

## Q-SYS QIO-ML4i

## Q-SYS QIO-L4o

## Q-SYS QIO-ML2x2

### KEY FEATURES

- Native audio I/O expanders for Q-SYS
- **QIO-ML4i:** Four (4) mic/line inputs
- **QIO-L4o:** Four (4) line outputs
- **QIO-ML2x2:** Two (2) mic/line inputs and two (2) line outputs
- Professional mic/line level inputs with +48 VDC phantom power and/or line outputs
- Microphone detection on inputs enables monitoring, usage statistics, and failure notifications
- Power-over-Ethernet capable
- Daisy-chain up to four QIO network I/O expanders on a single network run (with local daisy-chained DC power)
- Simple drag-and-drop integration and comprehensive management via Q-SYS Designer Software and Q-SYS Reflect Enterprise Manager
- Surface- or rack-mountable
- Includes surface mounting hardware
- QIO-RMK rack mounting kit sold separately
- QIO-PSU DC power supply sold separately



### Q-SYS QIO Series

Network audio I/O expanders for Q-SYS

The Q-SYS QIO Series network audio I/O expanders extend your Q-SYS system's capabilities and enable streamlined interoperability with non-networked audio devices. By separating local I/O from processing hardware, the QIO Series offer modular and easily scalable network I/O to support your desired topology.

### BENEFITS

**The right I/O where you need it:** QIO Series network I/O allows you to provide your Q-SYS system with greater flexibility to deploy mic/line audio connectivity where it's most convenient. Each of the three models features a compact form factor that can be rack- or surface-mounted.

**Audio I/O models:** feature professional mic/line level inputs with +48 VDC phantom power and/or line outputs to ensure high-performance and compatibility, along with microphone detection on inputs to enable monitoring, usage statistics and failure notifications.

- QIO-ML4i: Four (4) mic/line inputs
- QIO-L4o: Four (4) line outputs
- QIO-ML2x2: Two (2) mic/line inputs and two (2) line outputs

**Expanded I/O customization:** QIO Series is intended to present a simpler way to add network I/O connectivity to Q-SYS systems, decoupling the physical location of the I/O from processing hardware to support distributed or centralized processing architectures. Additionally, QIO Series lets you customize your I/O configuration, and complements the strengths of newer Q-SYS Core models that were designed with fewer onboard I/O options (Core Nano, Core 8 Flex, or NV-32-H (Core Capable)).

**Simplicity & scalability:** Daisy-chain up to four of the QIO Series devices on a single network run (with local daisy-chained DC power) to consume fewer network ports, avoid rack clutter, and allow for quicker future expansion without pulling additional network cables. Alternatively, QIO Series are also PoE-capable, providing simple single cable connectivity (when devices aren't daisy-chained).

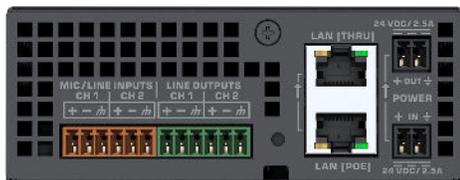
**Designed for Q-SYS:** QIO Series network I/O are native to Q-SYS, a cloud-manageable audio, video and control platform, built to deliver scalable, flexible AV solutions well into the future. At its foundation, the **Q-SYS OS** serves as the software foundation that manages your QIO Series devices along with a multitude of other native **Q-SYS Products** in the platform. Additionally, the modern IT architecture and development tools of the Q-SYS Platform enable an entire Ecosystem of third-party devices developed by approved **Q-SYS Partners**, as well as a worldwide community of Q-SYS developers using the available tools found in **Q-SYS Open**.

## Q-SYS QIO Series

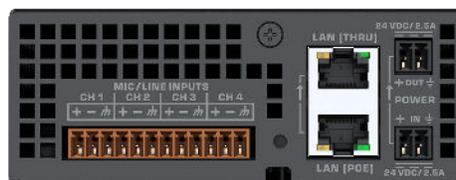
	QIO-ML4i	QIO-ML2x2	QIO-L4o
<b>Connectivity</b>	Four (4) mic/line inputs	Two (2) mic/line inputs and two (2) line outputs	Four (4) line outputs
<b>Mic/Line Inputs</b>			
Maximum input level		+24 dBu	-
Preamplifier gain range		0 dB to 60 dB	-
Input sensitivity range		-36 dBu TO +24 dBu	-
Phantom power		+48 VDC, 10 mA maximum per input	-
<b>Input Frequency Response</b>			
20 Hz to 20 kHz		+/- 1.0 dB	-
<b>Input THD+N @ 1 KHz</b>			
@ +24 dBu sensitivity & +24 dBu input		< 0.1%	-
@ +24 dBu sensitivity & +10 dBu input		< 0.05%	-
@ +10 dBu sensitivity & +8 dBu input		< 0.015%	-
@ -10 dBu sensitivity & -10.5 dBu input		< 0.015%	-
@ -36 dBu sensitivity & -36.5 dBu input		< 0.015%	-
Equivalent Input Noise		< -120 dBu, no weighting @ 20 Hz to 20 kHz	-
Input to input crosstalk @ 1 kHz		> 85 dB	-
<b>Input Dynamic Range</b>			
@ +24 dBu sensitivity		> 105 dB	-
@ +10 dBu sensitivity		> 100 dB	-
@ -10 dBu sensitivity		> 95 dB	-
@ -36 dBu sensitivity		> 80 dB	-
Input impedance		5 k $\Omega$ single-ended, 10 k $\Omega$ balanced	-
<b>Line Outputs</b>			
Output audio range level		-	-36 dBu to +24 dBu
<b>Input Frequency Response</b>			
20 Hz - 20 kHz		-	+/- 0.5 dB
<b>Output THD+N @ 1 KHz</b>			
+10 dBu output level		-	< 0.01%
Output dynamic range		-	108 dB
Output to output crosstalk @ 1 kHz		-	> 85 dB
Output Impedance		-	150 $\Omega$ to 300 $\Omega$
Sample rate		48 kHz	
Bit depth		24 bit	

## Q-SYS QIO Series

	QIO-ML4i	QIO-ML2x2	QIO-L4o
<b>Other Connectors</b>			
External power supply	24 VDC nominal, 2.5 A on Euro connector with second connector for daisy-chaining (QIO-PSU power supply sold separately)		
LAN (PoE)	Gigabit LAN connection for Q-LAN, PoE		
PoE specification	Conforms to IEEE 802.3af Type 1		
LAN (Thru)	Ethernet daisy-chaining		
<b>General</b>			
Dimensions	8.5 x 4.25 x 1.59 in (215.9 x 108 x 40.4 mm)		
Weight	1.72 lb (0.78 kg)		
Mounting options	Surface- and wall-mountable (hardware included) Rack-mountable; 1RU, quarter-rack width (QIO-RMK rack kit sold separately)		
<b>Environmental</b>			
Ambient operating temperature range	0°C to +50°C		
Humidity	0% - 85% through 30°C, non-condensing		
Storage temperature	-20° to 70°C		
Compliance	FCC 47 CFR Part 15, IC ICES-003, CE (EN55032, EN55035), EU RoHS directive 2011/65/EU, WEEE directive 2012/19/EU, China RoHS directive GB/T26572, EAC, UL, C-UL, NOM-019		



QIO-ML2x2



QIO-ML4i



QIO-L4o