Partner: Polycom
Model: ATX
Device Type: Telepresence Conference

GENERAL INFORMATION

SIMPLWINDOWS NAME:	Polycom ATX v1.0
CATEGORY:	Conferencing
VERSION:	1.0
SUMMARY:	This module provides control of the Polycom ATX telepresence system via RS232.
GENERAL NOTES:	This module controls the Polycom ATX telepresence system. The ATX telepresence system consists of three Polycom HDX 8000s. The Crestron control system communicates with the primary HDX 8000 only. The intent of this module and the associated touch panel pages is to provide the dealer with the opportunity to add functionality while still providing the standard Polycom telepresence functionality. There is a text file that must be loaded onto the Crestron processor. This file MUST be called System_Config.ini. It MUST be placed in the User folder in the Internal Flash. This file is only read at boot up. There is a boot up process that must be completed before any control is allowed. The module will first read the System_Config.ini file. After that is complete it will initialize with the HDX. Once this process has successfully completed, the Show_Start_Button output will go high. At this point, control is allowed. All text on the touch panel is read in from the System_Config.ini file except the numbers on the keypads. THIS MODULE IS PASSWORD PROTECTED.
CRESTRON HARDWARE REQUIRED:	C2ICOM
SETUP OF CRESTRON HARDWARE:	RS232 Baud: 38400 Parity: None Data Bits: 8 Stop Bits: 1
VENDOR FIRMWARE:	Polycom Architected Telepresence Experience™ (ATX) 300 Software Development Kit (SDK) version 1.0
VENDOR SETUP:	The firmware must be loaded into all three Polycom HDX 8000 units. All three HDX 8000s need to have the option key installed to enable the ATX API.
CABLE DIAGRAM:	CNSP-124

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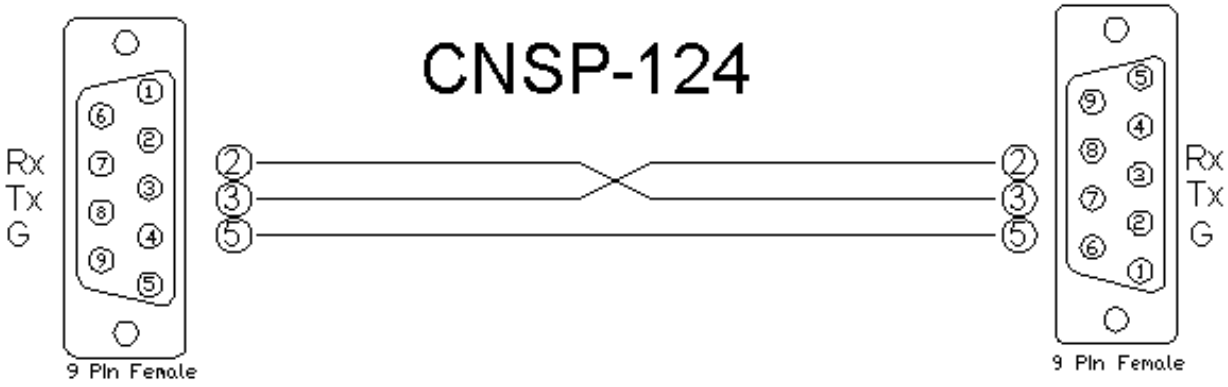

CONTROL:

Video_Dial_Speed_Dial_<1…9>	D	Pulse to place a video call to the desired video speed dial entry.
Video_Manual_Dial_Key_*	D	Pulse to enter an ad hoc video number to dial.
Audio_Dial_Speed_Dial_<1/2/3/4>	D	Pulse to place an audio call to the desired audio speed dial entry.
Audio_Manual_Dial_Key_*	D	Pulse to enter an ad hoc audio number to dial.
Audio_Manual_Dial_Key_Dial	D	Pulse to dial the number entered in the Audio_Manual_Dial_Text field. This input has two other functions. It will answer and incoming audio call. It will also hang up a connected audio call. The text on the button will be either “Dial/Answer” or “Hang Up”.
Volume_<Up/Down>	D	Press and hold to adjust the volume.
Privacy_Toggle	D	Pulse to turn the microphone mute on and off.
Start_Button	D	Pulse to page flip to the first Video Speed Dial page.
Home_Button	D	Pulse to page flip back to the Welcome page.
Video_Manual_Dial_Page	D	Pulse to page flip to the Video Manual Dial page.
Video_Speed_Dial	D	Pulse to page flip to the first Video Speed Dial page.
Video_Speed_Dial_Next_Page	D	Pulse to page flip to the second Video Speed Dial page, if available.
Video_Speed_Dial_Previous_Page	D	Pulse to page flip to the first Video Speed Dial page, if more than one Video Speed Dial page is available.
Audio_Dial_Page	D	Pulse to page flip to the Audio Dial page.
Help_Desk_Button	D	Pulse to page flip to the Help Desk Dial page, if available.

