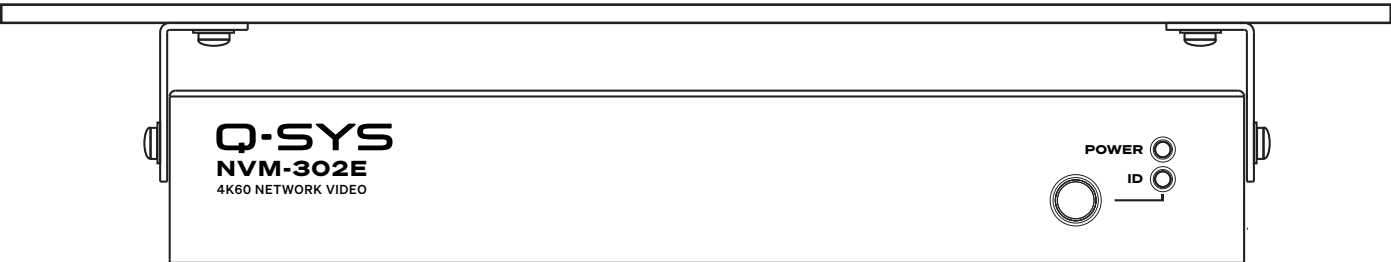


NVM-302E 4K60 Network Video Encoder Endpoint for Q-SYS



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 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.
16. The equipment power supply cord shall be connected to a socket-outlet with earthing connection.
17. Please return to the authorized dealer for any installation, replacement, repair, update or service.



CALIFORNIA WARNING: CAN EXPOSE YOU TO LEAD, A CARCINOGEN AND REPRODUCTIVE TOXICANT. SEE WWW.P65WARNINGS.CA.GOV.

Power Supply Statements



IMPORTANT!: 802.3at Type 2 Class 4 (30W from PSE, 25.5W at NVM) or 802.3bt Type 3 Class 5 (45W from PSE, 40W at NVM) power input required. For more information, see the "Power Requirements" section.



WARNING!: For maximum load operation, this product is intended to be supplied by a UL listed (Certificate) Power over Ethernet (PoE) compliant power supply:

Type 3 Class 5: Rated 48-56VDC, IEEE 802.3bt, and rated 0.9A minimum, TMA 50°C minimum, and altitude of 2000m.

If you need further assistance, contact QSC, LLC for further information.



IMPORTANT!: PoE is considered a Network Environment 0 per IEC TR62101, and therefore, the interconnected ITE circuits may be classified as SELV. The ITE must be connected only to PoE networks that do not route to outside the plant.

Maintenance and Repair



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.

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 90% RH non-condensing
- **Operating Temperature Range:** 0°C to 50°C (32°F to 122°F)
- **Operating Humidity Range:** 5% to 90% 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.

RoHS Statements

The QSC Q-SYS NVM-302E 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 product is distributed.

中国RoHS声明

产品中有害物质的名称及含量

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
金属部件	○	○	○	○	○	○
塑胶部件	○	○	○	○	○	○
印刷电路板	○	○	○	○	○	○
内部线	○	○	○	○	○	○

本表格依据SJ/T11364的规定编制。

O: 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 26572-2011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过GB/T 2657-2011限定的限量要求。

根据中国电子行业标准SJ/T11364-2014 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。

台灣 RoHS 聲明

限用物質含有情況標示聲明書

Declaration of the Presence Condition of the Restricted Substances Marking

設備名稱 Product Name: 視頻外設 Video Peripheral, 型號 Model: NVM-302E						
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)
外殼 Enclosure	○	○	○	○	○	○
塑膠部 Plastic parts	○	○	○	○	○	○
電路板 PCB	○	○	○	○	○	○
內部線 Internal wiring	○	○	○	○	○	○

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.

