CYNAP MODULE HELP FILE

WolfVision Cynap, AV clients (Crestron)

CYNAP MODULE HELP

Module name	Cynap_Client.*umc, Cynap_Client.usp*
Version	*1.14.00*
Description	This document defines the common Crestron module interface for the WolfVision Cynap. The Cynap may be controlled using the Cynap_Client.umc module included, along with the simpl+ Cynap_Client.usp. This module requires a single Ethernet port connection from the Crestron network to the Cynap being controlled. For installations containing more than one Cynap, multiple instances of the module may be used. The communication module implements the actual Cynap protocol for communicating to the unit but exposes a more simplified protocol to the programmer.
Maintainer	WolfVision GmbH
Inputs	***Power_On, digital*** *Pulse to power on the device.* ***Power_Off, digital*** *Pulse to power off the device.* ***Power_Toggle, digital*** *Pulse to toggle the power of the device.* ***Presentation_Mode_Open, digital*** *Pulse to put the device into Mirror Mode Open.* ***Presentation_Mode_Protected, digital*** *Pulse to put the device into Mirror Mode Protected..* ***Presentation_Mode_Toggle, digital*** *Pulse to toggle the device between modes.* ***Presentation_Snapshots_Toggle, digital*** *Pulse to toggle the snapshots save on/off.* ***Presentation_Recordings_Toggle, digital*** *Pulse to toggle the recordings save on/off.* ***Presentation_New, digital*** *Pulse to start a new presentation.* ***Presentation_End, digital*** *Pulse to end presentation, and power off the device.* ***Source_Input1, digital*** *Pulse to create a new window with the content from HDMI 1.* ***Source_Input2, digital*** *Pulse to create a new window with the content from HDMI 2.* ***Source_Browser, digital*** *Pulse to create a new window with a browser window..* ***Source_Local Drives, digital*** *Pulse to browse the local files located on the internal harddrive and usb connected drives..* ***Source_Cloud Drives, digital*** *Pulse to browse the available cloud drives.(Dropbox and GoogleDrive).* ***Source_Mirror, digital*** *Pulse to create a new window with content from any mobile mirrored device connected.* ***Source_Whiteboard, digital*** *Pulse to create a new window with whiteboard background.* ***Source_WebRTC*** *Pulse to create a new window for video conferencing.* ***Browse_Close_Windows, digital*** *Pulse to close windows associated with browsing.* ***Select_Drive, analog*** *Send a level to select a drive.* ***Local_Drive_x_Select, digital*** *Pulse to select the drive at x location. X= 1 to 12.*

Cloud_Drive_Disconnect, digital
Pulse to disconnect the connected cloud drive(Either dropbox or google drive while browsing that drive).
Select_Cloud_Drive_Dropbox, digital
Pulse to browse the files located on the Dropbox cloud drive.
Select_Cloud_Drive_Google_Drive, digital
Pulse to browse the files located on the Google Drive cloud drive.

Number_of_Browse_Lines, analog
Set this to define how many lines will be used and updated during browsing.
Scroll_Bar_In, analog
This signal connectos the the analog join associated with the level bar for file browsing.

Get_Downloads, digital
Pulse to get the available downloaded file list
Back_Button, digital
Pulse to go back one level while browsing files.

Select_Browse_Line, analog
Direct select of line
Browse_Line_x_Select, digital
Pulse to select the file/dir located at x point in the list. X= 1 to 12.

Select_Download_Line, analog
Direct select of line
Browse_Download_x_Select, digital
Pulse to select the file located at x point on the list. X=1 to 12.

Active_Window_Close, digital
Pulse to close the active window.
Active_Window_Mode_Fullscreen, digital
Pulse to set the active window mode to fullscreen.
Active_Window_Mode_Normal, digital
Pulse to set the active window mode to normal.
Active_Window_Mode_Toggle, digital
Pulse to toggle the active window mode between fullscreen and normal.
Active_Window_Volume_Button, digital
Pulse to activate the window volume control page.
Active_Window_Volume_In, analog
Change level to change the volume level of the active window.
Active_Window_Mute_On, digital
Pulse to set the active window mute status to On.
Active_Window_Mute_Off, digital
Pulse to set the active window mute status to Off.
Active_Window_Mute_Toggle, digital
Pulse to toggle the active window mute status between On and Off.

