# HB1MSD01



# **Dynamo Motion Sensor** Instruction Manual





www.integratedpower.net.au

Features

- Sensor can be commissioned and changed from romote control

- Easily retrofitted to many brands of LED highbays
- Can conrol dimming of fittings (if 1-10V dimmable driver fitted)

- Built-in daylight sensor

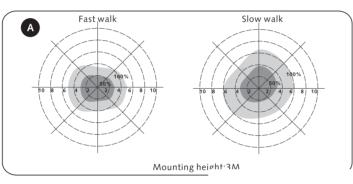
## SPECIFICATIONS

Input voltage	220-240Vac, 50/60Hz
Rated load	800W@220-240Vac (Inductive load)
	1000W@220-240Vac (Resistive load)
Detection area	8m Max.(radius) adjustable
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/ + $\infty$
Stand-by dimming level	10% / 20% / 30% / 50%
Sensor principle	Microwave motion detector
Microwave frequency	5.8GHz±75MHz, ISM wave band
Transmitting power	<0.5mW (1% of transmitting power for cell phone)
Mounting height	3-15m
Detection angle	150°(Wall installation),
	360°(Ceiling installation)

#### GENERAL GUIDELINES FOR INSTALLATION

- Please read the entire instruction manual before using the product and then save it for future reference. We reserve the right for any errors in text or images and any necessary changes made to technical data.
- 2, The sensor should be installed by a qualified electrician. And ensure that the electricity supply is switched off before installing or servicing the product.
- The sensor should not be modified in any way. Any modifications made to this product will immediately invalidate any warranties issued.
- 4, The company does not accept responsibility for any consequences resulting from unauthorized modification of the product.
- 5, Microwaves cannot pass through metal or brick walls if thicker than 20cm. They will pass through thinner walls but there will be some attenuation.
- 6, The sensor is designed for indoor use only. The raining or wind blowing may trigger the microwave motion sensor even if without human motion when outdoor use.
- 7, The sensor should be connected to a stable power supply of 220-240Vac, 50/ 60Hz.
- Detection area will be affected by speed of motion, height of installation and volume of moving object.
- 9, Daylight sensor is tested on sunny environment with no lampshade.

## DETECTION PATTERN



 
 O
 Auto Cubic Seting
 Diff. Test Cubic Seting

 OS1
 QS2
 QS3
 QS4

 Detection Area
 Detection Area
 Detection Area

 25%
 50%
 75%
 100%

 55
 30s
 1min
 3min

 56
 20%
 30%
 50%

 57%
 100min
 20min
 30min

 58
 30s
 1min
 3min

 59
 30%
 50%
 50%

 Stand-by Dered
 0s
 10s
 1min

 05
 10s
 1min
 3min

 5min
 10min
 30min
 400

 Daylight Sensor
 50Lux
 50Lux

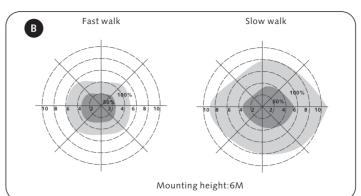
 5Lux
 15Lux
 30Lux
 50Lux

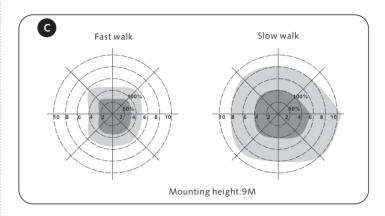
 100Lux
 150Lux
 Desable
 Test (2s)

 Collocus
 150Lus
 Desable
 Test (2s)

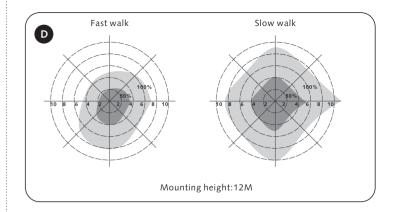
The motion sensor will flash 3 times each time a command is sent from the remote.

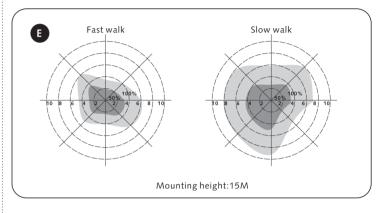
## DETECTION PATTERN



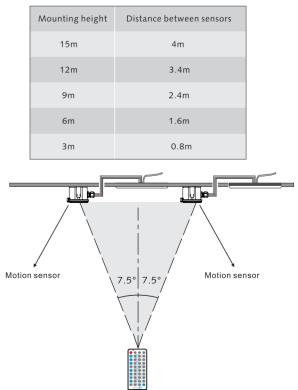


Button	Remarks		
	Press the "ON/OFF" button, the light goes to constant on or constant off mode, sensor is disabled. Press " Reset " or " Auto Mode" button to quit from this mode.		
Reset	Press "Reset" button, all parameters are same as setting of DIP switch.		
Auto Mode	Press "Auto Mode" button, the sensor starts to work and all parameter setting will be remained the same as the previous status before the light was switched on/off.		
DIM Test	Press "DIM Test" button to test dimming function. Sensor will dim automatically and return to normal work mode.		
	The button "Test(2s)" is for factory testing purpose only. The sensor will go to test mode, Detection sensitivity: 100% Hold time: 2sec stand-by dim level:10% Stand-by period: 0s Daylight sensor: Disable Test mode can be quit by pressing any button.		
053 054	scene OptionsDetection AreaHold Time periodStand-by dim levelDaylight dim levelQS1100%30s1min10%5LuxQS2100%1min3min10%10LuxQS3100%5min10min10%30LuxQS4100%10min30min10%Disable		

