Cisco Room Devices Driver 3.2.4

GENERAL INFORMATION

SIMPLWINDOWS NAME:	Cisco Room Devices 3.2.4
CATEGORY:	Conferencing
VERSION:	v. 3.0 – Release v. 3.1 – Feature additions & bug fixes v. 3.2 – Feature additions & bug fixes v 3.2.1 – Bug fixes v 3.2.3 – Feature additions & bug fixes v 3.2.4 – Feature additions & bug fixes
VERSION DATE:	7/26/2019
DESCRIPTION:	Used to control a Cisco room device
GENERAL NOTES:	**How communication operates** This module can be used on a COM port or it can use SSH. Only one type may be used at run-time. The socket connections are handled internally. No prior initialization is required by the programmer – the module will begin communicating with the codec once the signal Connect has a rising edge regardless of the transport used. SSH has two modes: Secure and Unsecure. Unsecure mode auto-accepts a connection while Secure mode will check a file of host key fingerprints before sending any sensitive data. This file is stored in \NVRAM\CiscoSxCodec\ and is a JSON formatted List<string> collection. The module outputs a connection state on all three types of transports. The LoggedIn state (4d) should be used to buffer any commands that need to be sent once the system is logged in and ready to process commands. Any commands triggered before being logged in will be ignored. Each transport connection has a digital output that specifies if the module is busy processing data received from the codec. When the module initially connects to the device it will request a lot of information from the codec depending on the settings on the module. The programmer can enable/disable initial phonebook requests, call history requests, and booking requests. All other sections are automatically polled at the start. Depending on these settings and the transport used, it may take several minutes until the module is complete with initialization. **How the phonebook operates** **-Download as needed:** The first 500 entries (or all entries depending on the download settings) are downloaded initially either by the user or as a programmed function. The module will only output 10 entries using an XSIG signal. To view all entries the programmer must use the signals Navigate Up/Down Page to see more entries. The module will keep downloading entries so that the 10 entries are always populated as long as there are entries on the codec. The internal code will make sure there is a buffer of at least 5 pages before requesting more. This same logic is used on folders and on searches with a search parameter. Support for the Address Book smart object is disabled with this setting. Support for setting the number of contacts to display a time is disabled with this setting. **-Download All** All entries are retrieved from the phonebook using a recursive search. Support for the Address Book smart object is enabled with this setting.

Support for setting the number of contacts to display a time is enabled with this setting.

How the call system works

A call is divided into three main types: Incoming, Outgoing, and Connected

-Any call dialed will be available as an Outgoing call until it is connected.

-Any call incoming will be available as an Incoming call until it is connected.

Only 5 concurrent calls within each section are supported. Calls will automatically move up in index as other calls are removed.

Props on the Address Book Smart Object:

The property names will be:

-"callRate"
-"callType"
-"number"

CRESTRON HARDWARE REQUIRED:	3 Series Processor
Cisco TelePresence Software tested versions	TC 7.3, CE 8.3.4, CE 9.1.X through CE 9.7.X
Cisco TelePresence SX-10	1. Only supports Microphones 1 & 2 2. Only supports Camera 1 3. Only supports video input connectors 1, 2, & 3 4. Only supports video output connector 1
Cisco TelePresence SX-20	1. Only supports Microphones 1 & 2 2. Only supports Camera 1 3. Only supports video input connectors 1 & 2 4. Only supports video output connectors 1 & 2
Cisco TelePresence SX-80	All features should be supported that are exposed by this module
Cisco TelePresence MX200 G2	1. Only supports Microphones 1 & 2 2. Only supports Camera 1 3. Only supports video input connectors 1 & 2 4. Only supports video output connector 1
Cisco TelePresence MX300 G2	1. Only supports Microphones 1 & 2 2. Only supports Camera 1 3. Only supports video input connectors 1 & 2 4. Only supports video output connector 1
Cisco TelePresence MX700	1. Only supports Camera 1 & 2 2. Only supports video input connector 1 3. Only supports video output connector 1
Cisco TelePresence MX800	1. Only supports Camera 1 & 2 2. Only supports video input connector 1 3. Only supports video output connector 1
Cisco DX80	1. Only supports Microphone 1 2. Only supports Camera 1 3. Only supports video input connector 1

	4. Does not support video output connectors
Cisco DX70	1. Only supports Microphone 1 2. Only supports Camera 1 3. Only supports video input connector 1 4. Does not support video output connectors
Cisco Webex Room 55	1. Only supports Microphones 1, 2, & 3 2. Only supports Camera 1 3. Only supports video input connectors 1 & 2 4. Only supports video output connector 1
Cisco Webex Room 70	1. Only supports Microphones 1, 2, & 3 2. Only supports Camera 1 3. Only supports video input connectors 1, 2, & 3 4. Only supports video output connectors 1 & 2
Cisco Webex Room Kit	1. Only supports Microphones 1, 2, & 3 2. Only supports Camera 1 3. Only supports video input connector 1, 2, & 3 4. Only supports video output connector 1 & 2
Cisco Webex Room Kit Plus	1. Only supports Microphones 1, 2, & 3 2. Only supports Camera 1 3. Only supports video input connector 1, 2, & 3 4. Only supports video output connector 1 & 2

