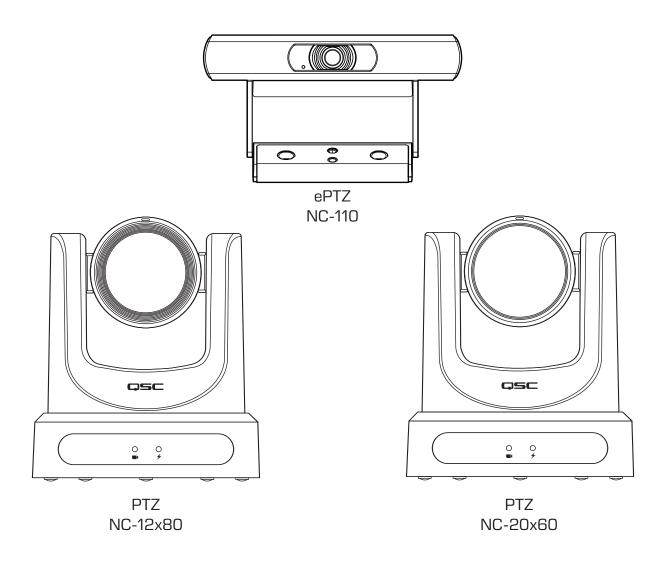




Hardware User Manual

Q-SYS NC Series Cameras





EXPLANATION OF TERMS AND SYMBOLS

The term "WARNING!" indicates instructions regarding personal safety. If the instructions are not followed, the result may be bodily injury or death.

The term "CAUTION!" indicates instructions regarding possible damage to physical equipment. If these instructions are not followed, it may result in damage to the equipment that may not be covered under the warranty.

The term "IMPORTANT!" indicates instructions or information that are vital to the successful completion of the procedure.

The term "NOTE" is used to indicate additional useful information.



The intent of the lightning flash with an arrowhead symbol within an equilateral triangle is to alert the user to the presence of un-insulated "dangerous" voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to humans.



The intent of the exclamation point within an equilateral triangle is to alert the user to the presence of important safety, operating, and maintenance instructions in this manual.



IMPORTANT SAFETY INSTRUCTIONS



- Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Install in accordance with the manufacturer's instructions.
- 6. Refer all servicing to qualified service personnel.
- 7. Adhere to all applicable local codes.

Maintenance and Repairs



WARNING!: Advanced technology, e.g., the use of modern materials and powerful electronics, requires specially adapted maintenance and repair methods. To avoid the danger of subsequent damage to the apparatus, injuries to persons, and/or the creation of additional safety hazards, all maintenance or repair work on the apparatus should be performed only by a QSC authorized service station or an authorized QSC International Distributor. QSC is not responsible for any injury, harm, or related damages arising from any failure of the customer, owner, or user of the apparatus to facilitate those repairs.

FCC Statement



Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Expected Product Life Cycle: 10 years, **Storage Temperature range:** --20°C to +60°C, **Relative Humidity:** range of 5 — 85% RH non-condensing.

Warranty

For a copy of the QSC Limited Warranty, visit the QSC, LLC., website at www.qsc.com.

RoHS Statement

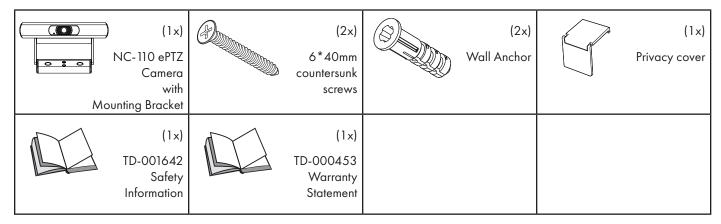
The QSC Q-SYS NC Series: NC-110, NC-12x80, and NC-20x60 are in compliance with European Directive 2015/863/EU-Restriction of Hazardous Substances (RoHS2).

