

<b>High Energy Transient Immunity:</b>	No false alarms up to $\pm 2\text{kV}$ . Complies with BS EN 61000-4-5 : 1995.
<b>Conducted RF Susceptibility:</b>	No false alarms at 10Vrms. Complies with BS EN 61000-4-6 : 1996.
<b>Conducted Emissions:</b>	Complies with EN 55022 Class B.
<b>Radiated Emissions:</b>	Complies with EN 55022 Class B. Complies with DD ENV 50204 : 1996.
<b>EMC:</b>	Independently certified to EN 50130-4 : 1996.
<b>Pulse Count:</b>	Multi-mode Pulse Count. Internal link to select

4.4 Environmental

Operating Temperature:	-35°C (-31°F) to +55°C (+131°F).
Temperature Compensation:	Microprocessor controlled true temperature compensation.
Temperature Tolerance:	No false alarms up to 1.7°C/minute (3°F/minute).
Maximum Humidity:	95% non-condensing.
Storage Temperature:	-35°C (-31°F) to +60°C (+140°F).
EMC Environment:	Residential/Commercial/Light Industrial or Industrial.

4.5 Physical

Casing:	2.5mm (0.1") wall thickness in flame retardant ABS. Designer white with super-white lens.
Dimensions:	113mm diameter x 30mm (4.4" x 1.2").
Packed Weight:	125g (4.5oz) approx.

Select a suitable location for the *Rf360* according to the following criteria:

- Do not mount the unit where it could be affected by:
  - Glass areas (e.g. windows, patio doors)
  - Hot or cold objects (e.g. heaters, air conditioning units)
  - Light sources (e.g. filament lamps, fluorescent tubes)
- Avoid exposing the unit to:
  - Condensation or high humidity (e.g. near kettle)
  - Hot or cold air circulation (e.g. above radiator or vent)
  - Direct sunlight (e.g. near window)
- The mounting surface should be stable and vibration-free
- Do not mount on false ceilings
- Suitable for internal use only

The recommended mounting height for the *Rf360* is 2.4m (8ft). The detection range diameter will increase if mounted higher than 2.4m and decrease if mounted lower (see Figure 2).

To open the *Rf360* partially undo the retaining screw then insert a flat-head screw driver into opening slot and twist (see Figure 3). The front cover may now be eased off from the underside of the casing.

Refer to Figures 4 and 5 to select suitable knockouts for mounting the back on the ceiling.

In normal use it will not be necessary to remove the PCB when mounting the *Rf360*, however the PCB may be removed by gently easing off the bug guard (see Figure 1), slackening the PCB retaining screw and easing out the PCB by sliding it forwards. Care should be taken not to strain or damage any of the sensitive components during this procedure. When replacing the PCB follow the reverse of the above procedure making sure the PCB is correctly located within the four PCB location corners of the plastic.

