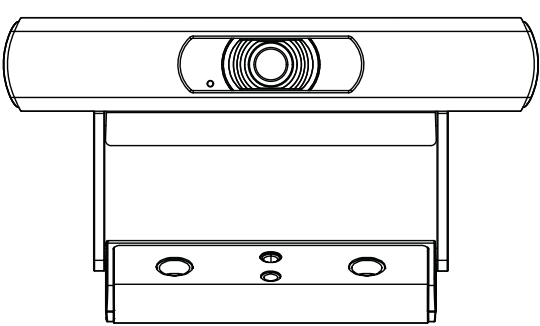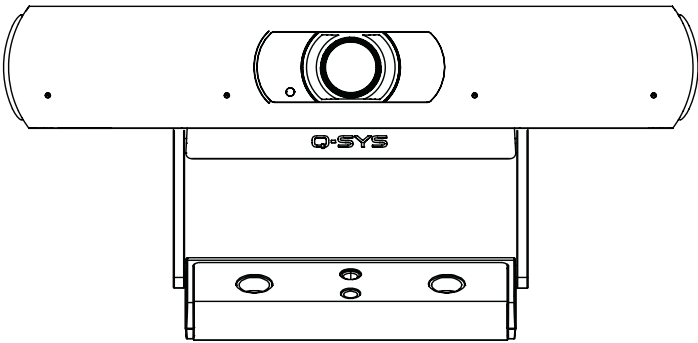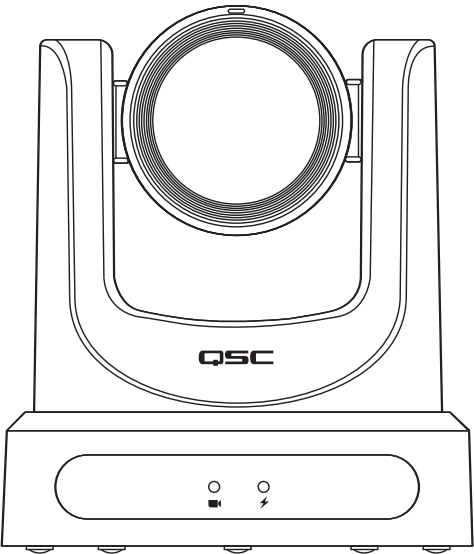# Hardware User Manual

Q-SYS

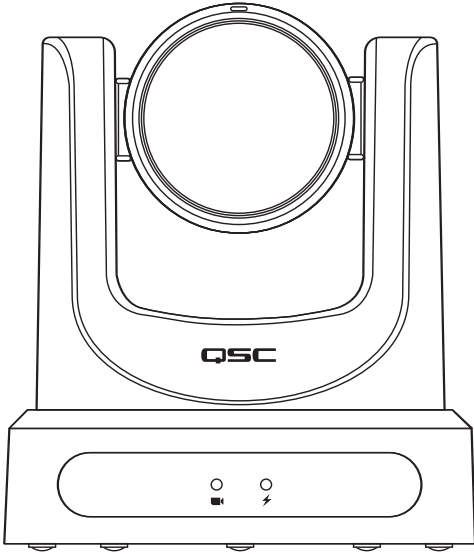## Q-SYS NC Series Cameras

ePTZ
NC-110

ePTZ
NC-90-G2

PTZ
NC-12×80

PTZ
NC-20×60

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 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

1. 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.

RoHS Statements

The QSC Q-SYS NC-90-G2, NC-110, NC-12×80, and NC-20×60 comply with the European RoHS Directive 2011/65/EU, including all subsequent amendments, as well as other RoHS-type regulations applicable in regions where the products are distributed.

China RoHS

产品中有害物质的名称及含有的信息表										
部件名称	有害物质									
	Pb	Hg	Cd	Cr(VI)	PBBs	PBDEs	DBP	DIBP	BBP	DEHP
印制电路板组件	×	○	○	○	○	○	○	○	○	○
金属部件	○	○	○	○	○	○	○	○	○	○
塑胶部件	○	○	○	○	○	○	○	○	○	○
玻璃	○	○	○	○	○	○	○	○	○	○

本表格依据SJ/T11364的规定编制。

注1:○:表示该有害物质在该部件所有均质材料中的含量均不超出电器电子产品有害物质限制使用国家标准要求。

×:表示该有害物质至少在该部件的某一均质材料中的含量超出电器电子产品有害物质限制使用国家标准要求。

注2:以上未列出的部件,表明其有害物质含量均不超出电器电子产品有害物质限制使用国家标准要求。

在中华人民共和国境内销售的电子信息产品必须标识此标志,标志内的数字代表在正常使用状态下的产品的环保使用期限。

根据中国电子行业标准SJ/T11364-2024 和相关的中国政府法规,本产品及其某些内部或外部组件上可能带有环保使用期限标识。取决于组件和组件制造商产品及其组件上的使用期限标识可能有所不同。组件上的使用期限标识优先于产品上任何与之相冲突的或不同的环保使用期限标识。
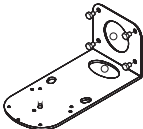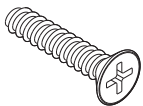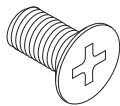
Taiwan RoHS

限用物質含有情況標示聲明书
Declaration of the Presence Condition of the Restricted Substances Marking

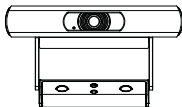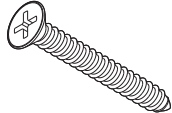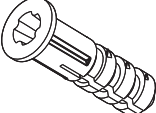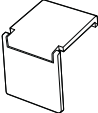| 設備名稱:網路攝像機,型號:NC Series						
單元 Unit	限用物質及其化學符號Restricted substances and its chemical symbols					
	鉛(Pb)	汞(Hg)	鎘(Cd)	六價鉻(Cr+6)	多溴聯苯(PBB)	多溴二苯醚(PBDE)
電路板 PCB	超出0.1 wt%	○	○	○	○	○
外殼 Enclosure	○	○	○	○	○	○
配件 Accessories	○	○	○	○	○	○
玻璃 Glass	○	○	○	○	○	○

備考1.“超出0.1 wt%”及“超出0.01 wt%”係指限用物質之百分比含量超出百分比含量基準值。

Note 1: "Exceeding 0.1 wt %" and "exceeding 0.01 wt %" indicate that the percentage content of the restricted substance exceeds the restricted substance exceeds the reference percentage value of presence condition.

備考2.“O”係指該項限用物質之百分比含量未超出百分比含量基準值。

Note 2. "O" indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.

備考3.“_”係指該項限用物質為排除項目。

Note 3: The "_" indicates that the restricted substance corresponds to the exemption.