What's in the Box

NC-12x80, NC-20x60 PTZ Cameras

[]	(1x) NC-12x80 or NC-20x60 PTZ Camera	(1x) Wall Bracket	(F)	(5x) M3 x 6mm screws	(1x) 1/4" -20 screw
	(1x) TD-001642 Safety Information	(1x) TD-000453 Warranty Statement			

NC-110 ePTZ Camera

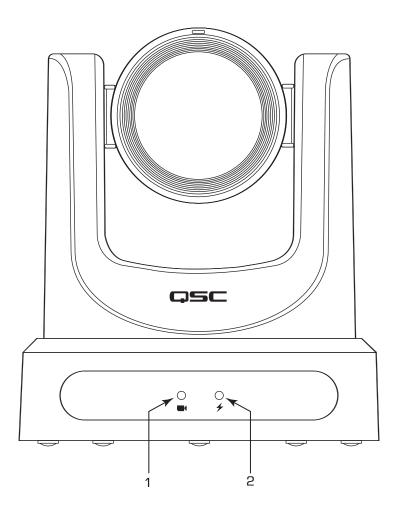


Introduction

The QSC Q-SYS™ NC Series comprises three camera models: NC-12x80, NC-20x60, and NC-110. These cameras send IP streams across a Q-LAN network to certain Q-SYS Core processors and peripherals, which bridge this IP signal to a USB signal for host computers to use in software applications.

Connections and Controls (NC-12x80 and NC-20x60 PTZ)

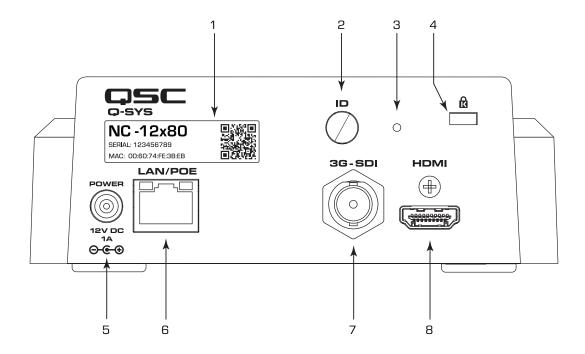
Front Panel



- 1. Status LED (Green)
 - Off indicates the camera is in standby mode; network streams are off.
 - On indicates the camera is streaming video over the network.
 - Blinking indicates the ID mode is on.
- 2. Power LED (Blue)
 - On indicates the camera has power applied.
 - Off indicates the camera has no power applied.

Connections and Controls (NC-12x80 and NC-20x60 PTZ) (continued)

Rear Panel



1. Product Label

- Identifies product model: NC-12x80 or NC-20x60
- Identifies the product serial number
- Identifies the product MAC address
- 2. ID Button: Press to identify this product in Q-SYS Designer Software and Q-SYS Configurator. The green STATUS LED on the front panel blinks when in ID mode. Press again to turn off.
- 3. Factory Reset pin-hole: Use a paperclip or similarly sized object to insert. Press and hold the reset button for 5 seconds. This resets all parameters to the factory defaults.
- 4. Kensington™ Lock Slot: for use with a security cable (not supplied).
- 5. DC 12 V: Connect an external power supply (not included). Supply must be rated at 12VDC 1A, EIAJ-04, center pin positive, outside barrel negative. Use only a class 2/LPS power supply.
- 6. LAN/PoE: RJ-45 connector for Q-SYS Gigabit Ethernet and Power over Ethernet. Cat5e cabling or better required.
- 7. 3G-SDI: 3G-SDI output via various video formats. Video formats can be changed via Q-SYS Designer Software or a Q-SYS User Control Interface (UCI). Maximum video format is 1080p60.
- 8. HDMI: HDMI® 1.4b output via various video formats. Video formats can be changed via Q-SYS Designer Software or a Q-SYS UCI. Maximum video format is 4K30. Note: NC Series PTZ Cameras support the usage of either HDMI or SDI, but not both simultaneously.

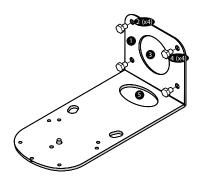
Installation — NC-12x80 & NC-20x60 PTZ

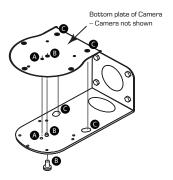
Install the Wall Mount Bracket

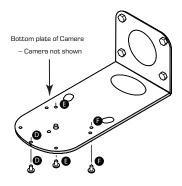
- Select a location on the wall or other vertical surface where the camera is to be mounted. Make sure the surface is strong enough to hold the weight of the camera and bracket.
- 2. Use the short side (1) of the bracket as a template to mark the location of the four mounting holes (2) onto the wall.
- 3. If the camera cables are installed inside the wall, run the cables through the large hole (3) in the short side of the bracket.
- 4. Using appropriate screws (4), as necessary, attach the bracket to the wall. Tighten the attaching hardware. (Screws not supplied.)

