POLYCOM GROUP SERIES DRIVER

BETA

Crestron Electronics, Inc.

Version	Date	Comments	Author
3.0.04	7/20/2018	Initial release	Casey Blicharz
3.0.07	9/27/2018	Added Calendar support Bug fixes	Casey Blicharz
3.0.08	10/25/2018	Bug fixes & feature additions	Casey Blicharz
3.0.11	10/30/2018	Bug fixes & feature additions	Casey Blicharz
3.0.12	11/19/2018	Bug fixes & feature additions	Casey Blicharz
3.0.13	12/5/2018	Bug fixes & signal additions	Casey Blicharz
3.0.14	3/21/2019	Bug fixes	Casey Blicharz
3.0.15	10/01/2019	Internal testing of new feature	Casey Blicharz
3.0.16	1/14/2020	-PointToPointAutoAnswerMode mimics Multipoint functionality -Added Global Directory Live Search -Added ability to download more than 65,000 directory entries.	Casey Martineau
3.0.17	3/16/2020	-Removed XSIG for calendar meetings and put all signals on module -Added support for more international characters	Casey Martineau
4.0.0	10/30/2020	-recompiled driver with Newtonsoft 4.0.8	Natalie Jackman

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1 OVERVIEW

API Version: 6.1.5

Tested Polycom Group Series software: 6.1.7, 6.2.2

2   NOTES

Regarding Skype For Business support, it was found through testing that Skype For Business contacts would only show up in this module if the user logs into their Skype For Business account in their Skype client and adds a group called "Pinned Contacts". Once this group is added, even if there is an error message indicating it can not be added, the API begins returning the contacts. The local directory will show all contacts on the user while the global directory will show all contacts in the service.

Global Directory Live Search will only function if the global directory has been downloaded at least once. This feature uses an API command to search the phonebook instead of searching entries downloaded previously. This was added because the API doesn't always return all entries until the search terms become more specific.

Downloading both the local and global phonebook should be done separately. If you plan on downloading both, wait until one is finished before beginning the second one. If this is not done separately then it may take longer than normal to retrieve all entries.

Currently, "Enable Legacy API Over SSH" must be enabled on the Polycom device (Security -> Global Security -> Access) to allow the driver to make an SSH connection with the device.

When reporting issues, please enable verbose logging on the driver and provide the logs that print to console from the moment the module connects to the issue being reproduced. These will not be added to any persistent logs.

When setting the max directory entries to download, there is a chance if the directory is large enough that the processor may run out of memory.

3   AUDIO VIDEO

Name	Type	I/O	Description
Set_AudioTransmitLevel	A	Input	Sets the audio transmit level. Valid range: -6 to +18
Set_LineInLevel	A	Input	Sets the line in level. Valid range: 0 to 10
Set_MediaInLevel	A	Input	Sets the media in level. Valid range: 0 to 10
Set_Volume	A	Input	Sets the volume. Valid range: 0 to 50
Increase_Volume	D	Input	Increases the volume by 1 step ever 250ms until a falling edge is detected.
Decrease_Volume	D	Input	Decreases the volume by 1 step ever 250ms until a falling edge is detected.
Mute_Volume	D	Input	Mutes volume.
Unmute_Volume	D	Input	Unmutes volume.
Enable_MicrophoneMute	D	Input	Enables Microphone Mute.
Disable_MicrophoneMute	D	Input	Disables Microphone Mute.
Enable_EchoCanceller	D	Input	Enables echo canceller.
Disable_EchoCanceller	D	Input	Disables echo canceller.
Enable_KeyboardNoiseReduction	D	Input	Enables keyboard noise reduction.
Disable_KeyboardNoiseReduction	D	Input	Disable keyboard noise reduction.
Enable_LiveMusicMode	D	Input	Enables live music mode.
Disable_LiveMuseMode	D	Input	Disables live music mode.
Enable_PolycomMicrophones	D	Input	Enables polycom microphones.
Disable_PolycomMicrophones	D	Input	Disables polycom microphones.
Enable_Stereo	D	Input	Enables stereo.
Disable_Stereo	D	Input	Disable stereo.
Enable_AutoShowContent	D	Input	Enables auto show content.
Disable_AutoShowContent	D	Input	Disables auto show content.
Enable_ContentAuto	D	Input	Enables content auto.
Disable_ContentAuto	D	Input	Disables content auto.
Enable_FarControlNearCamera	D	Input	Enables far control of the near end camera.
Disable_FarControlNearCamera	D	Input	Disables far control of the near end camera.
Enable_CameraTracking	D	Input	Enables camera tracking.
Disable_CameraTracking	D	Input	Disables camera tracking.
Enable_SelfView	D	Input	Enables self view.
Disable_SelfView	D	Input	Disable self view.
Auto_Selfview	D	Input	Sets self view to auto mode.
Set_LineOutMode	A	Input	Sets the line out mode:

