TI 316 1.5 en QSC Q-SYS Plug-in for d&b 10D, 30D, D20 and D80 amplifiers

Quick start guide



1. Introduction

The d&b Q-SYS Plug-in allows the control and monitoring of a number of functions of the d&b 4 channel amplifiers (10D, 30D, D20 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.
- QSC Q-SYS system and Q-SYS Designer V5.1.00 or higher.
- Q-SYS Designer project file containing the d&b Plug-in module for 10D, 30D, D20 and D80 amplifiers.

Plug-in capabilities

- Device
 - Power the amplifier on and off
 - Track the amplifier's Power and Error status
 - Set the amplifier's name
 - Physically identify an amplifier

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

- Backup and load presets
- Fire presets immediately via a Q-SYS control pin
- Track the modified status of currently active preset

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
- Log events such as device disconnects and communication errors to the QSC Core's event log.

2. Getting Started

- 1. Open the provided Q-SYS Designer project file containing the d&b Plug-in module.
- 2. Copy the Plug-in to the clipboard, or drag and drop it into the **«User Library»** panel on the right side.



 Paste the Plug-in to your project, or drag and drop the Plug-in from the **«User Library»** panel on the right side.

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

 By selecting the Plug-in module, a set of configuration options and control pins will become available in the QSYS **«Tool»** menu. Configure the features which you want to control or supervise (Input monitoring, Presets, and Metering).

 d&b Amplifier Plugin Properties 					
Output mode	Dual Channel / 2-Way Active	•			
Input monitoring	No	•			
AmpPresets	Yes	•			
Metering	No	•			
Event logging	No	•			
Graphic Properties					
Position	64; 81				
Fill		1			
 Control Pins 					
♦ AmpPresets					
Outputs					
Device name					
IP address		1			
Online					
Power					
PowerOk					
Status		1			

Note: Enabling or disabling features 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 the project, this can have a slight impact on your network traffic load.

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 R1 for this purpose.

 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.

- Enable **«Event Logging»** to allow your QSC Core to keep track of errors affecting the Plug-in itself, such as device disconnected or OCA communication errors.
- 7. Select the desired control pins for controlling and monitoring the amplifiers via external controls.
- Add further Q-SYS components and controls and connect them as required. The Plug-in's control pins allow you to create – for example – a global mute button, as shown below.



9. 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.

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

3. Plug-in details overview Amplifier Settings/Status

Amplifier settings / status	Device name		IP address		Device status
Power	Main 7.18	ID	169.254.227.190		ОК
			1	-1	
 [4]	 [5]	[6]	[1]	 [2]	 [3]

- [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.

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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