What's in the Box

NC-12×80, NC-20×60 PTZ Cameras

	(1x) NC-12×80 or NC-20×60 PTZ Camera		(1x) Wall Bracket		(5x) M3 × 6mm screws		(1x) 1/4" -20 screw
	(1x) TD-001642 Safety Information		(1x) TD-000453 Warranty Statement				

NC-110, NC-90-G2 ePTZ Camera

|							
	(1x) NC-110 or NC-90-G2 ePTZ Camera with Mounting Bracket		(2x) 6*40mm countersunk screws		(2x) Wall Anchor		(1x) Privacy cover
	(1x) TD-001642 Safety Information		(1x) TD-000453 Warranty Statement				

Introduction

The QSC Q-SYS™ NC Series comprises multiple camera models, including NC-12×80, NC-20×60, NC-110, and NC-90-G2. 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-12×80 and NC-20×60 PTZ)

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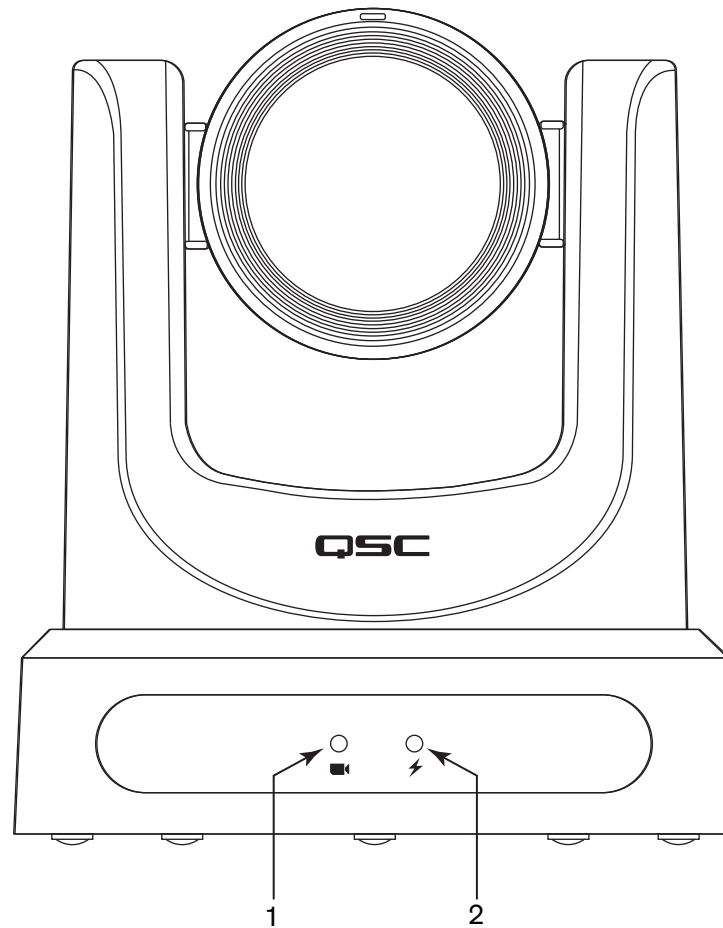
1. Status LED (Green)
   - Off indicates the camera is in standby mode; network streams are off.
   - On indicates the camera is streaming video over the network.
   - Blinking indicates the ID mode is on.
2. Power LED (Blue)
   - On indicates the camera has power applied.
   - Off indicates the camera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

Connections and Controls (NC-12×80 and NC-20×60 PTZ) (continued)

Rear Panel
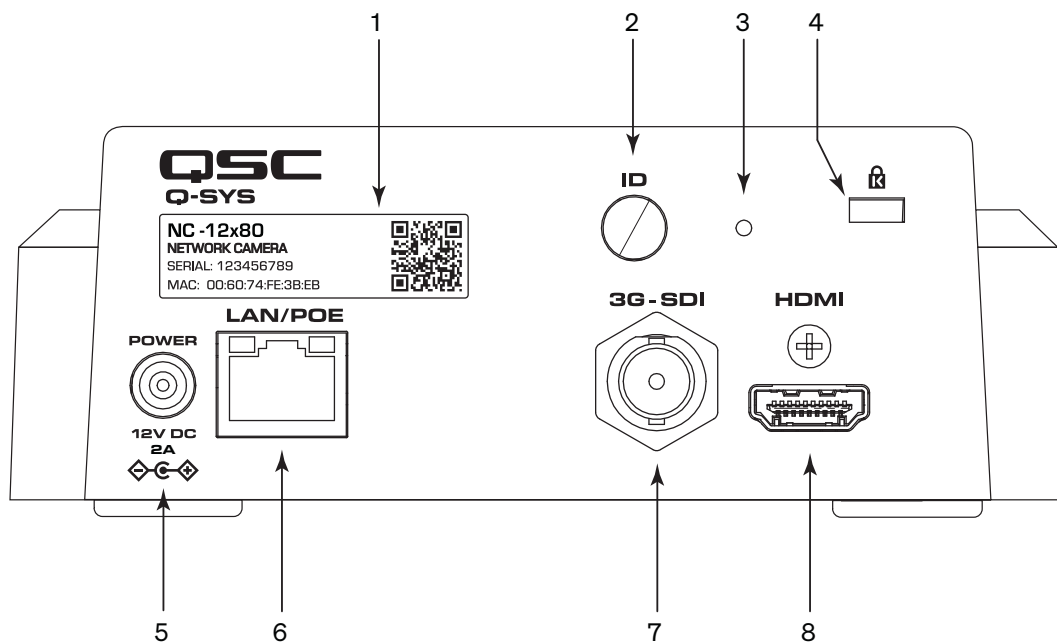
1. Product Label
    - Identifies product model: NC-12×80 or NC-20×60
    - Identifies the product serial number
    - Identifies the product MAC address
2. ID Button: Press to identify this product in Q-SYS Designer Software and Q-SYS Configurator. The green STATUS LED on the front panel blinks when 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 2A, 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-12×80 & NC-20×60 PTZ

Install the Wall Mount Bracket

1. 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.)
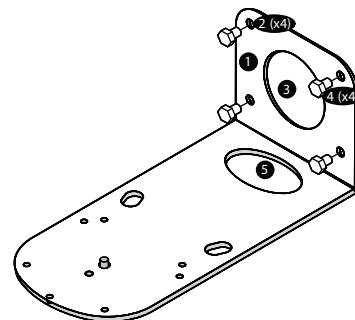
Mount the Camera on the Wall Bracket

Bottom plate of Camera – Camera not shown

1. 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.
7. Secure the cables to the bracket so that there is no strain placed on the connectors.