Figure 2

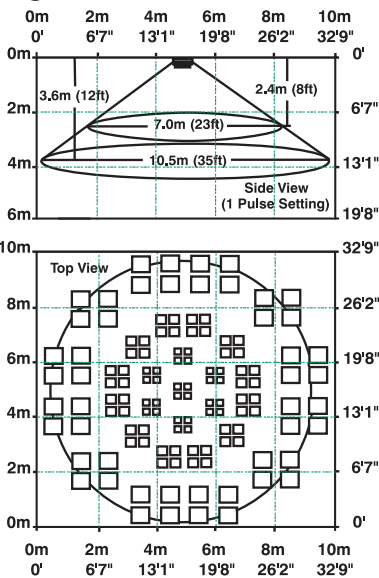


Figure 3

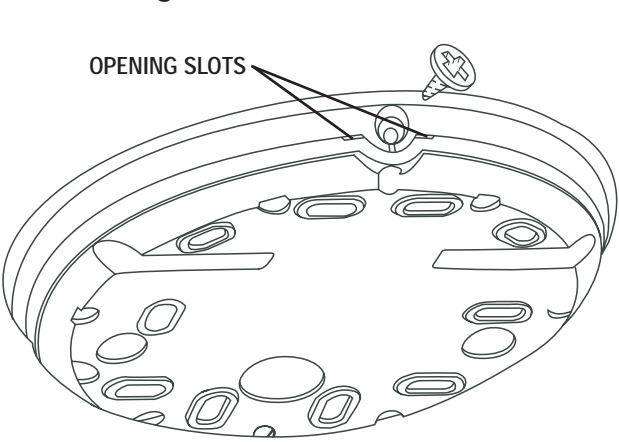


Figure 4

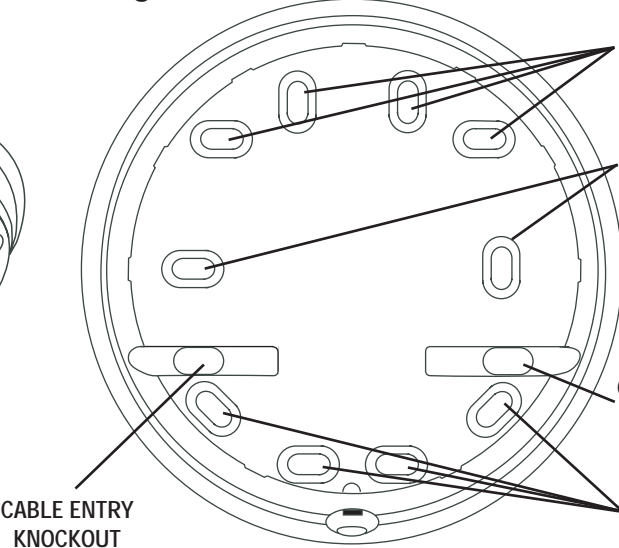
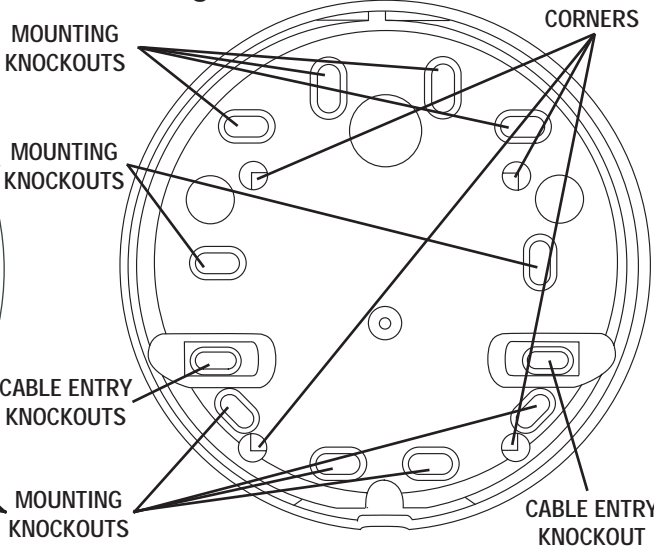


Figure 5



Refer to Figures 4 and 5 to select knockouts for chosen cable entry route. Connect wires to the terminal block in the following order (see Figure 1a).

Terminal L/FTA	Latch/First to Alarm input. Connect to "Set Positive" or "Alarm Positive" on alarm control panel. (Not suitable for use on entry/exit or intermediate (inhibited entry) zones).
RLED	Remote LED disable input. Connect to 12Voc to disable LED, 0Voc to enable LED.
ALARM	Alarm relay contacts. Connect to a normally closed intruder zone on the alarm control panel. <ul style="list-style-type: none"><li>normally closed relay contacts protected by an 18Ω series resistor</li><li>open on intruder detection or power failure</li></ul>
12V	Connect to auxiliary +12Voc on the alarm control panel.
0V	Connect to auxiliary 0Voc on the alarm control panel.
TAMPER	Connect to a normally closed tamper zone on the alarm control panel. <ul style="list-style-type: none"><li>normally closed switch contacts</li><li>open on removal of front cover</li></ul>

**Note**

- Alarm cable should not be run alongside/parallel to mains wiring
- To comply with EU Directives the *Rf360* must be connected to a power source supplied from an isolating transformer

8.1 Pulse Count

The *Rf360* utilises a unique multi-mode pulse count technique. This analyses the size and speed of the target as well as digitally counting pulses. The design allows the greatest flexibility between fast catch performance and maximum false alarm immunity. Three pulse count settings are available (see Figure 1b):

Fast	<b>Maximum sensitivity</b> when fast detection performance is a priority for high security installations. One zone edge crossing will cause an alarm activation.
Normal	<b>(Factory Set).</b> Two zone edge crossings are required for an alarm activation.
Slow	<b>Maximum immunity</b> to false alarms. Three zone edge crossings are required for an alarm activation.

8.2 Latch Input Functions

The latch terminal (see Figure 1a) can perform several different functions depending on how it is connected:

**Latch Connected to Set Positive (SW+, Set+):** The LED will be disabled while the system is set. Any detectors triggered while the system is set will indicate this by permanently lighting the LED (upon unsetting the system). Detectors can be reset by taking the latch line high and then low again.

**Latch Connected to Alarm Positive (AL+, A+Ve):** The first detector activated while the system is set will indicate this with a slowly flashing LED (upon unsetting the system). Detectors which had activated subsequently will indicate this by permanently lighting the LED. Detectors can be reset by taking the latch line high and then low again.

The latch input is not suitable for use on entry/exit or walk through zones.

Check the detector operation by powering up the *Rf360* and ensure that between 9Voc and 16Voc is supplied to the detector (see Figure 1a).

Replace the front cover by hooking it on at the top and then clip it closed at the bottom. Allow three minutes for the *Rf360* to warm up and stabilise before walk testing. With the Walk Test LED enabled (factory-set, see Figure 1c), walk test the area. Detection is indicated by the Walk Test LED lighting up, allowing coverage to be checked. Allow five seconds between each test for the *Rf360* to stabilise. Walk test at least once a year.

**Remember**

- Always instruct the user not to obstruct the field of view
- Large objects near the *Rf360* will reduce coverage

There are several ways that the Walk Test LED can be disabled to prevent unauthorised persons from tracing the coverage pattern (see Figure 1c):

**LED Disable Jumper:**  
**Enable** Link upper two pins to enable the Walk Test LED  
**Disable** Link lower two pins to disable the Walk Test LED

**RLED Terminal:** may additionally be used to enable (0Voc) or disable (12Voc) the LED - connect to a suitable output on the alarm control panel.

The front cover may now be permanently secured using the short screw supplied.