			1 – Fixed 2 – Variable
Set_CurrentPlayingSource	A	Input	Sets the current playing source. 1d = First available input 2d … [N]d = Nth available input
Set_CurrentMappedSource	A	Input	Sets the current mapped source. Refer to device for allowed values.
SendContentSource_[1-9]	D	Input	Sets the current playing source. These are mapped to available inputs.
StopPlayingSource	D	Input	Stops playing the source.
Set_Camera1Content	A	Input	Sets camera 1 content: 1 – People 2 – Content
Set_Camera2Content	A	Input	Sets camera 2 content: 1 – People 2 – Content
Set_Camera3Content	A	Input	Sets camera 3 content: 1 – People 2 – Content
Set_Camera4Content	A	Input	Sets camera 4 content: 1 – People 2 – Content
Set_VgaQualityPreference	A	Input	Sets the VGA quality preference: 1 – People 2 – Content 3 – Both
Set_PrimaryCamera	A	Input	Sets the primary camera: 1 – Camera 1 2 – Camera 2 3 – Camera 3 4 – Camera 4
Set_SleepTime	A	Input	Sets the sleep time: 1- 0 2 – 1 3 – 3 4 – 15

			5 - 30 6 – 60 7 – 120 8 – 240 9 - 480
Select_NearEndCamera	A	Input	Selects a near end camera for control: 1 – Camera 1 2 – Camera 2 3 – Camera 3 4 – Camera 4
ZoomIn_NearEndCamera	D	Input	Zooms in the near end camera.
ZoomOut_NearEndCamera	D	Input	Zooms out the near end camera.
MoveUp_NearEndCamera	D	Input	Moves near end camera up.
MoveDown_NearEndCamera	D	Input	Moves near end camera down.
MoveLeft_NearEndCamera	D	Input	Moves near end camera left.
MoveRight_NearEndCamera	D	Input	Moves near end camera right.
SelectPreset_NearEndCamera	A	Input	Selects a present on the near end camera: 0 thru 99
SetPreset_NearEndCamera	A	Input	Sets the current settings as a preset on the camera: 0 thru 99
Select_FarEndCamera	A	Input	Selects a far end camera for control: 1 – Camera 1 2 – Camera 2 3 – Camera 3 4 – Camera 4
ZoomIn_FarEndCamera	D	Input	Zooms in the far end camera.
ZoomOut_FarEndCamera	D	Input	Zooms out the far end camera.
MoveUp_FarEndCamera	D	Input	Moves far end camera up.
MoveDown_FarEndCamera	D	Input	Moves far end camera down.
MoveLeft_FarEndCamera	D	Input	Moves far end camera left.
MoveRight_FarEndCamera	D	Input	Moves far end camera right.
SelectPreset_FarEndCamera	A	Input	Selects a present on the near end camera: 0 thru 15
SetPreset_FarEndCamera	A	Input	Sets the current settings as a preset on the camera:

			0 thru 15
AudioTransmitLevel_Value	A	Output	Specifies the audio transmit level.
LineInLevel_Value	A	Output	Specifies the line in level.
Volume_Value	A	Output	Specifies the volume level.
MediaInLevel_Value	A	Output	Specifies the media in level.
LineOutMode_Value	A	Output	Specifies the line out mode:
Mute_IsEnabled	D	Output	Specifies if mute is enabled.
FarEndMute_IsEnabled	D	Output	Specifies if far end mute is enabled.
EchoCanceller_IsEnabled	D	Output	Specifies if echo canceller is enabled.
KeyboardNoiseReduction_IsEnabled	D	Output	Specifies if keyboard noise reduction is enabled.
LiveMusicMode_IsEnabled	D	Output	Specifies if live music mode is enabled.
PolycomMicrophones_IsEnabled	D	Output	Specifies if polycom microphones are enabled.
Stereo_IsEnabled	D	Output	Specifies if stereo is enabled.
SourcePlaying_IsEnabled	D	Output	Specifies if a source is playing.
AutoShowContent_IsEnabled	D	Output	Specifies if auto show content is enabled.
ContentAuto_IsEnabled	D	Output	Specifies if content auto is enabled.
FarControlNearCamera_IsEnabled	D	Output	Specifies if far control of the near end camera is enabled.
CameraTracking_IsEnabled	D	Output	Specifies if camera tracking is enabled.
SelfView_IsEnabled	D	Output	Specifies if self view is enabled.
SelfView_IsAuto	D	Output	Specifies if self view auto is enabled.
Selected_NearEndCamera	A	Output	Specifies the currently selected near end camera: 1 – Camera 1 2 – Camera 2 3 – Camera 3 4 – Camera 4
Selected_FarEndCamera	A	Output	Specifies the currently selection far end camera: 1 – Camera 1 2 – Camera 2 3 – Camera 3 4 – Camera 4
CurrentPlayingSource_Value	A	Output	Specifies the current playing source.