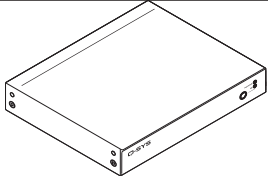
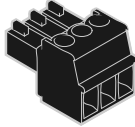
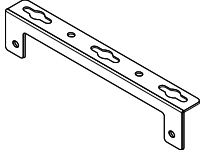
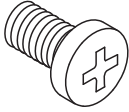
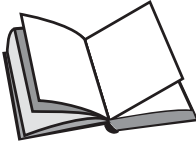
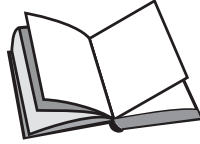
備考2. “O”係指該項限用物質之百分比含量未超出百分比含量基準值。

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

 <p>(1x) NVM</p>	 <p>(2x) Euro Connector 3-position, black RS232</p>	 <p>(2x) Mounting Bracket</p>
 <p>(6x) Phillips Pan Head M4 x 7mm (4 used + 2 spares)</p>	 <p>(1x) Warranty TD-000453</p>	 <p>(1x) Safety Information TD-001717</p>

Introduction

The Q-SYS NV Series NVM Encoder is the next evolution for native video distribution on the Q-SYS Platform. The NVM Encoder is dual HDMI endpoint offering a comprehensive single-cable solution for video distribution, and AV bridging. The NVM's compact size and reduced I/O make it ideal for supporting meeting rooms, learning spaces, hospitality and entertainment installations. The NVM can be used alongside other Q-SYS NV Series video endpoints, providing system design flexibility. Like all Q-SYS products, the NVM offers native integration and control, simplifying configuration and operation.



NOTE: NVM network video endpoints require Q-SYS Designer Software (QDS) for configuration and operation. QDS version compatibility information can be found [here](#). Information about the QDS components related to the NVM, including their properties and controls, can be found in Q-SYS Help at help.qsys.com. Or, simply drag an NVM component from the Inventory into the Schematic and press F1.

Power Requirements

The Q-SYS NVM-302E has a flexible power solution that allows the integrator to choose to use either Power over Ethernet (PoE) 802.3at Type 2 Class 4 (30W from PSE, 25.5W at NVM) or 802.3bt Type 3 Class 5 (45W from PSE, 40W at NVM). Increased USB power is available when using a Type 3 Class 5 PoE.

Refer to the NVM Specifications Sheet at qsys.com for additional power supply details.

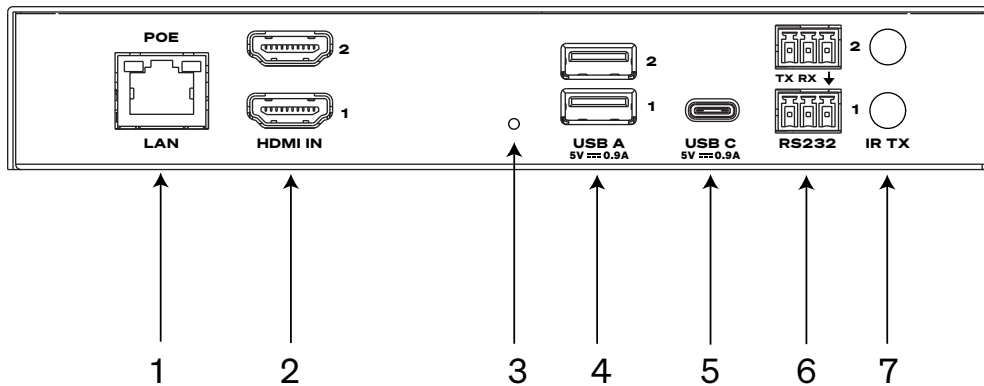
Connections and Callouts

Front Panel



1. **Power LED** – Illuminates blue when the NVM is powered on.
2. **ID Button** – Locates the NVM 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** – RJ-45 connector, 2.5GbE, 802.3at Type 2 Class 4 (30W from PSE, 25.5W at NVM). For connection to Q-LAN. **Note:** For increased USB power, 802.3bt Type 3 Class 5 (45W from PSE, 40W at NVM) is also supported.
2. **HDMI In (x2)** – HDMI 2.0 Input with support for HDCP 2.3 and HDCP 1.4.
3. **Reset Button** – Use a paper clip, or similar tool, to press and hold the reset button for 10 seconds to reset the NVM to factory values.
4. **USB A (x2)** – USB 3.0 Type A Host Port. Supports 5VDC (300mA total across all USB A and USB C ports with Type 2 Class 4 PoE, 900mA total with Type 3 Class 5 PoE).
5. **USB C** – USB 3.2 Gen 1x1 (5Gbps) Type C Host/Device Port, supporting DisplayPort Alt-Mode (DP 1.4 Source). Supports 5VDC (300mA total across all USB A and USB C ports with Type 2 Class 4 PoE, 900mA total with Type 3 Class 5 PoE).
6. **RS232 (x2)** – Serial Transmit and Receive. Uses the black 3-pin Euro connectors
7. **IR TX Port (x2)** – 3.5mm jack for connection to IR transmitter.