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CONTROL – LOCAL & CORPORATE PHONEBOOK:

LocalPhonebook_EnableInitialPoll CorporatePhonebook_EnableInitialPoll	D	If enabled, once the system gets into a logged-in state it will use the functionality provided by <PhonebookType>_Request. If disabled, the user/programmer are required to pulse <PhonebookType>_Request.
LocalPhonebook_Request CorporatePhonebook_Request	D	Download As Needed – Requests the first 500 entries of the phonebook in the root directory. Download All – Requests all the entries in the phonebook including all folders.
LocalPhonebook_Search CorporatePhonebook_Search	D	Requests the first 500 entries of the phonebook in any directory that match the SearchString specified.
LocalPhonebook_SearchString CorporatePhonebook_SearchString	S	Used to specify the search parameters of a phonebook search.
LocalPhonebook_SelectEntry CorporatePhonebook_SelectEntry	A	Selects an entry in the phonebook. Valid values are 1 - 10
LocalPhonebook_SelectContactMethod CorporatePhonebook_SelectContactMethod	A	Selects a contact method that is associated with the currently selected entry. Valid values are 1 - 5
LocalPhonebook_ClearSelectedEntry CorporatePhonebook_ClearSelectedEntry	D	Clears all feedback on the currently selected entry.
LocalPhonebook_DialSelected CorporatePhonebook_DialSelected	D	Dials the currently selected entry with either the first available contact method if one is not specified or the specified contact method.
LocalPhonebook_NavigateToPreviousDirectory CorporatePhonebook_NavigateToPreviousDirectory	D	Navigates the phonebook to the parent folder of the current folder.
LocalPhonebook_NavigateToRootDirectory CorporatePhonebook_NavigateToRootDirectory	D	Navigates the phonebook to the root folder.
LocalPhonebook_NavigateDownPage CorporatePhonebook_NavigateDownPage	D	Navigates the phonebook down one page. There are a total of 50 pages with 10 items on each page. As the user navigates through the pages, the internal code will keep requesting and removing entries to allow for navigation through all entries in the phonebook, not limited by the original 500 entries downloaded when RequestPhonebook is pulsed.
LocalPhonebook_NavigateUpPage CorporatePhonebook_NavigateUpPage	D	Navigates the phonebook up one page.

FEEDBACK - LOCAL & CORPORATE PHONEBOOK:

LocalPhonebook_Status CorporatePhonebook_Status	S	The current status of the phonebook. This will specify if a download is taking place, how many entries are downloading, and how many entries were found in a download. The will also display any errors with a search.
LocalPhonebook_DownloadState CorporatePhonebook_DownloadState	A	1 = Downloading 2 = Download Complete
LocalPhonebook_NumberOfEntries CorporatePhonebook_NumberOfEntries	A	Specifies the number of entries in the current selected page. Values are 1-10
LocalPhonebook_Entries_XSIG CorporatePhonebook_Entries_XSIG	S	XSIG containing up to 10 entry names for the current selected page.
LocalPhonebook_Selected_NumberOfContactMethods CorporatePhonebook_Selected_NumberOfContactMethods	A	Specifies the number of contact methods for a selected entry. Values are 1 - 5
LocalPhonebook_Selected_ContactMethods_XSIG CorporatePhonebook_Selected_ContactMethods_XSIG	S	XSIG containing up to 5 contact methods for the selected entry.
LocalPhonebook_CurrentFolder CorporatePhonebook_CurrentFolder	S	Specifies the current folder the phonebook is displaying.
LocalPhonebook_Selected_Name CorporatePhonebook_Selected_Name	S	Specifies the Name field of the currently selected entry.
LocalPhonebook_Selected_Title CorporatePhonebook_Selected_Title	S	Specifies the Title field of the currently selected entry.
LocalPhonebook_Selected_Number CorporatePhonebook_Selected_Number	S	Specifies the Number field of the currently selected entry and contact method. This will be the first available option if one is not selected.
LocalPhonebook_Selected_Device CorporatePhonebook_Selected_Device	S	Specifies the Device field of the currently selected entry.
LocalPhonebook_Selected_Protocol CorporatePhonebook_Selected_Protocol	S	Specifies the Protocol field of the currently selected entry and contact method. This will be the first available option if one is not selected.
LocalPhonebook_Selected_CallRate CorporatePhonebook_Selected_CallRate	S	Specifies the CallRate field of the currently selected entry and contact method. This will be the first available option if one is not selected.

