

### Will the upcoming product(s) be certified for Microsoft Teams/Google Meet/Zoom?

It is our intention to have these, as well as future collaboration products, certified with the major collaboration platforms. We will provide updates on any status changes and milestones as they've been achieved.

### **Q-SYS Scaling Licenses - General**

### Which Q-SYS Cores support Q-SYS Scaling Licenses?

Currently, the Q-SYS Core Nano and Q-SYS Core 8 Flex are the only models to support the Q-SYS Scaling licenses.

### Are there Q-SYS Scaling Licenses for any of the other Q-SYS Cores?

Currently there are no Q-SYS Scaling Licenses for any Q-SYS Core models other than the Q-SYS Core Nano and the Q-SYS Core 8 Flex.

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## Can Q-SYS Scaling Licenses be applied to any Q-SYS Core Nano or Q-SYS Core 8 Flex already installed in the field?

Yes – Q-SYS Scaling Licenses can be applied to any Q-SYS Core Nano or Q-SYS Core 8 Flex, as long as they're upgraded to Q-SYS Designer v9.4 or later.

### Does using either of these Q-SYS Scaling Licenses take capability or capacity away from the Cores?

Using the Q-SYS Scaling Licenses only adds to a Core's capabilities and capacities.

### Can both Q-SYS Scaling Licenses be applied to a Core?

Yes – although the Q-SYS Core hardware still has finite limits that cannot be expanded. Specifically, applying both licenses will not quadruple their processing capacity or provide 256x256 network I/O, so this wouldn't represent the best value. A larger Q-SYS Core such as the 510i would be a better option.

### Do the Q-SYS Scaling Licenses increase the capability of a Core's Software-based Dante channels?

No - these licenses only scale the network I/O capacity used for Q-LAN and AES67, which is shared with Software-based Dante, but Software-based Dante remains separate licenses with their own capacities. The Q-SYS Core Nano and Q-SYS Core 8 Flex are still limited to 32x32 maximum Software-based Dante capacity.

#### Do the Q-SYS Scaling Licenses include any other licensed features?

No - the UCI Deployment, Scripting Engine, and Multi-track Playback licenses are separate licenses.

### **Q-SYS Scaling Licenses - Collaboration Bundle**

#### Can the Collaboration Bundle be used in non-collaboration applications?

Yes – The Collaboration Bundle can be used in other applications, but the specific features and capacities scaled by it are most applicable to collaboration applications, hence the name.

### **Q-SYS Scaling Licenses - Commercial AV Bundle**

#### Can the Commercial AV Bundle be used in non-commercial AV applications?

Yes – The Commercial AV Bundle can be used in other applications, but the specific features and capacities scaled by it are most applicable to a broad range of audio distribution, paging and entertainment applications, hence the name.

## What counts as a peripheral in respect to the Commercial AV Bundle scaling license and its ability to scale the number of peripherals within a single system?

With respect to this the Q-SYS Commercial AV Bundle scaling license, peripherals include native Q-SYS cameras, Q-LAN I/O, NV-32-H, TSC Series touchscreens, Paging Stations, Extensions and plugins with their "Is Managed" property set to "Yes". It does not include Streaming I/O, Loudspeakers, Scripts or plugins with their "Is Managed" property set to "No".

### **Q-SYS NM Series Microphones**

### Can I use the Q-SYS NM-T1 without a Q-SYS Core?

No – The Q-SYS NM-T1 is a native Q-LAN endpoint and requires a Q-SYS Core for operation.

### Can multiple Q-SYS NM-T1 microphones be daisy-chained?

No – Each Q-SYS NM-T1 requires direct connection to a PoE network switch or injector.

### How many Q-SYS NM-T1 can be used with each Q-SYS Core processor?

As the product draws closer to its tentative customer shipment dates in US Summer 2022, QSC will provide more granular details on how many Q-SYS microphones are supported per Q-SYS Core and how the AEC processing resources are allocated.

### What is the pick-up distance for the Q-SYS NM Series NM-T1?

There are many factors that influence pickup distance including talker level, ambient room noise and input gain. Regardless of these conditions, it is always best practice to place the microphone as close to the talker as possible. In standard meeting room conditions, the Q-SYS NM-T1 can pick up talkers from 1 to 3 meters away.

### How do I know which beam is which in relation to the NM-T1 tabletop microphone?

Within the NM-T1 Q-SYS Designer software component, each beam has an ID button. Pressing this button will cause the 90° segment of the light ring associated with that beam to blink yellow.