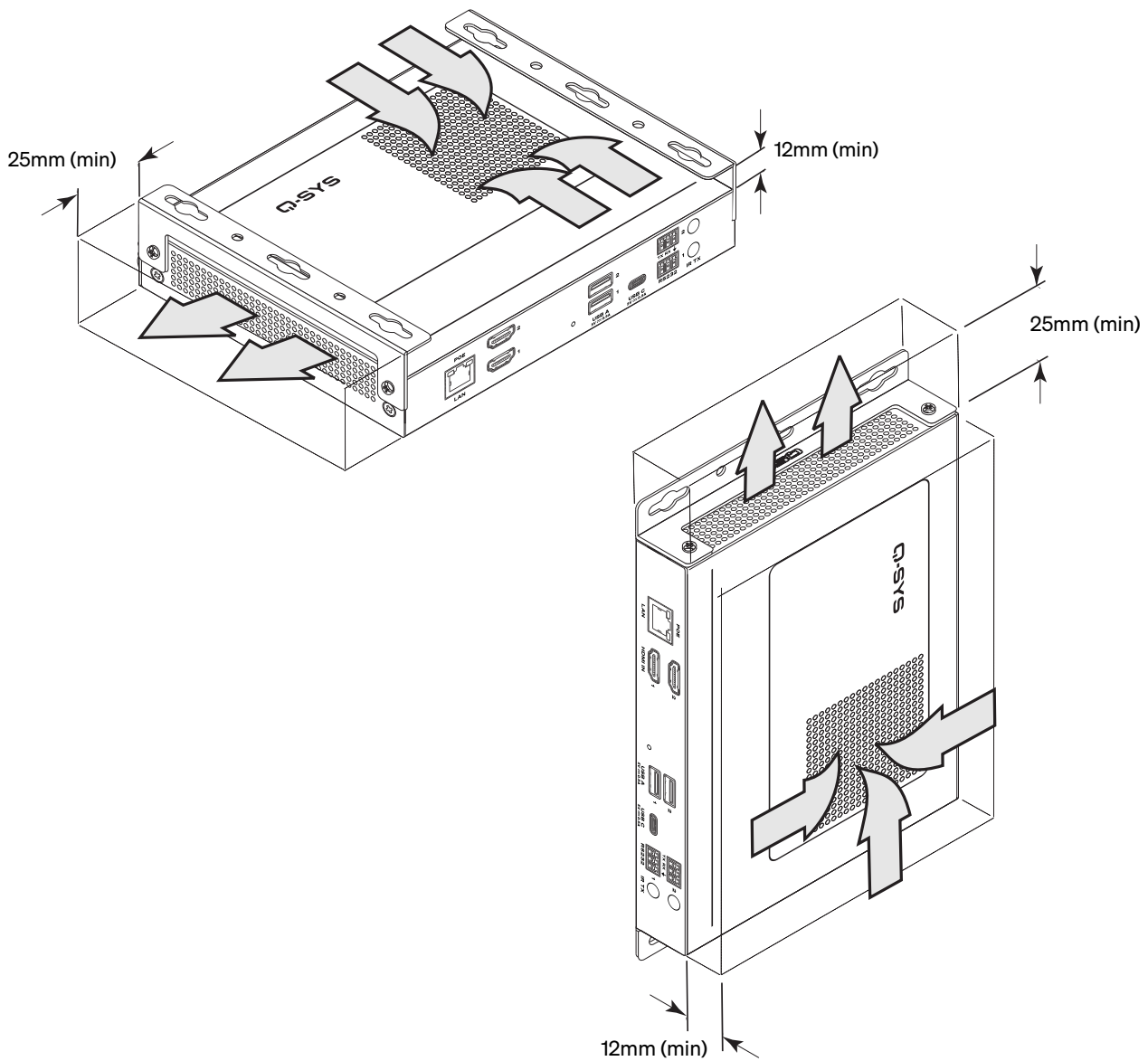
Installation

The NVM can be mounted under a table or desk, flush-mounted (such as on a wall), or mounted in a rack. 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
- "Rack-Mount Installation" on page 9

