



PIR Sensor

Manual

V1

Contents

Safety Guide	3
Your Small PIR Sensor	4
Connecting to a SoundClip	5
Connecting to a VideoClip	5
Connecting to your Own Device	5
Settle Time.....	5
Connecting to a Period Telephone	6
Technical Information.....	7
Technical Drawings.....	8

Safety Guide

Please observe the following when installing this device.

Warning

- This product is not designed to be resistant to moisture or excessive dirt/dust. When deciding on a suitable installation point ensure there is reasonable protection from environmental damage.
- If you require this unit to be installed outdoors or in a dusty or damp environment use a certified IP rated enclosure and seal any entry/exit holes of wiring etc. This product should not exceed its operating temperature.
- Do not place the unit in direct sunlight for prolonged periods as this may cause the product to overheat. PIR or Passive Infra-Red devices operate at reduced sensitivity if the detection area is subject to large fluctuations in temperature and consideration must be made to the installation location.
- Disposal of old electrical equipment please follow the guidelines associated with your country/territory or ship the unit back to blackbox-av and we will dispose/recycle the unit. This product shall not be treated as household waste. Instead it shall be handed to applicable collection point for the recycling of electronic equipment. If you dispose of this unit correctly you will be helping prevent future harm to the environment which is caused by poor waste management of this type of equipment.

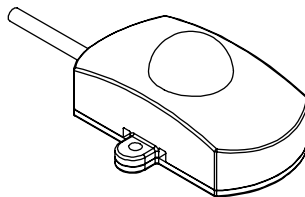
Precautions of Use

- Do not operate the unit below -20 or above 50 degrees Celsius. Do not bring the unit from a very cold environment to a warm environment without allowing it time to acclimatise as condensation may affect its operation.
- When using the device ensure you have read the instructions and have wired the unit together correctly. Please see the technical spec page for details on these connections. Failure to use care with these connections may result in damaging the device and subsequently affect the blackbox-av warranty.
- If you are using the PIR with your own device any damage associated with your device not being fully compatible will affect the blackbox-av warranty. The option of using your own device needs to be carried out with a qualified engineer.

Your Small PIR Sensor

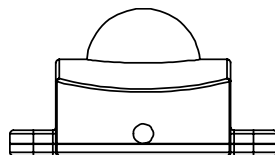
In the box

1. Small PIR Sensor
2. 2 x Mounting Screws
3. 1 x Sticker
4. User Manual
5. Reducer (Optional)



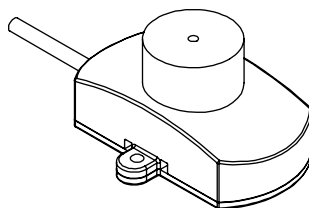
PIR Sensor

The small Passive Infrared Sensor (PIR) is our electronic device that measures infrared light radiating from objects within its field of view. We use PIRs to detect human movement to activate or deactivate audio or video devices.



Compatibility

The small PIR has been developed specifically for use with our SoundClip and VideoClip range of products (see connection instructions on Page 6). The PIR should be compatible with other devices, please check with the individual manufacturers first.



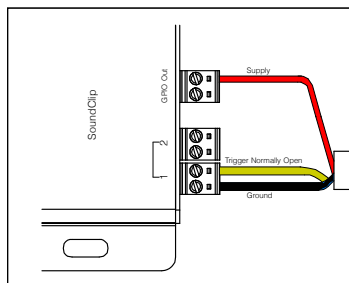
Connecting to a SoundClip

If you have purchased the PIR for use with a SoundClip it will be supplied with green terminals already attached.

Connect the terminal with the red wire attached to the GPIO Out.

Connect the terminal with the black and yellow wires attached to button 1 as per diagram to the right.

For programming instructions please refer to the SoundClip manual.

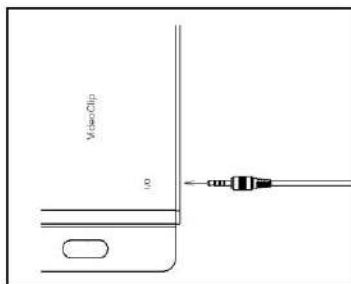


Connecting to a VideoClip

If you have purchased the PIR for use with a VideoClip it will be supplied with a 3.5mm jack.

The PIR is connected to the VideoClip's I/O port.

