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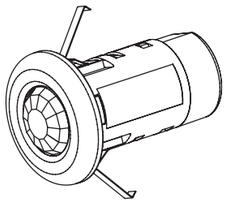
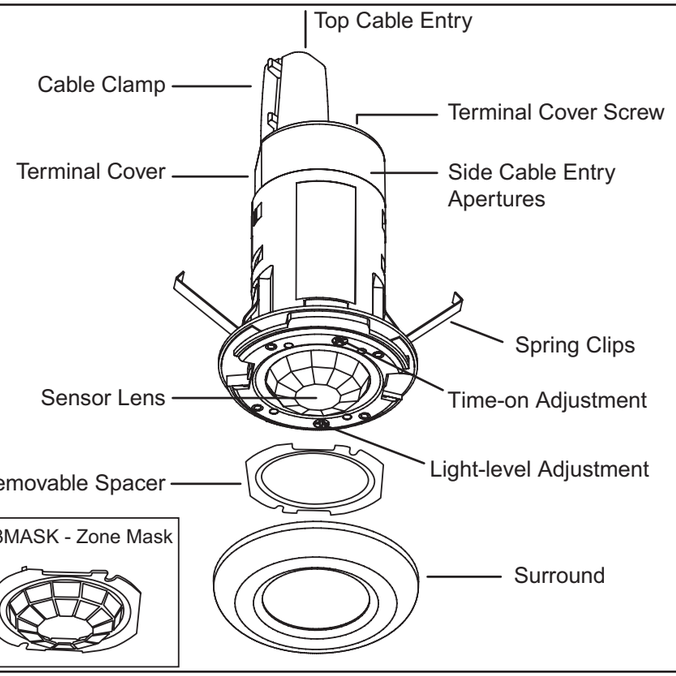
CLIPSAL by Schneider Electric



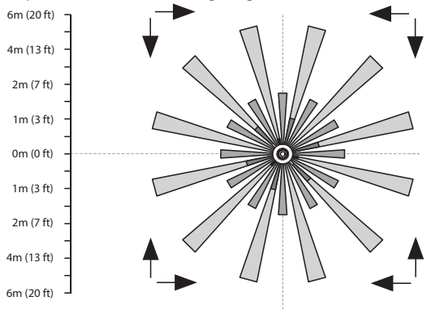
753R Infrascan 360 degree, 3 Wire

1



2

Top view at 2.4m mounting height



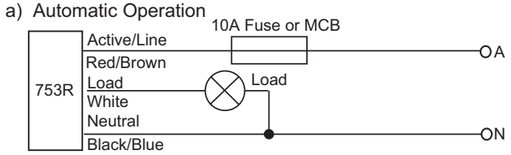
Arrows shows the direction of approach for maximum rated range.

Note: The effective field of view is circular, approximately 10m diameter, when mounted on a ceiling 2.4m above the floor.

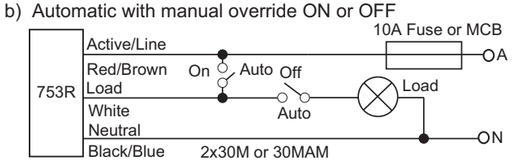
3

753R 3 Wire Infrascan

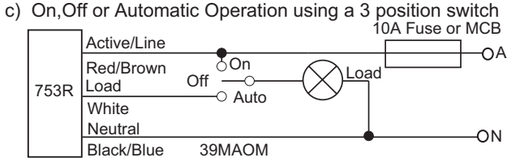
a) Automatic Operation



b) Automatic with manual override ON or OFF



c) On,Off or Automatic Operation using a 3 position switch



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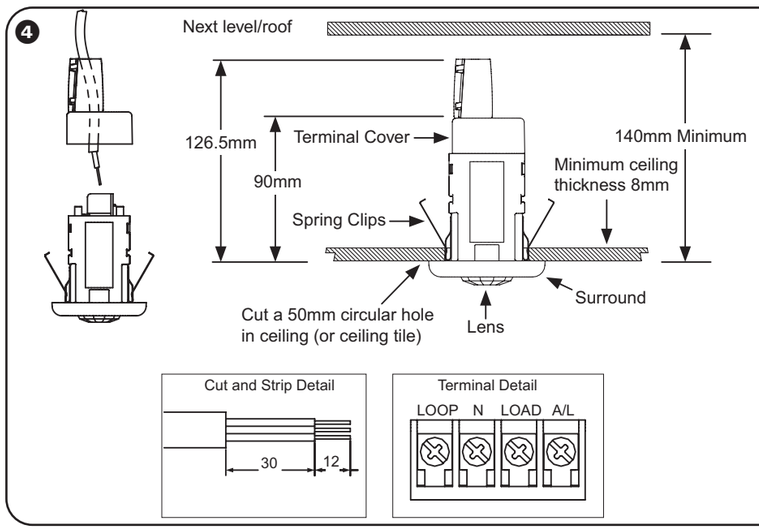

