Pyramid

360° Ceiling Mount PIR Detector

IR-360 / 360DO

GENERAL

IR-TEC's Pyramid is an innovative 360° ceiling mount passive infrared detector with outstanding performance and supreme reliability that meet demands of all kinds of professional installation. The Pyramid is manufactured under restrict quality control standard, backed by IR-TEC's 5 year warranty, we trust the Pyramid will deliver full satisfaction to you and your client.

IR-360 is the standard version of Pyramid with N.C/N.O selectable alarm output for general security signaling. The IR-360DO is an innovative configuration of Pyramid which provides both N.C/N.O selectable alarm output and a synchronous relay contact output with adjustable delay time for CCD camera or security lighting controls. With only one simple installation, IR-360DO offers two different applications.

SPECIFICATIONS

IR-360

Infrared sensor .... Omni-directional, dual element
Power supply .... 9 ~ 16 VDC (12 V typical)
Alarm output .... N.C/N.O, 28 VDC, 0.2A max.
Alarm period .... 3 ± 1 sec.
Alarm LED .... Red, can be disabled
Current drain .... 14 mA, 12 VDC (stand by)
Mounting height .... 2.4 ~ 4.2m
Pulse count .... 2 - 4 selectable
Warm up time .... Approx. 60 seconds (LED on)
Tamper switch .... N.C cover open activates
RFI immunity .... Ave. 25V/m (10~1000 MHz)
Temperature .... -20°C ~ 60°C (-4°F ~ 140°F)
Humidity .... 95% RH max.
Dimensions .... 100x100x46mm (4.0x4.0x1.8")

IR-360DO

Relay contact .... N.O 1 Amp resistive load max.
Delay time .... 5 sec. ~ 5 min. (adjustable)
Current drain .... 16 mA, 12 VDC (stand by)

IR-TEC

Installation Instructions

In order to continue improving its product, IR-TEC reserves the right to change specifications without prior notice.

DESCRIPTION

Mounting plate

Main unit

Cover

LED on/off selector — Alarm output selector — Pulse count selector

IR-360

| LED SW. | ALARM O/P | PULSE COUNT | |

LED on/off selector — Alarm output selector
Delay time adjuster — Pulse count selector

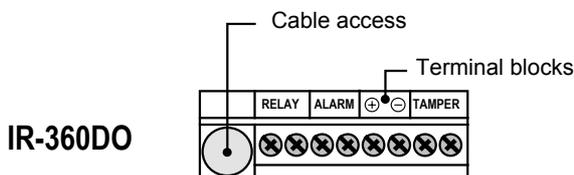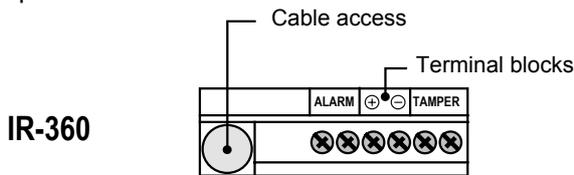IR-360DO

| DELAY TIME | LED SW. | ALARM O/P | PULSE COUNT |
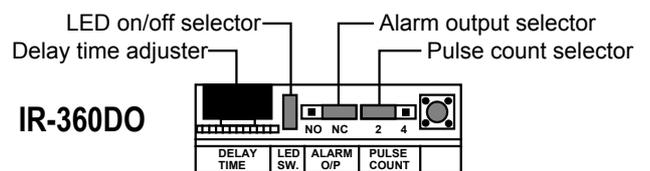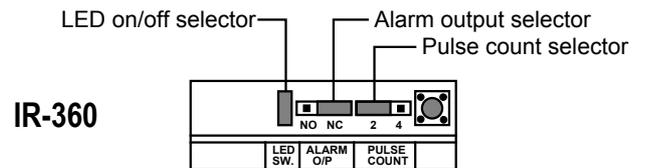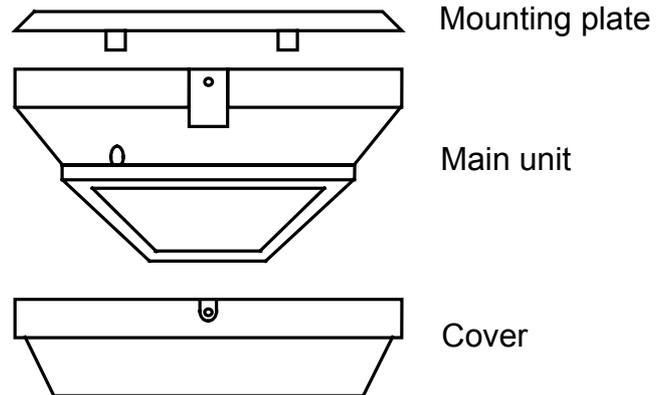
INSTALLATION HINTS