Ventilation Requirements

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

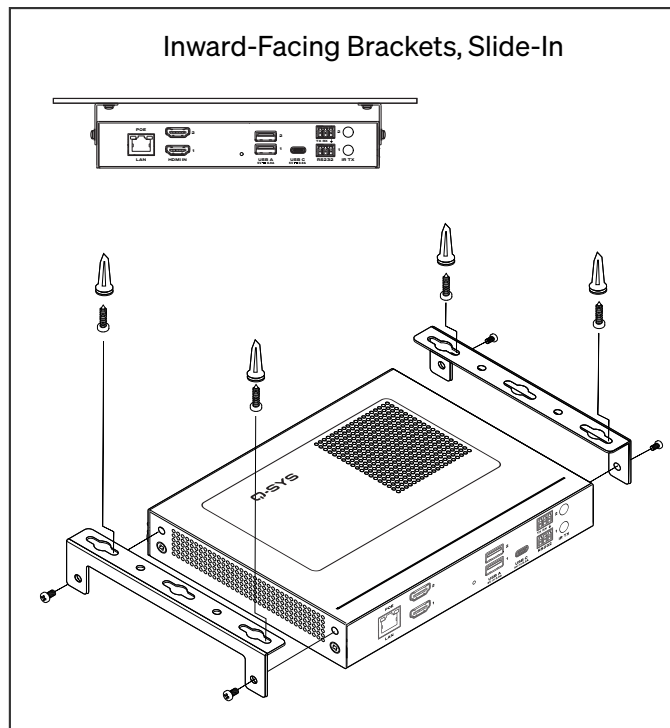
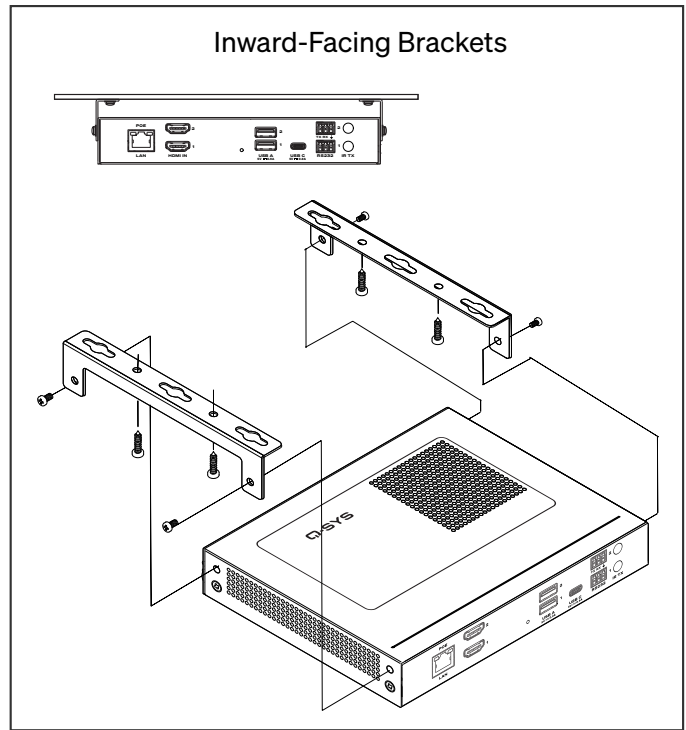
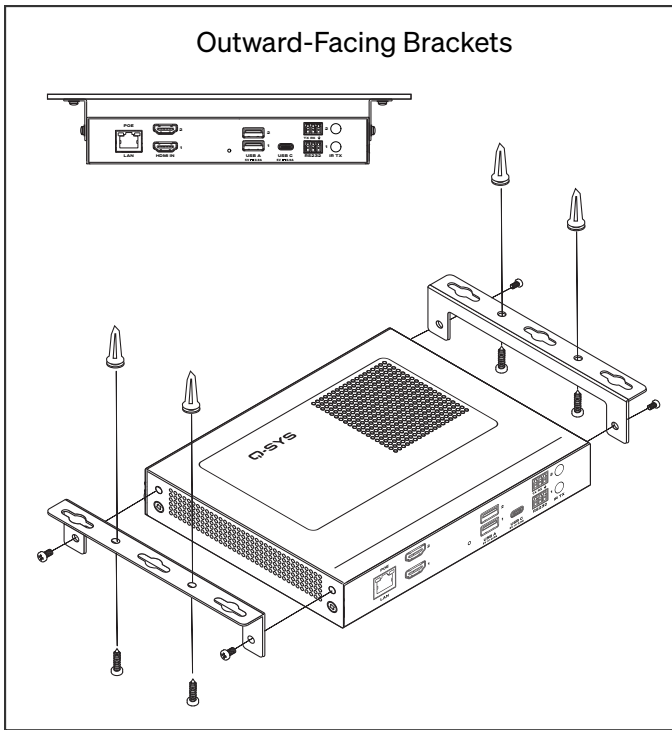


