



# QSC Q-SYS Module Setup Guide

**About:**

Q-SYS is a cloud-manageable audio, video and control platform built around a modern, standards-based IT architecture.

**Device Setup:**

Please use Q-SYS Designer PC software for this part of setup.

The Q-SYS device must be configured in offline mode first, and then its configuration must be saved to the core.

The Compass Control Q-SYS Module UI currently supports two-way control with 4 types of Q-SYS components:

- DSP Mixer Components
- Router Components
- Gain Components
- Snapshots

The Compass Control Q-SYS Driver supports one-way control with all types of Q-SYS Components.

On the schematic with the desired controls, click on each component once and start typing a new name to rename the component. Renaming the component is required for controlling Q-SYS. Default unaltered names will not be accepted. When renaming components, please write down all names that are desired for control. These will be entered into Compass Navigator variables for the UI to auto populate.

When the project is complete, save the design to the core and deploy the project to the Q-SYS device.

**Setup Module:**

Please open Compass Navigator for the remainder of setup.

In Compass Navigator, open the desired project to add the Q-SYS module. Please note that Compass Control supports only 1 Q-SYS module in the system for the Module UI to work properly.

**Setup Communication:**

Q-SYS units are controlled over IP on Port 1710.

In Compass Navigator, please insert the IP Address under Device Properties.

**Setup Login:**

In Compass Navigator, click on the Q-SYS device properties tab located under IP Devices. If the Core Unit Interface is password protected, then enter the password under "Password" and the username under "Login". Click on "Login type" and set the value to "Common". These credentials are required for control if a password is protecting the Q-SYS Core interface.

**Variable Setup:**

In Compass Navigator, click on the Variables tab located under Controller Designer. Here you will find the variables that must be set to control the Q-SYS device.

To control DSP Mixers from the Module UI, click on the *QSC\_List\_Mixer\_Components* variable. Under the properties tab:

- Change the array size from "Any" to the actual number of DSPs required to control
- Click on the "..." next to the Initial Value Text box.

- Uncheck the “Same” checkbox so that the list populates to the size specified for DSPs
- In each box, enter the DSP name that was given to the DSP component after the rename in Q-SYS Designer Software.

To control Gain Components from the Module UI, click on the *QSC\_List\_Gain\_Components* variable. Under the properties tab:

- Change the array size from “Any” to the actual number of Gain components required to control
- Click on the “...” next to the Initial Value Text box.
- Uncheck the “Same” checkbox so that the list populates to the size specified for Gain components
- In each box, enter the Gain name that was given to the Gain component after the rename in Q-SYS Designer Software.

To control Snapshots from the Module UI, click on the *QSC\_List\_Snapshot\_Banks* variable. Under the properties tab:

- Change the array size from “Any” to the actual number of Snapshots required to control
- Click on the “...” next to the Initial Value Text box.
- Uncheck the “Same” checkbox so that the list populates to the size specified for Snapshots
- In each box, enter the Snapshot name that was given to the Snapshot after the rename in Q-SYS Designer Software.

To control Routers from the Module UI, click on the *QSC\_List\_Router\_Components* variable. Under the properties tab:

- Change the array size from “Any” to the actual number of Routers required to control

- Click on the “...” next to the Initial Value Text box.
- Uncheck the “Same” checkbox so that the list populates to the size specified for Routers
- In each box, enter the Router name that was given to the Router component after the rename in Q-SYS Designer Software.

### Bi-Directional Feedback:

In Compass Navigator, click on the Variables tab located under Controller Designer. Here you will find the Project Variables that may be used to get component status.

- *QSC\_Gain\_Gains*
  - In the same order that the Gain components were entered into *QSC\_List\_Gain\_Components* array. This is where the gain status for Gain level is kept after calling *Var\_Load\_Gain()* Macro. These values are integers.
- *QSC\_Gain\_Mutes*
  - In the same order that the Gain components were entered into *QSC\_List\_Gain\_Components* array. This is where the mute status for Gain level is kept after calling *Var\_Load\_Gain()* Macro. These values are integer 0 for Mute off or 1 for Mute on.
- *QSC\_Gain\_Mutes\_ButtonState*
  - In the same order that the Gain components were entered into *QSC\_List\_Gain\_Components* array. This is where the mute status for Gain level is kept after calling *Var\_Load\_Gain()* Macro. These values are strings, ‘up’ for Mute Off and ‘down’ for Mute On.

- QSC\_Selected\_Mixer\_Output\_Gains
- QSC\_Selected\_Mixer\_Output\_Mutes
- QSC\_Selected\_Mixer\_Crosspoint\_Gains
- QSC\_Selected\_Mixer\_Crosspoint\_Mutes
  - The DSP Mixer variables can only support one mixer at a time. Please set QSC\_Selected\_Mixer\_Name to the desired Mixer name for control and call macro Var\_Select\_Mixer() with that name to select a mixer. Then call driver macro Var\_Select\_Mixer\_Output() with the mixer name to specify which output's crosspoints are desired for feedback. Gain and Mute are integers. Mute values are 0 for Mute off or 1 for Mute on. Once the Mixer and output are set, all gain and mutes status will be available in those gain and mute variables
- QSC\_Selected\_Router\_Output\_Mutes
- QSC\_Selected\_Router\_Output\_Status
  - The Router variables can only support one Router at a time. Please set QSC\_Selected\_Router\_Name to the desired Router name for control and call macro Var\_Select\_Router() with that name to select a router. Mutes and Status are integers. Mute values are 0 for Mute off or 1 for Mute on. The Status is the input number set at the output according to position in the array.

### Setup Complete

The module setup is complete. Save the module and open the project back up. Upload and update the project for use.

### Compass Control® Pro Offers:

- DSP Mixer Control on UI
  - Input Level and Mute
  - Output Level and Mute
- Router Control on UI
  - Input selection for Output
  - Output Mute
- Gain Component Control on UI
  - Level and Mute
- Snapshot Control on UI
  - Save Snapshot Bank
  - Load Snapshot Bank
- Driver control of all components
  - DSP
  - Gain
  - Snapshot
  - Input Amp
  - Output Amp
  - Delay
  - Ducker
  - Filter
  - EQ
  - Level