Mount the Camera on the Wall Bracket

- Align hole A on the bottom of the camera with the alignment pin A on the
 wall bracket. Place the camera onto the bracket so the alignment pin is
 inserted into the alignment hole on the camera and the rubber feet (C) on the
 bottom of the camera are inserted into the two slots (C).
- 2. Install the larger screw (B) up through the wall bracket into the threaded hole on the bottom of the camera. Use a Phillips screwdriver to loosely tighten the screw.
- 3. Install three smaller screws D, E, and F up through the wall bracket into the bottom of the camera. Tighten the screws using a Phillips screwdriver.
- 4. Tighten the larger screw installed earlier.
- 5. If the camera cables are not installed in the wall, run the cables up through the oval hole (5) in the longer part of the bracket.
- 6. Attach the cables to the appropriate connectors on the back of the camera per installation requirements.
- Secure the cables to the bracket so that there is no strain placed on the connectors.





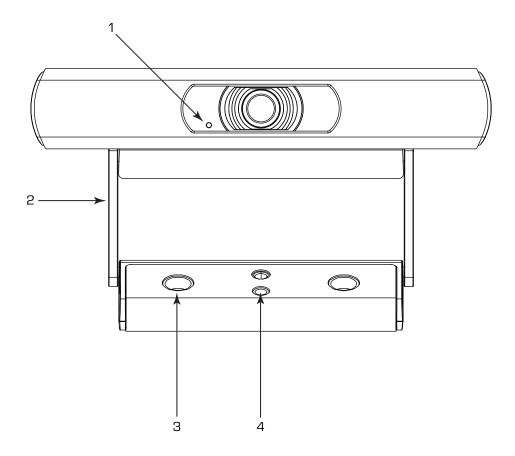


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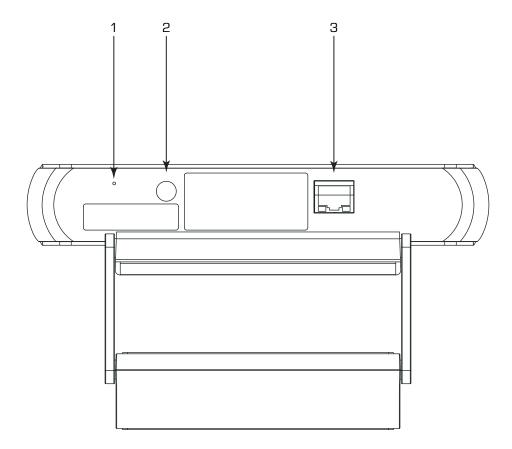
Connections and Controls (NC-110 ePTZ)

Front Panel



- 1. LED
 - Blinking Green: ID Mode
 - Solid Blue: Power On; Not Streaming
 - Solid Green: Streaming
 - Off: Camera is in Privacy Mode
- 2. Included Camera Mount: This product can be configured for monitor-mounting or surface-mounting.
- 3. Surface Mounting Screw Holes
- 4. Universal Mounting Adapter: This can be used when connecting the NC-110 to a different mount.

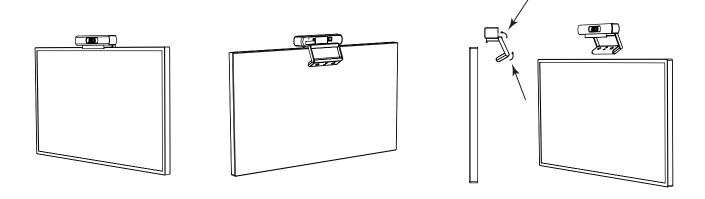
Rear Panel



- 1. Factory Reset Pinhole: Use a paperclip or similarly sized object to insert. Press and hold the reset button for 5 seconds. This resets all parameters to the factory defaults.
- 2. ID Button: Press to identify this product in Q-SYS Designer and Configurator. The STATUS LED on the front panel blinks green when in ID mode. Press again to turn off.
- 3. LAN/PoE: RJ-45 connector for Q-SYS Gigabit Ethernet and Power over Ethernet. Cat5e cabling or better required.