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FEEDBACK – LOCAL & CORPORATE PHONEBOOK:

LocalPhonebook_Selected_CallType CorporatePhonebook_Selected_CallType	S	Specifies the CallType field of the currently selected entry and contact method. This will be the first available option if one is not selected.

CONTROL – NEAR END CAMERAS:

NearEnd_RequestPresets	D	This will request a list of camera presets currently available on the codec.
NearEnd_SelectCamera	A	Determines which camera will be controlled.
NearEnd_ResetPosition	D	Resets the position of the selected camera.
NearEnd_PanLeft	D	Pan Left operation on the selected camera.
NearEnd_PanRight	D	Pan Right operation on the selected camera.
NearEnd_TiltUp	D	Tilt Up operation on the selected camera.
NearEnd_TiltDown	D	Tilt Down operation on the selected camera.
NearEnd_ZoomIn	D	Zoom In operation on the selected camera.
NearEnd_ZoomOut	D	Zoom Out operation on the selected camera.
NearEnd_FocusNear	D	Focus Near operation on the selected camera.
NearEnd_FocusFar	D	Focus Far operation on the selected camera.
NearEnd_AutoFocus	D	AutoFocus operation on the selected camera.
NearEnd_BrightnessMode	A	Sets the Brightness Mode of the selected camera. Valid values: 1 – Auto 2 – Manual
NearEnd_BrightnessLevel	A	Sets the default brightness level of the selected camera. This will only be used when NearEnd_BrightnessMode is set to Manual but the value can still be altered regardless of the current state.
NearEnd_SelectPreset	A	Selects a camera preset on the selected camera.
NearEnd_ActivateSelectedPreset	D	Activates the selected camera preset.
NearEnd_SaveSettingsAsCurrentPreset	D	Saves the current camera position as the currently selected preset. If the preset is not defined then this will not be saved.
NearEnd_RemoveSelectedPreset	D	Removes the selected preset from the selected camera.
NearEnd_AddNewPreset	D	Adds a new preset to the selected camera with the name NearEnd_NewPresetName. This will use the current camera's position.
NearEnd_NewPresetName	S	Specifies the name of any new preset that would be added by NearEnd_AddNewPreset.

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FEEDBACK – NEAR END CAMERAS:

NearEnd_NumberOfCameras	A	The number of cameras the module supports.
NearEnd_CameraNames_XSIG	S	The names of all the cameras.
NearEnd_CurrentPresetSaved	D	This signal will pulse when a preset is successfully saved.
NearEnd_NumberOfPresets	A	The number of presets for the currently selected camera.
NearEnd_PresetNames_XSIG	S	The names of the presets for the currently selected camera.

CONTROL – FAR END CAMERAS:

FarEnd_SelectCall	A	Selects a connected call for camera control. All camera controls are per-call. Valid values: 1- 5
FarEnd_PanLeft	D	Performs the Pan Left operation on the selected call's camera.
FarEnd_PanRight	D	Performs the Pan Right operation on the selected call's camera.
FarEnd_TiltUp	D	Performs the Tilt Up operation on the selected call's camera.
FarEnd_TiltDown	D	Performs the Tilt Down operation on the selected call's camera.
FarEnd_ZoomIn	D	Performs the Zoom In operation on the selected call's camera.
FarEnd_ZoomOut	D	Performs the Zoom Out operation on the selected call's camera.
FarEnd_SelectSource	A	Selects a source on the selected call. Valid values: 0 – 15 where 0 = No source and 15 = Source 15
FarEnd_SelectPreset	A	Activates a room preset on the selected call (This must be enabled on the far end to function). Valid values: 1 - 15

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CONTROL – CALL CONTROL:

Answer All	D	Answers all incoming calls.
Answer[1] - Answer[5]	D	Answers the selected incoming call.
RejectAll	D	Rejects all incoming calls.
Reject[1] - Reject[5]	D	Rejects the selected incoming call.
HangUpAll	D	Hangs up all connected & outgoing calls.
HangUpConnectedCall[[1] - HangUpConnectedCall[[5]	D	Hangs up the selected connected call.
HangUpOutgoingCall[1] - HangUpOutgoingCall[5]	D	Hangs up the selected outgoing call.
HoldAll	D	Puts all connected calls on hold.
Hold[1] - Hold[5]	D	Puts the selected connected call on hold.
ResumeAll	D	Resumes all connected calls on hold
Resume[1] - Resume[5]	D	Resumes the selected connected call on hold
Ignore All	D	Ignores all incoming calls.
Ignore[1] - Ignore[5]	D	Ignores the selected incoming call.
Join All	D	Joins all connected calls.
Transfer[1] - Transfer[5]	D	Transfers the selected connected call to the TransferDestination.
TransferDestination	S	The URI that should be used when transferring a connected call.