CurrentMappedSource_Value	A	Output	Specifies the current mapped source.
ContentSource _[1-9]_Available	D	Output	Specifies if the content source input is available.
Camera1Content_Value	A	Output	Specifies the content of camera 1: 1 – People 2 – Content
Camera2Content_Value	A	Output	Specifies the content of camera 2: 1 – People 2 – Content
Camera3Content_Value	A	Output	Specifies the content of camera 3: 1 – People 2 – Content
Camera4Content_Value	A	Output	Specifies the content of camera 4: 1 – People 2 – Content
VgaQualityPreference_Value	A	Output	Specifies the VGA quality preference: 1 – People 2 – Content 3 – Both
PrimaryCamera_Value	A	Output	Specifies the primary camera: 1 – Camera 1 2 – Camera 2 3 – Camera 3 4 – Camera 4
SleepTime_Value	A	Output	Specifies the sleep time: 1- 0 2 – 1 3 – 3 4 – 15 5 - 30 6 – 60 7 – 120 8 – 240 9 - 480

4 CALLFUNCTION - DIALING

Name	Type	Input/Output	Description
PlaceVideoCall	D	Input	Places a manual call.
PlaceAudioCall			
CallString	S	Input	Specifies the call string to be used when playing a call.
VideoCallRate	A	Input	Specifies the call rate to be used when placing a video call: 128, 256, 384, 512, 768, 1024, 1472, 1920, 2048, 3072, 3840, 4096, 6144
VideoCallProtocol	A	Input	Specifies the video call protocol to be used when placing a call: 0 - Auto 1 – H323 2 – IP 3 – SIP 4 - Gateway
AudioCallProtocol	A	Input	Specifies the audio call protocol to be used when placing a call: 0- Auto 1 – H323 2 – SIP Speakerphone 3 - POTS
Dtmf_Tone_0	D	Input	Sends the DTMF tone 0.
Dtmf_Tone_1	D	Input	Sends the DTMF tone 1.
Dtmf_Tone_2	D	Input	Sends the DTMF tone 2.
Dtmf_Tone_3	D	Input	Sends the DTMF tone 3.
Dtmf_Tone_4	D	Input	Sends the DTMF tone 4.
Dtmf_Tone_5	D	Input	Sends the DTMF tone 5.
Dtmf_Tone_6	D	Input	Sends the DTMF tone 6.
Dtmf_Tone_7	D	Input	Sends the DTMF tone 7.
Dtmf_Tone_8	D	Input	Sends the DTMF tone 8.
Dtmf_Tone_9	D	Input	Sends the DTMF tone 9.
Dtmf_Tone_Pound	D	Input	Sends the DTMF tone #.
Dtmf_Tone_Asterisk	D	Input	Sends the DTMF tone *.

5   CALLFUNCTION – INCOMING CALL

Name	Type	I/O	Description
AnswerIncomingCall	D	Input	Answers the incoming call.
IgnoreIncomingCall	D	Input	Hangs up the incoming call.
IncomingCall_IsAvailable	D	Output	Specifies if an incoming call is available.
IncomingCall_Name	S	Output	Specifies the incoming call name.
IncomingCall_Number	S	Output	Specifies the incoming call number.
IncomingCall_Type	S	Output	Specifies the incoming call type.
IncomingCall_Status	S	Output	Specifies the incoming call status.
IncomingCall_Speed	S	Output	Specifies the incoming call speed.
IncomingCall_CallId	S	Output	Specifies the incoming call ID.
IncomingCall_IsAudioCall	D	Output	Specifies if the incoming call is an audio call.
IncomingCall_IsVideoCall	D	Output	Specifies if the incoming call is a video call.

6   CALLFUNCTION – OUTGOING CALL

Name	Type	I/O	Description
CancelOutgoingCall	D	Input	Cancels the current outgoing call.
OutgoingCall_IsAvailable	D	Output	Specifies if an outgoing call is active.
OutgoingCall_Name	S	Output	Specifies the outgoing call name.
OutgoingCall_Number	S	Output	Specifies the outgoing call number.
OutgoingCall_Type	S	Output	Specifies the outgoing call type.
OutgoingCall_Status	S	Output	Specifies the outgoing call status.
OutgoingCall_Speed	S	Output	Specifies the outgoing call speed.
OutgoingCall_CallId	S	Output	Specifies the outgoing call ID.

7   CALLFUNCTION – CONNECTED CALL

Name	Type	I/O	Description
HangUpAllCalls	D	Input	Hangs up all calls (incoming, outgoing, connected).
HangUpCalll_[1-5]	D	Input	Hangs up the specifies call.
ConnectedCall_[1-5]_IsAvailable	D	Output	Specifies if the call is active.
ConnectedCall_[1-5]_Name	S	Output	Specifies the call far site name.
ConnectedCall_[1-5]_Number	S	Output	Specifies the call far site number.
ConnectedCall_[1-5]_Type	S	Output	Specifies the call type.
ConnectedCall_[1-5]_Status	S	Output	Specifies the call status.
ConnectedCall_[1-5]_Speed	S	Output	Specifies the call speed.
ConnectedCall_[1-5]_CallId	S	Output	Specifies the call ID.
ConnectedCall[1-5]_IsAudioCall	D	Output	Specifies if the connected call is an audio call.
ConnectedCall[1-5]_IsVideoCall	D	Output	Specifies if the connected call is a video call.

