GENERAL INFORMATION

SIMPLWINDOWS NAME:	Sony PCS-G70 Videoconference System Full Control v2.0
CATEGORY:	Conferencing
VERSION:	2.0
SUMMARY:	Controls most standard function on a Sony PCS-G70 Videoconference System. True feedback is provided where possible
GENERAL NOTES:	This module will control all standard functions on a Sony PCS-G70 videoconference system. This includes manual dialing, accessing and dialing from the PCS-G70 phone book, video switching, camera control, volume control, and infrared remote control emulation.

True feedback is provided for certain parameters. This includes:

Current volume level

Privacy

Line status for all ISDN and LAN lines

Current Near End Source Selected

Before using any other functions on the module, you must first pulse the Start_RS232 input. This will put the PCS-G70 into RS232 control mode, and it will also cause the phone book on the PCS-G70 to be downloaded to the Crestron system. While this is in progress, the Reading/Sorting_Directory_Fb output will be high.

This module provides access to the phone book stored on the Sony system. You can display the phone book entries in alphabetical order on a touch panel. You can display up to 20 entries per page. The number of entries to display is determined by the Directory Entries Per Page parameter. You can enter a value from 1d up to 20d for this parameter.

Use the Directory_Page_First/Previous/Next/Last inputs to scroll between successive pages of entries. You can also search for entries beginning with a certain letter by using the Directory_Search_Up/Down/Enter inputs. When you pulse the Directory_Search_Enter input, the list will scroll to the first entry which begins with the letter displayed at the Directory_Search_Letter$ output.

You can also use the Directory_Search_Letter analog input to go to any given letter immediately. This symbol would typically be driven by an Analog Initialize symbol, which would generate analog values from 1d to 27d. A value of 1d would cause entries, which start with a number to be displayed. A value of 2d would cause entries, which start with A to be displayed. 3d would cause entries which start with B to be displayed, and so on.

You can select any of the entries from the list using the Directory_Select_1-20 inputs. This will cause all the information about that entry to be recalled (numbers, call type, etc.). The call can now be placed, by pulsing the Directory_Dial input.

Any existing directory entries can have their contents modified. They can also be |
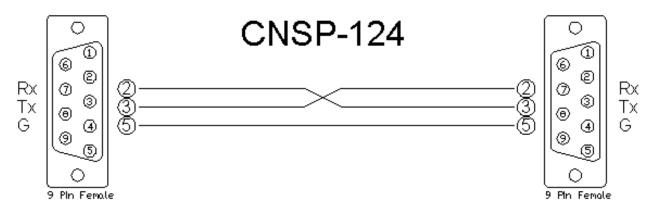
	deleted. You can also add new entries to the phone book. This is all performed using the Edit_Directory_* inputs. See the example program for a full implementation example.
	This module also allows emulation of all of the IR remote functions, using the IR_* inputs.
	This module also allows the status of the 30 lines and 5 LAN lines to be polled for status. If the Poll_Enable input is high, the lines will be polled for status every 5 seconds. If this input is low, the line status will never be polled. The line status is reported as an analog value from 0d to 5d. 0d = Not Available, 1d = No Network Detected, 2d = Network Present But No Call In Progress, 3d = Call In Progress, 4d = Call Connected, 5d = Call Failed.
CRESTRON HARDWARE REQUIRED:	C2I-COM6, C2COM-2/3, CNXCOM-6, CNXCOM-2, ST-COM
SETUP OF CRESTRON HARDWARE:	Protocol – RS232 Baud Rate – 38400 Parity – None Data Bits – 8 Stop Bits - 1
VENDOR FIRMWARE:	Tested With The following Versions: Host Version – 02.63 DSP Version – 03.66
VENDOR SETUP:	None
CABLE DIAGRAM:	CNSP-124

Partner: Sony
Model: PCS-G70
Device Type: Video Conference

CONTROL:

