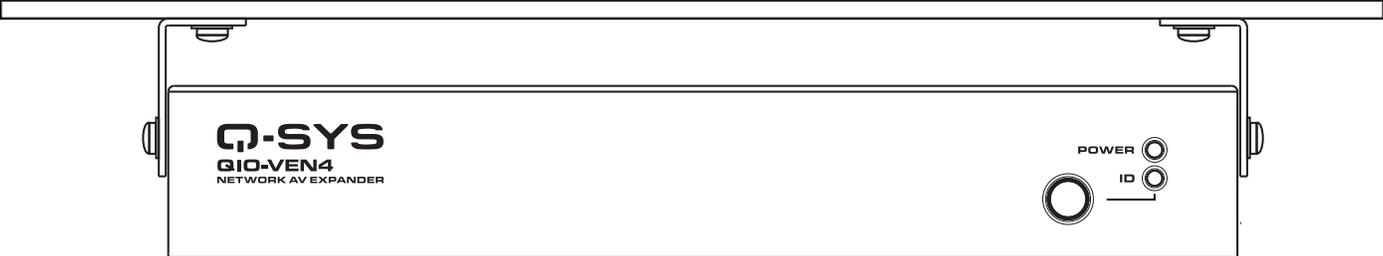


## QIO-VEN4 Network AV Expander for Q-SYS



# 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 lightning flash with arrowhead symbol in a triangle alerts the user to the presence of uninsulated dangerous voltage within the product's enclosure that may constitute a risk of electric shock to humans.



The exclamation point within a triangle alerts the user to important safety, operating, and maintenance instructions in this manual.



## IMPORTANT SAFETY INSTRUCTIONS



TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

- **Elevated Ambient Operating Temperature** – If installed in a closed or multi-unit assembly, the ambient operating temperature of the rack environment may be greater than room ambient. Ensure that the maximum operating temperature range is not exceeded. Refer to the "Environmental" section.
- **Reduced Air Flow** – Installation of the equipment should be such that the amount of air flow required for safe operation of the equipment is not compromised.

1. Read, follow, and keep these instructions.
2. Heed all warnings.
3. Do not use this apparatus near water.
4. Do not submerge the apparatus in water or liquids.
5. Do not use any aerosol spray, cleaner, disinfectant or fumigant on, near or into the apparatus.
6. Clean only with a dry cloth.
7. Do not block any ventilation opening. Install in accordance with the manufacturer's instructions.
8. Keep all ventilation openings free of dust or other matter.
9. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
10. Do not unplug the unit by pulling on the cord, use the plug.
11. Only use attachments/accessories specified by the manufacturer.
12. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
14. Adhere to all applicable, local codes.
15. Consult a licensed, professional engineer when any doubt or questions arise regarding a physical equipment installation.

## Maintenance and Repair



**WARNING!** Advanced technology, e.g., the use of modern materials and powerful electronics, requires specially adapted maintenance and repair methods. To avoid a 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.



**IMPORTANT!** 802.3bt Type 4 Class 8 (90W from PSE, 71W at QIO-VEN4) power input required. For more information, see "Power Requirements".

## Environmental

- **Expected Product Life Cycle:** 10 years
- **Storage Temperature Range:** -20°C to +70°C (-4°F to 158°F)
- **Storage Humidity Range:** 5% to 85% RH non-condensing
- **Operating Temperature Range:** 0°C to 40°C (32°F to 104°F)
- **Operating Humidity Range:** 5% to 85% RH non-condensing

## FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## European Conformity Statement



**WARNING!** LAN Ports 1 through 4 are compliant with Class A requirements and operation of this equipment in a residential environment could cause radio interference.

## Sustainability Compliance

QSC is committed to conducting business in accordance with evolving environmental regulations and industry standards. As part of our responsibility to customers, partners, and the communities in which we operate, QSC is strengthening its environmental compliance framework to better understand and mitigate the impacts of our operations and products by integrating sustainability into our policies, processes, and procedures. For more information, visit: <https://www.qsys.com/esg/>

# RoHS Statements

The QSC Q-SYS QIO-VEN4 complies 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.