Active_Window_DualScreen_Mode_On
Pulse to enable the dualscreen function.
Active_Window_DualScreen_Mode_Off
Pulse to disable the dualscreen function.
Active_Window_DualScreen_Mode_Toggle
Toggles the the dualscreen function on or off.

Window_x_Close, digital
Pulse to close x window
Window_x_Mode_Fullscreen, digital
Pulse to set the window mode to fullscreen
Window_x_Mode_Normal, digital
Pulse to set the window mode to normal
Window_x_Mode_Toggle, digital
Pulse to toggle the window mode between fullscreen and normal
Window_x_Volume_In, analog

Change level to change the volume level of the window.
Window_x_Mute_On, digital
Pulse to set the mute status to On
Window_x_Mute_Off, digital
Pulse to set the mute status to Off
Window_x_Mute_Toggle, digital
Pulse to toggle the window mute status between On and Off.
Window_x_DualScreen_Mode_On
Pulse to enable the dualscreen function for window x.
Window_x_DualScreen_Mode_Off
Pulse to disable the dualscreen function for window x.
Window_x_DualScreen_Mode_Toggle
Pulse to toggle the dualscreen function on/off for window x.

Tools
Master_Volume_level_In, analog
Change level to change the volume level of the system.
Master_Volume_Mute_On, digital
Pulse to set the system mute status to On
Master_Volume_Mute_Off, digital
Pulse to set the system mute status to On
Master_Volume_Mute_Toggle, digital
Pulse to toggle the system mute status between On and Off

Recording_On, digital
Pulse to start recording.
Recording_Pause, digital
Pulse to pause recording.
Recording_Stop, digital
Pulse to stop recording.

Streaming_On, digital
Pulse to start streaming.
Streaming_Off, digital
Pulse to stop streaming.
Streaming_Toggle, digital
Pulse to toggle the streaming state.

Link_to_Stream_On, digital
Pulse to show the QR Code on the display.
Link_to_Stream_Off, digital
Pulse to hide the QR Code on the display.
Link_to_Stream_Toggle, digital
Pulse to toggle the QR Show state.

Freeze_On, digital
Pulse to freeze the main screen.
Freeze_Off, digital
Pulse to unfreeze the main screen.
Freeze_Toggle, digital
Pulse to toggle the freeze state.

Take Snapshot, digital
Pulse to take a snapshot of the Cynap screen.
Close_All_Windows, digital
Pulse to close all open content windows.

Edit Bar Buttons
Pulsing any of the Edit Bar buttons will send that command to the active window only.
Power, digital
Visualizer power on/off function.
Light, digital

Pulse to toggle the Visualizer lights on/off.
Zoom_out, digital
Visualizer, Browser, Doc, PDF, Calc, Pres
Zoom_In, digital
Visualizer, Browser, Doc, PDF, Calc, Pres
Back, digital
Browser
Forward, digital
Browser
FullPage, digital
Doc, PDF, Calc
FullWidth, digital
Doc, PDF, Calc
FullHeight, digital
PDF
ArrowDown, digital
Browser, Doc, PDF, Calc, Pres
ArrowUp, digital
Browser, Doc, PDF, Calc, Pres
ArrowLeft, digital
Browser, Doc, PDF, Calc, Pres
ArrowRight, digital
Browser, Doc, PDF, Calc, Pres
Previous, digital
Image, Doc, Calc, Pres
Rewind, digital
Video
StepBack, digital
Image, Doc, Calc, Pres
Stop, digital
Video
Play, digital
Video
Pause, digital
Video
StepForward, digital
Image, Doc, Calc, Pres
FastForward, digital
Video
Next, digital
Doc, Calc, Pres, Image
Reload, digital
Browser
WWW, digital
Only used for displaying keyboard
Focus_Near, digital
Visualizer control
Focus_Far, digital
Visualizer control
Auto_Focus, digital
Visualizer control
Freeze, digital
Visualizer control
Preset_Recall, digital
Visualizer control
Preset_Save, digital
Visualizer control

Browser_URL_Text, serial
String to be used when a keyboard is active.
This string is used only with the browser window to input web addresses.
BrowserURLEnter, digital
Pulse, tied to the enter from the Keyboard to send the string
SendCommand, serial

