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# ISEE-QC2CAMKIT Two-Camera Kit ISEE-QC1CAM Single Camera Kit Installation Instructions

WI1679 2/08

## OVERVIEW

The NAPCO ISEE-QC2CAMKIT is a quick-connect installation system that allows a simplified, standardized camera installation using CAT5 cable and is intended for use with the NAPCO VIP-Gateway. This installation kit includes two (2) high quality IR cameras, passive video baluns with power leads, and a rugged PVC camera mounting / wiring enclosure system. This kit also includes a power distribution system that can provide power to a maximum of four (4) cameras from one economical plug-in 12VDC, 2 Amp power supply. These instructions also apply to the ISEE-QC1CAM for individual cameras to be added to an existing installation.

## SYSTEM COMPONENTS

**ISEE-CAMIR24** IR Bullet style camera, 24 IR LEDs, 50' IR range, 1/4" Color CCD image sensor, 3.6mm / f2.0 Standard Lens, 12VDC Operation.



**ISEE-VBALUN-P1** Passive Video Balun allows video and power transmission over CAT5 cable, 6 push pin terminals. Set of (1) male and (1) female with 2.1mm CCTV power lead connectors



**ISEE-BNC P-CBL** Patch Cable, BNC Male to Female, RG59, 120mm (for connecting ISEE-VBALUN-P1 Video Balun to VIP-Gateway)



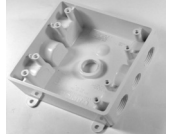
**ISEE -TRF12VDC2A** Plug in style power transformer/adaptor, provides regulated 12VDC @ 2,000mA output with 2.1mm male connector.



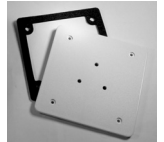
**ISEE-PWR1-4** Power Splitter, CCTV, 1 Female to 4 Male 2.1mm. Provides power to up to (4) cameras when using ISEE - TRF12VDC2A power supply



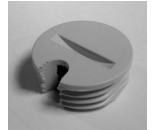
PVC double gang style weatherproof enclosure, white, provides a watertight enclosure for wiring and allows the camera to be easily and quickly mounted outdoors.



PVC double gang weatherproof cover with gasket, prepped for mounting of camera base, white.



PVC plug for sealing of wire entry hole, white, is slotted to allow the camera cable to exit the enclosure.



## INSTALLATION

The PVC camera mounting / wiring enclosure system allows the camera to be easily and quickly installed on the side of a building or under an eave. Before wiring the enclosure, attach the camera mounting bracket base to the enclosure cover using the three supplied mounting nuts and bolts.

1. Pull the CAT5 wire through the wall or eave to the location where the camera is to be installed. Punch through the knock-out on the bottom of the enclosure and one 1/2 inch threaded knock-out on the side. Push the camera signal and power connectors (one at a time) through the 1/2 inch threaded hole on the side of the enclosure.

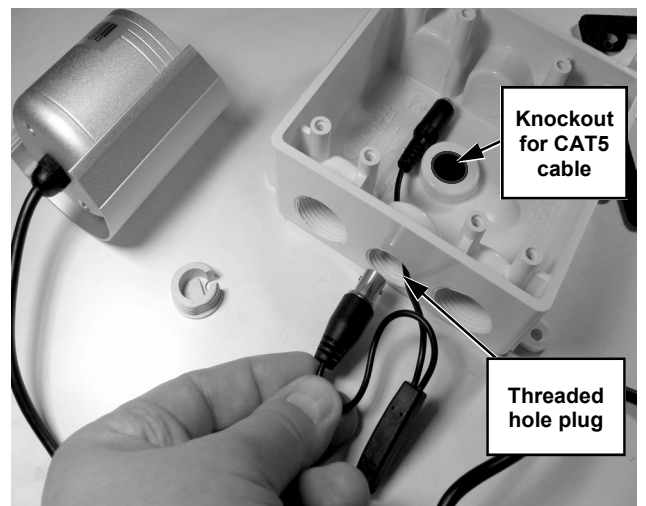


Fig. 1: Route the camera wires into enclosure

2. Pull an appropriate length of camera cable through the side entry hole and secure the opening with the PVC mounting plug. Place the notch on the plug over the cable and screw into place.