8   CALLFUNCTION - SETTINGS

Name	Type	I/O	Description
Set_ConnectionPreference	A	Input	Sets the connection preference: 1- Video 2 - Audio
Set_DialingMethod	A	Input	Sets the dialing method: 1- Auto 2 - Manual
ConnectionPreference_Value	A	Output	Specifies the connection preference: 0 – Unknown 1- Video 2 - Audio
DialingMethod_Value	A	Output	Specifies the dialing method: 0 - Unknown 1- Auto 2 - Manual

9 CONFERENCE

Name	Type	I/O	Description
Enable_PointToPointAutoAnswer	D	Input	Enables Point to Point auto answer.
Disable_PointToPointAutoAnswer	D	Input	Disable Point to Point auto answer.
Enable_DynamicBandwidth	D	Input	Enables dynamic bandwidth.
Disable_DynamicBandwidth	D	Input	Disable dynamic bandwidth.
Enable_Pvec	D	Input	Enables PVEC.
Disable_Pvec	D	Input	Disables PVEC.
Enable_Rsvp	D	Input	Enables RSVP.
Disable_Rsvp	D	Input	Disables RSVP.
Enable_H239	D	Input	Enabled H239.
Disable_H239	D	Input	Disables H239.
Enable_MuteAutoAnsweredCalls	D	Input	Enables muting of auto answered calls.
Disable_MuteAutoAnsweredCalls	D	Input	Disables muting of auto answered calls.
Enable_DisplayIconsInCall	D	Input	Enables displaying icons in a call.
Disable_DisplayIconsInCall	D	Input	Disables displaying icons in a call.
Enable_Transcoding	D	Input	Enables Transcoding.
Disable_Transcoding	D	Input	Disable Transcoding.
Set_AesEncryptionMode	A	Input	Sets the AES encryption mode: 1 – Yes 2 – No 3 – Required Video Calls Only 4 – Required All Calls
Set_MaxTimeInCall	A	Input	Sets the max time in a call.
Set_MultiPointAutoAnswerMode	A	Input	Sets the multi point auto answer mode: 1 – On 2 – Off 3 – Do Not Disturb
Set_MpMode	A	Input	Sets the MP mode: 1 – Auto 2 – Discussion 3 – Presentation 4 – Full screen
Set_MaxRxBandwidth	A	Input	Sets the max RX bandwidth.
Set_MaxTxBandwidth	A	Input	Sets the max TX bandwidth.

PointToPointAutoAnswer_IsEnabled	D	Output	Specifies if Point to Point auto answer mode is enabled.
DynamicBandwidth_IsEnabled	D	Output	Specifies if dynamic bandwidth is enabled.
Pvec_IsEnabled	D	Output	Specifies if PVEC is enabled.
Rsvp_IsEnabled	D	Output	Specifies if RSVP is enabled.
H239_IsEnabled	D	Output	Specifies if H239 is enabled.
MuteAutoAnsweredCalls_IsEnabled	D	Output	Specifies if muting of auto answered called is enabled.
DisplayIconsInCall_IsEnabled	D	Output	Specifies if display icons in call is enabled.
Transcoding_IsEnabled	D	Output	Specifies if transcoding is enabled.
MaxTimeInCall_Value	A	Output	Specifies the max time in call.
MaxRxBandwidth_Value	A	Output	Specifies the max RX bandwidth.
MaxTxBandwidth_Value	A	Output	Specifies the max TX bandwidth.
AesEncryptionMode_Value	A	Output	Specifies the AES encryption mode: 0 - Unknown 1 – Yes 2 – No 3 – Required Video Calls
MultiPointAutoAnswerMode_Value	A	Output	Specifies the multipoint auto answer mode: 0 - Unknown 1 – On 2 – Off 3 – Do Not Disturb
MpMode_Value	A	Output	Specifies the MP mode: 0 - Unknown 1 – Auto 2 – Discussion 3 – Presentation 4 – Full screen

10   NETWORK

Name	Type	I/O	Description
Enable_NatH323Compatible	D	Input	Enables NAT H323 Compatible.
Disable_NatH323Compatible	D	Input	Disable NAT H323 Compatible.
Enable_H323Gateway	D	Input	Enables the H323 Gateway.
Disable_H323Gateway	D	Input	Disables the H323 Gateway.
Enable_IpH323	D	Input	Enables IP H323.
Disable_IpH323	D	Input	Disables IP H323.
Enable_Dhcp	D	Input	Enables DHCP.
Disable_Dhcp	D	Input	Disables DHCP.
Enable_SipDebug	D	Input	Enables SIP Debug.
Disable_SipDebug	D	Input	Disable SIP Debug.
Enable_Sip	D	Input	Enables SIP.
Disable_Sip	D	Input	Disables SIP.
Set_E164Extension	S	Input	Sets the E164 Extension.
Set_GateKeeperIp	S	Input	Sets the Gate Keeper IP.
Set_H323Name	S	Input	Sets the H323 Name.
Set_GatekeeperMode	A	Input	Sets the gate keeper mode: 1 – Off 2 – Specify 3 - Auto
Set_DefaultGateway	S	Input	Sets the default gateway.
Set_DnsServer1	S	Input	Sets the 1st DNS server address.
Set_DnsServer2	S	Input	Sets the 2nd DNS server address.
Set_DnsServer3	S	Input	Sets the 3rd DNS server address.
Set_DnsServer4	S	Input	Sets the 4th DNS server address.
Set_Hostname	S	Input	Sets the Hostname.
Set_IpAddress	S	Input	Sets the IP address.
Set_LanPort	A	Input	Sets the LAN Port configuration: 1 - Auto 2 – 10 HDX 3 – 10 FDX 4 – 100 HDX 5 – 100 FDX 6 – 1000 HDX 7 – 1000 FDX
Set_NatConfiguration	A	Input	Sets the NAT configuration: 1 – Auto 2 – Manual

