





## Important safety instructions

Type numbers: NEC-070V04-11 | NEN-070V04-11 | NEC-070V04-21  
NEN-070V04-21 | INEC-070V05-11 | NEN-070V05-11 | NEC-070V05-21  
NEN-070V05-21 | INEC-070V09-11 | NEN-070V09-11 | NEC-070V09-21  
NEN-070V04-21

Read, follow, and retain all of the following safety instructions. Heed all warnings on the unit and in the operating instructions.

1. **Cleaning** - Unpower the unit before cleaning. Follow any instructions provided with the unit. Generally, using a dry cloth for cleaning is sufficient, but a moist fluff-free cloth or leather shammy may also be used. Do not use liquid cleaners or aerosol cleaners.
2. **Heat Sources** - Do not install the unit near any heat sources such as radiators, heaters, stoves, or other equipment (including amplifiers) that produce heat.
3. **Object and liquid entry** - Never push objects of any kind into this unit through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electrical shock. Never spill liquid of any kind on the unit. Do not place objects filled with liquids, such as vases or cups, on the unit.
4. **Controls adjustment** - Adjust only those controls specified in the operating instructions. Improper adjustment of other controls may cause damage to the unit. Use of controls or adjustments, or performance of procedures other than those specified, may result in hazardous radiation exposure.
5. **Overloading** - Do not overload outlets and extension cords. This can cause fire or electrical shock.
6. **Power sources** - Operate the unit only from the type of power source indicated on the label. Before proceeding, be sure to disconnect the power from the cable to be installed into the unit.
  - For external power supplied units, use only the recommended or approved power supplies.
  - For limited power source units, this power source must comply with *EN60950*. Substitutions may damage the unit or cause fire or shock.
  - For 24 VAC units, voltage applied to the unit's power input should not exceed 24 VAC. User-supplied wiring must comply with local electrical codes (Class 2 power levels). Do not ground the supply at the terminals or at the unit's power supply terminals.
  - If unsure of the type of power supply to use, contact your dealer or local power company.
7. **Damage requiring service** - Unplug the unit from the main AC power source and refer servicing to qualified service personnel when any damage to the equipment has occurred, such as:
  - the power supply cord or plug is damaged;

- liquid has been spilled in or on the equipment;
  - an object has fallen into the unit;
  - unit has been dropped or the unit cabinet is damaged;
  - unit exhibits a distinct change in performance;
  - unit does not operate normally when the user correctly follows the operating instructions.
8. Safety check - Safety checks should be performed upon completion of service or repairs to the unit to ensure proper operating condition.
  9. Installation - Install in accordance with the manufacturer's instructions and in accordance with applicable local codes.
  10. Attachments, changes, or modifications - Only use attachments/accessories specified by the manufacturer. Any change or modification of the equipment, not expressly approved by Bosch, could void the warranty or, in the case of an authorization agreement, authority to operate the equipment.



**DANGER!** High risk: This symbol indicates an imminently hazardous situation such as " Dangerous Voltage " inside the product. If not avoided, this will result in an electrical shock, serious bodily injury, or death.



**CAUTION!** Alerts the user to the risk of damage to the unit



**WARNING!** Medium risk: Indicates a potentially hazardous situation. If not avoided, this may result in minor or moderate injury. Alerts the user to important instructions accompanying the unit.



**NOTE!** This symbol indicates information or a company policy that relates directly or indirectly to the safety of personnel or protection of property.

The full version Installation Manual is available on the enclosed CD-ROM and can be viewed and printed out with Acrobat Reader, which is also on the enclosed CD-ROM. This user guide is the intellectual property of BOSCH Security Systems and is protected by copyright

### CAUTION!



- **Camera Grounding** - For mounting the camera in potentially damp environments, ensure to ground the system using the ground connection of the power supply connector (see section: Connecting external power supply).
- **U.S.A. models only** - *Section 810 of the National Electrical Code, ANSI/NFPA No. 70*, provides information regarding proper grounding of the mount and supporting structure, grounding of the coax to a discharge unit, size of grounding conductors, location of discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.
- **Permanently connected equipment** - Incorporate a readily accessible disconnect device in the building installation wiring.
- **Power lines** - Do not locate the camera near overhead power lines, power circuits, or electrical lights, nor where it may contact such power lines, circuits, or lights.

## 1.1 Unpacking

### **Parts list** (items supplied with unit)

- EX7IP Infrared Imager™ Assembly
- Installation Instructions booklet
- Allen Key
- Software CD

### **Items required for installation**

(not supplied with units)

- Mounting hardware
- Mounting tools
- PC/Laptop with RJ45 Ethernet port
- Power supply