Installation Cont'd

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.

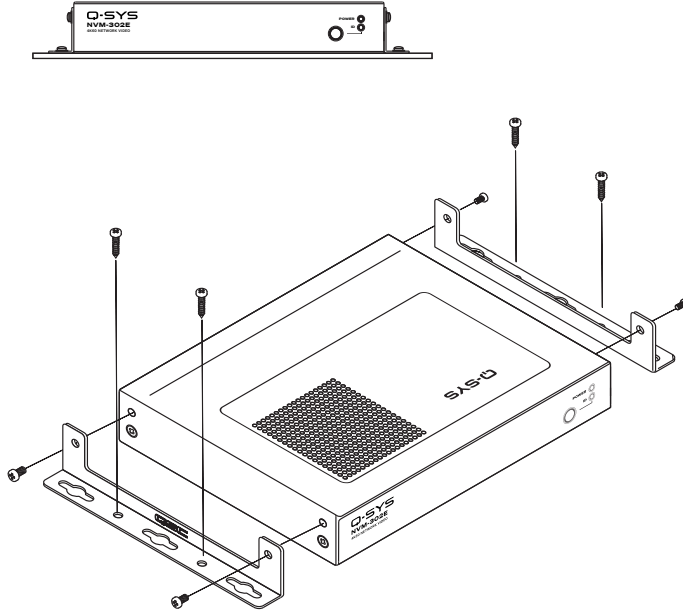
TIP: If a semi-permanent installation is desired, use the bracket keystone holes in conjunction with screws tightened loosely to the brackets to allow for easy slide-on and slide-off of the unit.



Installation Cont'd

Flush / Wall Mounting

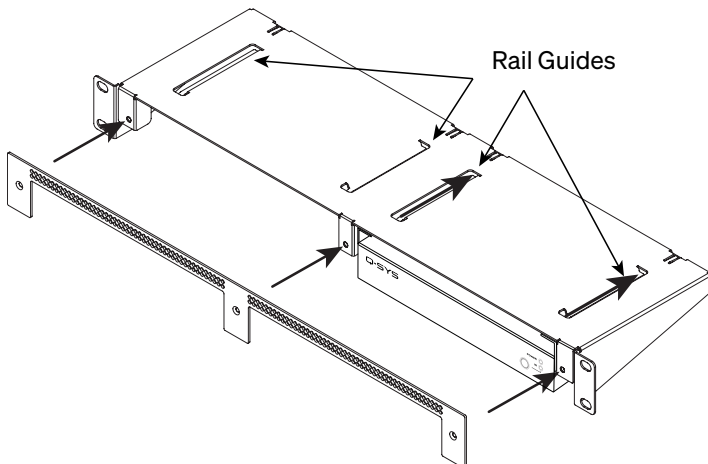
Use the two (2) included brackets and four (4) Phillips pan head screws. Screws for mounting the brackets to the surface are pictured but not included.



Rack-Mount Installation

NVM devices can optionally be mounted in a standard rack using the 1RU rack-mount accessory kit (FG-901652-00, NV-RM), which can accommodate two NV devices side-by-side. The kit includes a tray (x1), front panel (x1), and Phillips flathead M6 × 6mm screws (x3 plus a spare) for mounting the front panel to the tray.

1. Follow the **Inward-Facing Brackets** illustration (previous page) to attach the mounting brackets to the NVM.
2. Mount the tray to a 1RU slot in the rack using four rack screws (not provided).
3. With the tray mounted, slide the NVM brackets into the **Rail Guides** in the top of the tray. You will hear a click when the NVM is inserted fully.
4. Attach the front panel to the tray using three (3) of the provided flathead screws. Note the orientation of the tray and panel:





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/

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