

PRODUCT SPECIFICATION

PRODUCT    12VDC Microwave Sensor

MODEL NO    HN084-03V

DATE        2021-10-20

PREPARED    夏勇

CHECKED    罗泉东

APPROVED    周蒙

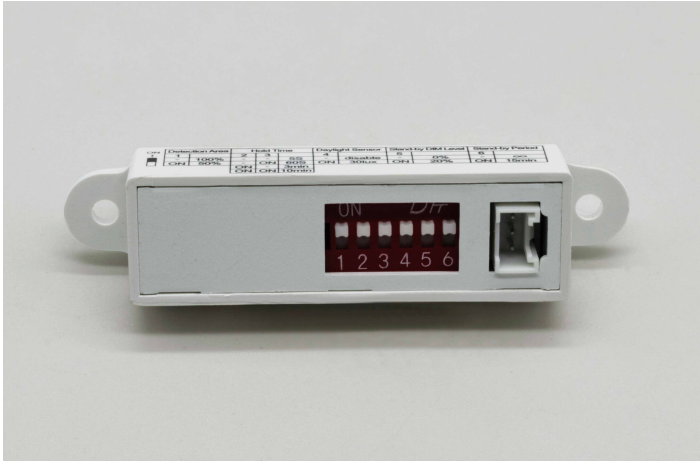
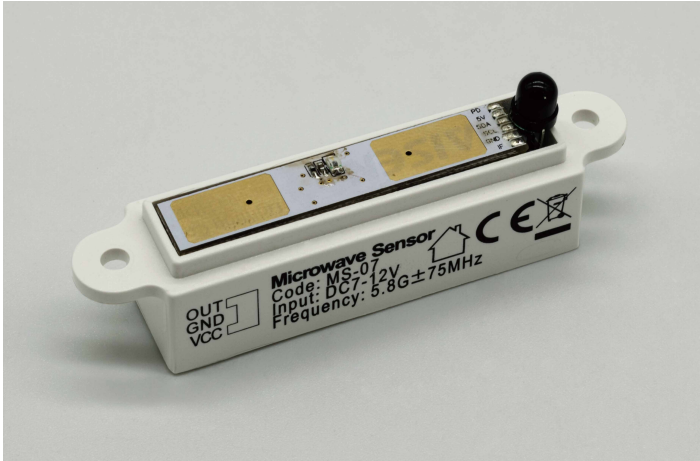
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• 12VDC Microwave Sensor

HN084-03V  

- 12VDC Input, PWM Dimmable
- DIP Switches & Remote Control
- Small Size, One For All