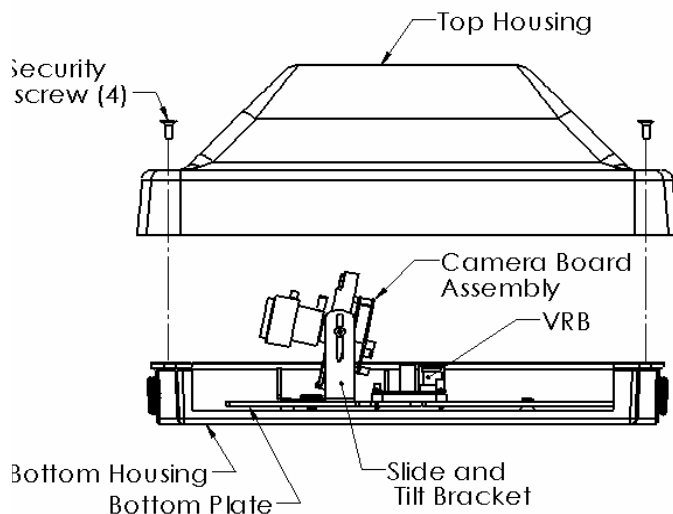
## 1.2 Initial Preparations

- 1.) Determine the operating voltage at the installation site. The camera's Voltage Regulator Board accepts 12-24VAC / VDC input without change to internal connections.
- 2.) Determine the optimum mounting location for the camera. See *Section 2, Mounting the unit.*
- 3.) All cameras have been tested and pre-focused with telephoto setting as factory default prior to shipment. If any adjustment needed, it is advisable to check the camera's operation before installation
- 4.) Install IP Camera Software on PC.

## 2. Mounting the unit

### 2.1 Camera housing- Internal Modules location and access.

- 1.) Remove the four security screws holding the top housing to the chassis assembly. Use the supplied Allen key.
- 2.) Carefully separate the housing from the chassis assembly, ensuring the wires are not displaced and the camera lens is not damaged.



### 2.2 Camera: Mounting and setup:

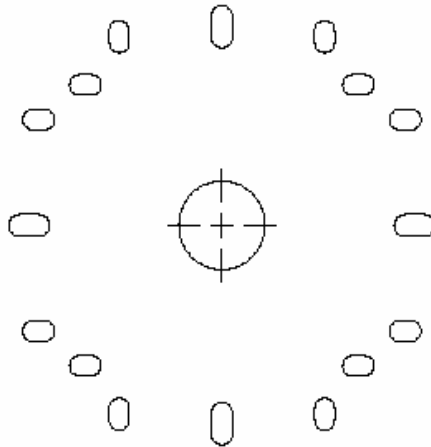
Select a suitable location that protects the camera from accidental damage, tampering and environmental conditions exceeding the specifications of the camera to be mounted.



**CAUTION!** Ensure the selected location is protected from falling objects, accidental contact with moving objects and unintentional interference from personnel. Follow all applicable building codes.

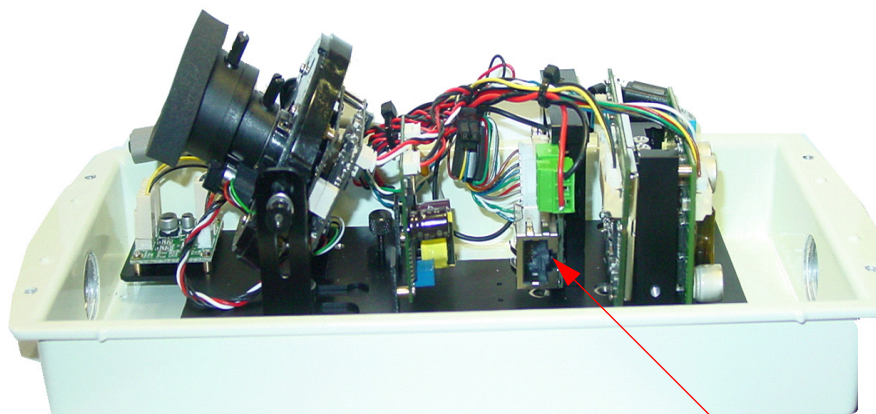
**These mounting guidelines should be followed:**

- 1.) Locate the bracket such that it cannot be easily interfered with, either intentionally or accidentally.
- 2.) Select a mounting surface capable of supporting the combined weight of the camera and mounting hardware under all expected conditions of vibration and temperature. Installations on drywall must use #8 screws and #8 drywall nylon plugs or a superior connection.
  - 2.1) The mounting holes are configured for a single-gang electrical box or a ceiling electrical box. See the figure below for the mounting template.

**2.2) Ethernet connection**

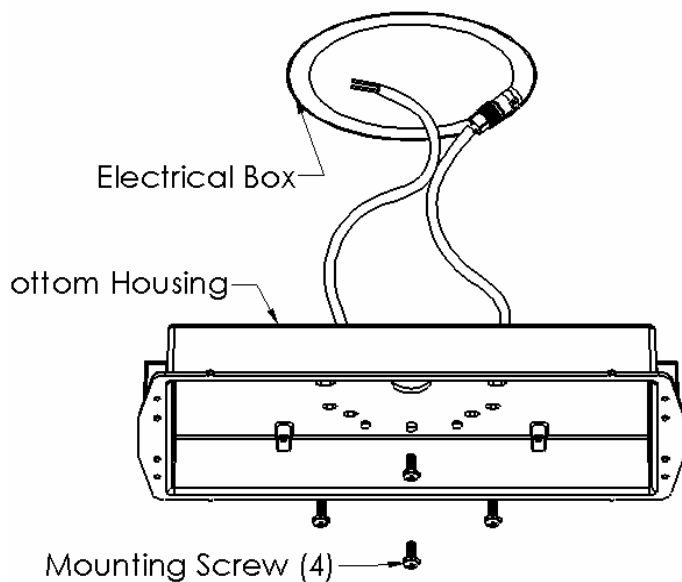
- 2.2.1) Connect the RJ45 cable (not supplied) to its mating connector. See figure below on page 7.
- 2.2.2) Feed the camera's power cable and the RJ45 cable through the foam gasket at the bottom of the camera chassis.
- 2.2.3) Connect the power cable to the power source and the RJ45 cable to the PC/laptop computer.
- 2.2.4) Check for proper operation.
- 2.2.5.) Mount the camera housing to the electrical box and ceiling as shown below.