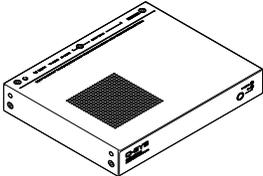
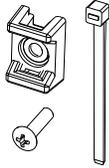
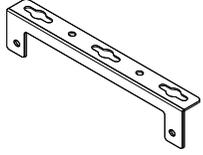
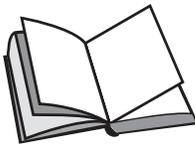
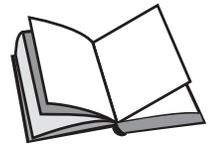
The QSC Q-SYS QIO-VEN4 is in compliance with “China RoHS” directives. The following table is provided for product use in China and its territories.

QSC Q-SYS QIO-VEN4						
部件名称 (Part Name)	有害物质 (Hazardous Substances)					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(vi))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
电路板组件 (PCB Assemblies)	X	0	0	0	0	0
机壳装配件 (Chassis Assemblies)	X	0	0	0	0	0

本表格依据 SJ/T 11364 的规定编制。  
 0: 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。  
 X: 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 GB/T 26572 规定的限量要求。  
 (目前由于技术或经济的原因暂时无法实现替代或减量化。)

This table is prepared following the requirement of SJ/T 11364.  
 0: Indicates that the concentration of the substance in all homogeneous materials of the part is below the relevant threshold specified in GB/T 26572.  
 X: Indicates that the concentration of the substance in at least one of all homogeneous materials of the part is above the relevant threshold specified in GB/T 26572.  
 (Replacement and reduction of content cannot be achieved currently because of the technical or economic reason.)

# What's in the Box

	(1x) QIO-VEN4		(1x) Cable Strain Relief (Tie mount, zip tie, screw)		(4x) Foam Spacer
	(2x) Mounting Bracket		(6x) Phillips Pan Head M4 x 7mm (4 used + 2 spares)		(1x) Warranty TD-000453
	(1x) Safety Information TD-001687				

# Introduction

The QIO-VEN4 is the AV and connectivity expander component of the RoomSuite Modular System. Designed with simplicity and scalability in mind, the RoomSuite Modular System supports a variety of collaboration platforms and BYOD configurations. The QIO-VEN4 is available as a bundle with the RMP-100 processor, or separately when additional expanders are needed. Optimized for under-table installation, one QIO-VEN4 can be powered from the RMP-100, while its own built-in PoE+ switch and USB-C port provide at-the-table connectivity for a variety of Q-SYS components and BYOD conferencing or content sharing. The QIO-VEN4 can be configured via a simple web-based workflow or remotely managed and monitored with Q-SYS Reflect, and does not require Q-SYS Designer Software.

## Power Requirements

The QIO-VEN4 requires Power over Ethernet (PoE) 802.3bt Type 4 class 8 (90W from PSE, 71W at QIO-VEN4) for full operation to specifications. PoE supplies of lower power output will result in compromised function. Refer to the QIO-VEN4 Specifications Sheet at [qsys.com](https://www.qsys.com) for additional power supply details. All safety instructions for the chosen power supply must be followed.



**NOTE:** The QIO-VEN4 includes a USB-C port; however, it is not capable of any power delivery or charging of external devices. The QIO-VEN4 includes a USB-A port that is limited to 0.5W and is therefore not suitable for charging external devices.

## Accessory Cable Kit

The RoomSuite Modular System Base Bundle (RS-MOD-BB) includes an Accessory Cable Kit (AG-000538-01) that provides:

- (3x) HDMI 2.0 cables, 2 meters
- (1x) USB-C 3.2 cable, 2 meters
- (1x) USB-C 3.2 cable with USB-A 3.0 adapter, 2 meters



**NOTE:** Use of the supplied Accessory Cable Kit cables is strongly recommended. Cables longer than 2 meters are unsupported. Use a 1 meter HDMI 2.0 cable (not supplied) when connecting RMP-100 HDMI Outputs to ingest devices other than displays.

