TI 316
QSC Q-SYS Plug-in for
d&b 5D, 10D, 30D, 40D, D20, D40 and D80 amplifiers
1.7 en

d&b
audiotechnik

1. Introduction

The d&b Q-SYS Plug-in allows basic control and monitoring of the d&b Ethernet-compatible amplifiers (5D, 10D, 30D, 40D, D20, D40 or D80) from within the QSC Q-SYS framework using the OCA protocol (AES70).

Requirements

- Ethernet-compatible d&b amplifiers: 10D, 30D, D20 or D80 with Firmware V2.02.00 or higher, 5D, 40D or D40.
- QSC Q-SYS system and Q-SYS Designer V9.0 or higher.

Plug-in capabilities

- **Device**
  - Power the amplifier on and off
  - Optionally set the Plug-in's status to **«Compromised»** when the amplifier is in Standby
  - Track the amplifier's Power and Error status
  - Physically identify an amplifier (audible beep and flashing display)
  - Allows the amplifier's time to be synchronized to the QSC Core's clock

- **Inputs**
  - Input routing for each output channel
  - Input gain controls for each individual input
  - Enable/disable Input gain

- **Outputs**
  - Channel output gain and mute control
  - Level metering for each channel, including ISP (Input Signal Present), GR (Gain Reduction), and OVL (OverLoad)
  - Set each amplifier channel's name
  - Supervise each channel's error status individually

- **Amplifier Presets**
  - Available for all amplifier models except 5D
  - Backup and load presets
  - Fire presets immediately via a Q-SYS control pin
  - Track the modified status of currently active preset
  - Optionally set the Plug-in's status to **«Compromised»** when the currently active preset has been modified

- **Monitoring**
  - Enable/disable Input monitoring for each individual input
  - Enable/disable Load monitoring for each individual output
  - Clear Input monitoring or Load monitoring errors
  - Input fallback and override settings

- **Event Logging**
  - Optionally log events such as internal Plug-in errors and amplifier connection issues to the QSC Core's system log.

2. Getting Started

1. Download and unzip the d&b Q-SYS Plug-in package.

2. Ensure you have the Q-SYS Designer software V9.0 or higher installed on your computer.

3. Double-click the included **«qplug»** file. This will automatically install the Plug-in in the correct location.

4. In Q-SYS Designer, drag and drop the Plug-in from the **«Plugins»** panel on the right side onto your project.

   **Note**: One copy of the Plug-in module is required per d&b amplifier in your setup.

5. Select the appropriate amplifier model in the Plug-in's **«Properties»** menu. This ensures a successful connection to the amplifier. Selecting the wrong amplifier model can lead to connection issues!

6. Configure each Plug-in's output mode in order to match the output configuration in the respective amplifier.
   Note: This does not change the output mode in the amplifier, it only affects the Q-SYS Plug-in.

7. Ensure the d&b amplifiers are connected to the same Ethernet network as your QSC core and their IP addresses and subnet masks are compatible.
   You may need to set the amplifier's IP mode to **«Manual»** via R1, the amplifier's display, or the Web Remote interface (where available).

8. Use the **«Emulate»** or **«Save to Core & Run»** functions in Q-SYS Designer and double-click the Plug-in module to open its control interface.

9. Enter the IP address of each amplifier in your setup into the **«IP address»** field within each Plug-in instance. The **«Online»** LED will illuminate green to indicate that the connection to the respective amplifier has been established successfully.

   Note: The configuration of Input monitoring and Load monitoring parameters (such as pilot tone, thresholds, and tolerances), as well as the creation and management of amplifier presets are beyond the scope of this Plug-in. We recommend using the **R1** software for this purpose.

   Note: Enabling or disabling Plug-in features in the **«Properties»** menu will not only show or hide the corresponding controls from the graphical interface, it will also define the number of amplifier parameters that will be monitored. Depending on the number of amplifiers in your project, this can have a slight impact on your network traffic and Core CPU load.

## 3. Plug-in details overview

Amplifier Settings/Status
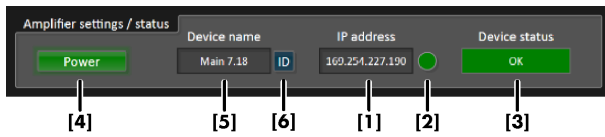
[1] Enter the amplifier's IP address here.
[2] The **«Online»** LED illuminates to indicate a successful network connection to the amplifier.
[3] The device general status can be as follows:
«Initializing» during network connection.
«Compromised» when the amplifier is Standby, when there is a channel error, or when the current preset has been modified and the **«Strict»** mode has been selected.
«Fault» indicates a device error in the amplifier.
«OK» indicates normal status.
[4] Power switch. Will turn green to indicate that the unit is switched on, or red to indicate Standby mode.
[5] Device name.
[6] Triggers the **«Wink»** command, which allows you to physically identify an amplifier (flashing display and buzzer).