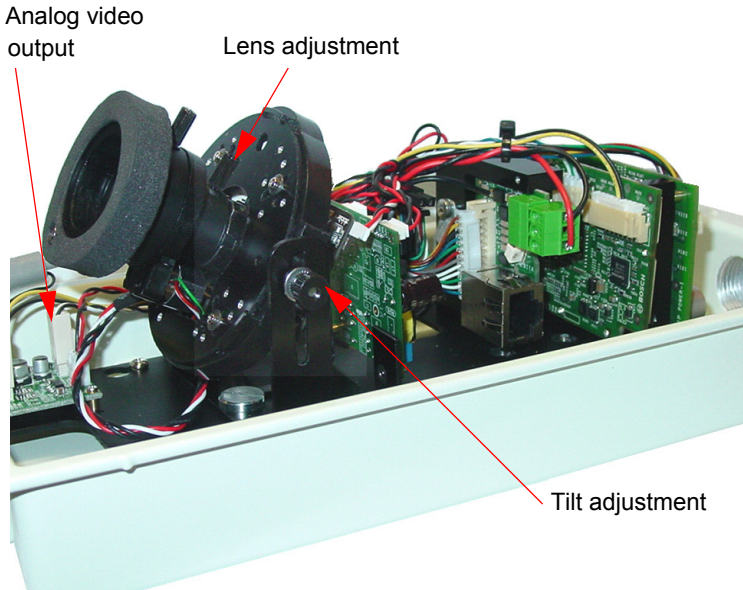
RJ45 mating connector

### 2.3) Camera chassis mounting



## 2.4) Camera lens adjustments

For optimum picture quality, the lens should be as close as possible to the inside face of the viewing window, without touching. For unique designation wall mount, rotate the camera to desired location. Power should be applied when performing the following adjustments.



3.) Secure all cabling.

### **Camera Setup:**

To determine if the camera is receiving a picture:

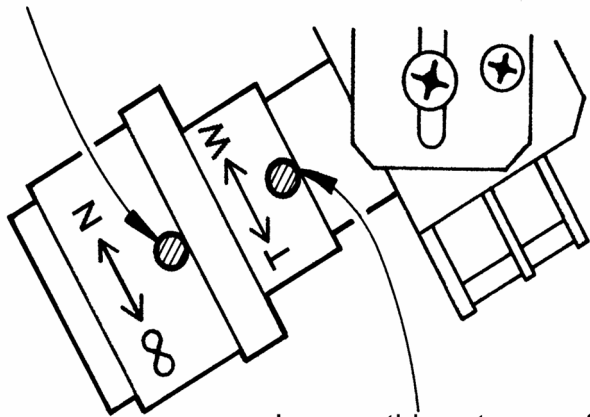
- 1.) Make sure the supplied software is installed in your PC/laptop computer (For Camera Configuration and Software Viewing Setup, refer to full version Installation Manual available on the enclosed CD-ROM -Section 4).
- 2.) Connect the camera to the PC/laptop and power up the camera. Follow the prompts. See section 2 of full version Installation Manual available on the enclosed CD-ROM for more detail.
- 3.) Launch Configuration Manager or web-browser.

## 2.3 Vari Focal and “Auto-Iris” Control Adjustments

For optimum picture quality, the camera lens should be as close as possible to the inside face of the viewing window, without touching. For focus adjustment follow the steps below.

- 1.) Loosen the lens set screws for focus/zoom adjustments.
- 2.) The set screw marked N  $\longleftrightarrow$   $\infty$  is used for image focus.
- 3.) The set screw marked T  $\longleftrightarrow$  W is used for telephoto or wide-angle settings.
- 4.) Re-tighten the set screws after focus adjustments have been completed.
- 5.) Locate the “Auto-Iris” adjustment controls.

Loosen this set screw for  
Focus Adjustment



Loosen this set screw for  
Telephoto or Wide Angle.



**Note:** Use Infra-Red Pass filter to cover the lens during focusing to simulate low light conditions on scene for correct 24-hour focusing. For camera with manual iris lens, the camera should be focused with the lens iris fully opened to simulate the worst possible depth of field. Using a Infra-Red Pass filter will ensure the iris is fully open for correct setup and adjustment.

Note that statement above is applicable only for Day/Night or IR version cameras.



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