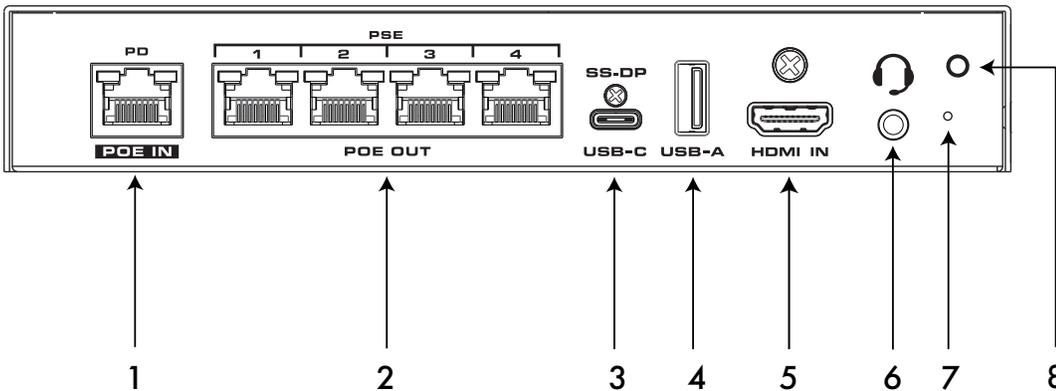
# Connections and Callouts

## Front Panel



1. **Power LED** – Illuminates blue when the QIO-VEN4 is powered on.
2. **ID Button** – Locates the QIO-VEN4 in Q-SYS Designer Software and Q-SYS Peripheral Manager.
3. **ID LED** – Blinks green when placed into ID Mode via ID Button or Q-SYS Peripheral Manager.

## Rear Panel



1. **LAN/PoE In** – RJ45 connector, 1GbE, 802.3bt PD Type 4 Class 8 (90W at PSE, 71W at QIO-VEN4). For connection to Q-LAN.
2. **LAN/PoE Out** – RJ45 connector, 1GbE, 802.3at PSE Type 2 Class 4 (30W at QIO-VEN4, 25.5W at PD). Maximum combined output power is 51W. For connection to Q-SYS peripherals.
3. **USB-C** – USB 3.2 Gen 1x1 (5Gbps) Type-C Device Port, supporting DisplayPort Alt-Mode (DP 1.4 Sink) and no Power Delivery.
4. **USB-A** – Unsupported. For future use.