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DTMF_Keypad_*	D	Pulse to enter DTMF tones. This will only be available if the connected call is to a bridge.
Hang_Up	D	Pulse to hang up the connected video call.
Answer_Incoming_Call	D	Pulse to answer an incoming video call.
Ignore_Incoming_Call	D	Pulse to ignore an incoming video call.
Call_Help_Desk	D	Pulse to dial the help desk number entered in the System_Config.ini file. If there is an audio call connected, that will be hung up first.
Do_Not_Disturb	D	Pulse to turn the Do Not Disturb function on and off.
Send_Document_Camera	D	Pulse to start and stop sending the document camera input as content.
Send_Laptop	D	Pulse to start and stop sending the laptop input as content.
Hide_Display	D	Pulse to set all video displays to blank video. This is only available when the ATX is not in a video call.
Show_Display	D	Pulse to set all video displays to view the local video. This is only available when the ATX is not in a video call.
Camera_<Close_Up/Wide>	D	Pulse to recall camera presets when either in a bridge call or a single codec call. Close Up will recall preset 99. In a bridge call, Wide will recall preset 96 and in a single codec call it will recall preset 97.
From_Device	S	Serial signal to be routed from a 2-way serial com port.

FEEDBACK:

Video_Speed_Dial_Name_<1…9>_Text	S	Serial signal indicating the names of the speed dial entries.
Video_Manual_Dial_Text	S	Serial signal indicating the entered manual video dial number.
Audio_Speed_Dial_Name_<1/2/3/4>_Text	S	Serial signal indicating the names of the audio speed dial entries.
Audio_Manual_Dial_Text	S	Serial signal indicating the entered manual audio dial number.
Volume_Level_Gauge	A	Analog value indicating the current volume level.
Privacy_Is_On	D	High to indicate that the microphone mute is currently on.
Far_End_Mute_Is_On	D	High to indicate that the far end microphone mute is currently on.
Far_End_Is_Sending_Content	D	High to indicate that the far end is sending content.

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Video_Manual_Dial_Button_Was_Pressed	D	High to indicate that the Video Manual Dial button was pressed. This is feedback for the Video Manual Dial button only.
Video_Speed_Dial_Button_Was_Pressed	D	High to indicate that the Video Speed Dial button was pressed. This is feedback for the Video Speed Dial button only.
Audio_Dial_Button_Was_Pressed	D	High to indicate that the Audio Dial button was pressed. This is feedback for the Audio Dial button only.
Show_Video_Manual_Dial_Page	D	High to show the Video Manual Dial page.
Show_Video_Speed_Dial_Page_1_ With_<1…9>_Speed_Dial(s)	D	High to show the proper first Video Speed Dial page.
Show_Video_Speed_Dial_Page_1_ With_9_Speed_Dials_&_More	D	High to show the first Video Speed Dial page with 9 speed dials when there are more than 9 video speed dials.
Show_Video_Speed_Dial_Page_2_ With_<1…9>_Speed_Dial(s)	D	High to show the proper second Video Speed Dial page, if available.
Show_Audio_Manual_Dial_Page_With_ <No/1/2/3/4>_Speed_Dials	D	High to show the proper Audio Manual dial page.
Show_Help_Desk_Page	D	High to show the Help Desk Dial page.
Show_Hang_Up_Page	D	High to show the Video Hang Up page.
Show_Hang_Up_with_DTMF_Page	D	High to show the Video Hang Up page with DTMF keypad.
Show_Camera_Control_Page	D	High to show the Camera Control page with the Hang Up page.
Show_Camera_Control_In_Bridge_Call_Page	D	High to show the Camera Control page with the Hang Up with DTMF Keypad page.
Show_Manual_Answer_Page	D	High to show the Manual Answer page.
Show_Do_Not_Disturb_Button_Page	D	High to show the Do Not Disturb button page.
Show_Document_Camera_Sub_Page	D	High to show the Document Camera button sub page.
Show_Start_Button	D	High to show the Start button.
Show_Opening_Page	D	Pulses to show the Opening page.
Show_Help_Desk_Button	D	High to show the Help Desk Button sub page.
Show_Please_Wait_Sub_Page	D	High to show the Please Wait sub page.
Center_Display_Is_Active	D	High to indicate that the center display is in an active call.
Left_Display_Is_Active	D	High to indicate that the left display is in an active call.

