



## d&b audiotechnik : E-PAC

This module controls the d&b audiotechnik E-PAC power amplifiers together with the d&b RxPresort module.

### GENERAL INFORMATION

<b>SIMPLWINDOWS NAME:</b>	d&b EPAC_Post
<b>CATEGORY:</b>	Custom / d&b audiotechnik
<b>VERSION:</b>	2.0
<b>SUMMARY:</b>	This module controls the d&b E-PAC power amplifiers together with the d&b RxPresort module. The "canSubnet" parameter and the index of "rxPreAmp" and "txPreAmp" arrays of the d&b RxPresort define the dbCAN ID of the E-PAC to be controlled.
<b>GENERAL NOTES:</b>	<p>Feedback within the d&amp;b remote network must be polled. Polling for this feedback can be rather processor unfriendly. That is why the module includes a poll digital input for each parameter. Check demo program on how to use these inputs.</p> <p>When a parameter is changed, the module polls for the feedback automatically. So polling is only necessary when a parameter is changed indirectly. An indirect change means, for example, switching between AmpPresets or changes made by controls other than Crestron (e.g. PC).</p>
<b>CRESTRON HARDWARE REQUIRED:</b>	2-Series processor
<b>SETUP OF CRESTRON HARDWARE:</b>	CP2E with XPANEL
<b>VENDOR FIRMWARE:</b>	EPAC V4.14
<b>VENDOR SETUP:</b>	A combination of D6, D12 and/or E-PAC amplifiers hooked up together via the CAN network and the R70 Ethernet to CAN interface which forms the interface to Crestron.
<b>CABLE DIAGRAM:</b>	For setting up a d&b remote network, please refer to TI 312 available at <a href="http://www.dbaudio.com">www.dbaudio.com</a> .



<b>CONTROL:</b>		
<b>Power_On</b>	D	Pulse to power on the amplifier.
<b>Power_Off</b>	D	Pulse to power off the amplifier.
<b>Power_Poll</b>	D	Pulse to poll for the current power status of the amplifier.
<b>PowerOk_Poll</b>	D	Pulse to poll for the current power status of the amplifier.
<b>Mute_On</b>	D	Pulse to mute.
<b>Mute_Off</b>	D	Pulse to unmute.
<b>Mute_Poll</b>	D	Pulse to poll for the current mute status.
<b>Error_Poll</b>	D	Pulse to poll for the error status of the amplifier.
<b>Filter1_On</b>	D	Pulse to enable Filter1. The function of Filter1 depends on the selected speaker setup.
<b>Filter1_Off</b>	D	Pulse to disable Filter1. The function of Filter1 depends on the selected speaker setup.
<b>Filter1_Poll</b>	D	Pulse to poll the current filter status.
<b>Filter2_On</b>	D	Pulse to enable Filter2. The function of Filter1 depends on the selected speaker setup.
<b>Filter2_Off</b>	D	Pulse to disable Filter2. The function of Filter1 depends on the selected speaker setup.
<b>Filter2_Poll</b>	D	Pulse to poll for the current filter status.
<b>Delay_On</b>	D	Pulse to enable the delay.
<b>Delay_Off</b>	D	Pulse to disable the delay.
<b>Delay_Poll</b>	D	Pulse to poll for the current delay status.
<b>Eq_On</b>	D	Pulse to enable the Eq section.
<b>Eq_Off</b>	D	Pulse to disable the Eq section.
<b>Eq_Poll</b>	D	Pulse to poll for the Eq status.



<b>DeviceName_Poll</b>	D	Pulse to poll for the DeviceName.
<b>PotiLevel_Poll</b>	D	Pulse to poll for the current level.
<b>DelayValue_ms_Poll</b>	D	Pulse to poll for the current delay value.
<b>AmpTemp_Poll</b>	D	Pulse to poll for the amplifier temperature.
<b>PotiLevel</b>	A	Sets the level. Ranges from -575d to 60d. Check demo program for proper use.
<b>DelayValue_ms</b>	A	Sets the delay in milliseconds. Ranges from 1d to 3400d. Check demo program for proper use.
<b>rxPost</b>	S	To be connected to rxPreAmp[x] of the d&b RxPresort module. The output index ( x ) defines the Device ID. Check demo program for proper use.

## FEEDBACK:

<b>Device_Online_Pulse</b>	D	Pulses for each incoming data to this device. They can be used together with a cyclical polling (e.g. for an error) to verify that the device/connection is OK. Check the demo program for proper use.
<b>Power_OnOff</b>	D	High when power is currently on.
<b>PowerOk</b>	D	High when the amplifier is powered. This is the status of the device as compared to Power_OnOff which is the status of the power switch.
<b>Mute_OnOff</b>	D	High when muted.
<b>GeneralError</b>	D	High when any error occurred.
<b>ChannelError</b>	D	High when an error occurred on channel A.
<b>Filter1_OnOff</b>	D	High when Filter1 is enabled.
<b>Filter2_OnOff</b>	D	High when Filter2 is enabled.
<b>Delay_OnOff</b>	D	High when delay is enabled.
<b>Eq_OnOff</b>	D	High when Eq is enabled.
<b>PotiLevel_FB</b>	A	Current level. Ranges from -575d to 60d (-57,5 to +6).
<b>DelayValue_ms_FB</b>	A	Current delay in milliseconds. Ranges from 1d to 3400d.
<b>DeviceErrorNumber</b>	A	Number describing a device error that occurred.



<b>ChannelErrorNumber</b>	A	Number describing an error that occurred on channel A.
<b>AmpTemp</b>	A	Current temperature of the amplifier.
<b>DeviceErrorText</b>	S	Brief description of the device error.
<b>ChannelErrorText</b>	S	Brief description of the error on channel A.
<b>Device_Name</b>	S	Device name of the amplifier.
<b>txPost</b>	S	To be connected to txPreAmp[x] of the d&b RxPresort module. The input index ( x ) defines the Device ID. Check demo program for proper use.

## TESTING:

<b>OPS USED FOR TESTING:</b>	V 3.155
<b>COMPILER USED FOR TESTING:</b>	V 2.07.22
<b>SAMPLE PROGRAM:</b>	DB D12 D6 EPAC Demo Program
<b>REVISION HISTORY:</b>	V 2.0 (Martin Renz d&b)