 On/Off Control

 Detection Area

 Daylight Sensor

 Hold Time

 Stand-by period

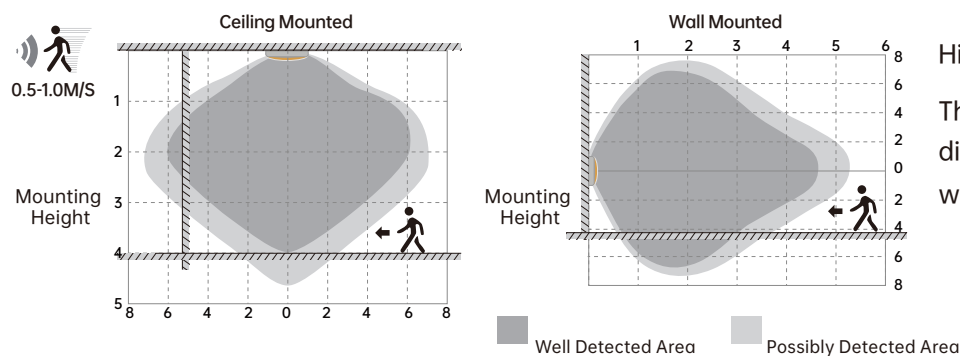
 Stand-by dimming level

 5 years Warranty

 Remote Control

Technical Data

Operating Voltage 7.5-12V	Detection Angle Side Wall<150° Ceiling Mounted 360°	Microwave Frequency 5.8GHz±75MHz
Connection Quick Connector	Brightness Adjust -/+ buttons on remote	Microwave Power <0.3mW
Operating Current <30mA	Detection Area DIP Switch:50%/100% Remote:50%/100%	IP Rating IP20
Control Method PWM	Stand-by dimming level DIP Switch: 0%/20% Remote: 0%/10%/20%/30%	Warranty 5 年
Mounting Height 2-4m/6.56-13.12ft Ceiling Mounted	Stand-by period DIP Switch: 15min/+∞ Remote: 5min/15min/30min/+∞	
Detection Range Max.ø12m/39.37ft Ceiling Mounted	Hold Time DIP Switch: 5S/1min/3min/10min Remote: 30S/1min/3min/10min	
Operating Temperature -20°C~+60°C	Daylight Threshold DIP Switch: 30Lux/Disable Remote: 10LUX/30LUX/50LUX/Disable	



Highest mounting height is 4m

This figure indicates the maximum distance at the highest mounting height with 100% sensitivity.

## DIP Switch Setting

**Switch UP**

**Switch DOWN**

**Stand-by period**

<input type="radio"/>	$\infty$
<input checked="" type="radio"/>	15min

The period of light keeping low output before it's completely switched off. When it's preset as " $\infty$ ", the light always keep at low output if no movement in the detection area and doesn't turn off.

**Stand-by dimming level**

<input type="radio"/>	0%
<input checked="" type="radio"/>	20%

The definition of low output in the standby period.

**Daylight Threshold**

<input type="radio"/>	Disable
<input checked="" type="radio"/>	30lux

Definition of the ambient brightness; only when the ambient brightness is lower than the preset specific lux amount, the sensor will work; when it's preset as "disable", the sensor works everytime it detects motion regardless the ambient brightness.

**Hold-Time**

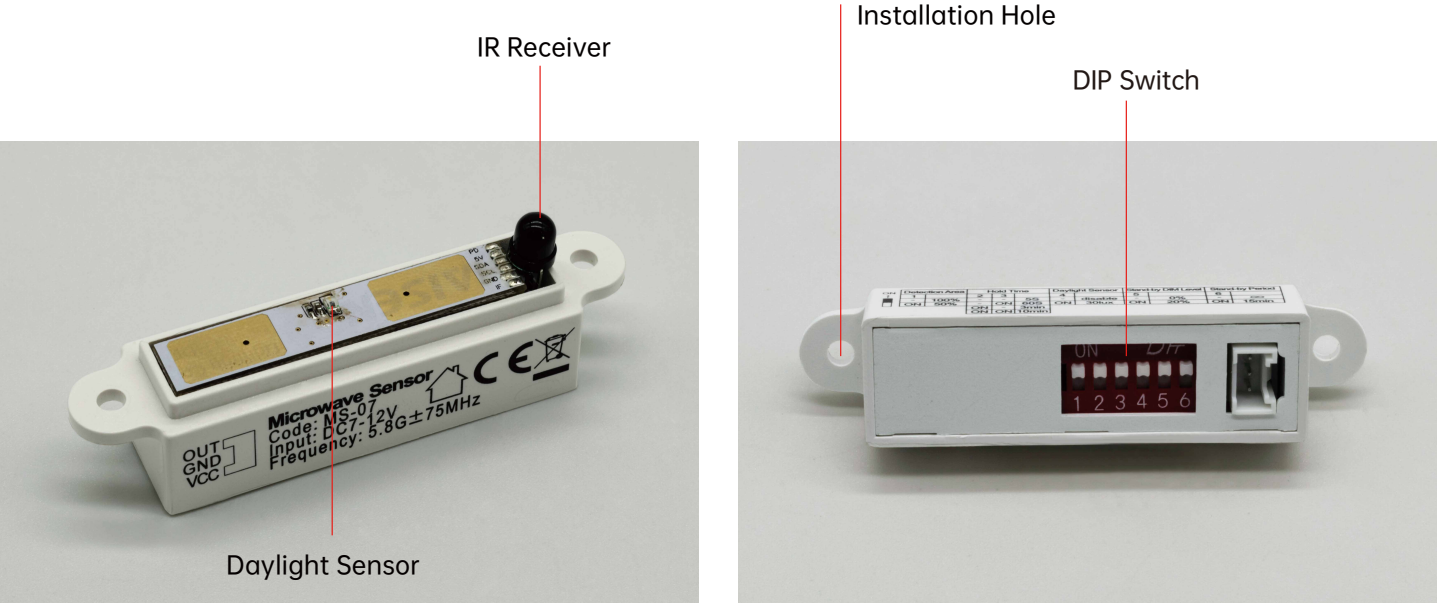
<input type="radio"/>	<input type="radio"/>	5s
<input type="radio"/>	<input checked="" type="radio"/>	60s
<input checked="" type="radio"/>	<input type="radio"/>	3min
<input checked="" type="radio"/>	<input checked="" type="radio"/>	10min