### What is the included strain relief cap with the Q-SYS NM-T1 used for?

The Q-SYS NM-T1 strain relief cap serves two purposes: first, it reduces strain on the network cable when the microphone is used in a free-standing application. Second, it limits access to the bottom of the microphone, preventing users from accidentally disconnecting the microphone or pressing the factory reset button.

### Does the Q-SYS NM-T1 light ring support custom colors and patterns?

Yes – the Q-SYS NM-T1 has the capability for custom LED colors and patterns.

### Can the Q-SYS NM-T1 be permanently mounted to a table?

Yes - the Q-SYS NM-T1 includes hardware for permanently mounting the microphone to a table.

#### What is the required hole size is required to mount the Q-SYS NM-T1 microphone on a table?

A 1-inch (25.4mm) hole is required to install the included Q-SYS NM-T1 mounting kit in a table.

#### What is the maximum cable length for the Q-SYS NM-T1?

The Q-SYS NM-T1 uses standard Ethernet for communications and therefore a maximum cable length of 328.1 feet (100 meters) is recommended.

#### Can I use the Q-SYS NM-T1 onboard proximity sensor for functions other than mute?

Yes - The Q-SYS NM-T1 proximity sensor can be used to control any device by exposing the control pin in Q-SYS Designer Software.

### How does the Q-SYS NM-T1 proximity sensing feature work?

The user must place their hand over other solid object over the microphone at a height of approximately 4-6". When the Q-SYS NM-T1 microphone detects the hand or object, it will begin to incrementally light up the light ring in a fuel gauge style pattern. The user must hold their hand or object over the microphone until this pattern is filled in order to activate the system control event.

### Is any programming required for the Q-SYS NM-T1 mute sync with UC platforms?

When used with the Call Sync component within the Q-SYS Designer software, no programming is required for the Q-SYS NM-T1 mute sync with popular collaboration platforms such as Microsoft Team and Zoom. Simply connect the microphone and HID Conferencing component to Room Sync and you're done!

### If I don't want users to have access to call control on the Q-SYS NM-T1 microphone, can I turn it off?

Yes – the control ring of the Q-SYS NM-T1 is highly customizable, you may enable and disable call control as well as the user button and mute buttons independently.

### Does the Q-SYS NM Series microphone have built-in AEC or does it take an AEC channel on a Q-SYS Core?

The Q-SYS NM series will be supported in terms of the number of mics per Q-SYS Core and not number of AEC channels. You will still be able to utilize AEC resources for integration with 3rd party mics alongside the NM series.

### Will the Q-SYS NM Series microphone mute sync function with UC platform solutions such as Zoom and Microsoft Teams?

Yes - the Q-SYS NM Series microphone mute sync function does work with Zoom, Microsoft Teams and other major platforms.

### How many zones are on the Q-SYS NM-T1?

The Q-SYS NM-T1 features four software-definable zones.

## Is it possible to use the Q-SYS NM Series microphone zones to aim a Q-SYS camera at that particular zone when audio is detected?

There are plans to incorporate the Q-SYS NM-T1 in a future update of the Automatic Camera Preset Recall Plugin.

### Can the user mute an individual Q-SYS NM-T1 microphone beam/zone?

When the mute buttons on the microphone are active, pressing any mute button will toggle muting for all active microphone zones. The system designer may disable unwanted coverage zones within the NM-T1 component in Q-SYS Designer.

### **Q-SYS NL Series Network Loudspeakers**

## What is the difference between the Q-SYS NL Series and the other installed loudspeaker lines like the AcousticDesign (AD) Series and AcousticCoverage (AC) Series?

The Q-SYS NL Series network loudspeakers are PoE/PoE+ endpoints with integrated amplifiers and single cable connection for power, data, and audio. Unlike the AD Series and AC Series passive loudspeakers, they do not require an amplifier.

### Can I use an external amplifier with the Q-SYS NL Series network loudspeakers?

The Q-SYS NL Series cannot be used as passive loudspeakers.

### Can I daisy chain multiple Q-SYS NL Series network loudspeakers?

Each Q-SYS NL Series network loudspeaker must be connected to a suitable PoE/PoE+ network switch or supply.

### What is the impedance of the Q-SYS NL Series network loudspeakers? Why is it not specified?

Unlike traditional passive loudspeakers, the Q-SYS NL Series network loudspeakers does not specify impedance since the driver in the series is matched to the amplifier and network interface for optimal performance.