FEEDBACK – INCOMING CALL STATUS:

IncomingCall[1] - IncomingCall[5]	D	Specifies if there is an incoming call.
IncomingCall_Number[1] - IncomingCall_Number[5]	S	The number of the incoming call(s).
IncomingCall_DisplayName[1] to IncomingCall_DisplayName[5]	S	The display name of the incoming call(s).
IncomingCall_Status[1] - IncomingCall_Status[5]	S	The status of the incoming call(s).
IncomingCall_CallType[1] - IncomingCall_CallType[5]	S	The call type of the incoming call(s).

FEEDBACK – CONNECTED CALL STATUS:

ConnectedCall_IsActive[1] - ConnectedCall_IsActive[5]	S	Specifies if there is a connected call
ConnectedCall_Number[1] - ConnectedCall_Number[5]	S	The number of the connected call(s).
ConnectedCall_DisplayName[1] to ConnectedCall_DisplayName[5]	S	The display name of the connected call(s).
ConnectedCall_Status[1] - ConnectedCall_Status[5]	S	The status of the connected call(s).
ConnectedCall_CallType[1] - ConnectedCall_CallType[5]	S	The call type of the connected call(s).
ConnectedCall_OnHold[1] - ConnectedCall_OnHold[5]	D	Specifies if a connected call is on hold.

FEEDBACK – OUTGOING CALL STATUS:

OutgoingCallIsActive[1] - OutgoingCallIsActive[5]	D	Specifies if there is an outgoing call. Any calls dialed on the Touch 10 or similar Cisco panel will also appear here.
OutgoingCall_Number[1] - OutgoingCall_Number[5]	S	The number of the outgoing call(s).
OutgoingCall_DisplayName[1] to OutgoingCall_DisplayName[5]	S	The display name of the outgoing call(s).
OutgoingCall_Status[1] - OutgoingCall_Status[5]	S	The status of the outgoing call(s).
OutgoingCall_CallType[1] - OutgoingCall_CallType[5]	S	The call type of the outgoing call(s).

CONTROL – CALL SETTINGS:

EnableDoNotDisturb	D	1 - Enables Do Not Disturb
DisableDoNotDisturb		1 - Disables Do Not Disturb
EnableAutoAnswer	D	1 - Enables Auto Answer
DisableAutoAnswer		1 - Disables Auto Answer
AutoAnswerDelay	A	The number of seconds the codec will wait until auto-answering an incoming call. Valid values: 0 - 50
DefaultCallRate	A	The default call rate the codec will use. Valid values: 128, 256, 384, 512, 768, 1152, 1472, 1920, 2560, 3072, 4000, 6000
DefaultCallProtocol	A	The default call protocol the codec will use. Valid values: 1 – Auto 2 – H320 3 – H323 4 – SIP
EncryptionMode	A	The encryption mode the codec will use. Valid values: 1 – Off 2 – On 3 – Best Effort

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FEEDBACK – CALL SETTINGS:

DoNotDisturb_IsEnabled	D	0 = Do Not Disturb is disabled 1 = Do Not Disturb is enabled
AutoAnswer_IsEnabled	D	0 = Auto Answer is disabled 1 = Auto Answer is enabled
AutoAnswerDelay	A	The number of seconds the codec will wait until auto-answering an incoming call. Outputs 0 - 50
DefaultCallRate	A	The default call rate of the codec. 128, 256, 384, 512, 768, 1152, 1472, 1920, 2560, 3072, 4000, 6000
DefaultCallProtocol	A	The default call protocol of the codec. 1 – Auto 2 – H320 3 – H323 4 – SIP
EncryptionMode	A	The encryption mode of the codec. 1 – Off 2 – On 3 – Best Effort

CONTROL – CALL HISTORY:

CallHistory_EnableInitialPoll	D	Enables polling for call history entries when the system gets to a logged in state.
CallHistory_Request	D	Requests the first 100 call history entries.
CallHistory_SearchString	S	The search parameters for a call history request.
CallHistory_AcknowledgeAll	D	Acknowledges all call history entries (this will be all entries, not just the ones displayed).
CallHistory_DeleteAll	D	Deletes all call history entries (this will be all entries, not just the ones displayed).
CallHistory_SelectEntry	A	Selects an entry. Valid values: 1 – 10
CallHistory_AcknowledgeSelected	D	Acknowledges the selected entry.
CallHistory_DeleteSelected	D	Deletes the selected entry.
CallHistory_DialSelected	D	Dials the selected entry.
CallHistory_NextPage	D	Navigates to the next 10 entries.
CallHistory_PreviousPage	D	Navigates to the previous 10 entries.