5. **HDMI In** – HDMI 2.0 Input with support for HDCP 2.3 and HDCP 1.4.
6. **Analog Audio I/O** – Unsupported. For future use.
7. **Reset Button** – Use a paper clip, or similar tool, to press and hold the reset button for 10 seconds to reset the QIO-VEN4 to factory values.
8. **Strain Relief Connection** – Attach the included Cable Strain Relief tie mount here. See "Cable Strain Relief" on page 10.

# Installation

The QIO-VEN4 can be mounted under a table or desk, on a rack shelf, flush-mounted (such as on a wall), or simply be placed freestanding on a surface without mounting. Regardless of your chosen installation method, you must observe the Ventilation Requirements.

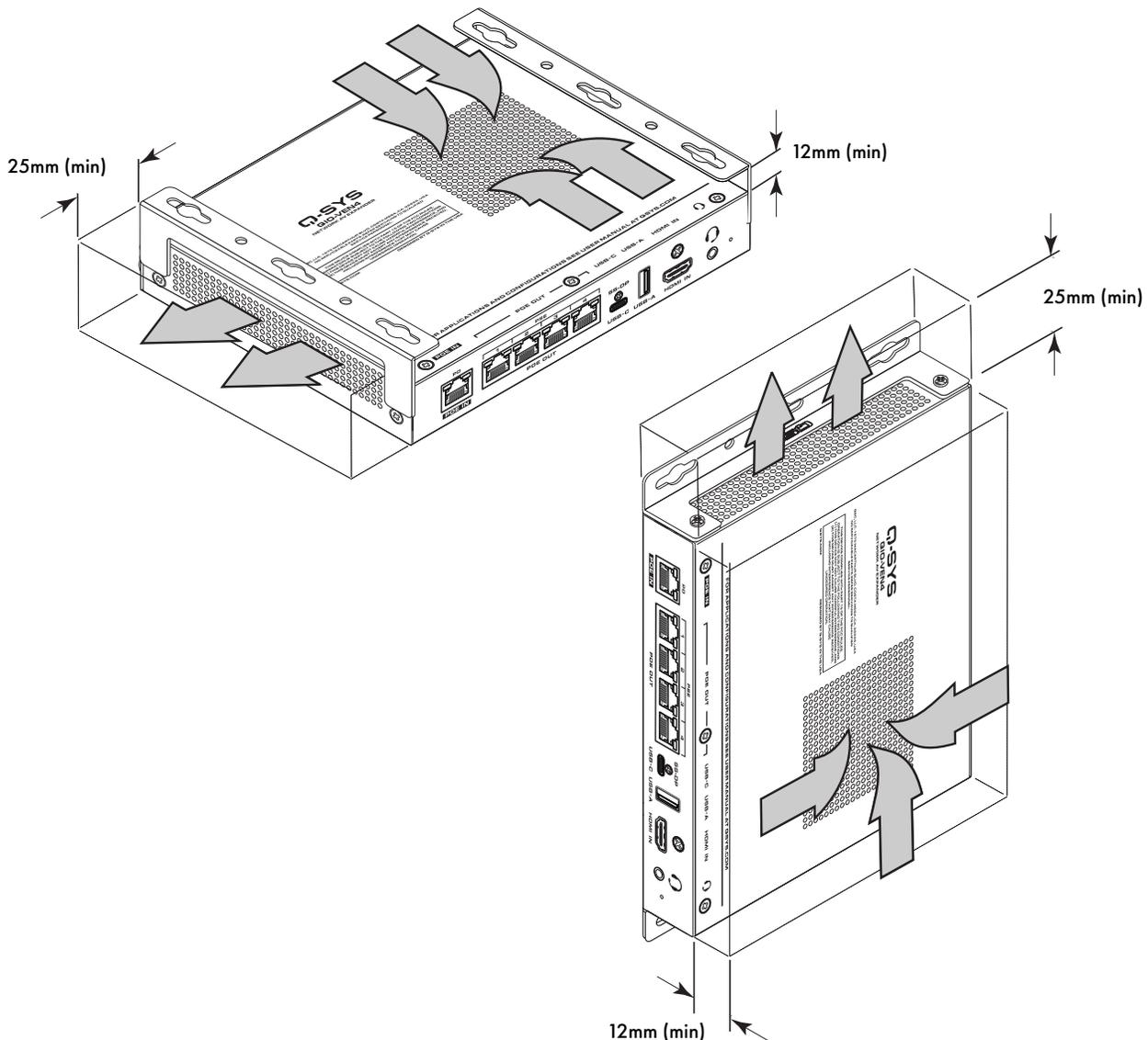
- "Ventilation Requirements" on page 7
- "Under Table Mounting" on page 8
- "Flush / Wall Mounting" on page 9
- "Freestanding Installation" on page 9
- "Cable Strain Relief" on page 10