Bottom plate of Camera – Camera not shown
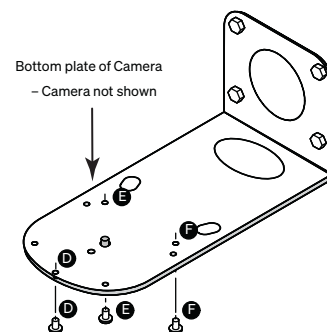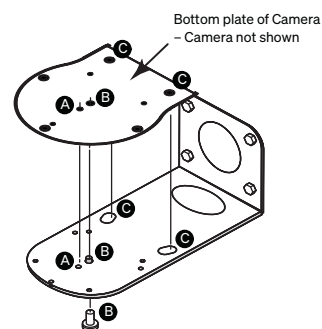
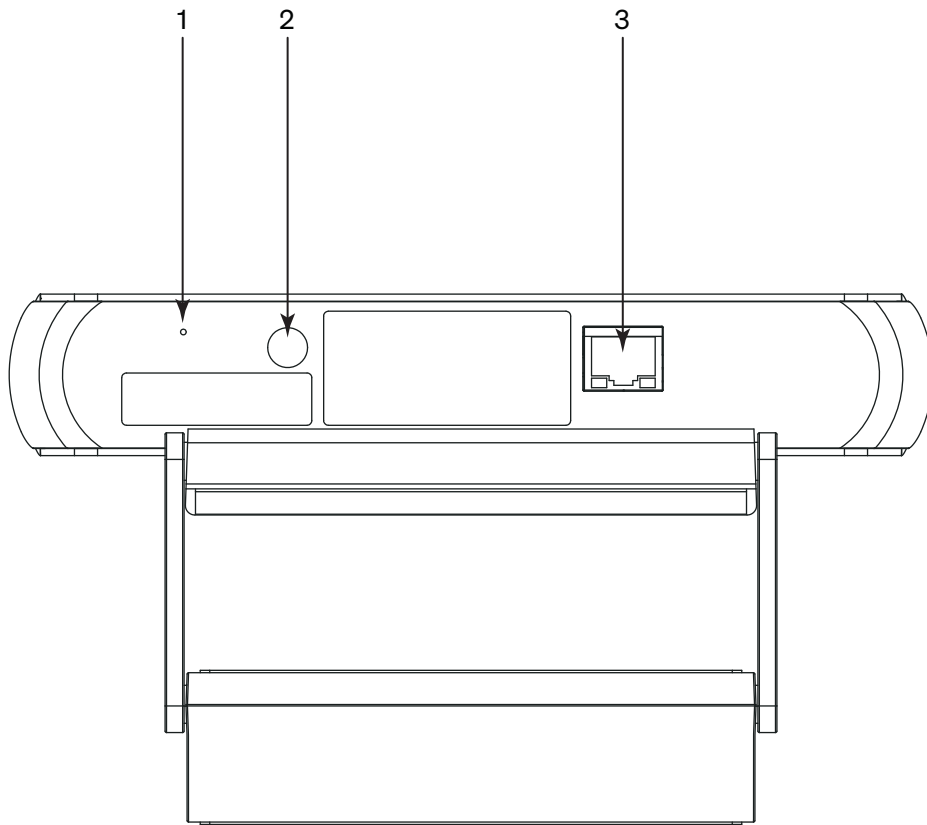# Connections and Controls (NC-110 ePTZ)

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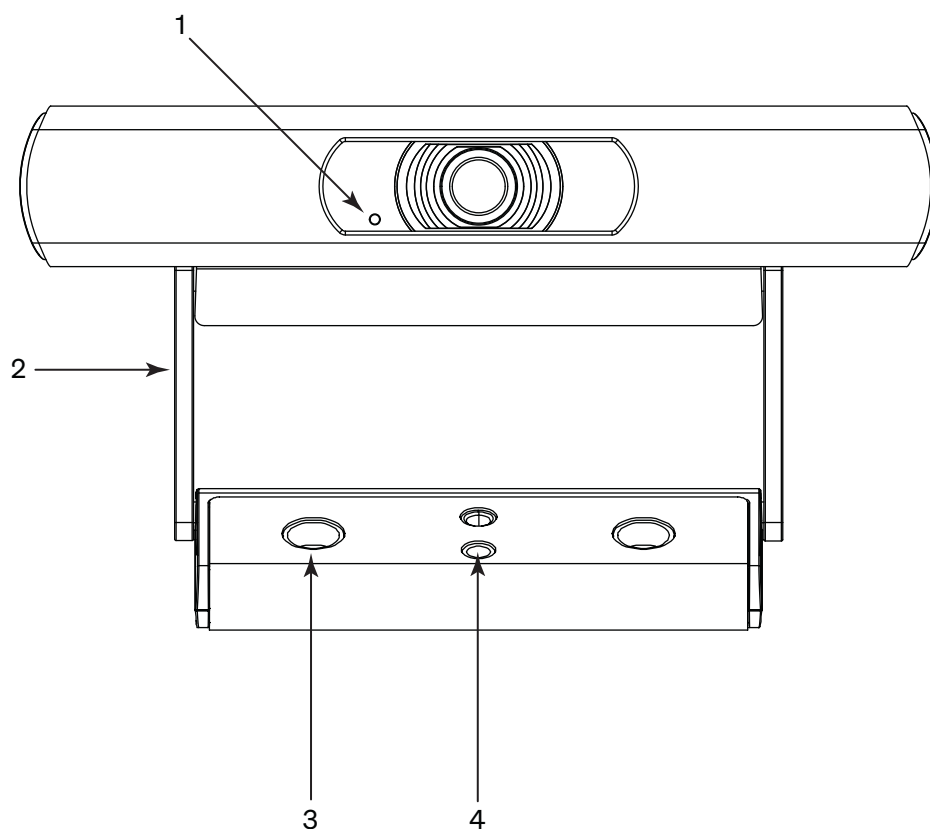
1. LED
   - Blinking Green: ID Mode
   - Solid Blue: Power On; Not Streaming
   - Solid Green: Streaming
   - Off: Camera is in Privacy Mode
2. Included Camera Mount: This product can be configured for monitor-mounting or surface-mounting.
3. Surface Mounting Screw Holes
4. Universal Mounting Adapter: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