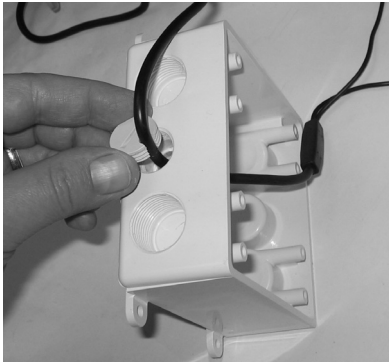


Fig. 2: Install wire plug into enclosure

3. Pull the CAT5 cable through the wire entry hole on the bottom of the enclosure.

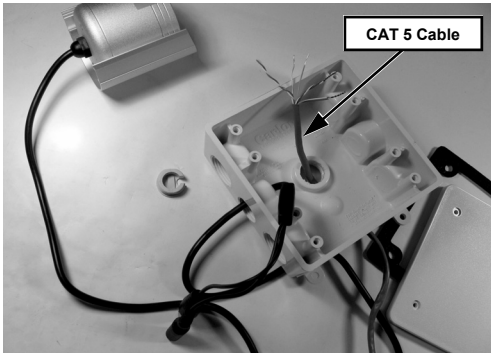


Fig. 3: Route CAT 5 Cable into base

4. Connect the camera power lead to the video balun with the male power jack and attach the camera signal lead to the video balun.

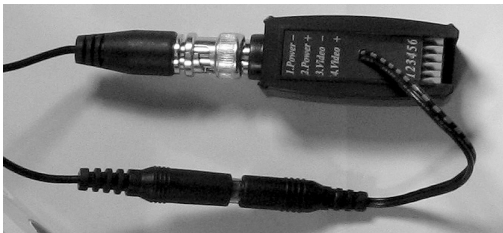


Fig. 4: Secure cover to enclosure

5. Connect the ISEE-VBALUN-P1 Video Balun to CAT5. Select one pair of CAT5 conductors to be used for video signal and the remaining 2 or 3 pair to be used to provide power to the camera. Refer to the following table to determine the number of CAT5 power conductors required, which is dependent on the length of the CAT5 cable run.

Length of Wire Run	No. of CAT5 Pair Required
125 Feet	3 Pair
100 Feet	3 Pair
75 Feet	2 Pair
50 Feet	2 Pair

6. Connect the CAT5 cable to the ISEE-VBALUN-P1 Video Balun by pushing in the pin-push terminals and sliding the stripped conductors into the terminal opening.



Fig. 5: Connect CAT5 conductors to video balun

7. After all connections are secure, tie up excess wires and place wire and balun inside enclosure as shown in Fig. 6.

**Note:** To ensure high-quality electrical connections in outdoor installations, a packet of dielectric grease is included in the kit. Place a small amount on the BNC center conductor as well as each stripped CAT5 conductor before making the connections to the balun.

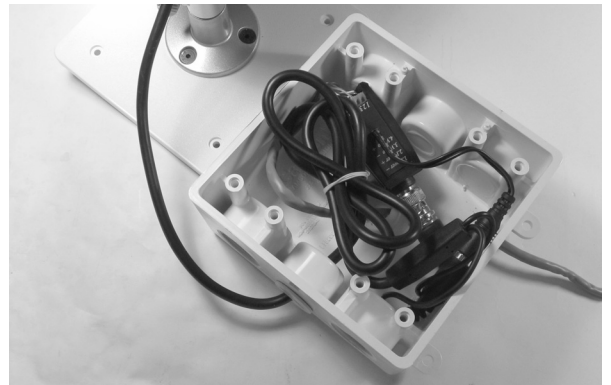


Fig. 6: Place cable and balun into enclosure

8. Affix gasket to cover and secure cover to enclosure with four (4) screws (supplied) as shown in Fig. 7.

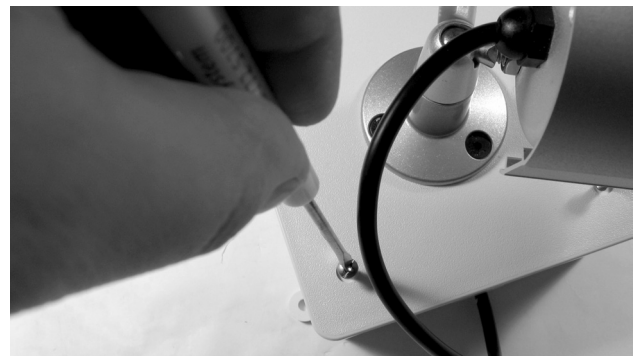


Fig. 7: Secure cover to enclosure

9. The camera enclosure can be mounted on a wall (see Fig. 8) or a ceiling (see Fig. 9). If mounting on a wall,

be sure to mount the enclosure with the *threaded hole plug positioned down* to create a drainage hole should any moisture enter the enclosure. In addition, allow a short length of the camera cable to exit the enclosure creating a short loop as shown in Fig. 8.