FEEDBACK – CALL HISTORY:

CallHistory_NumberOfEntries	A	The number of call history entries on the current page.
CallHistory_Entries_XSIG	S	The current call history entries on the current page.
CallHistory_DownloadState	A	Specifies if call history is currently being downloaded. 1 – Downloading 2 – Download Complete

CONTROL – DIALING:

Dialing_StringToDial	S	The URI that should be dialed when PlaceCall is pulsed.
Dialing_PlaceCall	D	Places a call using StringToDial as the URI and the settings below if set.
Dialing_CallType	A	Defines the type of call that should be specified when using PlaceCall. Valid values: 0 = Default 1 = Audio 2 = Video
Dialing_CallProtocol	A	Defines the protocol that should be used when using PlaceCall If left unset the codec will use its default protocol for the call. Valid values: 1 – Auto 2 – H320 3 – H323 4 – SIP
Dialing_CallSpeed	A	Defines the call speed that should be used when using PlaceCall. If left unset the codec will use its default call rate for the call. Valid values: 128, 256, 384, 512, 768, 1152, 1472, 1920, 2560, 3072, 4000, 6000

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CONTROL – DTMF:

DTMF_SelectCall	A	Selects a connected call to send DTMF tones to. Valid values: 1 – 5
DTMF_Key0 - DTMF_Key9, DTMF_Key* and DTMF_Key#	D	Sends the DTMF key to the selected connected call.
DTMF_SendCustomString	D	Sends StringToSend to the selected connected call.
DTMF_StringToSend	S	The string that should be sent as a DTMF tone to the connected call.

CONTROL – AUDIO:

SetVolume	A	Sets the volume on the codec. Valid values: 0 – 100
VolumeUp	D	Increases the volume by one step.
VolumeDown	D	Decreases the volume by one step.
VolumeRampingRate	A	The rate (ms) at which the module should increase/decrease volume. Default value is 250ms.
VolumeMuteOn	D	Enables volume mute.
VolumeMuteOff	D	Disables volume mute.
VolumeRampingRate	A	The rate at which volume up/down will be sent while ramping. This value is in milliseconds. The default value is 250ms.
VolumeMuteToggle	D	Toggles volume mute. CE 9.X Only.
MicrophoneMuteOn	D	Enables microphone mute (all microphones).
MicrophoneMuteOff	D	Disables microphone mute (all microphones).
MicrophoneMuteToggle	D	Toggles microphone mute (all microphones). CE 9.X Only.
MicrophoneGain[1] - MicrophoneGain[8]	A	Set the gain on a microphone. Valid values: 0 to 70

FEEDBACK – AUDIO:

VolumeLevel_Value	A	The current volume level of the codec . 0 – 100
VolumeIsMuted	D	Specifies if volume mute is enabled.
MicrophonesAreMuted	D	Specifies if microphone mute is enabled.
MicrophoneGainValue[1] - MicrophoneGainValue[8]	A	Specifies the gain of each individual microphone. 0 - 70

CONTROL – VIDEO:

SetMainVideoSource	A	Sets the main video source. Valid values: 1 – 4 (Source 1 through Source 4)
SetActiveConnector	A	Sets the active connector on Source 4. Valid values: 1 – DVI 2 - S-Video / Composite
SelfView_Enable	D	Enables Self View.
SelfView_Disable	D	Disables Self View.
SelfView_EnableFullscreen	D	Enables fullscreen.
SelfView_DisableFullscreen	D	Disables fullscreen.
SelfView_Monitor	A	Sets the monitor role. Valid values: 1- 4 (Monitor Role 1 – through Monitor Role 4)
SelfView_PIP_Position	A	Sets the PIP Position. Valid values: 1 – Center Left 2 – Center Right 3 – Lower Left 4 – Lower Right 5 – Upper Center 6 – Upper left 7 – Upper Right
PictureLayout	A	Sets the picture layout. Valid values: 1 – Auto 2 - Equal 3 – Overlay 4 – Prominent 5 - Single 6 - Custom

FEEDBACK – VIDEO:

MainVideoSource	A	Specifies the main video source. 1 – 4 (Source 1 through Source 4)
SelfView_IsOn	D	0 = Self view is disabled 1 = Self view is enabled
SelfView_IsFullscreen	D	0 = Fullscreen is disabled 1 = Fullscreen is enabled
SelfView_Monitor_Value	A	Specifies the monitor role. 1- 4 (Monitor Role 1 – through Monitor Role 4)
SelfView_PIP_Position_Value	A	Specifies the PIP position. 1 – Center Left 2 – Center Right 3 – Lower Left 4 – Lower Right 5 – Upper Center 6 – Upper left 7 – Upper Right
PictureLayout_Value	A	Specifies the picture layout. 1 – Auto 2 - Equal 3 – Overlay 4 – Prominent 5 - Single