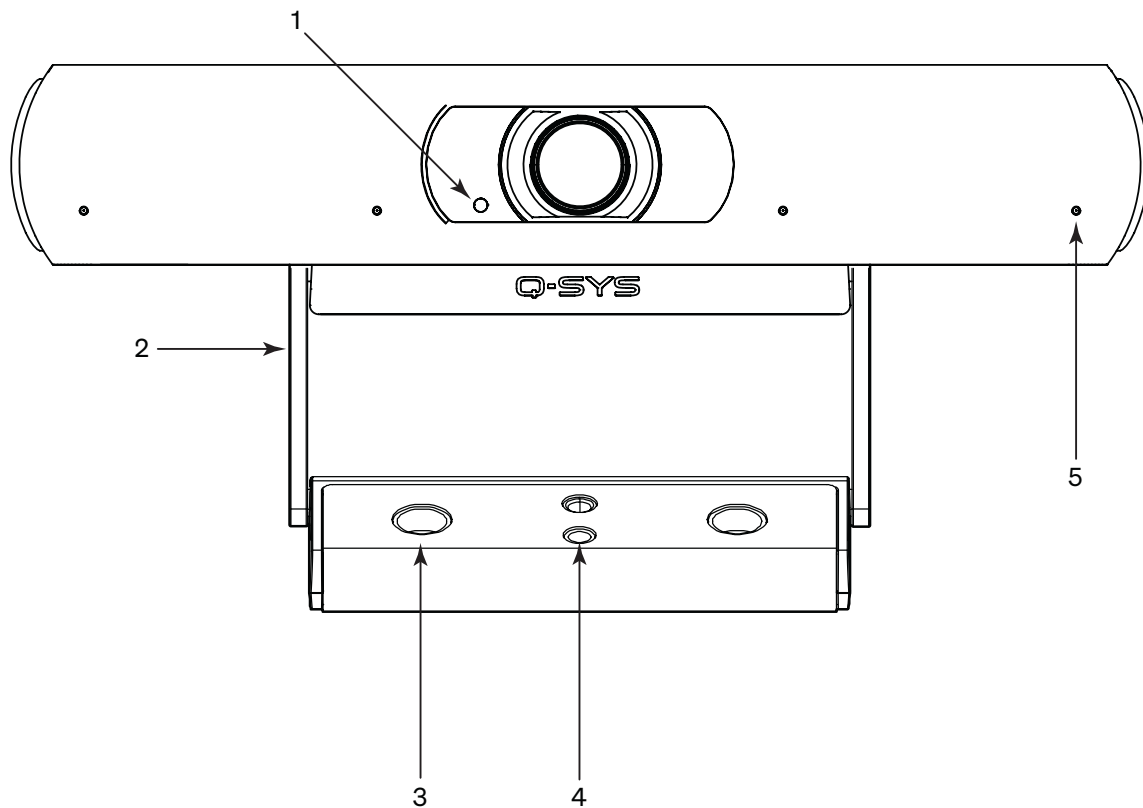# Connections and Controls (NC-110 ePTZ) (continued)

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.

Connections and Controls (NC-90-G2 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-90-G2 to a different mount.
5. Microphones (multiple)

Connections and Controls (NC-90-G2 ePTZ) (continued)

Rear Panel
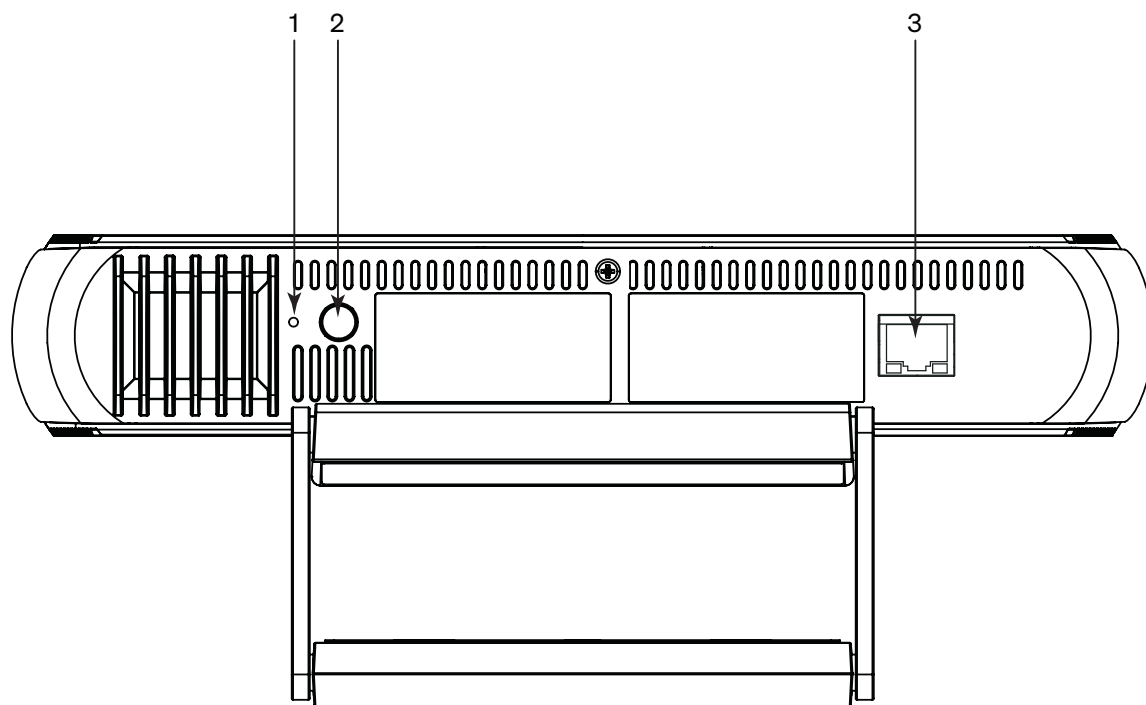
1. Factory Reset Pinhole: Use a paperclip or similarly sized object to insert. Press and hold the reset button for 5 seconds. This resets all parameters to the factory defaults.
2. ID Button: Press to identify this product in Q-SYS Designer and Configurator. The STATUS LED on the front panel blinks green 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.
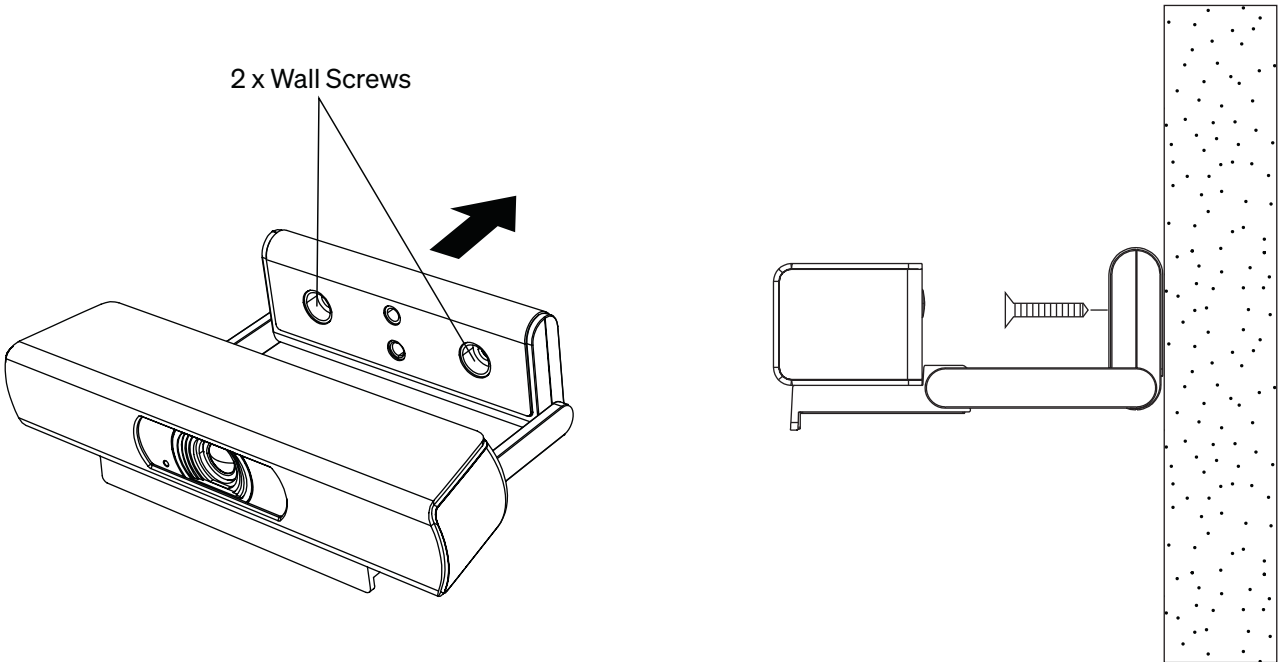
Installation (NC-110 and NC-90-G2 ePTZ)