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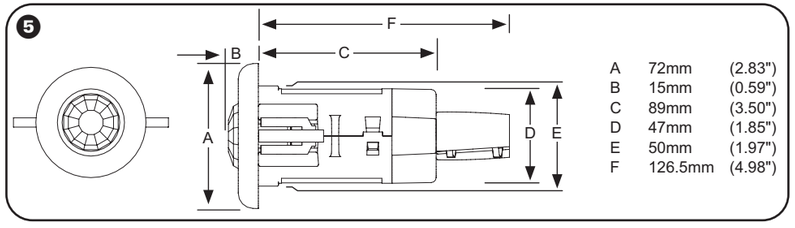

A	72mm	(2.83")
B	15mm	(0.59")
C	89mm	(3.50")
D	47mm	(1.85")
E	50mm	(1.97")
F	126.5mm	(4.98")

en 360° INFRASCAN Motion Sensor

About the product

The 360 Degree Infrascan motion sensor (hereinafter referred to as ***device***) is designed to monitor the immediate environment, and detect people moving within its 'Field of View'. When movement is detected, the device will activate an electrical load, such as a light, in response to that movement.

- Light-Level - Set the ambient light level at which the load is switched On when movement is detected.
- Time-On - Set the time that the load remains On after movement is detected.

❶ Identification of parts

NOTICE

RISK OF DAMAGE TO DEVICE

- The sensor head is specially designed to prevent water or dust from entering. So do not tamper it.
- Do not apply any pressure on the actual sensor lens itself, as this may damage the lens, and affect the performance.

Failure to follow these instructions can result in equipment damage.

Note:

- The device has an optional zone mask used to block it from detecting motion in unwanted trip areas. For example, a small office space with an open doorway, where it is not required to activate lighting when people pass by the open door.
- The zone mask incorporates a series of staged tear-away sections, allowing full customisation of the field of view. Tear away sections where you want detection to take place.
- To fit the zone mask, remove the surround, and unclip the removable spacer. Clip the zone mask in place, and replace the surround.
- Additional zone mask's are available, Clipsal Catalogue Number 753MASK.

Installation location

Position the device correctly for effective operation. Mount the sensor head vertically at 2.4 m height and so that the approach path is crossing the sensor face.

NOTICE

RISK OF DAMAGE TO DEVICE

- Do not mount the device close to objects which can create rapid temperature changes e.g. air conditioning vents, heater flues, moving water i.e. fountains and sprinklers. Avoid locations where condensation is likely to form on the lens.
- Do not mount the device on any surface that is subject to movement due to wind or other causes.
- In all cases, locate the device so that the 'approach path' is across the 'field of view' and not directly towards the device.

Failure to follow these instructions can result in equipment damage.

❷ Field of View

Note: There may be noticeable differences in range due to differing conditions (background temperature, speed of movement, types of clothing worn, etc).

❸ Wiring Diagrams

⚠⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Safe electrical installation must be carried out only by skilled professionals. Skilled professionals must prove profound knowledge in the following areas:

- Connecting to installation networks.
- Connecting several electrical devices.
- Laying electric cables.
- Safety standards, local wiring rules and regulations.

Failure to follow these instructions will result in death or serious injury.

Note: The 753R is a three-wire device, and switches the load using an internal relay. Power is not drawn through the load and so the 31CAP is not required.

❹ Mounting Procedure

NOTICE

RISK OF DAMAGE TO DEVICE

- When mounting in suspended ceilings there should be at least 140mm between the lower surface of the tile and the hard surface above.
- Do not apply any pressure on the actual sensor lens itself as this may damage the lens.
- Do not use side entry for cables

Failure to follow these instructions can result in equipment damage.

(1) Using a hole saw or otherwise, cut a 50 mm (2") circular hole in the ceiling (or ceiling tile). Draw cable through hole.

(2) Remove terminal cover screw and terminal cover to expose terminals. Remove cable entry tear-away(s) from the terminal cover as required to suit incoming cable.

Cable Entry

Punch out the top cable entry hole, then fit the cable clamp to the terminal cover. Push the two halves so that it snaps together, and clip onto the terminal cover entry hole. The cable clamp wraps around the incoming cable. Feed cable through.

(3) Strip cable. Terminate incoming wiring on the appropriate terminals as marked. Refer to *wiring diagrams* section for more information about wiring for different applications.

(4) Fit the terminal cover, and secure using the terminal cover screw.

(5) Depress the outer ends of the spring clips towards the centre of the device and push the device through the hole until it rests flat on the ceiling.

❺ Mechanical Specification

Commissioning

When setting the 'Time-On' or 'Light-Level' adjustments keep clear of the 'Field of View' when assessing the effect of the adjustment.

Set Up for Walk Test

(1) Connect device to mains power and allow at least 30 seconds for the device to stabilize before conducting any tests.

(2) Twist and remove the front surround and use a screwdriver to set the 'Time-On' adjustment fully anti-clockwise (5 second timer set).

(3) Set the 'Light-Level' sensor adjustment fully anti-clockwise (device set to respond in light or dark conditions).

