

MANUFACTURER'S STATEMENT

DITEC hereby declares that the PASM243 and PASM24W3 are in conformity with the basic requirements and the other relevant provisions of the directives 1999/5/EC. The complete declaration of conformity is available on our web site www.ditec.it.
Read this operation manual carefully before use to ensure proper operation of this product.
Failure to read this operation manual may cause improper operation and may result in serious injury or death of a person. The meanings of the symbols are as follows. Please study the following first and then read the contents of this operation manual.

	WARNING	Disregard of warning may cause the improper operation causing death or serious injury of a person.
	CAUTION	Disregard of caution may cause the improper operation causing injury of person or damage to objects.
	NOTE	Special attention is required to the section of this symbol.

NOTE

- This sensor is a non-contact switch intended for header mount / ceiling mount of an automatic door.
- Do not use for any other applications.
- When setting the sensor's detection area, make sure there is no traffic around the installation site.
- Before turning the power on, check the wiring to prevent damage or malfunction of equipments that are connected to the sensor.
- Only use the sensor as specified in the operation manual provided.
- Be sure to install the sensor in accordance with the local laws and standards of the country in which the sensor is installed.
- Before leaving the job site make sure that the sensor is operating properly and instruct the building owner/operator on proper operation of the door and the sensor.
- The sensor setting can only be changed by an installer or service engineer. When changed, register the changed setting and dates in the maintenance logbook accompanying the door.

	WARNING	Do not wash, disassemble, rebuild or repair the sensor, otherwise it may cause electric shock or breakdown of equipments.
Danger of electric shock.		

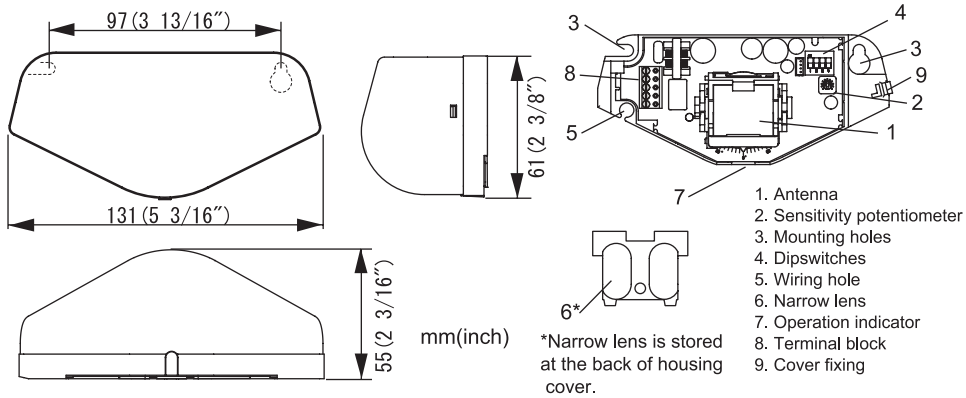
- NOTE** The following conditions are not suitable for the sensor installation.
- Vibrating header or mounting surface.
 - Waterdrops or snow on the sensor.
 - Moving objects, steel plate, emergency lights or illumination in the detection area or in vicinity.

SPECIFICATIONS

Model	: PASM243 / PASM24W3	Output	: Form C relay
Cover color	: Silver / Black		: 50V 0.3A Max.(Resistance load)
Mounting height	: 2.0 (6'7") to 3.5m (11'5")	Output hold time	: 0.5sec. / 2.0sec.
Detection method	: Microwave doppler effect	Response time	: <0.3 sec.
Power frequency	: 24.125GHz	Operating humidity	: <80%
Power density	: <20dBm	Operating temperature	: -20°C to +55°C (-4°F to 131°F)
Detection area	: See Detection area	IP rate	: IP54
Vertical adjustment	: +10° to +70° (Header mount) +20° to +80° (Ceiling mount)	Weight	: 140g (4.9oz)
Horizontal adjustment	: 30° to left or right		: 1 Cable 3m (9'10")
Power supply	: 12 to 24VAC(±10%) 12 to 30VDC(±10%)	Accessories	: 1 Operation manual 2 Mounting screws 1 Mounting template 1 Narrow lens*
Power consumption	: < 1.5W(<2VA at AC)		
Minimum speed	: 5cm(1 15/16")/sec.		
Operation indicator	: Green / Stand-by Red / Detection Green blinking / Set-up		

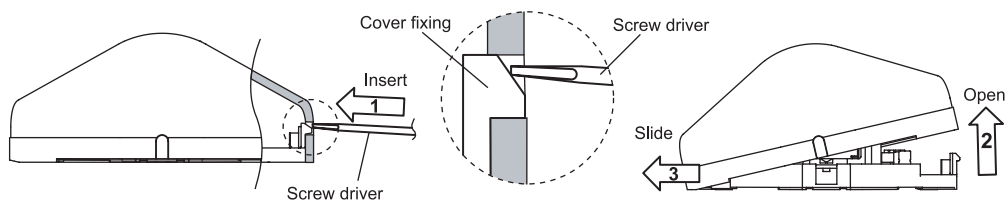
NOTE The specifications herein are subject to change without prior notice due to improvements.