			3 - Off
Set_SubnetMask	S	Input	Sets the subnet mask.
Set_WanIpAddress	S	Input	Sets the WAN IP address.
Set_SipAccountName	S	Input	Sets the SIP account name.
Set_SipPassword	S	Input	Sets the SIP password.
Set_SipProxyServer	S	Input	Sets the SIP proxy server.
Set_SipRegistrarServer	S	Input	Sets the SIP registrar server.
Set_SipTransportProtocol	A	Input	Sets the SIP transport protocol: 1- Auto 2 – TCP 3 – UDP 4 - TLS
Set_SipUsername	S	Input	Sets the SIP username.
NatH323Compatible_IsEnabled	D	Output	Specifies if NAT H323 Compatible is enabled.
H323Gateway_IsEnabled	D	Output	Specifies if the H323 Gateway is enabled.
IpH323_IsEnabled	D	Output	Specifies if IP H323 is enabled.
Dhcp_IsEnabled	D	Output	Specifies if DHCP is enabled.
H460FirewallTraversal_IsEnabled	D	Output	Specifies if H460 Firewall Traversal is enabled.
SipDebug_IsEnabled	D	Output	Specifies if SIP Debug is enabled.
Sip_IsEnabled	D	Output	Specifies if SIP is enabled.
GateKeeperMode_Value	A	Output	Specifies the gate keeper mode: 0 - Unknown 1 – Off 2 – Specify 3 - Auto
LanPort_Value	A	Output	Specifies the LAN port mode: 0 - Unknown 1 - Auto 2 – 10 HDX 3 – 10 FDX 4 – 100 HDX 5 – 100 FDX 6 – 1000 HDX 7 – 1000 FDX
NatConfiguration_Value	A	Output	Specifies the NAT configuration mode: 0 - Unknown

			1 – Auto 2 – Manual 3 - Off
SipTransportProtocol_Value	A	Output	Specifies the SIP transport protocol: 0 - Unknown 1- Auto 2 – TCP 3 – UDP 4 - TLS
E164Extension_Value	S	Output	Specifies the E164 extension.
GateKeeperIp_Value	S	Output	Specifies the gate keeper IP address.
H323Name_Value	S	Output	Specifies the H323 name.
DefaultGateway_Value	S	Output	Specifies the default gateway address.
DnsServer1_Value	S	Output	Specifies the 1st DNS server address.
DnsServer2_Value	S	Output	Specifies the 2nd DNS server address.
DnsServer3_Value	S	Output	Specifies the 3rd DNS server address.
DnsServer4_Value	S	Output	Specifies the 4th DNS server address.
Hostname_Value	S	Output	Specifies the hostname.
IpAddress_Value	S	Output	Specifies the IP address.
SubnetMask_Value	S	Output	Specifies the subnet mask.
WanIpAddress_Value	S	Output	Specifies the WAN IP address.
SipAccountName_Value	S	Output	Specifies the SIP account name.
SipProxyServer_Value	S	Output	Specifies the SIP proxy server.
SipRegistrarServer_Value	S	Output	Specifies the SIP registrar server.
SipUsername_Value	S	Output	Specifies the SIP username.

11   GLOBAL SERVICES

Name	Type	I/O	Description
Enable_CalendarPlayTone	D	Input	Enables Calendar Play Tone.
Disable_CalendarPlayTone	D	Input	Disables Calendar Play Tone.
Enable_CalendarService	D	Input	Enables Calendar Service.
Disable_CalendarService	D	Input	Disable Calendar Service.
Enable_PrivateMeetingsDisplayed	D	Input	Enables Private Meetings being Displayed.
Disable_PrivateMeetingsDisplayed	D	Input	Disables Private Meetings being Displayed.
Enable_LdapDirectoryServer	D	Input	Enables the LDAP directory server.
Disable_LdapDirectoryServer	D	Input	Disable the LDAP directory server.
Enable_LdapSsl	D	Input	Enables LDAP SSL.
Disable_LdapSsl	D	Input	Disables LDAP SSL.
Enable_Snmp	D	Input	Enables SNMP.
Disable_Snmp	D	Input	Disable SNMP.
Update_CalendarMeetings	D	Input	Queries the device for the day's meetings.
Clear_SelectedCalendarMeeting	D	Input	Clears the selected calendar meeting.
Clear_CallMethodForCalendarMeeting	D	Input	Clears the selected call method for the selected calendar meeting.
Dial_SelectedCalendarMeeting	D	Input	Dials the selected calendar meeting.
Select_CalendarMeeting	A	Input	Selects a calendar meeting. The first meeting has a value of 1d.
Select_CallMethodForCalendarMeeting	A	Input	Selects a call method for the selected calendar meeting. The first call method has a value of 1d.
Calendar_DateFormat	A	Input	1 – Month / Day / Year 2 – Day / Month / Year
Calendar_TimeFormat	A	Input	1 – 12 Hour mode 2 – 24 Hour mode
Calendar_EnableInitialPoll	D	Input	Determines if the calendar meetings will be downloaded when the module connects to the device.