(4) Walk slowly around the area in the desired 'Field of View' to confirm the load is activated from within the desired area.
- Check that the device responds appropriately when entering the room.
- Check that the device does not trigger unnecessarily when walking past open entry ways (eg adjoining hallway or corridor). If necessary, fit the zone mask to restrict the field of view to avoid tripping.

(5) Set the 'Light-Level' as desired for activation at dusk for normal operation.

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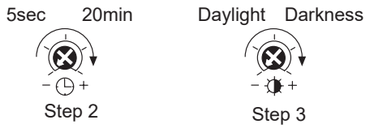
(6) Set the 'Time-On' interval to the desired time for normal operation.

(7) Replace the front surround.

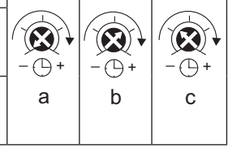


Time-On Adjustment

Adjustment Range: 5 seconds to 20 minutes.

Rotate clockwise to set required time-out period.

a	Minimum setting (5 seconds)
b	For areas with constant occupation but infrequent movement
c	For areas with less occupation but constant movement



NOTICE

RISK OF DAMAGE TO DEVICE

Take care not to scratch/damage the translucent window on the front of the device as it forms part of the optical detection system. For continued optimum performance ensure that the window is cleaned periodically with mild soap, water and soft cloth.

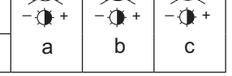
Failure to follow these instructions can result in equipment damage.

Light-Level Adjustment

Adjustment Range: 1 lux to full sunlight.

Rotate clockwise to avoid having load activated when natural light is adequate.

a	To activate the load at dusk, set adjustment to this area
b	Load activated at night only
c	Load activated both day and night



Troubleshooting

Problem	Possible Cause	Possible Action
Light turns on for no apparent reason.	Momentary power failure.	None, device will reset after 'Time-Out'.
	Unseen target.	Check for animals.
	Extreme draughts of hot and cold air.	Check doors, windows or air conditioning outlets.
	Trees / bushes moving in the wind.	Re-aim sensor head.
	Vehicular or pedestrian traffic on edge of 'Field of View'.	Re-aim sensor head.
Light turns on during daylight.	Wrong setting on 'Light Adjustment'.	Reset according to 'Commissioning' Instructions.
Lights do not turn on in dim and dark conditions.	Wrong setting on 'Light Adjustment'.	Reset according to 'Commissioning' Instructions.
	Light globe blown.	Replace light globe.
Light remains permanently on.	Manual override switch fitted and set to 'Manual'.	Reset according to 'Commissioning' Instructions.
	Moving infrared source being detected. **Note**: Do not mount too close objects which can change temperature rapidly, eg air conditioner vents, heater flues, moving water (fountains, sprinklers).	Remove unwanted infrared source. If unable to resolve, blank off viewing window. Light should turn off after 'Time-Out'. If light still remains on, call installer.

Technical Specifications

Operating Voltage	220-240V a.c. @ 50Hz
Maximum Load Current	10A
Minimum Load (Watts)	0W
Maximum Off-State Leakage Current	0mA
Stand-By Power Consumption	< 1W
Conductors Required	3 Wire
Neutral Required	Yes
Operating Temperature Range	0º - 50ºC
Warm-Up Time	30 seconds
Rated Detection Field at Maximum Sensitivity *	360°, Circular Detection Field 10 meters diameter
Optimal Mounting Height for Rated Detection Field	2.4m
Timer Delay Range	5 sec – 20 min
Light Level Inhibit Threshold	Continuous from 1 lux to full sunlight, user adjustable
Mounting Surface	Ceiling mount
Overall Dimensions	72mm diameter x 141.5mm high
Cables Accommodated	4 terminals, up to 2 x 2.5mm2 cable per terminal
Compatible Load types	Incandescent 240V Halogen Fluorescent Iron Core Transformers Electronic Transformers 300W LEDi Lamp (upto 12 lamps) M Motors (5 A max.) M5 Locked rotor current

Note:

- Specifications Typical @ 240V a.c, 25ºC
- The device is recommmended for INDOOR USE ONLY

* The range specifications given are based on a 90kg person travelling at greater than one metre per second across the field of view, where there is a temperature differential greater than five degrees Celsius between the person and the background. Objects that are hotter or moving faster (e.g. motor vehicle on nearby roadway) may be detected at greater distances. A person covered in heavy clothing or walking directly towards the sensor may not be detected until they get much closer to the device.

** Only iron-core transformer compatible with electronic switches may be used to ensure compliance with IEC 60669-2-1

Customer Care

Warranty information (Australia)

We warrant this product for 2 years—

visit **https://www.schneider-electric.com.au/ en/aboutus/legal/terms-and-conditions.jsp**

Our goods also come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Warranty information (New Zealand)

We warrant this product for 2 years—

visit **https://www.schneider-electric.co.nz/en/aboutus/legal/terms-and-conditions.jsp**

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