screen will blink and press the + - buttons to adjust.	
Test 25	Test mode	Supports to check if the sensor works correctly with a short 2S holdtime;Press it and the holdtime will change to 2S, and it can't be memorized.	

Model: LHB-MS-RC





#### How to Use LHB-MWMS

#### **1. SENSOR PROGAMMING**

1. ON/OFF button to turn on the light

- 2. SCENE button to start programming
- 3. Choose functional button of detection area, see icon blinking on the LCD screen display then use + buttons to change
- 4. Same programming with all the other functional buttons of holdtime , standby dimming level, standby period and daylight threshold
- 5. Done and leave the remote.

\*Icon keeps blinking on the screen for 5S that means the program will then be kept afte 5S. \*Each press will make sensor dim down light then back to100%, it means remote signal has been well received.

#### 2. MEMORY AND APPLY

@the 1st sensor 1. ON/OFF button to turn on the light

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- 2. SCENE button to start programming
- 3. START button
- 4. Choose functional button of detection area, see icon blinking on the LCD screen display then use + buttons to change
- 5. Same programming with all the other functional buttons of holdtime ,standby dimming level, standby period and daylight threshold
- 6. MEMORY button
- 7. APPLY button

#### @the other sensors

1. ON/OFF button to turn on the light

2. SCENE button to start programming

3. APPLY button

#### 3. MANULLY DIMMING

ON/OFF mode

1. ON/OFF button to turn on the light

2. Press +- button to dim light directly, it dims from 10% to 100%

#### DIMMING mode

1. ON/OFF button to turn on the light

- 2. SCENE button to start programming
- 3. POWER button

4. +- buttons to dim light, but it only dims from 60% to 100%; 50% is one of the standby dimming level options

\* Number on LCD screen display may keep changing 10%-100%.