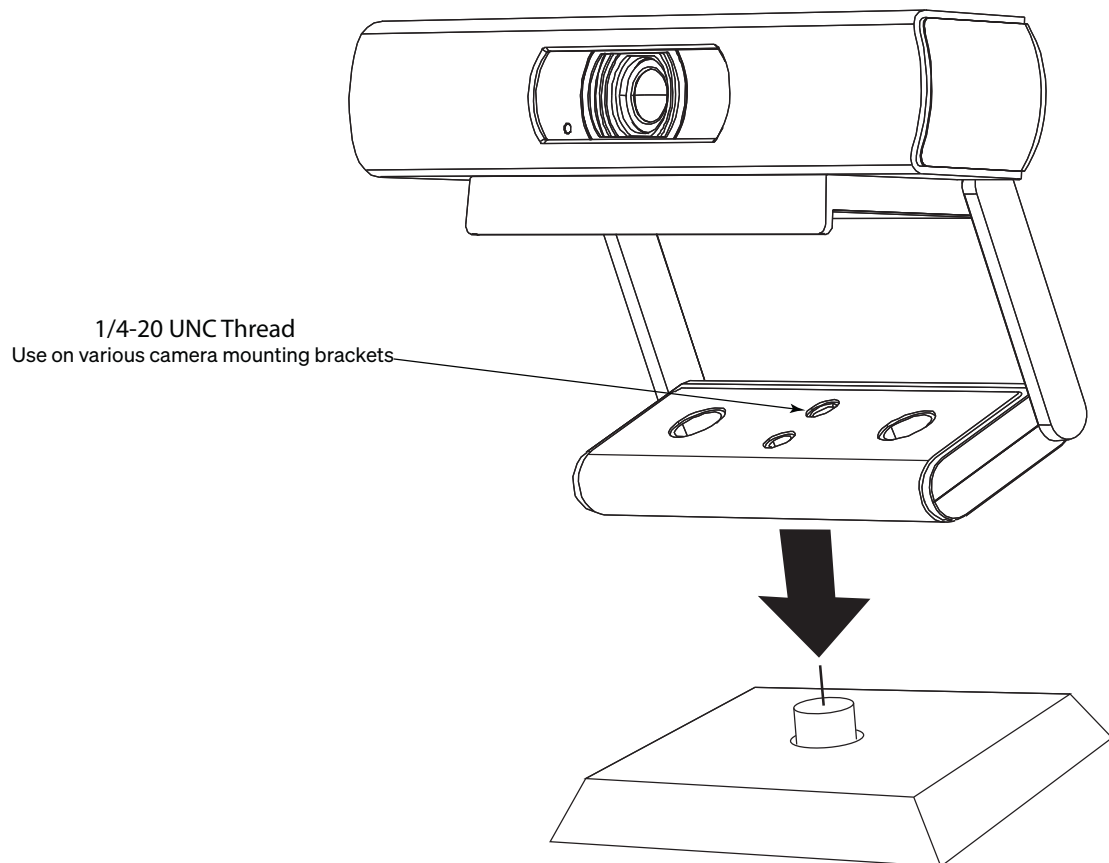**NOTE:** NC-110 is shown. NC-90-G2 is similar.

Mounting Above a Monitor
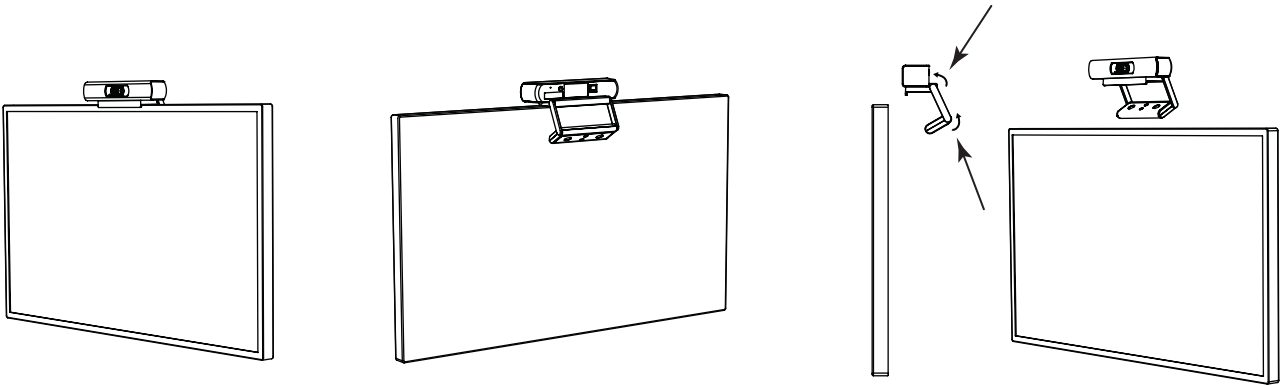
Bend the bracket at the indicated pivot points shown to allow the optimal fit to the selected monitor.

Mounting to a Wall

2 x Wall Screws
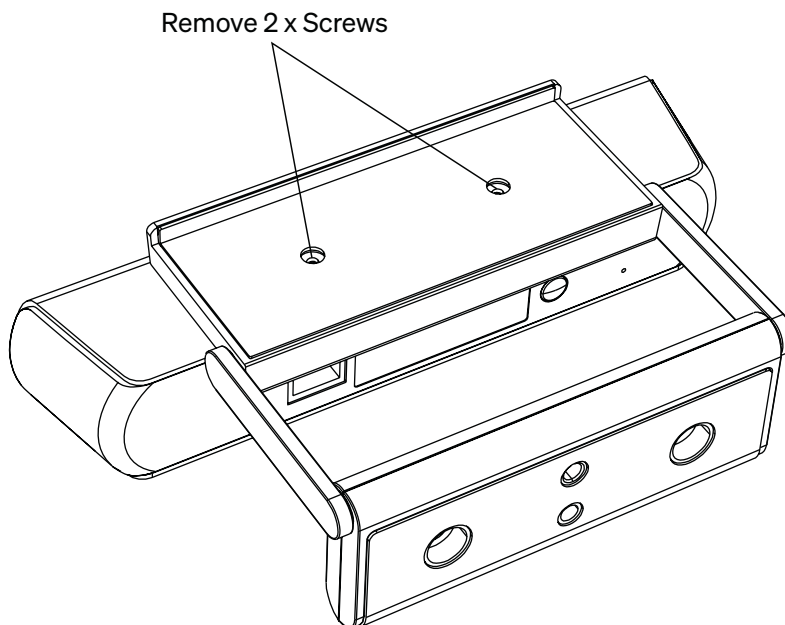
Installation (NC-110 and NC-90-G2 ePTZ) (continued)