Start_RS232	D	Pulse to begin communications with the unit. This input must be pulsed before using any other functions on this module. This will also cause the phone book to be read from the unit.
End_RS232	D	Pulse when finished communicating with the unit. This can typically be set to 0.
Power_On/Off	D	Pulse to power the unit on/off
Display_Near/Far_End	D	Pulse to select which image to view – Near or Far end video
Display_Cycle	D	Pulse to cycle between viewing near and far end video
Main_Video_Input_*	D	Pulse to select the main video input to send to the far end
Main_Video_Input_Cycle	D	Pulse to cycle between the available main video inputs to send to the far end
Sub_Video_Input_*	D	Pulse to select the sub video.
Video_Split_Mode_*	D	Pulse to select the desired video split mode.
Whiteboard_On/Off	D	Pulse to start or stop transmitting the whiteboard image. This should function independently of the current video source selected
Dual_Video_Start/Stop	D	Pulse to start and stop dual video.
DSB_On/Off	D	Pulse to start or stop transmitting the Data Solutions Box (DSB) image. This should function independently of the current video source selected
DSB_Input_A/B	D	Pulse to select which DSB image to transmit
Receive_Input_*	D	Pulse to pick which far end source you would like to receive
Receive_Input_Cycle	D	Pulse to cycle to the next available far end video source
Pip_*	D	Pulse to turn the PIP on/off, and to select the location of the PIP. Note this will only work while a call is in progress.
PIP_Cycle	D	Pulse to cycle the PIP to the next location
Volume_Up/Down	D	Press and hold to ramp the receive volume up/down
Privacy_On/Off/Toggle	D	Pulse to turn privacy (mic mute) on or off
Near/Far_End_Camera	D	Pulse to select the near or far end camera to control with the

		Camera_* inputs
Camera_*	D	Controls all available camera functions, including storing recalling up to 6 preset positions
Camera_Preset_Save	D	Pulse before saving a camera preset. The corresponding _Fb output will go high
Dial_Call_Type_ISDN/IP/Telephone	D	Pulse to select the call type for a manual dial call
Dial_Call_Quality_*	D	Pulse to select the quality (line speed) for a manual call
Dial_Call_Select_Number_1/2	D	Pulse to select number 1 or number 2 for entry
Dial_Call_Copy_Num1_To_Num2	D	Pulse to copy number 1 to number 2
Dial_Call_Clear_Num1_+_Num2	D	Pulse to clear both number 1 and number 2 fields
Dial_Call_Dial	D	Pulse to place the manually dialed call.
Dial_Call_Hang_Up_All	D	Pulse to hang up all currently active calls
Dial_Call_Hang_Up_A/B/C/D/E	D	Pulse to individually hang up any of the 5 possible calls
Dial_Call_Answer_Accept	D	Pulse to accept an incoming call
Dial_Call_Answer_Reject	D	Pulse to reject an incoming call
Directory_Page_First/Previous/ Next/Last	D	Pulse to scroll through pages of the phone book
Directory_Select_1-20	D	Pulse to select one of the currently selected phone book entries
Directory_Search_Up/Down	D	Pulse to scroll through the letters of the alphabet to select entries starting with that letter
Directory_Search_Enter	D	Pulse to cause the phone book display to scroll to the letter specified by Directory_Search_Letter$ output.
Directory_Search_Letter	A	Can be used with an Analog Initialize symbol to immediately cause the phone book to scroll to the desired letter
Directory_Dial	D	Pulse to dial the site previously selected using the Directory_Select_1-20 input
Edit_Directory_Select_Name/ Number_1/Number_2	D	Used when editing a phone book entry. Allows you to select if you want to edit the site name, first number, or second number
Directory_Edit_Line_*	D	Used when editing a phone book entry. Allows you to select what type of call will be used
Directory_Edit_ISDN_Auto/Bonding	D	Used when editing a phone book entry. Allows you to select which type of ISDN call will be placed
Directory_Edit_Bri_*	D	Used when editing a phone book entry. Allows you to select how many bri lines will be used for the call
Directory_Edit_Restrict_Auto/56k	D	Used when editing a phone book entry. Allows you to select if the call will be restricted to 56k
Diretory_Edit_LAN_BW_*	D	Used when editing a phone book entry. Allows you to select the LAN bandwidth to use for the call
Directory_Edit_Prefix_*	D	Used when editing a phone book entry. Allows you to specify if a dialing prefix will be used for the entry
Directory_Edit_Video_*	D	Used when editing a phone book entry. Allows you to select what type of video to use for the call
Directory_Edit_Frame_15/30fps	D	Used when editing a phone book entry. Allows you to select the number of frames per second to use for the call
Directory_Edit_Audio_*	D	Used when editing a phone book entry. Allows you to select the type of

		audio to use for the call
Directory_Edit_FECC_On/Off	D	Used when editing a phone book entry. Allows you to select if far end camera control will be active for the call
Directory_Edit_Data_On/Off	D	Used when editing a phone book entry. Allows you to select if T.120 data will be used for the call
Directory_Edit_Save_Entry	D	Pulse to save all of the currently selected settings to the currently active phone book entry
Directory_Edit_Delete_Entry	D	Pulse to delete the currently active phone book entry
Directory_Edit_Add_New_Entry	D	Pulse if you want to add a new entry to the phone book
IR_*	D	Used to emulate all IR remote control functions
Keyboard_*	D	Used for entering all alphanumeric information for placing calls, and editing phone book entries
Numeric_Keypad_*	D	Used for entering any numeric information for placing calls
DTMF_*	D	Used to send DTMF touch tones
Poll_Enable	D	Hold high to enable polling of the line status
From_Device$	S	Serial signal to be routed from a 2-way RS232 port