The period of light keeping 100% brightness after moving objects leave the detection area.

**Detection Area**

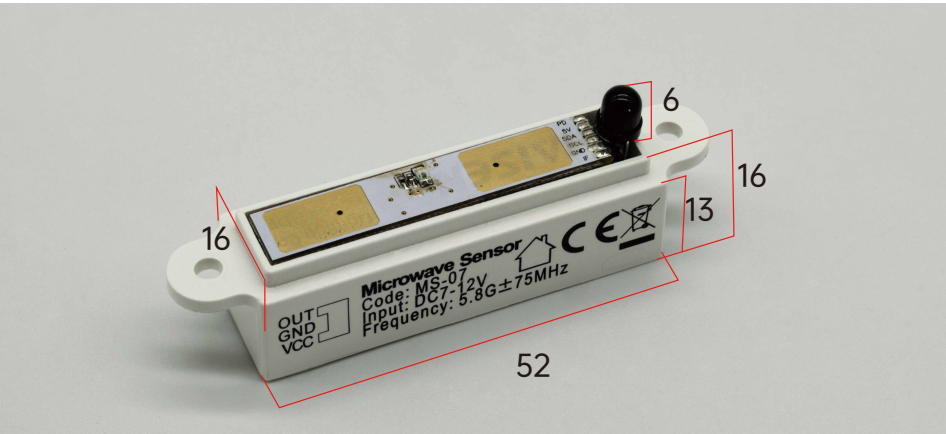
<input type="radio"/>	100%
<input checked="" type="radio"/>	50%

In this area, movement will be detected and able to trigger the sensor. 100% detection area is also known as the strong sensitivity.