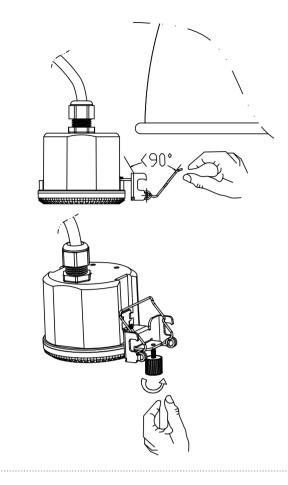


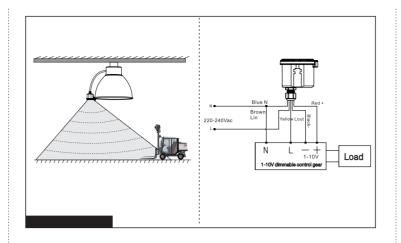


As the control angle of the Infrared Remote Control is fixed (15°), if sensors are installed too close to each other, settings of both sensors will be configured. Please refer to the below chart for the distance of the installation of the sensor:



## INSTALLATION





- Use the 'piggy back' plug to connect the sensor to the mains supply and the LED highbay.

- If the highbay has a 1-10V dimmable ballast, connect the LV cable to the dimming cable on the highbay for dimming control. The dimming cable does not need to be used for the sensor to function (it will just not have the dimming functionality)

- Use the remote control (or the dip switched inside the unit) to set the sensor as required

#### Warranty Statement"Integrated Power Pty Ltd" ABN - 72 604 326 061

This product is warranted to be free from defects in materials and workmansh (or the date of manufacture if installation date is unknown) for a period of 3 (the within the warranty period by reason of improper workmanship or faulty materia replace the goods without charge, subject to the terms and conditions below:

1. The product is properly installed, and installation is consistent with the manu and is installed by suitably trained and qualified installer.

2. The product is not subjected to any unauthorized

modifications.

3. The product is only used for the purpose of illumination, in line with its design

4. Any faults or defects attributable to the misuse, abuse, accident or non-obse on the part of the user are specifically excluded.

The warranty does not cover:

1. Damage caused by acts of god, or other incidents / occurrences beyond the , fire, theft, storms, floods or power surges.

- 2. Damage caused by chemical impact or other abuse including environmenta
- substances such as bleach on the product. 3. Damage or problems caused by the use of an accessory, component or equ
- 4. Integrated Power do not cover freight charges (including insurance) or labour

Our goods come with guarantees that cannot be excluded under the Australian for a major failure and compensation for any other reasonably foreseeable loss or replaced if the goods fail to be of acceptable quality and the failure does not

#### SETTINGS (DIP SWITCH)

Detection area, hold time, stand-by period, stand-by DIM level and daylight sensor can be set by using DIP switches on the sensor. Note that reducing the detection area will also reduce the sensitivity.

I         1           I         ON         100%           II         -         50%	Detection area I: up to 100% II: up to 50%
I         2         3         4           I         ON         ON         SS           III         -         ON         N           IIII         -         ON         N           III         -         ON         N           IV         -         ON         3min           V         ON         ON         -           VI         -         -         30min	Hold time Refers to the time period the lamp remains at 100% illumination after no motion detected. I: 5s II: 30s III: 1min IV: 3min V: 20min VI: 30min
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Stand-by period Refers to the time period the lamp remains at a pre-setting dimming level before it completely switches off in the long absence of people I: 0s II: 1min III: 3min IV: 10min V: 30min VI: + $\infty$ * When set to 0s, the lamp will work as on/off function * When set daylight sensor to "Disable" and stand-by period to "+ $\omega$ " . the lamp will work as 2-step dimming control (Motion detected, 100% lumens, no motion, remains at pre-setting level lumens)

I         ON         ON         I0%           II         ON         -         20%           III         -         ON         30%           IV         -         -         50%	Stand-by dimming level This is the pre-setting dimming level you would like to have after the hold time in the long absence of people. I: 10% II: 20% III: 30% IV: 50%
0N         II         - ONONON Suz           II         - ONONON NI Suz           IIII         - ONON ON ISuz           IIII         - ONON SUZ           V         - ONON ON SUZ           V         - ONON ON SUZ           VI         - ONON ON SUZ           VII	Daylight sensor The sensor can be set to only allow the lamp to illuminate below a defined ambient brightness threshold. The settings are as follows: I: 5lux, darkness operation only II: 15lux, darkness operation only III: 30lux, twilight operation V: 50lux, twilight operation V: 100lux, twilight operation VI: 150lux, twilight operation VI: Disable* *When set to Disable Mode, the sensor will switch on the lamp when motion is detected regardless of ambient light levels.

# FAQ

Question	Cause
	Incorrect daylight sensor setting selected.
The load will not illuminate.	Load has failed.
	Power is switched off.
	Continuous movement in the detection area.
The load is permanently illuminated.	The lamp (containing sensor) is installed in an area too close to reflective surfaces, i.e. metal, glass or concrete walls.
The load will not illuminate despite movement.	Speed of moving object is not in the range of 0.5~3m/s or the detection radius is too small.
The remote control is not working.	The battery on the remote control is run out.
The remote control is not working.	The remote control is not aligned with sensor.

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	e entitled to a replacement or refund o entitled to have the goods repaired e.	
	Remedy	
selected.	Adjust setting.	
	Replace load.	
	Switch on.	
ection area.	Check detection area setting.	
nstalled in faces, i.e.	1, Make sure installation area suitable with at least 30cm space between lamp and surrounding reflective surfaces. 2, Reduce sensitivity (detection area).	
he range of is too small.	Check detection area setting.	
l is run out.	Change the battery.	

Change the remote angle.