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Right_Display_Is_Active	D	High to indicate that the right display is in an active call.
Show_Display_Control_Buttons_Sub_Page	D	High to show the Display Control sub page.
Do_Not_Disturb_Is_On	D	High to indicate that the Do Not Disturb is active.
Near_End_Sending_Document_Camera	D	High to indicate that the near end is sending the document camera content.
Near_End_Sending_Laptop	D	High to indicate that the near end is sending the laptop content.
Send_Document_Camera_Relay	D	High to trigger a relay output on the Crestron processor to drive an external switcher to switch to the Document Camera input.
Send_Laptop_Relay	D	High to trigger a relay output on the Crestron processor to drive an external switcher to switch to the Laptop input.
System_Name_Text	S	Serial signal indicating the name of the system entered in the System_Config.ini file.
Help_Desk_Button_Label_Text	S	Serial signal indicating the text for the Help Desk button.
Far_End_Muted_Text	S	Serial signal indicating the text for the Far End Muted text field.
Far_End_Sending_Text	S	Serial signal indicating the text for the Far End Sending text field.
Local_Content_Text	S	Serial signal indicating the text for the Local Content text field.
Local_PC_Text	S	Serial signal indicating the text for the Local PC text field.
Local_Doc_Cam_Text	S	Serial signal indicating the text for the Local Doc Cam Text field.
Volume_Text	S	Serial signal indicating the text for the Volume text field.
Home_Text	S	Serial signal indicating the text for the Home button.
Audio_Clear_Text	S	Serial signal indicating the text for the Audio Clear button.
Audio_Backspace_Text	S	Serial signal indicating the text for the Audio Backspace button.
Audio_Dial_Text	S	Serial signal indicating the text for the Audio Dial button.
Hang_Up_Text	S	Serial signal indicating the text for the Video Hang Up button.
Start_Text	S	Serial signal indicating the text for the Start button.
Touch_To_Start_Text	S	Serial signal indicating the text for the Touch To Start text field.

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Video_Clear_Text	S	Serial signal indicating the text for the Video Clear button.
Video_Backspace_Text	S	Serial signal indicating the text for the Video Backspace button.
Video_Dial_Text	S	Serial signal indicating the text for the Video Dial button.
Previous_SD_Page_Text	S	Serial signal indicating the text for the Previous Speed Dial Page text field.
Next_SD_Page_Text	S	Serial signal indicating the text for the Next Speed Dial Page text field.
Video_Call_Status_Text	S	Serial signal indicating the text for the Video Call Status.
Video_Location_Text	S	Serial signal indicating the text for the Video Call Location.
Do_Not_Disturb_Text	S	Serial signal indicating the text for the Do Not Disturb button.
Answer_Button_Text	S	Serial signal indicating the text for the Video Answer button.
Ignore_Button_Text	S	Serial signal indicating the text for the Video Ignore button.
Touch_To_Dial_Help_Text	S	Serial signal indicating the text for the Touch To Dial Help Desk text field.
Help_Call_Disconnect_Audio_Text	S	Serial signal indicating the text for the Help Desk Call Disconnect Audio text field.
Start_Page_Wait_Text	S	Serial signal indicating the text for the Start Page Please Wait text field.
Codec_Address_Text	S	Serial signal indicating the address of the primary HDX 8000.
Show_Display_Text	S	Serial signal indicating the text for the Show Display button.
Hide_Display_Text	S	Serial signal indicating the text for the Hide Display button.
Camera_Views_Text	S	Serial signal indicating the text for the Camera Views text field.
Close_Up_Text	S	Serial signal indicating the text for the Close Up button.
Wide_Text	S	Serial signal indicating the text for the Wide button.
Incoming_Audio_Call_Text	S	Serial signal indicating the text for the Incoming Audio Call text field.
To_Device	S	Serial signal to be routed to a 2-way serial com port.

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TESTING:

OPS USED FOR TESTING:	4.001.1012
SIMPL WINDOWS USED FOR TESTING:	2.11.27
CRESTRON DB USED FOR TESTING:	21.02.018.00
DEVICE DB USED FOR TESTING:	26.05.004.00
SAMPLE PROGRAM:	Polycom ATX v1.0
REVISION HISTORY:	V. 1.0 – Original release. Known Issues: 1) The audio dial pad does not send DTMF tones. 2) If you switch away from the hang up page and then back, the close up and wide shot buttons don't work. 3) When you press the Do Not Disturb button to clear the Do Not Disturb setting, it goes to Auto Answer mode. 4) There is no visual clue that there is an incoming audio call. 5) The secondary codec light indicator gets out of sync with the actual codec status. 6) When placing a call, the far end phone number disappears immediately after pressing the dial button. 7) The Primary codec light indicator does not light up if the system was already in an audio call. 8) The page focus indicator gets out of sync with the displayed page when a video call is made to an invalid address. 9) In ad-hoc dial mode, if an E.164 extension is dialed, the screen truncates the last digit(s) of the string. 10) When calling a system in manual answer mode, the mute button gets hung in one mode if pressed before the call is completely connected. 11) If you push the hide display button repeatedly, then push the show display button, the screens display near video for a short time then blank out unexpectedly. 12) If you make a bridge call, the screen goes to the DTMF pad + hang up button + close up wide shot buttons. If you toggle to the audio dial screen, the close up and wide shot buttons remain on the screen and are overlaid with the audio dial buttons. 13) The call status string can be truncated for some incoming calls.

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