		A passthrough to send commands directly to the Cynap.
Outputs		***Link_Established_Fb, digital*** *Shows whether an Ethernet link is established to the Cynap or not.* ***Valid_Login, digital*** *Shows whether the admin password is correct or not.* ***BoxName, serial*** *Text used to display the name of the Cynap unit* ***Show_PIN_code, digital*** *Displays a popup page when a PIN Code is available.* ***PIN_Code, serial*** *Text used to display the PIN code.* ***Show_Busy_Subpage*** *This signal will go high is the system is processing a lot of information and slowing down.* ***Power_On_Fb, digital*** *Indicates that the power is on.* ***Power_Off_Fb, digital*** *Indicates that the power is off.* ***Presentation_Mode Open_Fb, digital*** *Indicates that the mode is Open.* ***Presentation_Mode_Protected_Fb, digital*** *Indicates that the mode is Protected.* ***Presentation_Snapshots_Fb, digital*** *Indicates the state of the toggle.* ***Presentation_Recordings_Fb, digital*** *Indicates the state of the toggle.* ***Input1/2_Type, analog*** *Value of what input 1/2 icon type is.* ***Input1/2_Name, serial*** *Text of what input 1/2 has been set to.* ***Input1/2_Enabled, digital*** *This will be set to low if there is no connected source on the input. (Beta)* **Source_Cloud_Visible, digital** This signal will go high when the system allows at least one cloud drive to be shown. **Source_Mirror_Visible, digital** This signal will go high when in the Protected Mode **Source_Mirror_Waiting, digital** This signal will go high when the mirror stream is open and allows for a morror connection to be established. **Browse_Local_Drives_Subpage_Fb, digital** This signal will go high while browsing the local drives. **Local_Drive_x_Show** X will go high is there is a valid drive to be displayed ***Local_Drive_[x]_Text, serial*** *Text for the the listed drives 1-12.* ***Local_Drive_[x]_Type, analog*** *Value for the the listed drives 1-12. (USB, Local, Cloud…)* **Browse_Cloud_Drives_Subpage_Fb, digital** This signal will go high while browsing the cloud drives. **Show_Disconnect_Button, digital** This signal will go high while browsing the cloud drives. **Show_Select_Dropbox, digital** This signal will go high if dropbox is allowed to be shown for selection. ***Cloud_Drive_Dropbox_Status, analog***

Status of the dropbox connection. (0-disconnected, 1-Authentification, 2-Connected, 3-Failed, 4-Synced

Show_Select_GoogleDrive, digital
This signal will go high if googledrive is allowed to be shown for selection.
Cloud_Drive_GoogleDrive_Status, analog
Status of the dropbox connection. (0-disconnected, 1-Authentification, 2-Connected, 3-Failed, 4-Synced

Browse_Files_Subpage_Fb, digital
Will go high when browsing a drives file system
Number_of_Total_Files, analog
Number of files in a directory
Scroll_Bar_Out, analog
The output level of the scroll bar

Browse_List_Drive_type, analog
A value to know if we are browsing local or cloud drive
Browse_List_Header_Text, serial
Text displaying back 2 levels in the file structure
Back_Button_Text, serial
Text displaying the previous file structure

Browse_Line_x_Enabled, digital
This signal will go high if the file/dir is valid
Browse_Line_x_Text, serial
Text string for the x number file/dir
Browse_Line_x_Icon, analog
Value for the Icon preview

Browse_Download_x_Show, digital
This signal will go high is the Browse_Line_x_Select can be downloaded from the cloud drive.

Number_Of_Active_Windows, analog
Value of the current number of active windows in use

Active_Window, analog
Value of the currently selected active window

Active_Window_Mode_Fullscreen_Fb, digital
High if active window is fullscreen
Active_Window_Mode_Normal_Fb, digital
High if active window is normal
Active_Window_Volume_Subpage, digital
High if active window volume button was toggled on to display volume subpage
Active_Window_Volume_Button_Show, digital
High if active window has volume controls associated with its type
Active_Window_Mute_Button_Show, digital
High if active window has volume controls associated with its type
Active_Window_Volume_Out, analog
Volume level of the current active window
Active_Window_Mute_On_Fb, digital
High if active window mute is on
Active_Window_Mute_Off_Fb, digital
High if active window mute is off

