

**Manufacturer: Bose**  
**Model: EX Series**  
**Device Type: Digital Signal Processor**



## GENERAL INFORMATION

<b>SIMPLWINDOWS NAME:</b>	Bose EX Series PSTN Control v3.1
<b>CATEGORY:</b>	Conferencing
<b>VERSION:</b>	3.1
<b>SUMMARY:</b>	The PSTN Control component controls all of the features of the PSTN dialer. This component will also control the ring and DTMF volume levels.
<b>GENERAL NOTES:</b>	<p><b>IMPORTANT</b> The follow EX Series devices do NOT support PSTN control:</p> <ul style="list-style-type: none"><li>- EX-12AEC</li><li>- EX-1280</li><li>- ESP-880A</li></ul>
<b>CRESTRON HARDWARE REQUIRED:</b>	Crestron 3-Series or 4-Series processor.
<b>VENDOR FIRMWARE:</b>	v2.520

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**PARAMETERS:**

<b>PSTN_Country_Code</b>	Set to the country code of the PSTN line.
<b>Module_Name</b>	Set to the name of the PSTN module.
<b>Command_Processor_ID</b>	The unique identifier for the command processor module this module will register with.

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**CONTROL:**

On_Hook	D	Pulse to recall the parameter set number specified by its corresponding Parameter_Set_[x]_Number value.
Off_Hook	D	Pulse to manually put the line on hook.
Toggle_Hook	D	Pulse to manually put the line off hook.
Answer_Call	D	Pulse to answer incoming call.
End_Call	D	Pulse to end active call.
Flash	D	Pulse to flash the PSTN line.
Keypad_Dial	D	Pulse to dial number propagated to the Keypad_Text signal.
Keypad_[0-9, *, #]	D	Pulse signal to append the corresponding digit to the Keypad_Text signal.
Keypad_Clear	D	Pulse to clear the Keypad_Text.
Keypad_Backspace	D	Pulse to backspace the Keypad_Text.
Keypad_Entered_Text	S	Set to a string that will be dialed.
Keypad_Dial_Entered_Text	D	Pulse to dial the number or address that is propagated to the Keypad_Entered_Text signal.
AutoAnswer_On	D	Pulse to turn auto answer on.
AutoAnswer_Off	D	Pulse to turn auto answer off.
AutoAnswer_Toggle	D	Pulse to toggle the state of auto answer.
AutoAnswer_Ring_Count	A	Set to the number of rings before an incoming call is answered. If value is set to zero, auto answer will be disabled. If value is greater than zero, auto answer must be manually turned on.
Ring_Level_Up	D	Pulse to raise ring level by 1dB.
Ring_Level_Down	D	Pulse to lower ring level by 1dB.
New_Ring_Level_dB	A	Set to the new desired dB level of the ringer.
Set_New_Ring_Level_dB	D	Pulse to set ring level to the value on New_Ring_Level_dB.
DTMF_Level_Up	D	Pulse to raise DTMF level by 1dB.
DTMF_Level_Down	D	Pulse to lower DTMF level by 1dB.

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<b>New_DTMF_Level_dB</b>	A	Set to the new desired dB level of the DTMF tones.
<b>Set_Net_DTMF_Level_dB</b>	D	Pulse to set DTMF level to the value on New_DTMF_Level_dB.
<b>Enable</b>	D	Latch high to enable this component.

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**FEEDBACK:**

<b>Is_Initialized</b>	D	Indicates the module is registered to the command processor and is synchronized with current device state when the signal is high, or not synchronized with current device state when the signal is low.
<b>Call_Is_Active</b>	D	High to indicate there is an active call on the line.
<b>Is_On_Hook</b>	D	High to indicate the line is on hook.
<b>Is_Off_Hook</b>	D	High to indicate the line is off hook.
<b>Call_State</b>	A	Indicates the current state of a call represented by an integer. Values include: 1d = "HANGUP", 2d = "INCOMING", 3d = "ACTIVE", 4d = "ERROR".
<b>Call_State_Text</b>	S	Indicates the current call state represented by a string value. Values include: "HANGUP", "INCOMING", "ACTIVE", "ERROR".
<b>Caller_ID_Name_Text</b>	S	Displays the name of the incoming caller.
<b>Caller_ID_Num_Text</b>	S	Displays the number of the incoming caller.
<b>Keypad_Text</b>	S	Displays the current text propagated to the keypad.
<b>AutoAnswer_Is_On</b>	D	High to indicate auto answer is on.
<b>AutoAnswer_Is_Off</b>	D	High to indicate auto answer is off.
<b>Ring_Level_dB</b>	A	Indicates the current level of the ringer.
<b>DTMF_Level_dB</b>	A	Indicates the current level of the DTMF tones.
<b>Is_Quarantined</b>	D	Indicates that there was a problem getting this component initialized due to a configuration issue when the signal is high, or that no initialization issue occurred when the signal is low. A quarantined component will not prevent the command processor or other components from getting initialized.

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**TESTING:**

<b>OPS USED FOR TESTING:</b>	CP3 1.8001.4666.20418 MC4 2.8000.00017
<b>SIMPL WINDOWS USED FOR TESTING:</b>	4.2000.00
<b>CRES DB USED FOR TESTING:</b>	214.0000.001.00
<b>DEVICE DATABASE:</b>	200.23000.001.00
<b>SYMBOL LIBRARY USED FOR TESTING:</b>	1176
<b>SAMPLE PROGRAM:</b>	Bose EX Series v3.1 IP Demo.smw Bose EX Series v3.1 RS232 Demo.smw
<b>REVISION HISTORY:</b>	v3.0 – Initial Release v3.1 – No updates have been performed