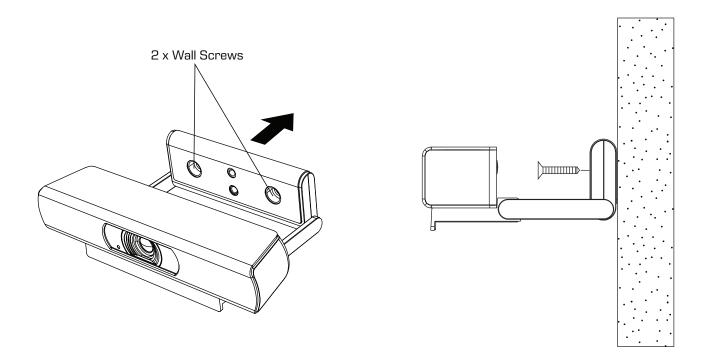
Installation (NC-110 ePTZ)

Mounting Above a Monitor

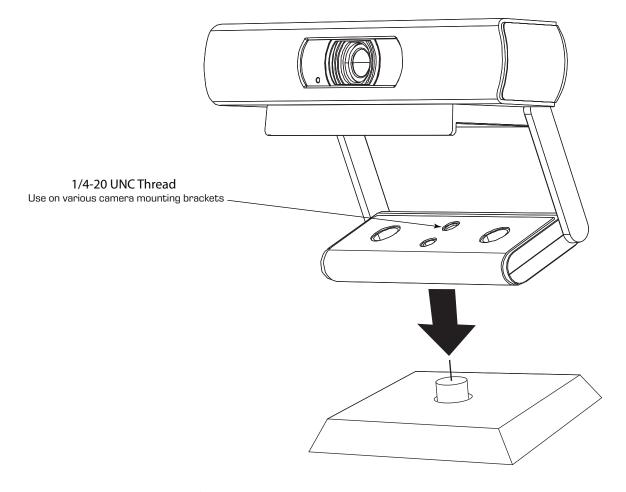


Bend the bracket at the indicated pivot points shown to allow the optimal fit to the selected monitor.

Mounting to a Wall



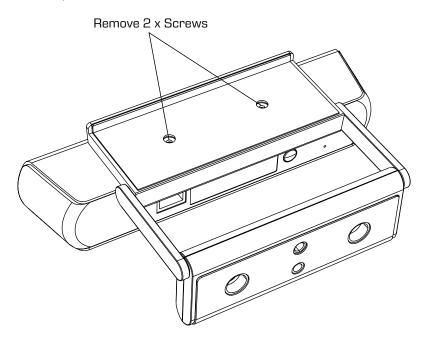
Using the Existing Bracket for a Third-Party Mount



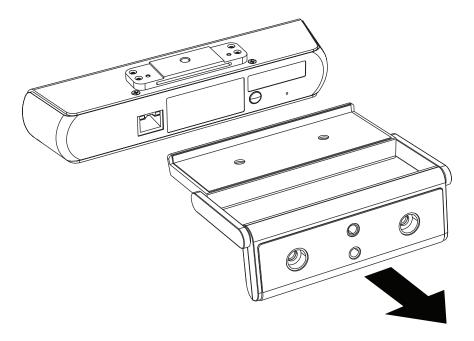
Attach the third-party mount to one of the 1/4-20 mounting holes on the included bracket.

Removing the Existing Bracket for a Third-Party Mount

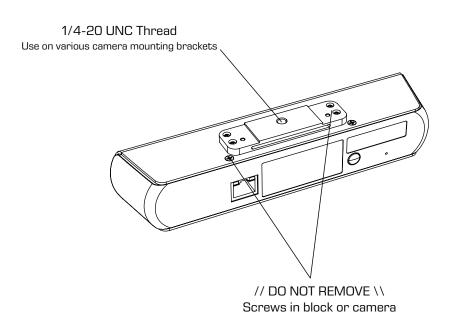
1. On the bottom side of the camera, remove the two screws on the bracket.