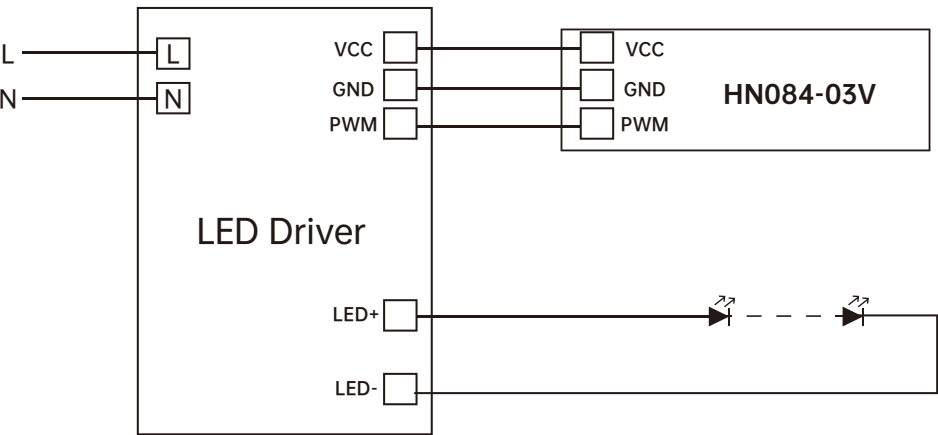


Dimensions

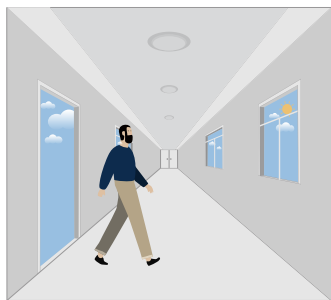
Unit:mm



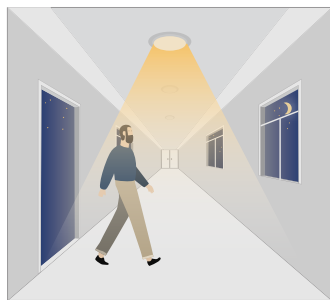
Wiring Diagram



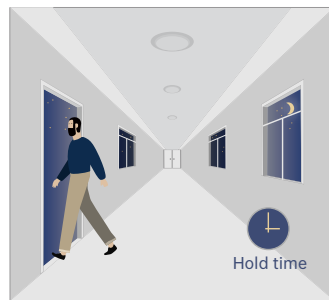
### 1. Automatically ON/OFF function



With sufficient daylight, even when motion detected, light remains OFF.



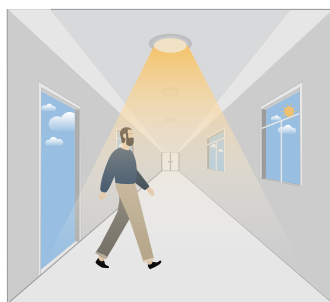
With insufficient daylight, the sensor turns light ON when motion gets detected.



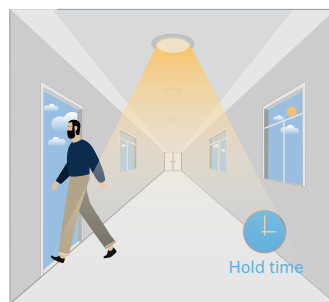
The sensor turns OFF light automatically after the holdtime when there's no motion detected.

### 2. Daylight Disable

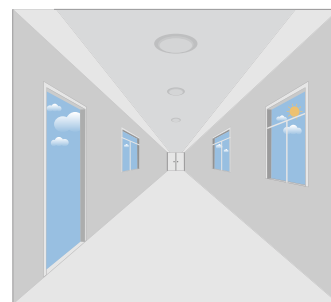
When daylight threshold is preset as "disable", the sensor turns light ON when motion gets detected, and OFF after hold-time.



The sensor turns light ON when motion gets detected.

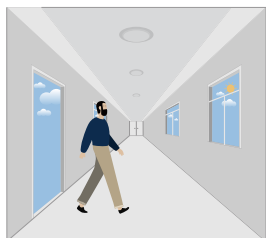


The sensor keeps light ON for holdtime period after motion leaves.

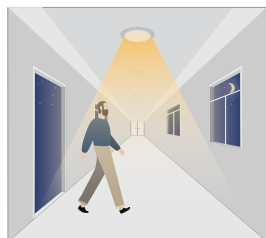


The sensor turns OFF light automatically after the holdtime.

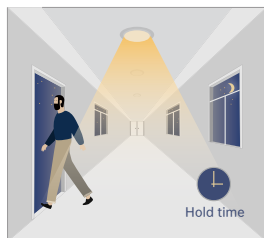
### 3. Corridor Function, Bi-level Dimmable



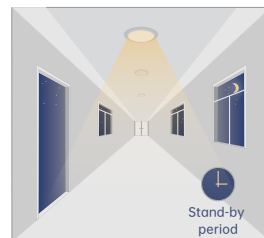
With sufficient daylight, the sensor keeps light OFF even motion gets detected.



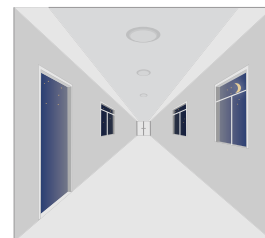
With insufficient daylight, the sensor turns light ON when motion gets detected.



After there's no motion detected, the sensor keeps light ON 100% for holdtime.



After holdtime, sensor dims light to standby dimming level for standby period.



The sensor turns OFF light automatically after the standby period when there's no motion detected.