FEEDBACK:

Reading/Sorting_Directory_Fb	D	High while the phone book directory is being read and sorted
Main_Video_Input_*_Fb	D	True feedback indicating which near end main video source is selected for transmission
Sub_Video_Input_*_Fb	D	True feedback indicating the currently selected sub video source.
Video_Split_Mode_*_Fb	D	High to indicate the currently selected video split mode.
Receive_Whiteboard_Start/Stop	D	Pulses when the near end system starts or stops receiving the whiteboard image from the far end
Receive_DSB_Start/Stop	D	Pulses when the near end system starts or stops receiving the DSB image from the far end
Volume_Bar	A	True feedback indicating the current receive volume level. Should be routed to a bargraph on a touch panel
Privacy_On/Off_Fb	D	True feedback indicating the state of privacy
Camera_Preset_Save_Fb	D	High while a camera preset save is in progress
Dial_Call_Type_*_Fb	D	Indicates which call type has been selected for a manually dialed call
Dial_Call_Quality_*_Fb	D	Indicates which call quality has been selected for a manually dialed call
Dial_Call_Select_Number_1/2_Fb	D	Indicates if number 1 or 2 is selected for entry

CRESTRON

Certified Module

Partner: Sony
Model: PCS-G70
Device Type: Video Conference

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Integrated Partner

Dial_Call_Number_1/2$	S	Serial signals containing numbers 1 and 2
Call_Connected	D	Pulses when the unit detects that a call has been connected
Incoming_Call	D	Pulses when the unit detects an incoming call
Directory_Select_1-20_Fb	D	Indicates which phone book directory entry has been selected
Directory_1-20$	S	Serial signals containing the names of the current page of phone book entries
Directory_Search_Letter$	S	A single serial character showing which letter is to be searched for
Edit_Directory_Select_Name/ Number_1/Number_2/Fb	D	Indicates which field has been selected to have it's contents modified
Entry_Name$	S	Contains the name of the currently selected phone book entry
Entry_Number_1/2$	S	Contains the numbers of the currently selected phone book entry
Directory_Edit_Line_*_Fb	D	Indicates the line type for the currently selected phone book entry
Directory_Edit_ISDN_*_Fb	D	Indicates the ISDN type for the currently selected phone book entry
Directory_Edit_Bri_*_Fb	D	Indicates the number of bri lines to use for the currently selected phone book entry
Directory_Edit_Restrict_*_Fb	D	Indicates the state of Restrict for the currently selected phone book entry
Directory_Edit_LAN_BW_*_Fb	D	Indicates the LAN Bandwidth for the currently selected phone book entry
Directory_Edit_Prefix_*_Fb	D	Indicates which prefix (if any) will be used with the currently selected phone book entry
Directory_Edit_Video_*_Fb	D	Indicates what video type will be used for the currently selected phone book entry
Directory_Edit_Frame_*_Fb	D	Indicates what frame rate will be used with the currently selected phone book entry
Directory_Edit_Audio_*_Fb	D	Indicates what audio type will be used for the currently selected phone book entry
Directory_Edit_FECC_On/Off_Fb	D	Indicates if Far End Camera Control will be used with the currently selected phone book entry
Directory_Edit_Data_On/Off_Fb	D	Indicates if T.120 data will be used with the currently selected phone book entry
Keyboard_Shift_Fb	D	Indicates if the Shift function is active on the alphanumeric keyboard

Keyboard_Caps_Lock_Fb	D	Indicates if the Caps Lock function is active on the alphanumeric keyboard
Line_<1-30>_Status	A	Shows the status of each of the 30 available lines (if the Poll_Enable input is asserted)
LAN_Line_<1-5>_Status	A	Shows the status of each of the 5 available LAN lines (if the Poll_Enable input is asserted)
To_Device$	S	Serial signal to be routed to a 2-way RS232 port

TESTING:

OPS USED FOR TESTING:	3.155.1240
SIMPL WINDOWS USED FOR TESTING:	2.11.09.00
DEVICE DB USED FOR TESTING:	20.05.014.00
CRESTRON DB USED FOR TESTING:	20.03.008.00
SAMPLE PROGRAM:	Sony PCS-G70 Full Control v2.0 Demo
REVISION HISTORY:	V. 1.0 – Original Release. V2.0 – Fixed an issue with the end of string characters in the responses from the PCS-G70. Also added status for all lines.