Window_x_Selected_Fb, digital
High is the window x is the currently selected window
Window_x_Visible_Fb, digital
High if the window has a valid source
Window_x_Source_Text, serial
Text name of the valid source
Window_x_Source_Type, analog
Value of the valid source
Window_x_Mode_Fullscreen_Fb, digital

High if active window is fullscreen
Window_x_Mode_Normal_Fb, digital
High if active window is normal
Window_x_Volume_Out, analog
Volume level of the current active window
Window_x_Mute_On_Fb, digital
High if active window mute is on
Window_x_Mute_Off_Fb, digital
High if active window mute is off
Window_x_DualScreen_Mode_On_Fb
High if the dualscreen function is on for window x.
Window_x_DualScreen_Mode_Off_Fb
High if the dualscreen function is off for window x.

Tools
Master_Volume_Level_Out, analog
Value of the system volume level
Master_Mute_On_Fb, digital
High if the system mute is on
Master_Mute_On_Fb, digital
High if the system mute is off

Recording_Enabled_Fb, digital
Indicates that recording is enabled.
Recording_Disabled_Fb, digital
Indicates that recording is disabled.
Recording_On_Fb, digital
Indicates that recording is on.
Recording_Pause_Fb, digital
Indicates that recording is paused.
Recording_Stop_Fb, digital
Indicates that recording is stopped.

Streaming_Enabled_Fb, digital
Indicates that streaming is enabled.
Streaming_Disabled_Fb, digital
Indicates that streaming is disabled.
Streaming_Off, digital
Indicates that streaming is off.
Streaming_Auto, digital
Indicates that streaming is on in Auto Mode.
Streaming_Continuous, digital
Indicates that streaming is on in Continuous Mode.
Streaming_Unicast, digital
Indicates that streaming is on in Unicast Mode.

Link_To_Stream_On_Fb
Indicates that the QR-code stream is being broadcast.
Link_To_Stream_Off_Fb
Indicates that the QR-code stream is not being broadcast.

Freeze_On_Fb, digital
Indicates that the maion screen Freeze is active.
Freeze_Off, digital
Indicates that the maion screen Freeze is NOT active.

Edit bar buttons show
EditBar_Active, digital
Display the EditBar popup.

The following signals are used to define what functions are available, in the edit bar, pr. active window.

	Power_Available, digital *Light_Available, digital* *Zoom_out_Available, digital* *Zoom_In_Available, digital* *Back_Available, digital* *Forward_Available, digital* *FullPage_Available, digital* *FullWidth_Available, digital* *FullHeight_Available, digital* *ArrowDown_Available, digital* *ArrowUp_Available, digital* *ArrowLeft_Available, digital* *ArrowRight_Available, digital* *Previous_Available, digital* *Rewind_Available, digital* *StepBack_Available, digital* *Stop_Available, digital* *Play_Available, digital* *Pause_Available, digital* *StepForward_Available, digital* *FastForward_Available, digital* *Next_Available, digital* *Reload_Available, digital* *WWW_Available, digital* *Focus_Near_Available, digital* *Focus_Far_Available, digital* *Auto_Focus_Available, digital* *Freeze_Available, digital* *Preset_Recall_Available, digital* *Preset_Save_Available, digital* **Browser_Keyboard_Show, digital** *High is the keyboard subpage should be shown* **Window_Data_Available, digital** *High is the ther is data to be shown in the edit bar window* **Window_Data, serial** *Text for extra data for the EditBar.*
Parameters	**Server_IP** *IP Address of cynap unit* **Password** *Admin password for cynap unit* *(default cynap password is :Password)* **MAC_Address** *MAC Address for cynap unit, input in Crestrons hex formatting, (\x before each part of the mac address. No spaces, dashes or colons/)*
Version History	**Version** **Date** **Remarks** 1.00.00 010415 Initial structure. 1.12.00 080716 Updates for firmware 1.06 release 1.14.0 160916 Fixes and updates to new features
Advisories/remarks	Please note the Cynap can (currently) only handle a total of 499 user files(Documents, Pictures, Movies, etc.). Have more files might cause unexpected results. Cynap streaming services can cause significant traffic which might interfere with the Crestron processor. It is highly advised to follow Crestron's Ethernet network guide lines in any setup.
Dependencies	Cynap_Client.umc, Cynap_client.usp
Firmware	V1.06f
Processor support	*2-Series, not currently supported.*

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	3-Series, support.
Hardware setup/settings	N/A