# Attention

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

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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

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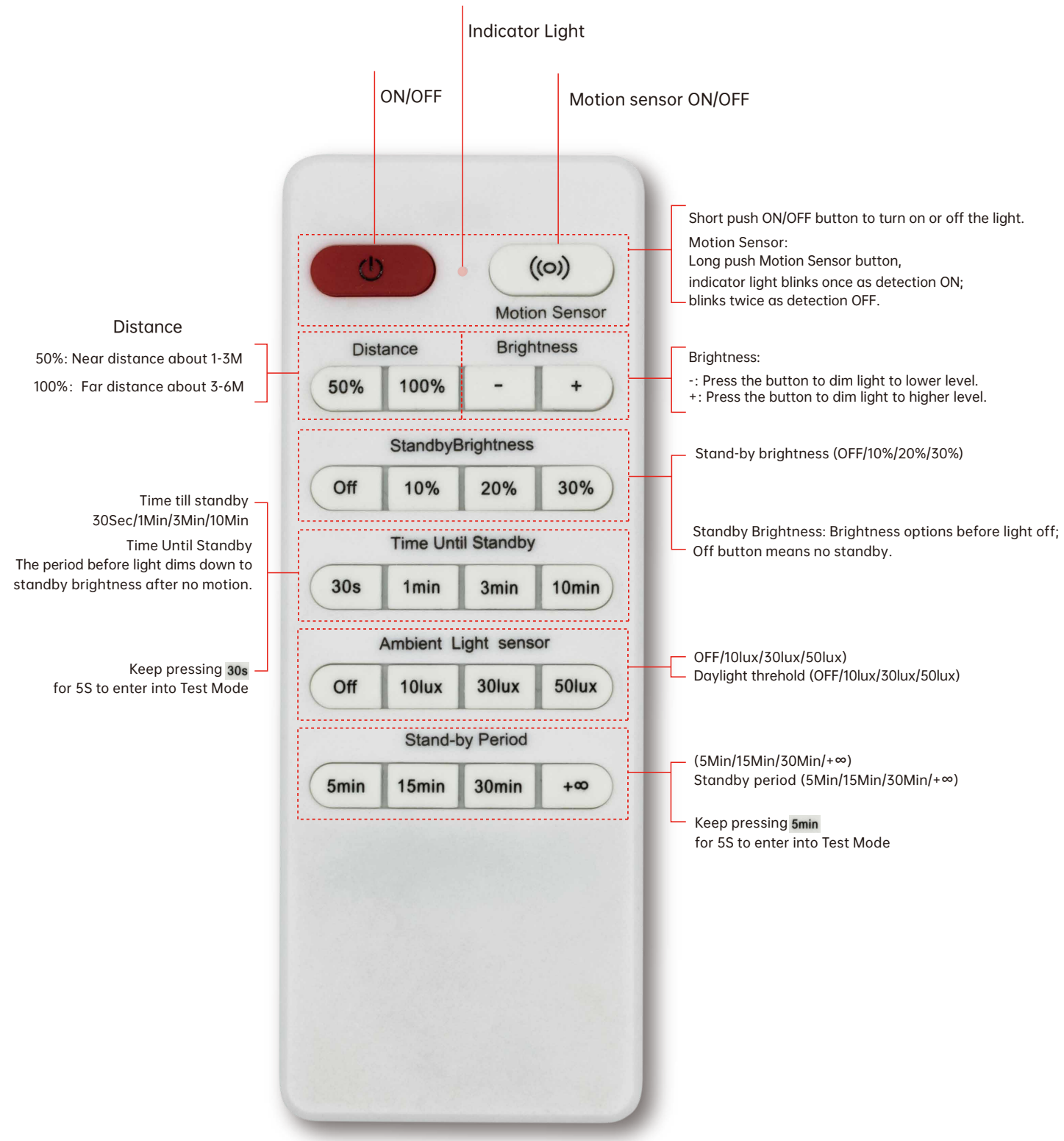
1. Suitable for indoor installation to avoid false triggering due to external factors such as rain, wind or tree swing.
2. Shall not be installed in the place with all four metal shelters and small space (such as galvanized-iron roof ).
3. Shall note be mounted installation, so as to avoid false trigger 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.
5. The sensor might be unwanted triggered in rooms that are small, or mostly filled with metal materials; please try to decrease sensitivity when it happens or contact us for support.

## User Notes

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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.
5. 3M distance is suggested when having a lot sensors in one same room.
6. If the sensor is applicated in the room with 5G WiFi router, 3M distance or above is needed.

Model: HD20R



Remark:

Indicator light on the remote will blink once every time it successfully delivers command.