### What signal processing is available at the Q-SYS NL Series network loudspeakers?

The Q-SYS NL Series network loudspeakers feature integrated output compression and limiting to optimize the speaker for use on PoE and PoE+ power supplies. These are integrated features of the products and are not user adjustable, any Q-SYS Designer Software supported processing can be used with a Q-SYS Core processor to feed to the Q-SYS NL Series loudspeaker.

### Do the Q-SYS NL-C4 and Q-SYS NL-P4 have a light ring like the Q-SYS NL-SB42?

The Q-SYS NL-C4 and Q-SYS NL-P4 do not have a light ring, this feature is limited to the Q-SYS NL-SB42. They do, however, have a status LED that is used to reflect device status and device identification.

### Does the Q-SYS NL-SB42 include a microphone in the soundbar?

There are no internal microphones on the Q-SYS NL-SB42 soundbar.

### How many of the Q-SYS NL Series network loudspeakers can I power from my switch?

The number of loudspeakers that may be powered is directly related to the power supply of the PoE switch. For example, it is common for PoE switches to allow powering devices on any port, but often the PoE switch does not have a power supply adequate to allow full PoE/PoE+power to all ports at the same time. There is no single answer to this question and will vary across switch manufacturers and must be calculated by taking the total PoE power budget divided by the power draw of each loudspeaker. In PoE Class 0 mode, the loudspeaker will draw up to 15.4 W at the PoE switch port. In PoE+ 802.3 at Class 4 mode, the loudspeaker will draw up to 30W at the PoE switch port depending upon the audio content.

### I'm configuring the power budget of my switch. Do I have to use PoE+ if it's available?

By default, the Q-SYS NL Series network loudspeakers are configured to operate as PoE 802.3af Class 0 devices. Using Q-SYS Designer Software, the system designer has the option to allow PoE+ capability to be advertised to the connected switch or mid-span injector to boost the overall output power of the loudspeakers. This option is provided to allow the system designer to manage the overall power utilization of the switch. In PoE Class 0 mode, the loudspeaker will draw up to 15.4 W at the PoE switch port. In PoE+ 802.3at Class 4 mode, the loudspeaker will draw up to 30W at the PoE switch port.

### How does the Q-SYS NL Series network loudspeakers know whether to use PoE or PoE+?

If the Q-SYS NL Series network loudspeaker is configured to allow PoE+ operation, the PoE negotiation happens without any further user intervention between the speaker and the PoE PSE (switch / mid-span injector). If the loudspeaker is configured by the system designer to allow PoE+ operation, but the PSE does not negotiate PoE+ power to the port, the NL series loudspeaker status will be shown as 'Compromised'

### What is the latency of the Q-SYS NL Series network loudspeakers?

All Q-SYS NL Series network loudspeakers are a native Q-LAN endpoint and provide the same Q-LAN latency 48kHz audio transport found on other Q-LAN devices.

### Are the Q-SYS NL Series network loudspeakers stereo or mono?

All Q-SYS NL Series network loudspeakers are mono. A stereo playback system can be created by using multiple Q-SYS NL Series network loudspeakers and routing stereo content to the loudspeakers from the Q-SYS Core processor.

### Q-SYS QIO Series Audio I/O Expanders - Mic/Line Inputs

### Which Q-SYS QIO Series audio I/O expander devices have the microphone detection feature?

Q-SYS QIO-ML4i and Q-SYS QIO-ML2x2 have the microphone detection feature on each mic/line input.

## Is the microphone detection feature the same as that found on the Q-SYS Core 8 Flex, Q-SYS Core 110f, and Q-SYS I/O-8 Flex?

Yes – the microphone detection feature offers the same feature set and functionality that's found on the Q-SYS Core 8 Flex, the Q-SYS Core 110f and the Q-SYS I/O-8 Flex.



What is the maximum input level of the Q-SYS QIO Series audio I/O expanders?

The maximum input level of the Q-SYS QIO Series audio I/O expanders are +24 dBu.

### What is the input gain range of the Q-SYS QIO Series audio I/O expanders?

The input gain range of the Q-SYS QIO Series audio I/O expanders are 0 to 60 dB.

Do the mic/line inputs of the Q-SYS QIO Series audio I/O expanders offer phantom power?

Yes – the mic/line inputs of the Q-SYS QIO Series audio I/O expanders offer phantom power of +48 VDC.

### QIO Series Audio I/O Expanders – Line Outputs

What is the maximum output level of the Q-SYS QIO Series audio I/O expanders? The maximum output level of the Q-SYS QIO Series Audio I/O Expanders are +24 dBu.