Set_CalendarPassword	S	Input	Sets the Calendar password.
Set_CalendarRemainingTime	A	Input	Sets the calendar remaining time. Valid Values: 1, 5, 10, 15, 30 2 - None
Set_MailboxAccountAddress	S	Input	Sets the Mailbox Account Address.
Set_CalendarServer	S	Input	Sets the Calendar server address.
Set_CalendarUser	S	Input	Sets the Calendar username.
Set_LdapAuthenticationType	A	Input	Sets the LDAP Authentication Type. 1 – Anonymous 2 – Basic 3 – NTLM
Set_LdapBaseName	S	Input	Sets the LDAP base name.
Set_LdapBindDn	S	Input	Sets the LDAP Bind DN.
Set_LdapNtlmDomain	S	Input	Sets the NTLM domain.
Set_LdapPassword	S	Input	Sets the LDAP password.
Set_LdapServerAddress	S	Input	Sets the LDAP server address.
Set_LdapServerPort	A	Input	Sets the LDAP server port.
Set_LdapUsername	S	Input	Sets the LDAP username.
Set_SnmpAdminName	S	Input	Sets the SNMP admin name.
Set_SnmpCommunityName	S	Input	Sets the SNMP community name.
Set_SnmpConsoleIpAddress	S	Input	Sets the SNMP console IP address.
Set_SnmpLocationName	S	Input	Sets the SNMP location name.
Set_SnmpSystemDescription	S	Input	Sets the SNMP system description.
Set_SnmpTrapVersion	A	Input	Sets the SNMP trap version: 1 – VC 2 – V2C 3 – V3
CalendarPlayTone_IsEnabled	D	Output	Specifies if Calendar Play Tone is enabled.
CalendarService_IsEnabled	D	Output	Specifies if Calendar Service is enabled.
Calendar_IsConnected	D	Output	Specifies if the calendar is connected.

CalendarRemainingTime_Value	A	Output	Specifies the calendar remaining time. 0 - Unknown 1, 5, 10, 15, 30 2 - None
PrivateMeetingsDisplay_IsEnabled	D	Output	Specifies if private meetings being displayed is enabled
MailboxAccountAddress_Value	S	Output	Specifies the mailbox account address.
CalendarServer_Value	S	Output	Specifies the calendar server address.
CalenderUser_Value	S	Output	Specifies the calendar user.
CalendarMeetingCount	A	Output	Specifies the number of calendar meetings available.
CalendarMeetingNames[1 - 25]	S	Output	Displays the name of the calendar meeting.
CalendarMeetingStartTimes[1 - 25]	S	Output	Displays the start time of the calendar meeting.
CalendarMeetingEndTimes[1 - 25]	S	Output	Displays the end time of the calendar meeting.
CalendarMeetingUIDs[1 - 25]	S	Output	Displays the name of the calendar meeting.
CalendarMeetingOrganizers[1 - 25]	S	Output	Displays the organizers of the calendar meeting.
CalendarMeetingDurations[1 - 25]	S	Output	Displays the duration of the calendar meeting.
CalendarMeetingIsDialable[1 - 25]	D	Output	Specifies if the meeting is dialable.
Selected_CalendarMeetingName	S	Output	The selected calendar meeting's name.
Selected_CalendarMeetingStartTime	S	Output	The selected calendar meeting's start time.
Selected_CalendarMeetingEndTime	S	Output	The selected calendar meeting's end time.
Selected_CalendarMeetingDuration	S	Output	Duration of meeting. Example: Mon 11:00 – 14:00
Selected_CalendarMeetingUID	S	Output	The selected calendar meeting's unique ID.
Selected_CalendarMeetingOrganizer	S	Output	The selected calendar meeting's organizer.

Selected_CalendarMeetingLocation	S	Output	The selected calendar meeting's location.
Selected_CalendarMeetingSubject	S	Output	The selected calendar meeting's subject.
Selected_CalendarMeetingPassword	S	Output	The selected calendar meeting's password.
Selected_CalendarMeetingNumberURI	S	Output	The selected call method's number.
Selected_CalendarMeetingNumberType	A	Output	The selected call method's type. 0 = Unknown 1 = Video 2 = Audio
Selected_CalendarMeetingNumberProtocol	A	Output	The selected call methods's protocol. 0 = Unknown 1 = H323 2 = IP 3 = SIP
CalendarMeetingNumberURI[1-5]	S	Output	All available call methods for the selected calendar meeting. This outputs the number to dial.
CalendarMeetingNumberType[1-5]	A	Output	All available call methods for the selected calendar meeting. This outputs the call type used for dialing. 0 = Unknown 1 = Video 2 = Audio
CalendarMeetingNumberProtocol[1-5]	A	Output	All available call methods for the selected calendar meeting. This outputs the protocol used for dialing. 0 = Unknown 1 = H323 2 = IP 3 = SIP
LdapDirectoryServer_IsEnabled	D	Output	Specifies if the LDAP directory server is enabled.