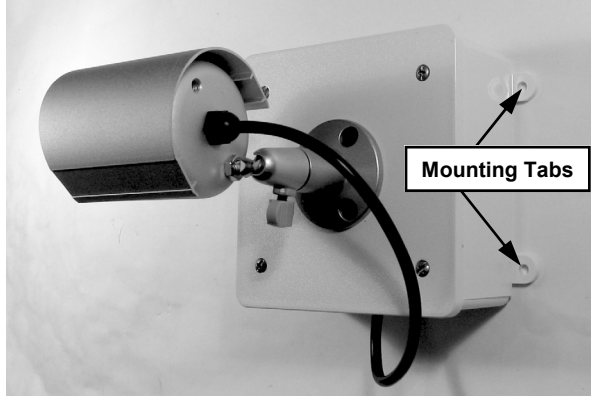


Fig. 8: Create loop when wall mounting

The camera may also be mounted under an eave or on a ceiling as shown in figure 9.



Fig. 9: Eave or Ceiling mounting

## 10. Power Supply Connections

The ISEE-QC2CAMKIT includes the ISEE-TRF12 VDC2A power supply (shown below), which provides a regulated 12VDC at 2 Amps. This power may be distributed to the cameras using the enclosed ISEE-PWR1-4 Power Splitter.



Fig. 10: ISEE-TRF12VDC2A Transformer / Adapter

Simply connect the splitter to the power supply power lead

and then connect each of the splitter power leads to the female power plug of the video balun (see Fig. 12).

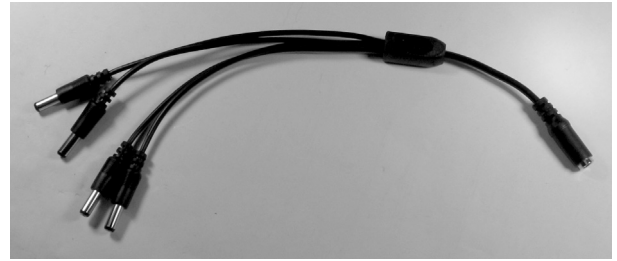


Fig. 11: ISEE-PWR1-4 Power Splitter

## 11. Video Balun / Gateway Connections

After connecting the video balun to the power supply splitter cable and making the required CAT5 power and signal connections, the balun may be connected to the gateway using the supplied short BNC patch cable.

When all power and signal connections are completed and the baluns are connected to the gateway (see Fig. 13), the power supply may be plugged into a wall socket.

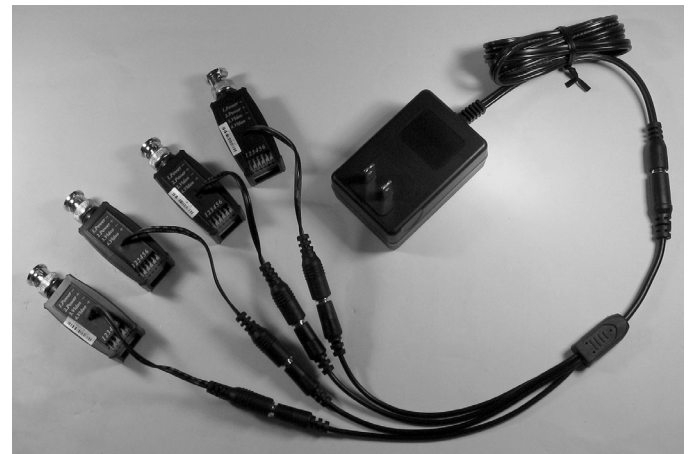


Fig. 12: Video baluns connected to the power splitter



Fig. 13: Video balun connected to gateway using the BNC patch cable.

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