

CTC-852 IR Camera

The IR Camera is designed to capturing images within an assigned area when an alarm is triggered. The IR camera will take 3 photos in an alarm event. It takes the first photo immediately after an alarm is triggered, then 2nd and 3rd photos in 2 and 4 seconds separately. Besides, equipped with IR illuminator, the camera can capture images even in the night time, ensuring 24-hour surveillance.

The IR Camera consists of a two-part design made up of a cover and a base. The cover contains all the electronics and optics and the base provides a means of fixing. The base has knockouts to allow mounting on either a flat surface or in a corner situation with fixing screws and plugs provided.

● Identifying the Parts

- 1 **IR Camera Lens**
- 2 **IR illuminator**
The illuminator delivers sufficient light for image capture in the low lux situation.

- 3 **IR Sensor/ Red LED**
 - The sensor is intended to detect moving objects.
 - In Test Mode, the LED Indicator and Red LED will light up for one second whenever a movement is detected.

- 4 **LED Indicator/ Learn Button**
 - The LED Indicator flashes blue light in normal speed to indicate the learning status.
 - The LED Indicator flashes blue light quickly to indicate that the IR camera is transmitting pictures to the Control Panel.
 - The LED Indicator flashes blue light slowly to indicate that the IR camera disconnects to the Control Panel.
 - In Test Mode, the LED Indicator and Red LED will light up for one second whenever a movement is detected.

- 5 **Tilt Switch**
It is designed to protect against unauthorized IR camera removal, sabotage, or unsteady installation.

- 6 **Jumper Switch (JP2)**
It is designed to protect again unauthorized IR camera removal, sabotage, or unsteady installation.



Jumper On

The jumper link is inserted connecting the two pins

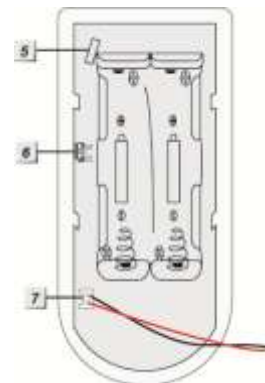
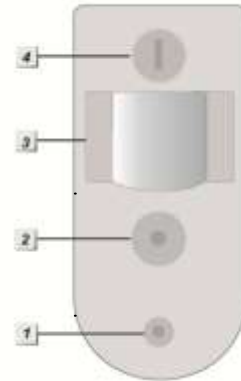


Jumper Off

if the jumper link is removed or "parked" on one pin.

- Jumper On: the Red LED is enabled.
- Jumper Off: the Red LED is disabled.

- 7 **Tamper Switch**
Provision for a tamper switch that will be activated when the cover is detached from the base prevents unauthorized access and removal from the mounting surface.



● Battery

The IR camera uses two 3.6V "AA" alkaline batteries as its power source. The IR camera will have a typical battery life of over 2 years at an average of 50 activations a day.

Low battery detection operates where the IR Camera has enough reserve energy to typically operate for 1 month before complete exhaustion. The low battery signal will be sent to the Control Panel along with regular signal transmissions for the Control Panel to display the status accordingly.

<NOTE>

- ☞ When changing batteries, after removing the old batteries, press the Learn Button twice to fully discharge before inserting new batteries.

● Tilt Switches

When the IR camera's tilt angle is up to certain degrees (45° to left/ 135°to right, or 90° forward/backward), a Tamper Alarm will be triggered.

● **Supervisory Signal**

After installation, the IR camera will automatically transmit Supervisory signals periodically to the Control Panel at random intervals of 30 to 50 minutes. If the Control Panel has not received the signal from the IR camera for the preset period of time, the Control Panel will indicate on its display that the particular IR camera is experiencing an out-of-signal problem.

● **Test Mode**

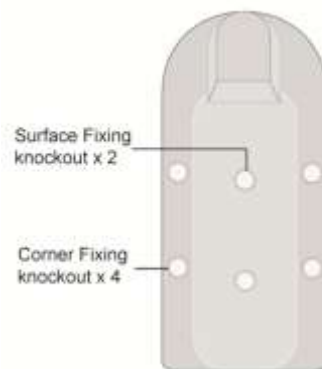
The IR camera can be put into Test mode for ten minutes by pressing and hold the Learn button over 10 seconds. In Test mode, sleep timer is disabled and LED Indicator & Red LED will light up for one second whenever a movement is detected. The IR camera will automatically exit Test Mode after ten minutes, and return to normal mode.

● **Getting Started**

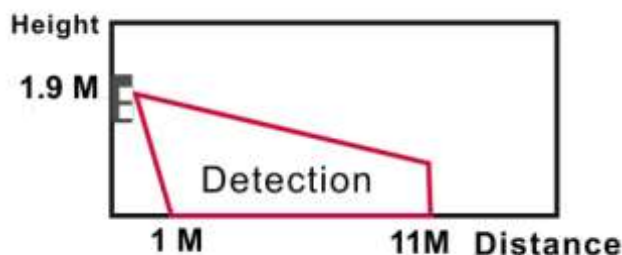
- Remove the fixing screw and cover assembly.
- Insert the two "AA" batteries into the battery holder taking care to connect the polarity correctly.
- Put the Control Panel in Learn mode and learn-in the IR camera by pressing the Learn/Test button in for 10 seconds, then press the test button again for 3 seconds. Please refer to section "Add IR Camera" in the operation manual of the Control Panel.
- After the IR camera is learnt-in, put the Control Panel into "Walk Test" mode, hold the IR camera in the desired location, and press the Learn button to confirm this location is within signal range of the Control Panel.
- After learning in the IR camera, place the IR camera into a desired location.

● **Mounting Method**

- The IR camera designed to be mounted on either a flat surface or in a corner situation with fixing screws and plugs provided.
- The base has knockouts, 2 in the center and four on the sides. Two knockouts are for surface fixing and four knockouts are for corner fixing.
- According to your desired mounting location, please use appropriate bracket for surface mount or corner mount.



● **Detection Coverage**



** The diagram is drawn based on an intruder height of 170 cm at room temperature 25°C.

● **Installation Recommendations**

- **It is recommended to install the IR Camera in the following locations.**
 - In a position such that an intruder would normally move across the IR Camera's field of view.
 - Around 1.9 meters above ground for best performance.
 - The detection range is from 1 m to 11 m.
 - In a corner for the widest view.
 - A surface or corner where animals are inaccessible.
 - Where its field of view will not be obstructed e.g. by curtains, ornaments etc.
- **Limitations**
 - Do not install the IR camera completely exposed to direct sunlight.
 - Avoid installing the IR camera in areas where devices may cause rapid change of temperature in the detection area, i.e. air conditioner, heaters, etc.
 - Avoid large obstacles in the detection area.
 - Not pointing directly at sources of heat e.g. fires or boilers, and not above radiators.
 - Avoid moving objects in the detection area i.e. curtain, wall hanging etc.