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CONTROL – PRESENTATION:

Presentation_Start	D	Starts the presentation. Settings below must be set prior to starting the presentation.
Presentation_Stop	D	Stops the presentation.
Presentation_InputSource	A	Specifies the input source that should be used on the presentation. Only InputSource or Connector can be used. If both are set then InputSource takes priority. Valid values: 1 – 4 = Input 1 through Input 4 5 = None
Presentation_Connector	A	Specifies the input connector that should be used on the presentation. Only InputSource or Connector can be used. If both are set then InputSource takes priority. Valid values: 1 – 5 = Connector 1 through Connector 5 6 = None
Presentation_SendingMode	A	Specifies the sending mode that should be used on the presentation. Valid values: 1 – Local and Remote 2 – Local Only
Presentation_Instance	A	Specifies the instance that should be used on the presentation. Valid values: 1 – New 2 – Instance 1 3 – Instance 2 4 – Instance 3 5 – Instance 4 6 – Instance 5 7 – Instance 6

FEEDBACK – PRESENTATION:

LocalPresentation_IsStarted	D	Specifies if a local presentation has started.
Presentation_Mode	A	Specifies the current presentation mode: 1 – Off 2 – Sending 3 - Receiving
PresentationSource_Is_Input[x]	D	Specifies the current source/input that is being used by an active presentation.

CONTROL – ROOM PRESETS:

ActivateRoomPreset	A	Activates and selects a room preset . Room presets differ to camera presets in that they store video settings as well as camera positions. Valid values: 1 - 15
DeleteRoomPreset	A	Deletes the currently selected preset.
StoreRoomPreset	A	Stores the current camera and room settings as the selected preset.

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CONTROL – MESSAGE WINDOW:

ClearMessageAlert	D	Clears the current message alert being displayed by the codec.
ShowMessageAlert	D	Shows a new message alert on the codec with the settings set below.
NewMessageAlertTitle	S	The title that should be used when showing a message alert.
NewMessageAlertText	S	The text that should be used when showing a message alert.
ClearMessagePrompt	D	Clears the current message prompt being displayed by the codec.
SelecMessagePromptOption1 through SelecMessagePromptOption5	D	Selects one of the five message prompt options being displayed by the codec.
ShowMessagePrompt	D	Shows a new message prompt on the codec with the settings set below.
NewMessagePromptTitle	S	The title that should be used when showing a message prompt.
NewMessagePromptText	S	The text that should be used when showing a message prompt.
NewMessagePromptOption1 through NewMessagePromptOption5	D	The options that should be used when showing a message prompt.

FEEDBACK – MESSAGE WINDOW:

MessageAlertIsActive	D	0 – No message alert is active 1 - Message alert is active
MessageAlertTitle	S	The title of the active message alert.
MessageAlertText	S	The text of the active message alert.
MessagePromptActive	D	0 – No message prompt is active 1 – Message prompt is active
MessagePromptTitle	S	The title of the active message prompt.
MessagePromptText	S	The text of the active message prompt.
MessagePromptOptionIsSelectable[1] through MessagePromptOptionIsSelectable[5]	D	Specifies if an option is available on the active message prompt.
MessagePromptOptionText[1] through MessagePromptOptionText[5]	S	The text on the active message prompt.
MessagePromptOptionSelected[1] through MessagePromptOptionSelected[5]	D	Specifies which option was selected on the active message prompt.

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CONTROL – BOOKINGS:

Bookings_EnableInitialPoll	D	Enables polling for booking entries when the system gets to a logged in state.
GetBookings	D	Gets the first 50 bookings for the current day.
TimeDisplayMode	A	Sets how time is displayed on all the string outputs. Valid values: 1 = 24 Hour 2 = 12 Hour
SelectBooking	A	Selects a booking entry.
JoinSelectedBooking	D	Joins the selected booking entry.
ClearSelectedBooking	D	Clears all string outputs associated with the selected booking.
SelectContactForSelectedBooking	A	Selects the contact method for the selected booking. (Not implemented)
JoinActiveBooking	D	Joins the next available booking if it is joinable.
SelectContactForActiveBooking	A	Selects the contact method for the active booking. (Not implemented)

FEEDBACK – BOOKINGS:

NumberOfBookings	A	The number of bookings that are available.
BookingTitles_XSIG	S	XSIG containing all booking titles.
BookingAgendas_XSIG	S	XSIG containing all booking agendas.
BookingStartTimes_XSIG	S	XSIG containing all booking start times.
BookingEndTimes_XSIG	S	XSIG containing all booking end times.
Booking_SelectedIsJoinable	D	Specifies if the selected booking is joinable.
Booking_SelectedInProgress	D	Specifies if the selected booking is in progress.
Booking_SelectedName	S	The selected booking's name field.
Booking_SelectedDescription	S	The selected booking's description field.
Booking_SelectedStartTime	S	The selected booking's start time field.
Booking_SelectedEndTime	S	The selected booking's end time field.
Booking_SelectedDuration	S	The selected booking's duration field.
Booking_SelectedOrganizer	S	The selected booking's organizer full name field.
Booking_SelectedWebExUrl	S	The selected booking's WebEx URL field.
Booking_SelectedWebExNumber	S	The selected booking's WebEx Number field.
Booking_SelectedWebExPassword	S	The selected booking's WebEx Password field.
Booking_SelectedWebExHostKey	S	The selected booking's WebEx Host Key field.
Booking_SelectedNumberOfContacts	A	The amount of numbers available for the selected booking. (Not implemented)
Booking_SelectedNumbers_XSIG	S	XSIG containing all of the numbers available for the selected booking. (Not implemented)
Booking_ActiveIsJoinable	D	Specifies if the active booking is joinable.
Booking_ActiveInProgress	D	Specifies if the active booking is in progress.
Booking_ActiveProgress	A	(Not implemented)

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Booking_ActiveName	D	The active booking's name field.
Booking_ActiveDescription	S	The active booking's description field.
Booking_ActiveStartTime	S	The active booking's start time field.
Booking_ActiveEndTime	S	The active booking's end time field.
Booking_ActiveDuration	S	The active booking's duration field.
Booking_ActiveOrganizer	S	The active booking's organizer full name field.
Booking_ActiveWebExUrl	S	The active booking's WebEx URL field.
Booking_ActiveWebExNumber	S	The active booking's WebEx Number field.
Booking_ActiveWebExPassword	S	The active booking's WebEx Password field.
Booking_ActiveWebExHostKey	S	The active booking's WebEx Host Key field.
Booking_ActiveNumberOfNumbers	A	The amount of numbers available for the active booking. (Not implemented)
Booking_ActiveNumbers_XSIG	S	XSIG containing all of the numbers available for the active booking. (Not implemented)

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CONTROL – SPEAKER TRACK:

SpeakerTrack_Activate	D	Activates Speaker Track.
SpeakerTrack_Deactivate	D	Deactivates Speaker Track.

FEEDBACK – SPEAKER TRACK:

SpeakerTrack_IsActivated	D	Specifies whether or not Speaker Track is currently activated.

CONTROL – PRESENTER TRACK:

PresenterTrack_Mode	A	Sets the Presenter Track mode: 1 – Off 2 – Follow 3 – Diagnostic 4 – Background 5 – Setup 6 - Persistent

FEEDBACK – PRESENTER TRACK:

PresenterTrack_IsAvailable	D	Specifies whether or not Presenter Track is available on the codec.
PresenterTrack_ModeValue	A	Specifies the current Presenter Track mode: 1 – Off 2 – Follow 3 – Diagnostic 4 – Background 5 – Setup 6 - Persistent

CONTROL – SYSTEM:

ActivateStandby	D	Activates standby.
DeactivateStandby	D	Deactivates standby.
LoggingMode	A	Changing the logging mode. Valid values: 1 – No logging 2 – Regular logging 3 – Verbose logging
OverrideUsername	S	Allows the programmer to set the username used and override the one specified by the property. The programmer must disconnect and reconnect to use the new username.
OverridePassword	S	Allows the programmer to set the password used and override the one specified by the property. The programmer must disconnect and reconnect to use the new password.

FEEDBACK – SYSTEM:

SoftwareVersion	S	The current software version running on the codec.
ProductID	S	The product name of the codec.
StandbyState	S	The current standby state of the codec.
MACAddress	S	The MAC address of the codec.
IPV4Address	S	The IP V4 address of the codec.
IPV6Address	S	The IP V6 address of the codec.
SIPURI	S	The SIP URI in use by the codec.
SIPStatus	S	The current SIP state.
H323GatekeeperAddress	S	The H323 Gatekeeper address.
H323GatekeeperPort	S	The H323 Gatekeeper port.
H323GatekeeperStatus	S	The H323 Gatekeeper status.

CONTROL – DIAGNOSTICS:

RunDiagnostics	D	This will clear the current set of diagnostics and query the device for a new list. It will use the filter specified by the signal DiagnosticsFilter.
DiagnosticsFilter	A	This selects the type of filter to use when running diagnostics. 0 – No Filter 1 – Alerts 2 – All 3 - None

FEEDBACK – DIAGNOSTICS:

DiagnosticsCount	A	The number of diagnostic messages received from the device. The limit is 10 messages.
Diagnostics_Description[1 – 10]	S	A description of the diagnostic message. This is automatically truncated to 255 characters.
Diagnostics_Level[1 - 10]	S	The level of the diagnostic message
Diagnostics_Type[1 - 10]	S	The type of diagnostic message
Diagnostics_Reference[1 - 10]	S	Any references that were included in the diagnostic message. This is automatically truncated to 255 characters.