**NOTE:** If mounting the unit on a rack shelf, note that the height of the unit with bracket is 1RU. Instructions for rack shelf mounting are not included in this manual. Consult your rack shelf documentation for guidance.

## Ventilation Requirements

Maintain at least 12mm clearance for fresh air intake and 25mm clearance for exhaust outflow, regardless of installation method and unit orientation.

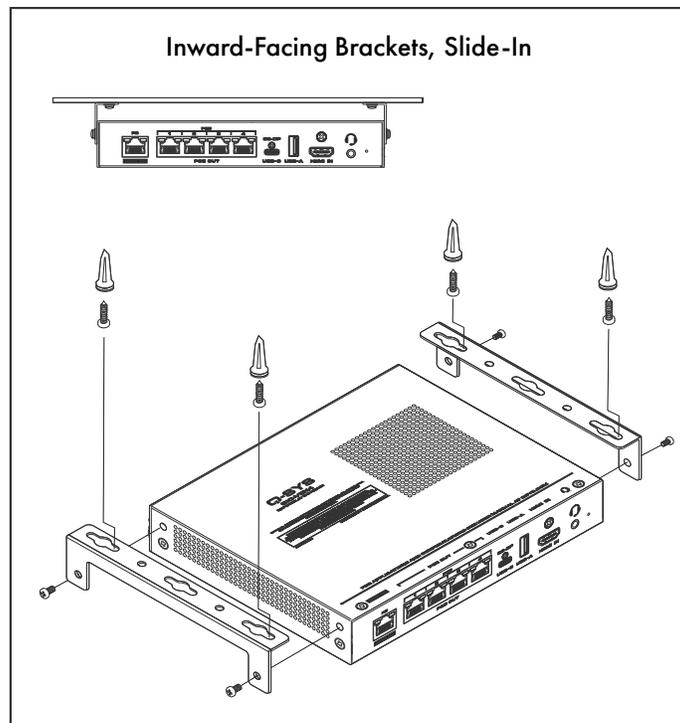
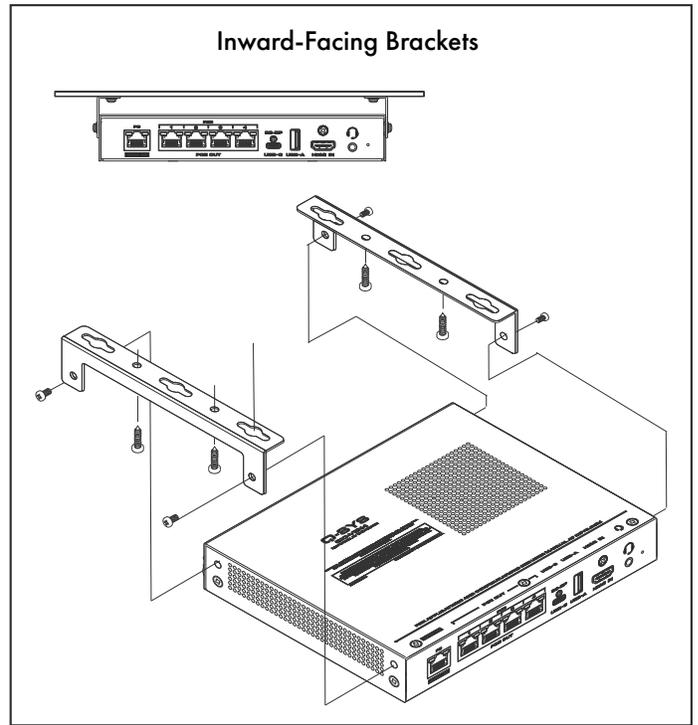
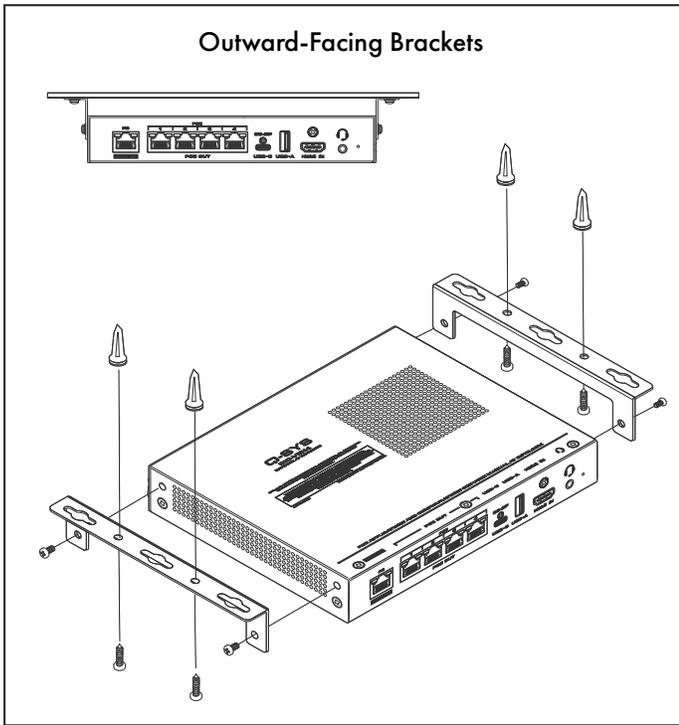


# Installation Cont'd

## Under Table Mounting

Use the two (2) included brackets and four (4) Phillips pan head screws. Brackets can be attached to the unit either outward-facing or inward-facing, as shown. Screw and anchor hardware for mounting the brackets to the surface is pictured but not included.

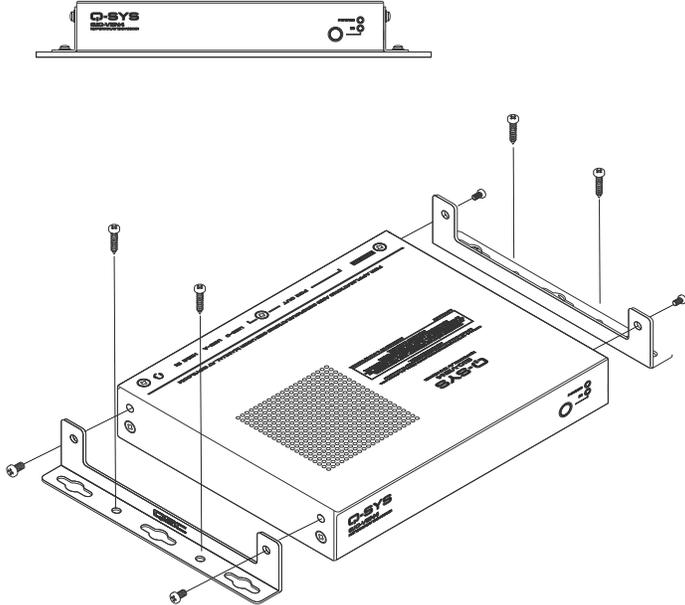
**TIP:** If a semi-permanent installation is desired, use the bracket keystone holes in conjunction with screws tightened loosely to the brackets to allow for easy slide-on and slide-off of the unit.