OUTER DIMENSIONS AND PART NAMES



INSTALLATION

- Affix the Mounting template at the desired mounting position.
- Drill 2 Mounting holes of ø3.4mm (ø1/8").
- To pass the cable through to the header, drill a Wiring hole of ø8mm (ø5/16").
- Remove the Mounting template.
- Remove the Housing cover with screw driver as shown below.



- Wire the cable to the door controller properly as shown below.



	WARNING	Before starting the procedure, ensure that the power is turned OFF. When passing through the cable to the hole, make sure not to tear the shield, otherwise it may cause electric shock or breakdown of the sensor.
Danger of electric shock.		

- Plug the connector of the sensor.
 - Supply power to the sensor and the sensor will automatically start the set-up mode with blinking Green.
 - Adjust the detection area and set the Dipswitches. (See **ADJUSTMENTS**)
- NOTE** Make sure to connect the cable correctly to the door controller before turning the power ON. The sensor does not detect objects for 10 seconds after supplying power.

- Hook the Housing cover on the left side of main body to place the Housing cover. If wiring is to be exposed, break the knockout.

	WARNING	Do not use the sensor without the Housing cover. When using the cable knockout, install the sensor indoors or use the rain-cover (Separately available) otherwise electric shock or breakdown of the sensor may occur.
Danger of electric shock.		

ADJUSTMENTS

- Detection area**
Adjust the detection area with Sensitivity potentiometer.

Wide area: Mounting height: 2.2m (7'3")
Vertical adjustment: +34°

Narrow area: Mounting height: 2.2m (7'3")
Vertical adjustment: +34°

NOTE When the sensor is mounted at higher than 3.0m, set the SENSITIVITY to "H (high)".

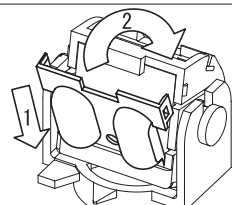
Detection area angle adjustment

	Adjustment	Scale	Angle
Vertical adjustment	Front View Side View	3° X 20 steps Side View	Header: +10°, +70°, +80° Ceiling: +20°
Horizontal adjustment	Front View	5° X 12 steps Front View	Front View: +30°, +30°

CAUTION Do not touch electric part of the sensor to avoid possible breakdown of the sensor.

Narrow area

To obtain Narrow area, place Narrow lens attached at the back of housing cover. To place Narrow lens, follow step 1&2 as shown on the right.



Dipswitches settings

Set Dipswitch 1&2 to enable the direction recognition. (PASM24W3 only)

Bi-direction	Uni-direction
When Dipswitch 1 is set to OFF, Bi-direction mode is effective, regardless of Dipswitch 2 setting.	Uni-direction with Auto-caution mode*

*Auto-caution mode (A person wavering in the detection area to be detected.)

Dipswitch 3: Output hold time
0.5sec. 2.0sec.

Dipswitch 4: Immunity
If there is external interference, set Dipswitch 4 to ON.

INFORM BUILDING OWNER / OPERATOR OF THE FOLLOWING ITEMS

WARNING

- Always keep the housing cover clean. If dirty, wipe the housing cover lightly with a cloth. (Do not use any cleaner or solvent.)
- Do not wash the sensor with water.
- Do not disassemble, rebuild or repair the sensor yourself, otherwise electric shock may occur.
- Always contact your installer or service engineer when changing the settings.
- Do not paint the housing cover.

NOTE

- When turning the power ON, always walk-test the detection area to ensure proper operation.
- Do not place any objects that move or emit light in the detection area. (e.g. Plant, illumination, etc.)

CHECKING

Check the operation according to the chart below.

Sensor Status	Power OFF	Set-up (Approx. 10sec.)	Stand-by	Detection
Operation indicator	OFF	Green blinking	Green	Red
Output Contact	③-④ ④-⑤	③-④ ④-⑤	③-④ ④-⑤	③-④ ④-⑤

TROUBLESHOOTING

Problem	Operation indicator	Possible cause	Possible countermeasures
Door does not open when a person enters the detection area.	None	Wrong power supply voltage.	Set to the stated voltage.
	Unstable	Wrong wiring or connection failure.	Check the wiring and Terminal block.
	Green	Sensitivity is too low.	Set the sensitivity higher.
Door opens when no one is in the detection area. (Ghosting)	Green blinking	Wrong detection area positioning.	Check ADJUSTMENTS .
	Red	The sensor is being set up.	Wait for the set-up to complete.
Door remains open	Green	Water drops on the housing cover.	Wipe the housing cover with a cloth.
		The detection area is overlapping with the door.	Adjust the detection area away from the door. Or set Dipswitch 4 to ON.
		Sensitivity is too high.	Set the sensitivity lower.
		Raining or snowing.	Set Dipswitch 1 to ON. (OM-106C Only) Or Dipswitch 4 to ON.
		Wrong wiring or connection failure.	Check the wiring and Terminal block.

DITEC S.p.A.

Via Mons. Banfi, 3 - 21042 Caronno Pertusella (VA) - ITALY

Tel. +39 02 963911 - Fax +39 02 9650314

www.ditec.it - ditec@ditecva.com