LdapSsl_IsEnabled	D	Output	Specifies if LDAP SSL is enabled.
LdapAuthenticationType_Value	A	Output	Specifies the LDAP authentication type: 0 - Unknown 1 – Anonymous 2 – Basic 3 – NTLM
LdapBaseName_Value	S	Output	Specifies the LDAP base name.
LdapBindDn_Value	S	Output	Specifies the LDAP bind DN.
LdapNtlmDomain_Value	S	Output	Specifies the LDAP NTLM Domain
LdapServerAddress_Value	S	Output	Specifies the LDAP server address.
LdapUsername_Value	S	Output	Specifies the LDAP username.
Snmp_IsEnabled	D	Output	Specifies if SNMP is enabled.
SnmpTrapVersion_Value	A	Output	Specifies the SNMP trap version: 0 – Unknown 1 – VC 2 – V2C 3 – V3
SnmpAdminName_Value	S	Output	Specifies the SNMP Admin name.
SnmpCommunityName_Value	S	Output	Specifies the SNMP community name.
SnmpConsoleIpAddress_Value	S	Output	Specifies the SNMP console IP address.
SnmpLocationName_Value	S	Output	Specifies the SNMP location name.
SnmpSystemDescription_Value	S	Output	Specifies the SNMP system description.

12 SYSTEM

Name	Type	I/O	Description
SystemUsername	S	Input	Sets the username to be used by the connection transport. Must be set before connecting to the device.

SystemPassword	S	Input	Sets the password to be used by the connection transport. Must be set before connecting to the device.
Sleep	D	Input	Tells the device to go to sleep mode.
Wake	D	Input	Tells the device to wake from sleep mode.
Reboot	D	Input	Reboots the device.
Enable_DaylightSavings	D	Input	Enables Daylight Savings.
Disable_DaylightSavings	D	Input	Disables Daylight Savings.
Enable_EchoReply	D	Input	Enables Echo Reply.
Disable_EchoReply	D	Input	Disables Echo Reply.
Enable_RemoteEnable	D	Input	Enables Remote Enable.
Disable_RemoteEnable	D	Input	Disables Remove Enable.
Enable_BasicMode	D	Input	Enables Basic Mode.
Disable_BasicMode	D	Input	Disables Basic Mode.
Set_SystemName	S	Input	Sets the SystemName to the specified string.
Sleep_IsActive	D	Output	Specifies if sleep mode is active.
DaylightSavingsTime_IsEnabled	D	Output	Specifies if Daylight Savings Time is enabled.
EchoReply_IsEnabled	D	Output	Specifies if Echo Reply is enabled.
Remote_IsEnabled	D	Output	Specifies if Remote End is enabled.
BasicMode_IsEnabled	D	Output	Specifies if Basic Mode is enabled.
H239_IsEnabled	D	Output	Specifies if H239 is enabled.
Version_Value	S	Output	Specifies the current version of the device.
SerialNumber_Value	S	Output	Specifies the serial number of the device.
Model_Value	S	Output	Specifies the model of the device.
SystemName_Value	S	Output	Specifies the system name of the device.

13   LOCAL/GLOBAL DIRECTORY + LIVE SEARCH

Name	Type	I/O	Description
Directory_DownloadEntries	D	Input	This will clear all downloaded entries and start re-downloading the entire phonebook recursively until the max entries have been met (a property on the module).
(Global Only) GlobalDirectoryIsMultiTiered	D	Input	Specifies if the global directory is multi-tiered or not. If this setting does not match the device then the directory download may not work. This needs to either have signal '1' on it if the feature should be used or commented out / '0' otherwise.
Directory_EnableInitialPoll (Excludes Live Search)	D	Input	Determines if the driver should retrieve the directory once it is connected and logged in. Latch this signal high before connecting if the feature is desired.
Directory_Home	D	Input	Navigates to the first page of the root directory.
Directory_FirstPage	D	Input	Navigates to the first page of the current directory.
Directory_NextPage	D	Input	Navigates to the next page in the current directory.
Direcory_PreviousPage	D	Input	Navigates to the previous page in the current directory.
Directory_PreviousDirectory	D	Input	Navigates to the parent directory of the current directory.
Directory_SelectEntry	A	Input	Selects an entry. Valid values are 1-20. If the selected entry is a group then the module will set the current directory to it and navigate to the first page of it.
Directory_ClearSelectedEntry	D	Input	Clears the selected entry.
Directory_DialSelectedEntry	D	Input	Dials the selected entry. This uses the API call with the unique ID of the contact as a parameter.
Directory_Search	D	Input	Module will search all downloaded entries for the search terms specified. SearchAnywhere will be used to specify if the use of wildcards around the search terms are needed.
Directory_SearchAnywhere	D	Input	When <Search> has a rising edge with this high then the search will append asterisks to the search term.