# Installation Cont'd

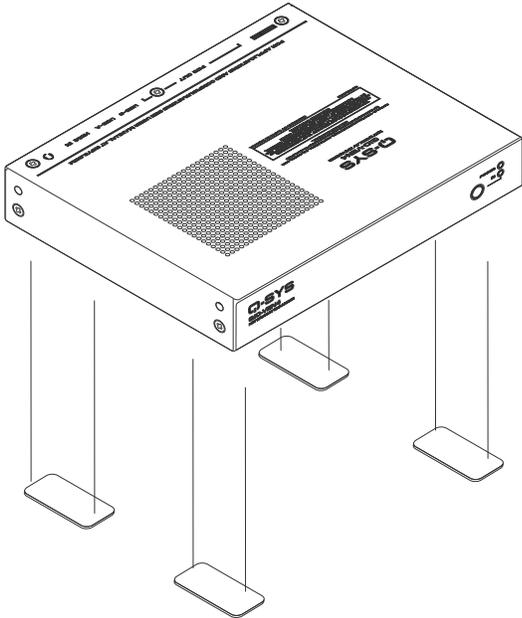
## Flush / Wall Mounting

Use the two (2) included brackets and four (4) Phillips pan head screws. Screws for mounting the brackets to the surface are pictured but not included.



## Freestanding Installation

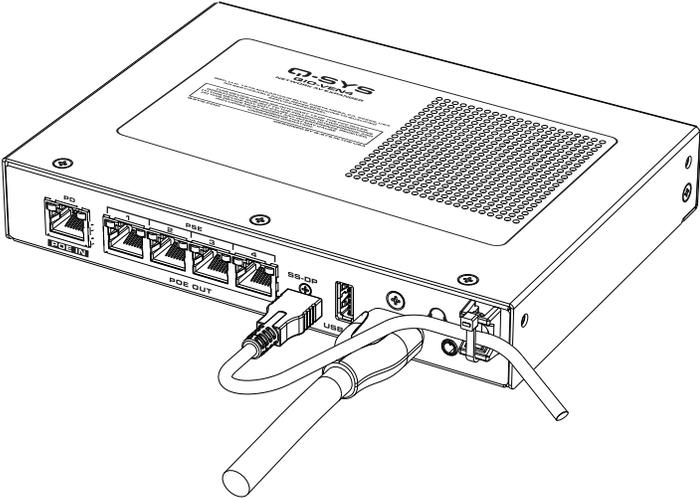
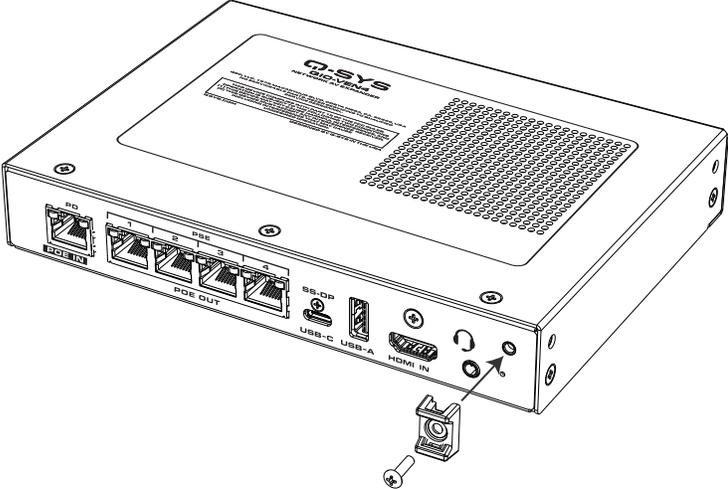
Attach the four (4) included foam spacers to the underside of the unit.



# Installation Cont'd

## Cable Strain Relief

Using the included Cable Strain Relief hardware, attach the tie mount to the upper right corner of the QIO-VEN4 rear panel and secure connected cables to it with the zip tie. This will help prevent damage to cables and connectors.





## 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](https://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/](https://qsys.com/contact-us/)

## Warranty

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

[qsys.com/support/warranty-statement/](https://qsys.com/support/warranty-statement/)



Q-SYS Shift is a trademark of QSC, LLC.