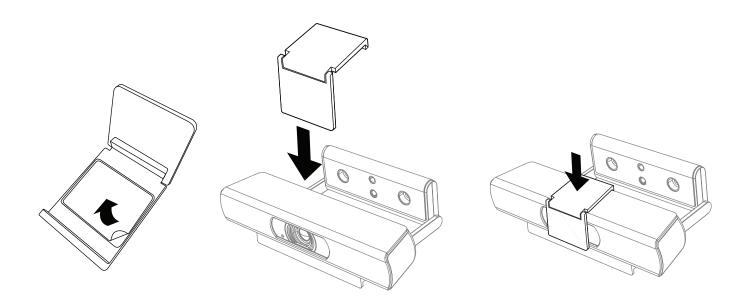
2. Slide the bracket off the camera.



3. Mount the camera to the third-party mount.



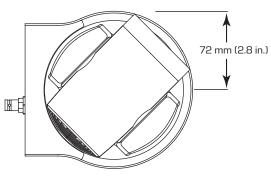
Installing Privacy Cover



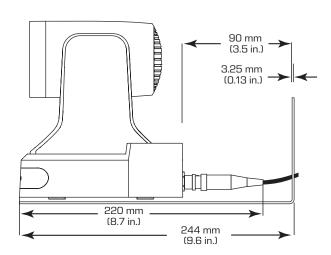
- 1. Peel adhesive.
- 2. Center and attach to top of camera.
- 3. Press firmly to affix adhesive.

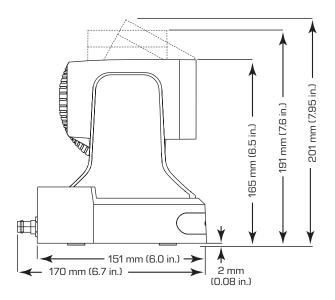
Dimension Drawings

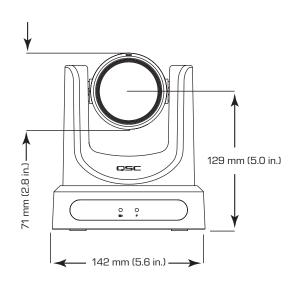
NC-12x80 & NC-20x60 PTZ



PTZ With Lens Cap

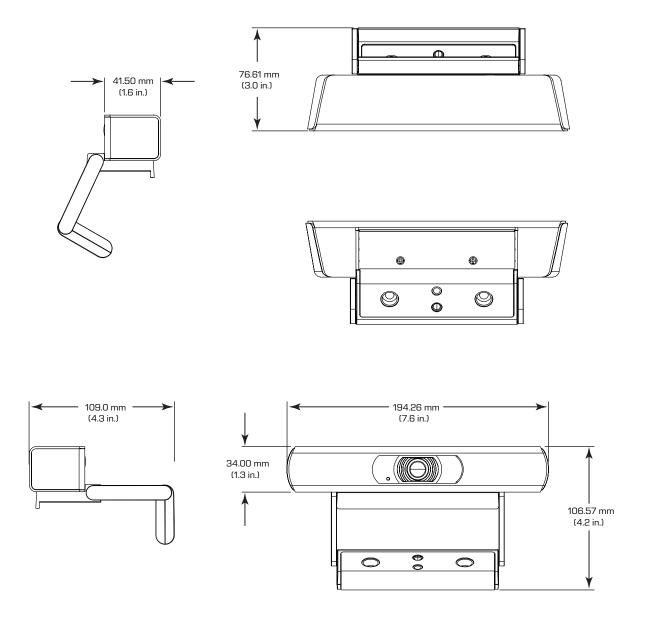






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QSC Self Help Portal

Read knowledge base articles and discussions, download software and firmware, view product documents and training videos, and create support cases.

https://qscprod.force.com/selfhelpportal/s/

Customer Support

Refer to the Contact Us page on the QSC website for Technical Support and Customer Care, including their phone numbers and hours of operation.

https://www.qsc.com/contact-us/