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CONTROL – SSH:

SSHServerAddress	S	The address that should be used for the connection. This can be the hostname or the IP address of the device.
SSHServerPort	A	The port that should be used for the connection. Valid values: 1 – 65535 Default value: 22
SSH_Connect	D	Connects to the codec using an SSH connection.
SSH_Disconnect	D	Disconnects from the codec.
SSH_AcceptKey	D	Accepts the currently received SSH key and stores it in a file in NVRAM.
SSH_RejectKey	D	Rejects the currently received SSH key and closes the connection.
SSH_CustomCommandToDevice	S	Sends data to the device. The driver will append a CRLF.

FEEDBACK – SSH:

SSH_UnknownKeyReceived	D	0 – No unknown keys have been received 1 – An unknown key has been received. Must accept or reject.
SSH_Key	S	The received host key fingerprint.
SSH_Connected	D	0 – Not connected 1 – Connected
SSH_ConnectionState	A	1 – Connected 2 – Connecting 3 – Disconnected 4 – Logged In (Ready to receive and process commands)
SSH_FromDevice	S	Data received from the device.

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CONTROL – COM:

COM_Start	D	When pulsed, this will allow the driver to communicate with the codec.
COM_Stop	D	When pulsed, this will stop all communication with the codec.
FromDevice	S	Data received on the COM port.

FEEDBACK – COM:

COM_Connected	D	0 – Not connected 1 – Connected Note: This is determined by Start/Stop.
COM_ConnectionState	A	1 – Connected 2 – Connecting (Not applicable) 3 – Disconnected 4 – Logged In (Ready to receive and process commands)
ToDevice	S	Data that should be sent to the COM port.

FEEDBACK – VIDEO INPUTS:

VideoInput[x]_Exists	D	Specifies if the video input exists on the device.
VideoInput[x]_IsConnected	D	Specifies if there is a source connected to the video input.
VideoInput[x]_SignalState	A	Specifies the current signal state: 1 – OK – There is a valid input source connected 2 – Unknown – There is no input source connected 3 – Unsupported – The current source is not supported
VideoInput[x]_ConnectorType	A	Specifies the connector type of the input: 1 - Camera 2 – Composite 3 – DVI 4 – 3G-SDI 5 – HDMI 6 – USB 7 – Unknown 8 – VGA 9 – Component 10 – HD-SDI
VideoInput[x]_ResolutionHeight	S	The resolution height of the connected video source. This will be 0 if there is no source connected.
VideoInput[x]_ResolutionWidth	S	The resolution width of the connected video source. This will be 0 if there is no source connected.
VideoInput[x]_RefreshRate	S	The refresh rate of the connected video source. This will be 0 if there is no source connected.

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PARAMETERS:

Username	S	The username that is used in the login sequence. User level determines what commands and feedback are available during run-time. This module will not stop any command from being sent due to user level.
Password	S	The password that is used in the login sequence.
Communication Mode	A	COM – Use the COM port and the COM group of signals. SSH – Use the SSH transport and the SSH group of signals.
SSH Security Mode	A	Unsecure – Allows all connections. Secure – Requires matching host key fingerprints with either user input or using a file in NVRAM
LocalPhonebook Download Settings	A	Download All – Downloads all entries in the phonebook when Request is used Download As Needed – Downloads entries when they are needed. Request will limit the search to 500 entries and then continue requesting entries as the user navigates the phonebook using Page Up/Down
LocalPhonebook Provider Name	S	The provider name that is used to specify which phonebook is used on the AddressBook Smart Object.
LocalPhonebook Entries Per Page	A	When Download All is used, this will be used to determine how many entries are outputted on the signal <LocalPhonebook_Entries_XSIG>. Valid range: 10-500
CorporatePhonebook Download Settings	A	Download All – Downloads all entries in the phonebook when Request is used Download As Needed – Downloads entries when they are needed. Request will limit the search to 500 entries and then continue requesting entries as the user navigates the phonebook using Page Up/Down
CorporatePhonebook Provider Name	S	The provider name that is used to specify which phonebook is used on the AddressBook Smart Object.
CorporatePhonebook Entries Per Page	A	When Download All is used, this will be used to determine how many entries are outputted on the signal <CorporatePhonebook_Entries_XSIG>. Valid range: 10-500
CallHistory Entries to Download	A	Specifies how many call history entries to download. Valid range: 1-200