Using the Existing Bracket for a Third-Party Mount

1/4-20 UNC Thread
Use on various camera mounting brackets

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

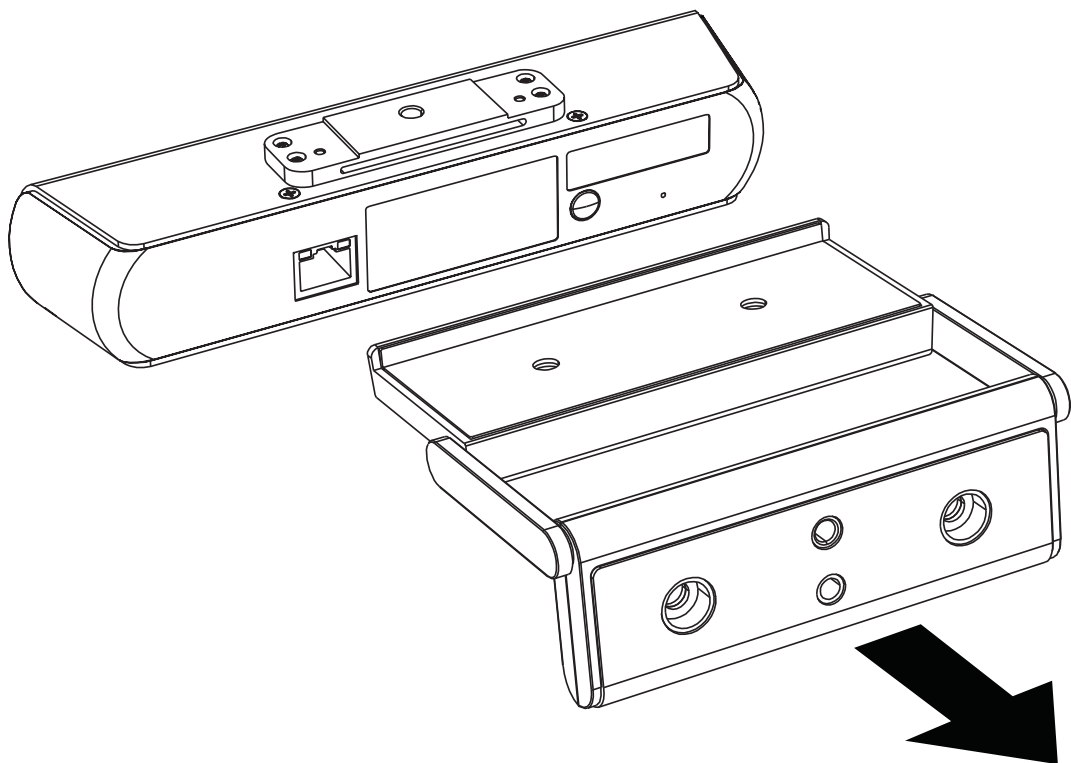## Removing the Existing Bracket for a Third-Party Mount

1.   On the bottom side of the camera, remove the two screws on the bracket.
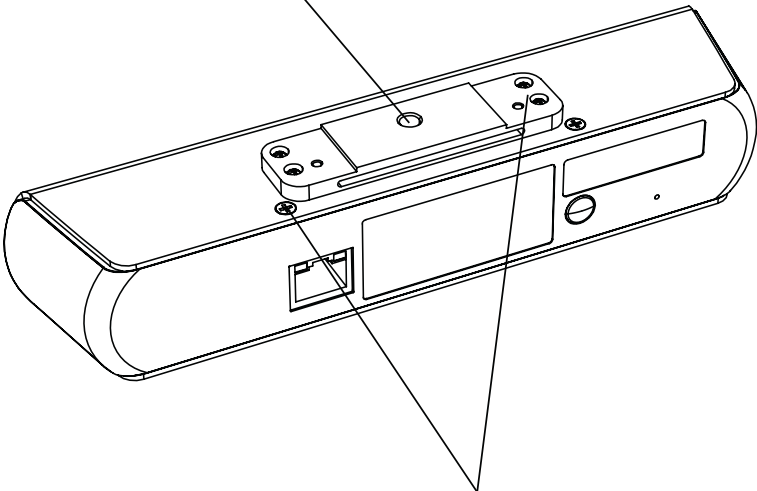
Remove 2 x Screws

Installation (NC-110 and NC-90-G2 ePTZ) (continued)
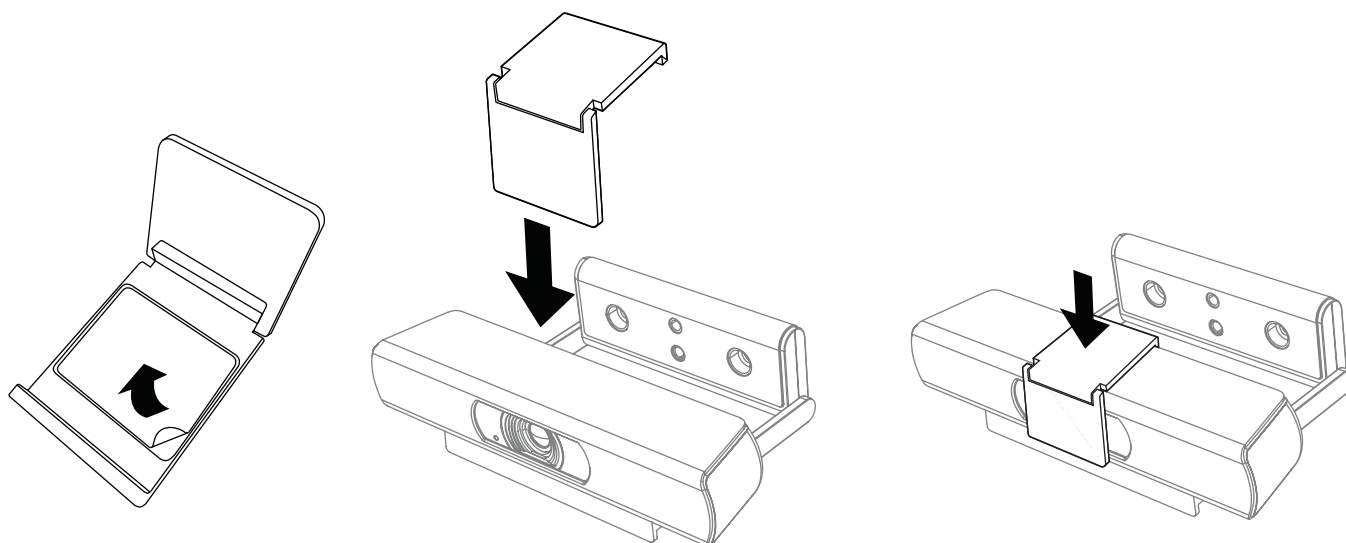
2. Slide the bracket off the camera.