For programming information please refer to the VideoClip Manual.



Connecting to your Own Device

If you are purchasing the PIR Sensor for use with your own device, you will need to be aware of the wire connections below:

Red – Supply = 5-12v

Black – Ground

Blue – Trigger normally closed (with internal pull up to supply)

Yellow – Trigger normally open (open drain FET suitable for logic level 0-12v)

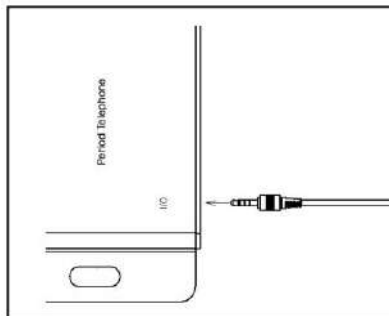
Settle Time

PIR devices need a short amount of time to settle which is usually less than a minute but can vary depending on the ambient room temperature. Once settled the PIR will begin to detect movement.

Connecting to a Period Telephone

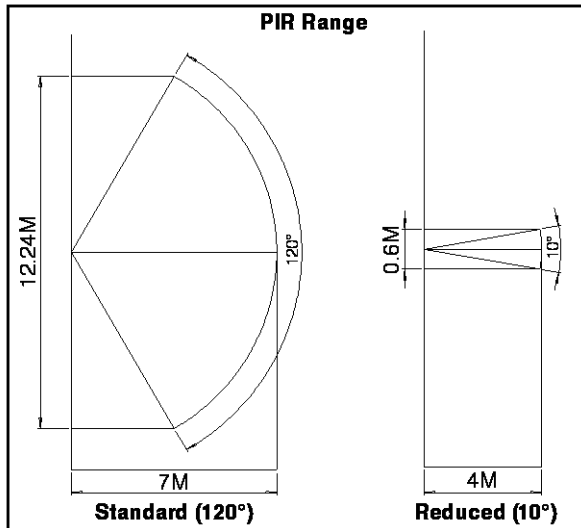
If Period telephone and PIR is ordered together, the Period Telephone will be delivered ready to use with PIR.

If PIR is ordered separately, please see period telephone manual (p8) for more information.



Technical Information

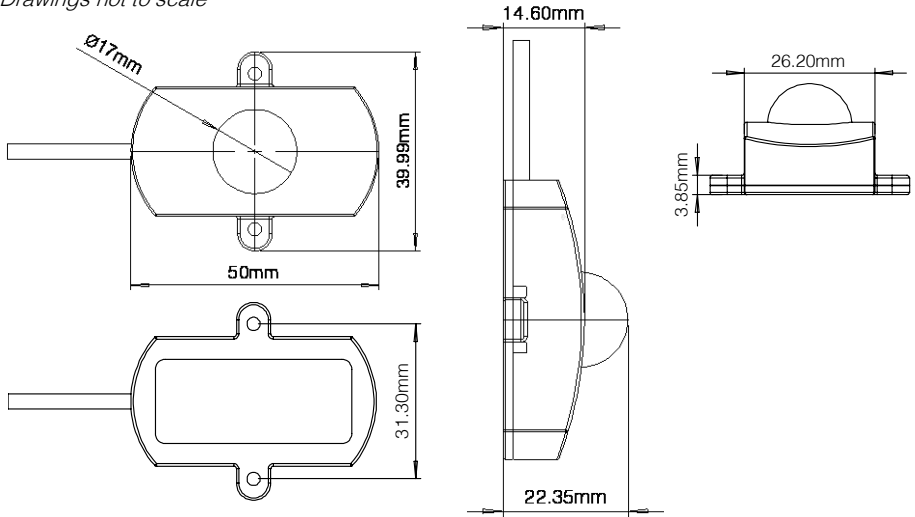
Weight	0.1Kg
Dimensions	50 x 39.99 x 22.35/25mm
Operating Voltage	5 – 24VDC
Operating Temperature	-20°C to +50°C
Static Current	< 50µA
Output Current	5A
Trigger Mode	Continuous Trigger
Induction Angle	120° / 10°
Induction Way	Passive
PIR Distance of Detection (Standard)	7M
PIR Distance of Detection (Reduced)	4M
Cable Length	2M
Switch Type	Normally Open



Technical Drawings

Standard Sense Angle

Drawings not to scale



Reduced Sense Angle