1. The Pyramid should be mounted on a firm section of ceiling and located for optimum coverage..

2. Do not install where the Pyramid is exposed to direct or mirror-reflected sunlight.

3. Make sure the detection area does not have obstruction which may block the detection zones.

4. Avoid running the alarm cable close to heavy duty electrical mains cable.

5. Avoid locating the Pyramid in areas which contain objects likely to produce a rapid change in temperature, such as heater, radiator, air conditioner, open flame…etc.

INSTALLATION & WIRING

1. Loosen the cover locking screw, separate the cover and main unit. Release the fixing screws (2) to disassemble the main unit and mounting plate.

2. Fixing the mounting plate with screws (2) at selected location on the ceiling.

3. Strip the outer sleeve of alarm cable. (6-core for IR-360, 8-core for IR-360DO). Run the coded wires through the cable access and connect to the corresponding terminal blocks according to the following instructions.

4. Replace the cover and fasten the locking screws. Apply DC power supply, then walk test can be proceeded.

IR-360

IR-360DO

TAMPER : 24 hours N.C loop of control panel

$\oplus$ $\ominus$: 9 ~ 16 VDC power supply

ALARM : Zone loop of control panel (N.C / N.O)

RELAY : Max. 2 Amp resistive load (Only IR-360DO)

PULSE COUNT

The Pyramid features intelligent pulse count which can effectively prevent false alarms cause by environmental interference. The IPC of Pyramid can be set to count 2 or 4 pulses by placing the jumper head on the corresponding pins. Alarm signal will only be sent if the selected pulses are generated within delay period (about 20 seconds). The state-of-the-art IPC circuitry analyzes the difference of pulse width, so when a true motion is detected, the subsequent pulse signal will tide over the pulse setting and report an alarm immediately. The conventional pulse count detector could possibly miss an intrusion due to an inevitable time delay for verifying the number of pulse.

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WALK TEST

Once the detector has been set up, walk test the entire area where coverage is desire. Should the coverage be incomplete, re-adjust or relocate the detector to obtain full coverage. Once coverage is as required, the alarm LED may be disabled by pull off LED jumper head.

☞ *Regular walk testing must be carried out, as part of your maintenance visits or at least once a year.)*

DELAY TIME

The synchronous relay contact of IR-360DO can be applied to control CCD camera, security lighting or other security equipment which are required to be activated when intrusion is detected. Delay time can be adjusted from approximate 5 seconds to minutes by rotating the thumb wheel of the delay time adjuster in clockwise direction.
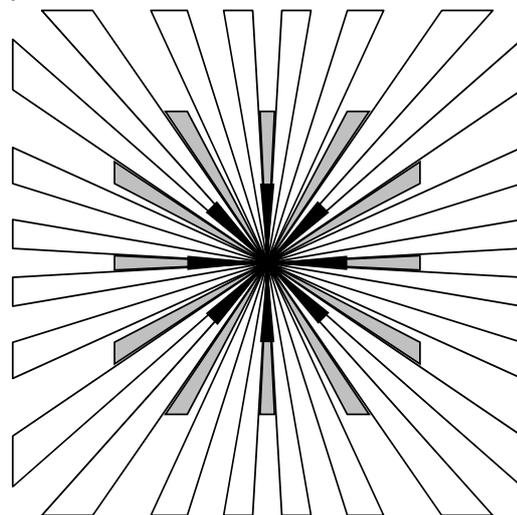
DETECTION PATTERN

Model: **IR-360** / **IR-360DO**

Side View
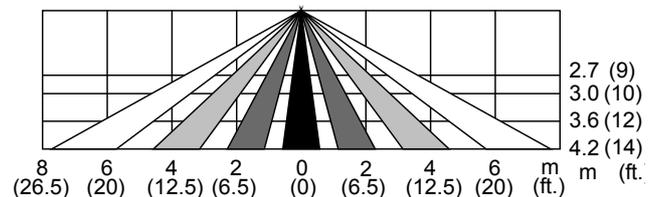
Top View

Max. Detection Range (at 25°C)

Mounting m	2.7	3.0	3.3	3.6

Height (ft.)	(9)	(10)	(11)	(12)
Detection Range	6 x 6 (20 x 20)	8 x 8 (26 x 26)	10 x 10 (33 x 33)	11 x 11 (36 x 36)