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

1/4-20 UNC Thread
Use on various camera mounting brackets

// DO NOT REMOVE \\
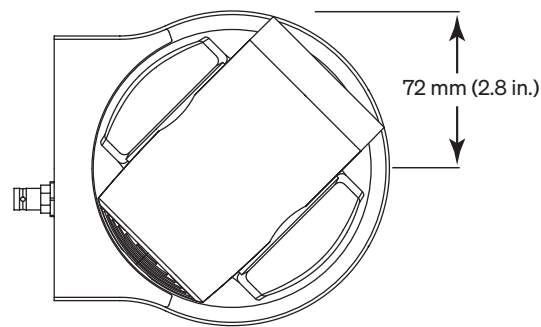Screws in block or camera
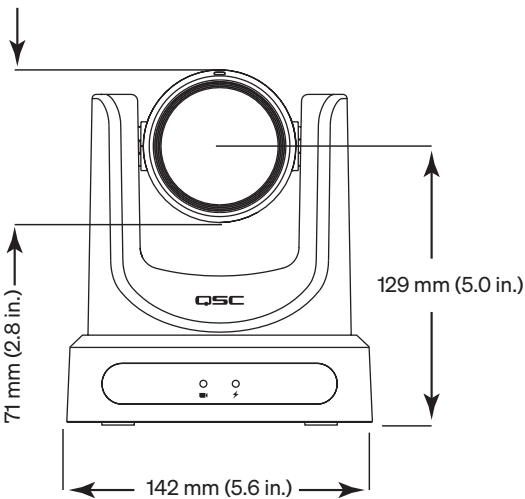
Installing Privacy Cover

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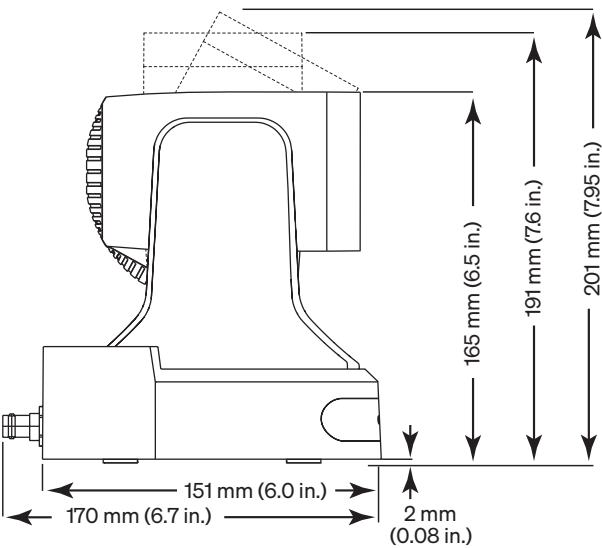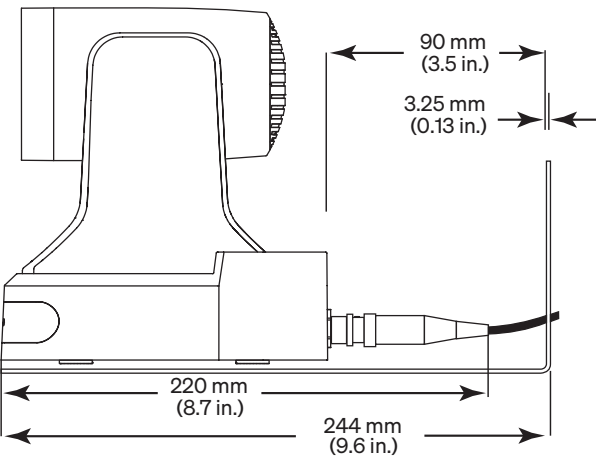2. Center and attach to top of camera.
3. Press firmly to affix adhesive.

Dimension Drawings

NC-12×80 & NC-20×60 PTZ

72 mm (2.8 in.)

PTZ With Lens Cap

90 mm (3.5 in.)

3.25 mm (0.13 in.)

220 mm (8.7 in.)

244 mm (9.6 in.)

165 mm (6.5 in.)

191 mm (7.6 in.)

201 mm (7.95 in.)

151 mm (6.0 in.)

170 mm (6.7 in.)

2 mm (0.08 in.)

71 mm (2.8 in.)

129 mm (5.0 in.)

142 mm (5.6 in.)

NC-110 ePTZ

41.50 mm
(1.6 in.)

76.61 mm
(3.0 in.)

109.0 mm
(4.3 in.)

194.26 mm
(7.6 in.)

34.00 mm
(1.3 in.)

106.57 mm
(4.2 in.)

41.50 mm
(1.6 in.)

34.0 mm
(1.3 in.)

39.4 mm
1.6 in.

NC-90-G2 ePTZ

22.6 mm (0.9 in)

HEATSINK

36.2 mm (1.4 in)

15.0 mm (0.6 in)

41.5 mm (1.6 in)

252.2 mm (9.9 in)

35.0 mm (1.4 in)

44.3 mm (1.7 in)

48.5 mm (1.9 in)

108.9 mm (4.3 in)

50.4 mm (2.0 in)

39.1 mm (1.5 in)