What is the output level range of the Q-SYS QIO Series audio I/O expanders?

The output level range of the Q-SYS QIO Series audio I/O expanders are -36 dBu to +24 dBu.

### QIO Series Audio I/O Expanders – GPIO

### Are the GPIO of the Q-SYS QIO Series audio I/O expanders configurable to be an input or an output?

No – The GPIO of the Q-SYS QIO Series audio I/O expanders are not configurable. There are eight dedicated inputs and eight dedicated outputs.

### Is a reference supplied for the Q-SYS QIO Series audio I/O expanders?

Yes – a 12 VDC / 0.1 Amp reference voltage is supplied along with a common ground.

### What modes do the inputs support with the Q-SYS QIO Series audio I/O expanders?

The inputs of the Q-SYS QIO Series audio I/O expanders support the following modes: Analog Input, Digital Input, Raw Input, Potentiometer (10k), Potentiometer (2 wire), Contact Closure.

### What modes do the Q-SYS QIO Series audio I/O expander outputs support?

The Q-SYS QIO Series audio I/O expander outputs support the following modes: Digital Output, Raw Output, Open Collector.

### How much current can the Q-SYS QIO Series audio I/O expander outputs sink?

The Q-SYS QIO Series audio I/O expander outputs can sink a maximum of 0.2 Amps at 24 VDC.

### QIO Series Audio I/O Expanders - Serial

**Does the Q-SYS QIO-S4 support anything beyond RS232?** Port 1 can be configured for RS232, RS422, or RS485. Additionally, all ports offer CTS and RTS pins.

### What is the maximum baud rate of the Q-SYS QIO Series audio I/O expanders?

The maximum baud range of the Q-SYS QIO Series audio I/O expanders is 230400.

### QIO Series Audio I/O Expanders – IR

### Can the Q-SYS QIO Series audio I/O expander input be used to learn IR commands?

Yes - the Q-SYS QIO Series audio I/O expander input can be used to learn IR commands. That is the primary intended use for the IR receiver.

## Can the Q-SYS QIO Series audio I/O expander input be routed on demand to relay commands to one or more of the outputs?

Yes – the Q-SYS QIO Series audio I/O expander input can be routed on demand, "capture" and send is a covered use case.

### Does the Q-SYS QIO-IR1x4 come with an IR receiver and IR emitters?

The Q-SYS QIO-IR1x4 does not come with an IR receiver or IR emitters

### Will Q-SYS Designer Software have an IR database included?

Yes - a large IR database will be included with Q-SYS Designer Software v9.5 and beyond.

#### What IR format will be required on the Q-SYS QIO-IR1x4?

The required IR format is Pronto standard.

#### Will I be able to change IR commands on the Q-SYS QIO-IR1x4 within a running design?

Yes - the IR driver implementation will allow for run-time edits.

### QIO Series Audio I/O Expanders – Family

#### Is surface mounting hardware required for the Q-SYS QIO Series audio I/O expanders?

Surface mounting hardware is included with each Q-SYS QIO Series audio I/O expander with exception of hardware to fasten the surface mount brackets to your specific surface (table, wall, display bracket, etc.).

#### Can the Q-SYS QIO Series audio I/O expanders be surface mounted right-side up?

Yes – the Q-SYS QIO Series audio I/O expanders can be surface mounted right-side up, the included surface mount brackets are symmetrical permitting mounting in either orientation.

#### What level of PoE do the Q-SYS QIO Series audio I/O expanders require?

All Q-SYS QIO Series audio I/O expanders are Type 1 devices.

### Do the Q-SYS QIO Series audio I/O expanders support daisy-chaining with PoE (power over Ethernet)?

There is no standard for daisy-chaining PoE with Q-SYS QIO Series audio I/O expanders. If you wish to consolidate network runs, conserve switch ports, or add-on later without pulling additional network cable, local DC power must be used which can be daisy-chained.

#### Do the Q-SYS QIO Series audio I/O expanders support dynamic pairing?

Yes – the Q-SYS QIO Series audio I/O expanders support both network name-based and switch port-based dynamic pairing when not daisy-chaining.

### Do the Q-SYS QIO Series audio I/O expanders support network redundancy?

No – The Q-SYS QIO Series audio I/O expanders do not support network redundancy. They are intended for cost-effective, scalable, and modular installation with the ability to easily re-configure system I/O needs later and be easily swapped by lesser skilled professionals in the event of failure.