Directory_SearchTerm	S	Input	Specifies the string to search for when <Search> has a rising edge.
Directory_EntriesPerPage	A	Input	Specifies the amount of entries to display. Valid values: 1 - 20
Directory_IsSearching	D	Output	Specifies if the module is currently downloading the phonebook.
Directory_SelectedName	S	Output	Specifies the name of the selected user.
Directory_SelectedItemIsGroup	D	Output	Specifies if the selected item is a group.
Directory_Entry[1-20]_Name	S	Output	The names of the entries on the current page. Groups will have a [+] appended to the beginning of them.

14   REMOTE CONTROL BUTTON

Name	Type	I/O	Description
Button_Pound	D	Input	API call to "button" with the pound parameter.
Button_Asterisk	D	Input	API call to "button" with the asterisk parameter.
Button_[0-9]	D	Input	API call to "button" with the 0-9 parameter.
Button_Period	D	Input	API call to "button" with the . parameter.
Button_Down	D	Input	API call to "button" with the down parameter.
Button_Left	D	Input	API call to "button" with the left parameter.
Button_Right	D	Input	API call to "button" with the right parameter.
Button_Select	D	Input	API call to "button" with the select parameter.
Button_Up	D	Input	API call to "button" with the up parameter.
Button_Back	D	Input	API call to "button" with the back parameter.
Button_Call	D	Input	API call to "button" with the call parameter.
Button_Graphics	D	Input	API call to "button" with the graphics parameter.
Button_Hangup	D	Input	API call to "button" with the hangup parameter.
Button_Mute	D	Input	API call to "button" with the mute parameter.
Button_VolumePlus	D	Input	API call to "button" with the volume+ parameter.
Button_VolumeMinus	D	Input	API call to "button" with the volume- parameter.
Button_Camera	D	Input	API call to "button" with the camera parameter.
Button_Delete	D	Input	API call to "button" with the delete parameter.
Button_Directory	D	Input	API call to "button" with the directory parameter.
Button_Home	D	Input	API call to "button" with the home parameter.
Button_Keyboard	D	Input	API call to "button" with the keyboard parameter.
Button_Menu	D	Input	API call to "button" with the menu parameter.
Button_Pip	D	Input	API call to "button" with the pip parameter.
Button_Preset	D	Input	API call to "button" with the preset parameter.
Button_Info	D	Input	API call to "button" with the info parameter.

15　COM TRANSPORT

Name	Type	I/O	Description
StartCOMTransport	D	Input	Starts the COM connection.
StopCOMTransport	D	Input	Stops the COM connection.
FromDevice	S	Input	Connect to the RX signal on a COM port.
COMTransport_ConnectionState	A	Output	0 – Unknown 1 – Connecting 2 – Connected 3 – Disconnected 4 – Logged In
COMTransport_ProcessingData	D	Output	Specifies that the module is processing feedback from the device.
ToDevice	S	Output	Connect to the TX signal on a COM port.

16 SSH TRANSPORT

Name	Type	I/O	Description
SSHTransportDeviceHostname	S	Input	Sets the IP address or hostname of the Polycom Group Series device. Must be set before starting a connection.
SSHTransportPort	S	Input	Sets the Port for the connection. Must be greater than 0 if set. The default value is 22d.
StartSSHTransport	D	Input	Starts the SSH connection.
StopSSHTransport	D	Input	Stops the SSH connection.
SSHAcceptKey	D	Input	Accepts the unknown host key fingerprint and stores it in \NVRAM\PolycomGroupSeriesDriver\hostKeyFingerprints.dat.
SSHRejectKey	D	Input	Rejects the unknown host key fingerprint and stops the connection.
SSH_TransmitData	S	Input	Sends the value given to the device. This will automatically append the delimiter.
SSHTransport_ConnectionState	A	Output	0 – Unknown 1 – Connecting 2 – Connected 3 – Disconnected 4 – Logged In
SSHTransport_ProcessingData	D	Output	Specifies that the module is processing feedback from the device.
SSH_UnknownKeyReceived	D	Output	Specifies if SSHKey represents a key that must be accepted or rejected.
SSHKey	S	Output	The host key fingerprint given to the driver to accept/reject.
SSH_ReceivedData	S	Output	All received data from the device will show up on this output, even data expected by the module.

17 MODULE LOGGING

Name	Type	I/O	Description
LoggingMode	A	Input	1 – None 2 – Regular 3 – Verbose Logging prints to the console currently.

18   PROPERTIES

Name	Description
Communication Mode	Determines whether SSH or COM transport is used.
SSH Security Mode	**Secure** – Before the username/password are sent to the device, the client-provided host key fingerprint will compared to the stored ones in : \NVRAM\PolycomGroupSeriesDriver\hostKeyFingerprints.dat. If it does not exist in that file, the programmer must either accept or reject the key. Accepting it will store it in the file mentioned above. **Unsecure** – Auto-accepts all SSH connections.
Max Local/Global Directory Entries	Specifies the maximum amount of entries that should be download by the module. If this is set to 0d, then the driver will set the internal maximum value to Int32.MaxValue (2,147,483,647).