Input monitoring
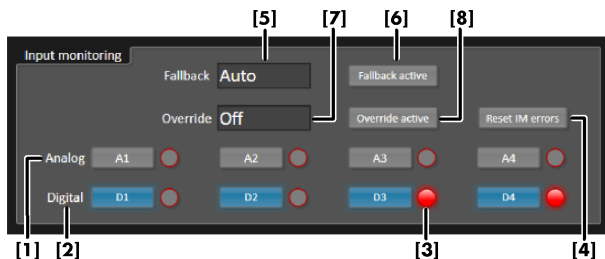
[1] Enable/disable Input monitoring for each analog input.
[2] Enable/disable Input monitoring for each digital input.
[3] Individual Input monitoring error indicators.
[4] Reset Input monitoring (IM) errors.
[5] Fallback mode (Off, Manual or Auto).
[6] Enable/disable Fallback.
[7] Override mode (Off, Manual or Auto).
[8] Enable/disable Override.

Input gain
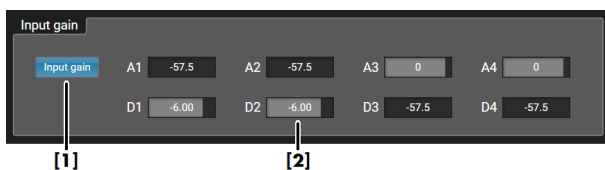
[1] General Input gain enable/disable switch.
**[2]** Input gain controls for individual analog and digital inputs.

Input routing
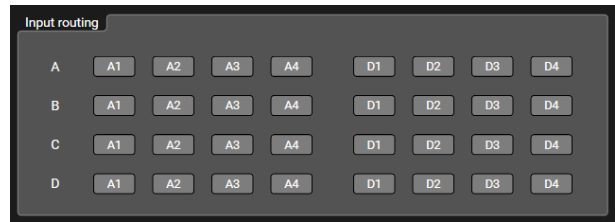
The **«Input routing»** tab varies, depending on the corresponding amplifier connected and accessed.

For detailed information on the input routing of the respective amplifier, please refer to the corresponding amplifier manual which can be downloaded from the related product page at www.dbaudio.com.
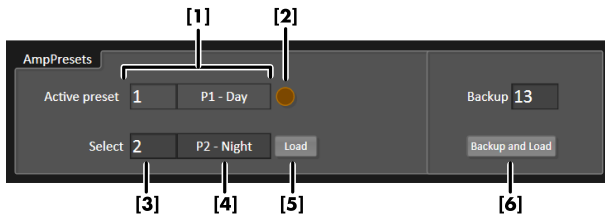
Channel
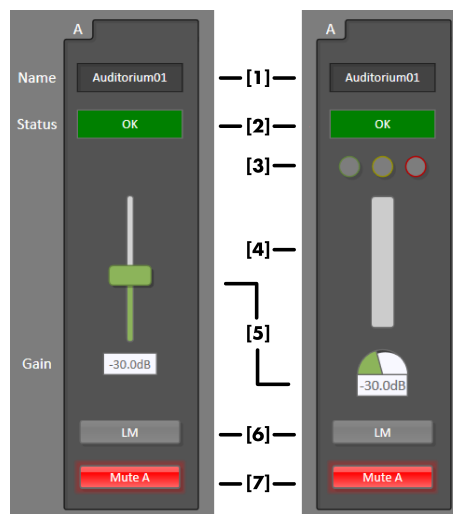
Channel controls with Metering disabled (left) and enabled (right).

[1] Channel name.
[2] Channel status.
[3] LED indicators for ISP (green), GR (yellow), and OVL (red).
[4] Output level meter (Headroom).
[5] Output level control.
[6] Enable/disable Load monitoring (LM).
[7] Mute/unmute channel.

AmpPresets

[1] Number and name of the currently active preset.

[2] **«Preset modified»** LED will indicate if the amplifier's settings have been changed since the current preset was loaded. If the **«Strict»** mode is used, this will also turn the general status to **«Compromised»**.

[3] Combo-box for selecting next preset. This preset will only be preselected, but not loaded until **«Load»** is pressed. Alternatively, the **«Trigger Preset»** control pin can be used to fire presets immediately.

[4] Display for the preselected preset's name.

[5] Load the preselected preset.

[6] Backup the current configuration (modified preset) in the desired backup slot, and load the preselected preset.

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