#### Do the Q-SYS QIO Series audio I/O expanders support device redundancy?

No – The Q-SYS QIO Series audio I/O expanders does not support device redundancy. They are intended for cost-effective, scalable, and modular installation with the ability to easily re-configure system I/O needs later and be easily swapped by lesser skilled professionals in the event of failure.



### Do the Q-SYS QIO Series audio I/O expanders support 802.1x?

Yes – the Q-SYS QIO Series audio I/O expanders support 802.1x, although daisy-chaining may not be supported depending upon your network topology and configuration.

### QIO Series Audio I/O Expanders – Rack Mount Kit

### Is a rack mounting kit required with the Q-SYS QIO Series audio I/O expanders?

A rack mounting kid is only required with the Q-SYS QIO Series audio I/O expanders if you want to rack mount one or more devices cleanly and quickly with minimal effort.

### Is hardware included for mounting Q-SYS QIO Series audio I/O expanders to the rack mount kit?

Yes – hardware is included for mounting Q-SYS QIO Series audio I/O expanders to the rack mount kid, with exception of the screws required to secure the tray to your rack rails. Three blank panels are also provided to make for a clean installation and optimized rack airflow.

### Can the rack mount kit be used to surface mount multiple devices at once?

No – any adjustments to the prescribed use-case with the rack mount kit would void the warranty.

### QIO Series Audio I/O Expanders – Power Supply

### How many Q-SYS QIO Series audio I/O expanders can be powered by daisy-chaining?

Up to four Q-SYS QIO Series audio I/O expanders can be powered by daisy-chaining.

### Is the Q-SYS QIO Series audio I/O expander power supply region-specific?

The Q-SYS QIO Series audio I/O expander power supply itself is universal with global compliance. There are region-specific SKUs which determines the power cord type included: US, EU, UK, AU, IN, JP, or CN.

### Is the Q-SYS QIO Series audio I/O expander power supply a wall wart or line lump/separate brick?

The Q-SYS QIO Series audio I/O expander is an in-line power supply with pre-stripped and pre-tinned leads on the DC side and a detachable region-specific mains cable on the AC side.

### How long is the Q-SYS QIO Series audio I/O expander power cable?

The Q-SYS QIO Series audio I/O expanders AC cable is 3.28 feet (1 meter), and the DC lead is approximately 3.94 feet (1.2 meters).

### How big is the Q-SYS QIO Series audio I/O expander power supply "brick"?

The Q-SYS QIO Series audio I/O expander power supply "brick": is approximately 5.75 x 2.35 x 1.25 in (146 x 60 x 32 mm).

### QSC AD-DWL Landscape Loudspeaker System

### What is the QSC AcousticDesign Series AD-DWL landscape loudspeaker system cone driver made from?

The QSC AcousticDesign Series AD-DWL landscape loudspeaker system cone drivers are made of polypropylene.

### What is the QSC AcousticDesign Series AD-DWL landscape loudspeaker system enclosure made from?

The QSC AcousticDesign Series AD-DWL landscape loudspeaker system enclosure is made of glass-filled polypropylene, F1-F2 UL rated which means it met both water and UV immersion requirements.

### How tall are the QSC AcousticDesign Series AD-DWL landscape loudspeaker system bollards?

The QSC AD-DWL landscape loudspeaker system bollards are 30.16 inches (766mm).

### What is the weather resistance of the QSC AcousticDesign Series AD-DWL landscape loudspeaker system?

The QSC AD-DWL landscape loudspeaker system has been designed for a wide range of environmental conditions from -5 - 50C (20 - 125F), high humidity, and salt mist conditions.

### What range of temperatures can the QSC AcousticDesign Series AD-DWL landscape loudspeaker system function within?

The QSC AD-DWL landscape loudspeaker system has an operational temperature of -5 through 50C (23 - 122F).

### What is an Ingress Protection rating?

The Ingress Protection Rating is used to define levels of sealing effectiveness of electrical enclosures against intrusion from foreign bodies (tools, dirt etc.) and moisture.

### What are the mounting types for the QSC AcousticDesign Series AD-DWL landscape loudspeaker system?

The QSC AD-DWL landscape loudspeaker system can be surface mounted or with an additional accessory (AD-DWL.BASE) the product can be anchored into the ground.

### Are the QSC AcousticDesign Series AD-DWL landscape loudspeaker system paintable?

Yes - the QSC AD-DWL landscape loudspeaker system exteriors are paintable.



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