86.2 mm (3.4 in)
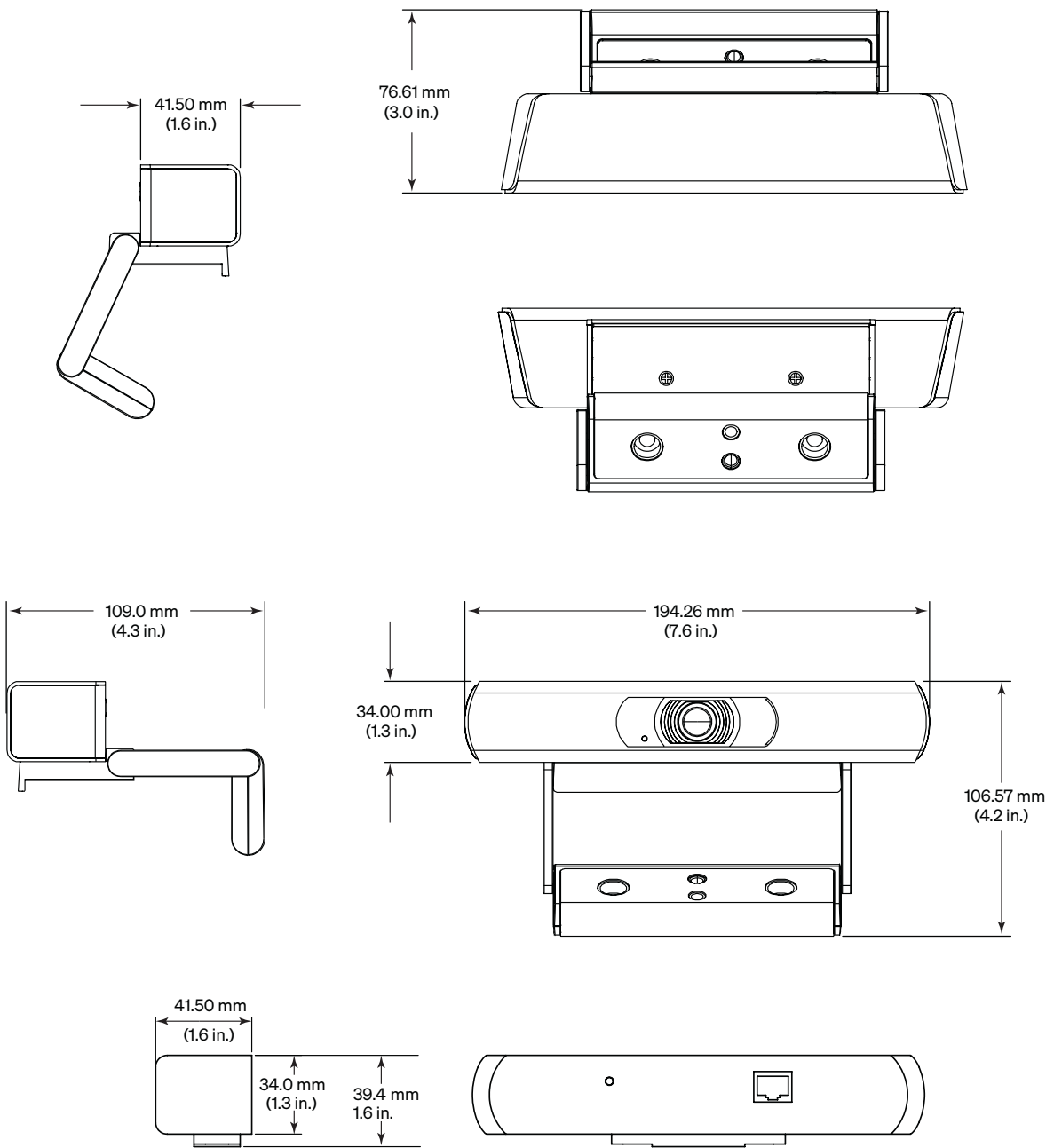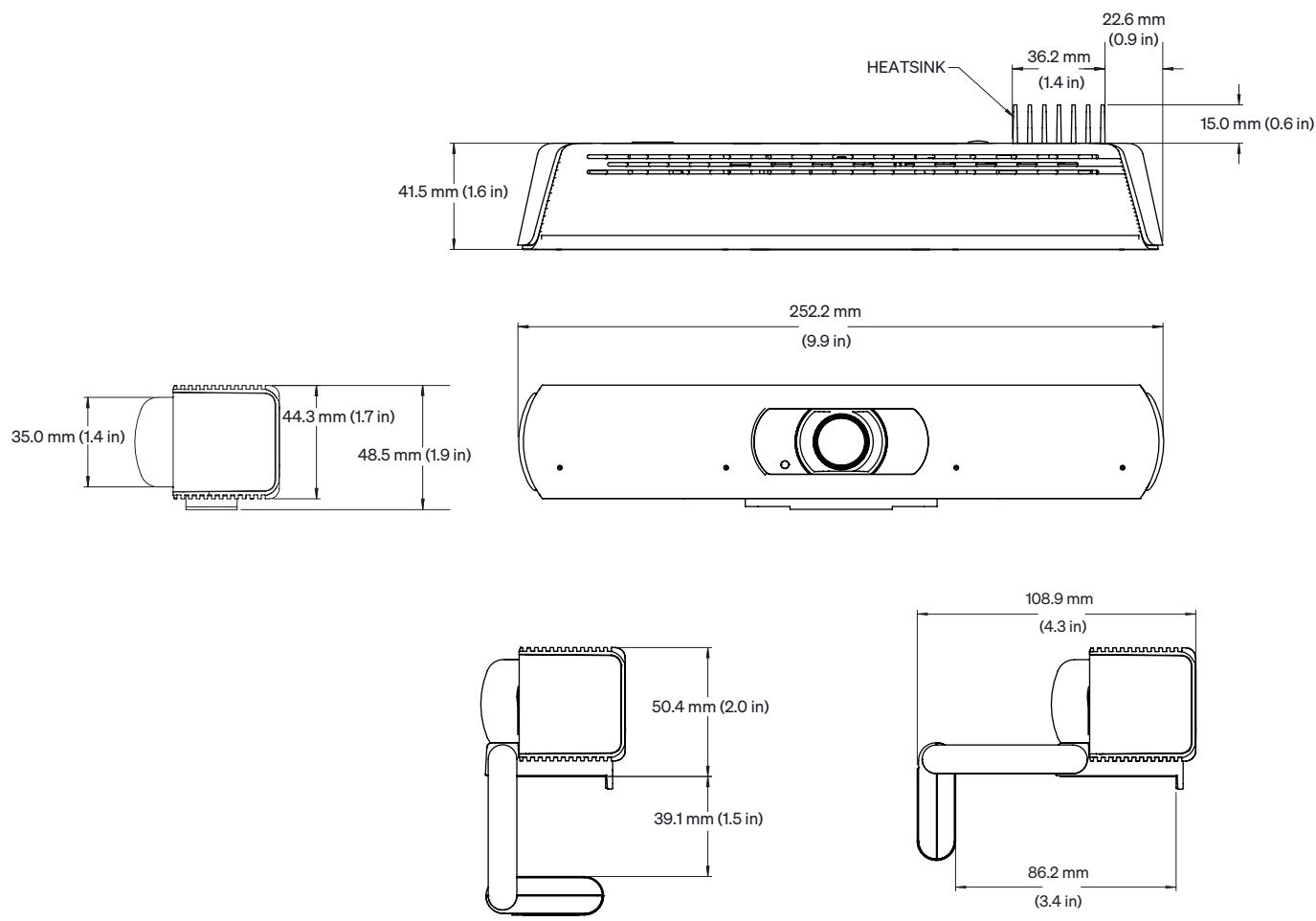
Knowledge Base

Find answers to common questions, troubleshooting information, tips, and application notes. Link to support policies and resources, including Q-SYS Help, software and firmware, product documents, and training videos. Create support cases.

support.qsys.com

Customer Support

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

qsys.com/contact-us/

Warranty

For a copy of the QSC Limited Warranty,go to:

qsys.com/support/warranty-statement/