

**TI 321 1.1 en**  
**Crestron Module for**  
**d&b 10D, 30D, D20 and D80 amplifiers**

**Quick start guide**

## 1. Introduction

The d&b Crestron modul allows the control and monitoring of a number of functions of the d&b four channel amplifiers (10D, 30D, D20 and D80) from within the Crestron framework using the OCA protocol (AES70).

### Requirements

- Ethernet-compatible d&b amplifiers (10D, 30D, D20 or D80) with Firmware V2.02.00 or higher.
- **Hardware Controller:** Crestron 3-Series control engine
- **Development Tool:** SIMPL Windows (V4.06.01 or higher)
- **Touch Panel Designer:** VisionTools Pro-e

### Plug-in capabilities

#### ▪ Device

- Power the amplifier on and off.
- Track the amplifier's Power and Error status.
- Read the amplifier name.

#### ▪ Outputs

- Channel output gain and mute control.
- Supervise each channel's error status individually.
- Monitor the amplifier channel temperature

#### ▪ Amplifier Presets

- Backup and load presets.
- Track the modified status of currently active preset and display its name.

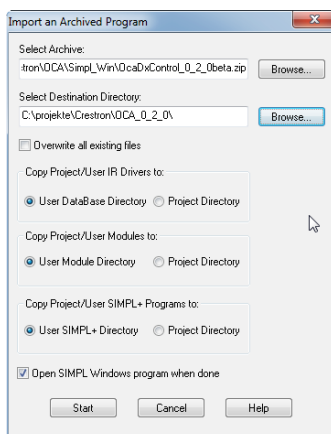
#### ▪ Monitoring

- Enable/disable Input monitoring for each individual analog and digital input.
- Enable/disable Load monitoring for each individual output.

- **Log** events such as device disconnects and communication errors.

## 1. Getting Started

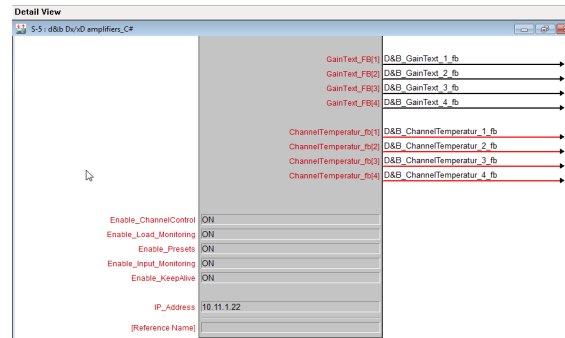
1. Import the provided SIMPL Windows Program archive containing the d&b module (d&b Dx/xD amplifiers).
2. Integrate the d&b SIMPL+ module to the "User SIMPL+ Directory" by selecting the respective check box in the dialog. This is mandatory to make a new project from scratch.



3. The demo program contains some Logic with the d&b Dx/xD amplifier module and a sample user interface to show the functionality of the module.

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

4. By opening the d&b Dx/xD amplifier module in the «**Details**» view, a set of parameters can be set. Configure the features which you want to control or monitor and define the IP Address of the connected device.



**Note:** Enabling or disabling features will not hide the corresponding controls in or outputs from the graphical interface, it will only define the number of amplifier parameters that will be monitored. Depending on the number of amplifiers in the project, this can have an impact on your network traffic and CPU load.

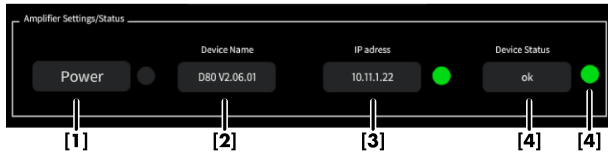
**Note:** The configuration of Input monitoring and Load monitoring parameters (such as pilot tone, thresholds and tolerances), as well as the creation and management of amplifier presets are beyond the scope of this Plug-in. We recommend using R1 for this purpose.

5. Select the desired control pins by defining variable for controlling and monitoring the amplifiers and connect these variable to other crestron logic or to a XPanel module. This allows you to create – for example – a global mute button.
6. Ensure the d&b amplifier is connected to the same Ethernet network as your Crestron controller 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.
7. Use the «**Convert/Compile**» in the Project Menu in SIMPL Windows to compile your program and send it to the Crestron controller.
8. Open the Crestron VisionTools Pro-e software to make a user interface or open the sample Smart Graphics project.
9. Compile the user interface and double click the output link in the «**Message Log**» window. The explorer pops up displaying the generated Crestron Xpanel Project. Double click it to start it. Enter the IP address of the crestron controller and the crestron IPID under «**Options**» - «**Host settings**» and the XPanel connects and displays the amp settings

## 2. Plug-in details overview

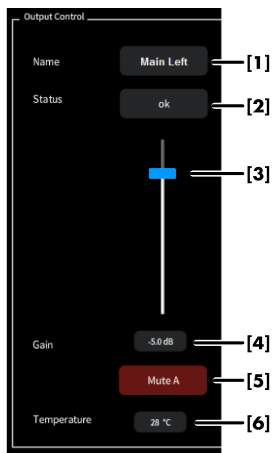
The crestron framework enables system integrators to design their own custom user interface. By means of the d&b crestron module, the user interface can be connected to d&b audiotechnik amplifiers over Ethernet. The following screen shots of the d&b crestron demo project gives an insight overview of the supported functionality.

### Amplifier Settings/Status



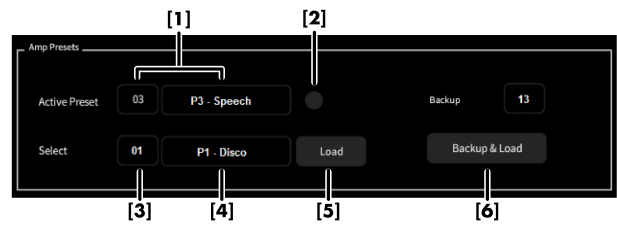
- [1] Power switch. The LED indicator right beside the switch illuminates green to indicate that the unit is switched on, or red to indicate Standby mode.
- [2] Device name.
- [3] Enter the amplifier's IP address here. The «**Online**» LED right beside the input field illuminates green to indicate a successful network connection to the amplifier.
- [4] The device general status can be as follows:  
«**Fault**» indicates a device error in the amplifier.  
«**OK**» indicates normal status.
- [5] The LED indicator flashes with a duty-cycle of 5 sec. if «**Enable\_KeepAlive**» is set to on.

### Channel



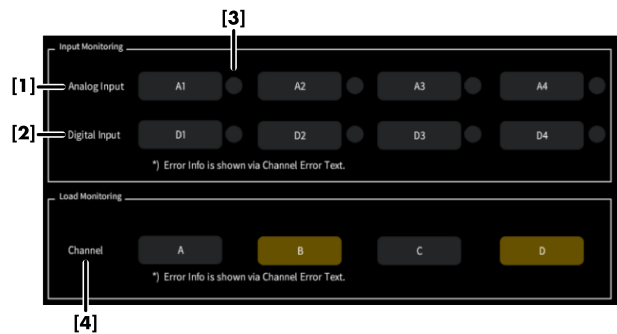
- [1] Channel name.
- [2] Channel status.
- [3] Output level control.
- [4] Gain setting.
- [5] Mute/unmute channel.
- [6] Channel temperature.

### 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.
- [3] Combo-box for selecting the 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.

### Input monitoring / Load 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] Enable/disable Load monitoring for each amplifier output channel. \*

\* **Note:** The «**Error Info**» is shown via the «**Channel Error Text**»

