

This document provides additional assistance with wiring your Extron IP Link Pro Control Processor to your device. Different components may require a different wiring scheme than those listed below.

For complete operating instructions, refer to the user's manual for the specific IP Link Pro Control Processor or the documentation supplied by the manufacturer of the controlled device.

For more information on using Global Scripter Modules, refer to the "[Guide to Using Scripter Modules](#)" document.

Device Specifications

Device Type: Streaming Media
Manufacturer: Extron
Firmware Version: 2.04
Model(s): SMD 101, SMD 202

Tested on the Following Software and Firmware Versions

IP Link Pro Control Processor Firmware	Global Scripter Version
3.04.0001-b002	2.3.1

Version History

Module Version	Date	Notes
1_11_4_0	12/11/2019	Added: <ul style="list-style-type: none">Note about Channel Preset Recall commandSort command parameter to File and Folder Update commandLoad Source CommandLoad Source String Removed: <ul style="list-style-type: none">Sorting of Favorites Updated: <ul style="list-style-type: none">Ethernet Protocol to SSHFixed serial controlFixed encoding to support additional languages
1_10_1_0	3/27/2019	<ul style="list-style-type: none">Added ability to sort the folders and files name in alphabetical order.Added ability to view and load additional results for command

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		sets. Fixed Channel Preset Recall status.
1_8_1_0	8/1/2018	Updated Appendix B table.
1_8_0_0	7/3/2018	<ul style="list-style-type: none"> Combined SMD101 and SMD202 modules Added functionality for Channel List, Favorite List, Folder, and History List commands Improved functionality for File commands. See "Renamed Commands and Values" tables below for changes in commands and its values. Added CurrentSourceItem command Added additional file extension support Updated notes on how to use commands
1_2_7_0	6/9/2017	Fixed Load File (Navigation) command. Updated File List to now show when you have reached the end of the list. File List also now only will display the name of the file available rather than the whole path of that file.
1_2_5_0	2/23/2017	Fixing LoopPlay command string.
1_2_4_0	1/26/2017	Updated Playback status to catch unsolicited changes from Webpage.
1_2_2_0	6/28/2016	Added Subtitles and Loop Play commands. Added Next Track and Previous Track to Playback. Fixed File List.
1_2_0_0	4/1/2016	Initial Version

Module Notes

Module Notes

- Unidirectional variable must be set to 'True' if status is not required. Default value is 'False'.
Example: `InterfaceName.Unidirectional = 'True'`
- connectionCounter variable must be set to the number of queries that will be sent to the device before displaying 'Disconnected' if no response is received. Default value is 15.
Example: `InterfaceName.connectionCounter = 5`
- If login credentials are required, devicePassword must be set accordingly.
Example: `InterfaceName.devicePassword = 'extron'`
- NumberOfChannelListSearch variable must be set accordingly. Default value is '5'. Number of Channel List Search ranges from '1' to '100'.
Example: `InterfaceName.NumberofChannelListSearch = '1'`
- NumberOfFavoritesFolderSearch variable must be set accordingly. Default value is '1'. Number of Favorites Folder Search ranges from '1' to '100'.
Example: `InterfaceName.NumberofFavoritesFolderSearch = '1'`
- NumberOfFavoritesItemSearch variable must be set accordingly. Default value is '1'. Number of Favorites Item Search ranges from '1' to '100'.
Example: `InterfaceName.NumberofFavoritesItemSearch = '1'`
- NumberOfFileSearch variable must be set accordingly. Default value is '1'. Number of File Search ranges from '1' to '100'.
Example: `InterfaceName.NumberofFileSearch = '1'`
- NumberOfFolderSearch variable must be set accordingly. Default value is '1'. Number of Folder Search ranges from '1' to '100'.
Example: `InterfaceName.NumberofFolderSearch = '1'`
- NumberOfHistoryListSearch variable must be set accordingly. Default value is '1'. Number of History List Search ranges from '1' to '100'.
Example: `InterfaceName.NumberofHistoryListSearch = '1'`

Supported Classes and Examples

SerialClass

```
InterfaceName = ModuleName.SerialClass(ProcessorName, 'COM1', Model='SMD 101')
```

SerialOverEthernetClass

```
InterfaceName = ModuleName.SerialOverEthernetClass('192.168.254.254', 2001, Model='SMD 101')
```

SSHClass

#Password Required

```
InterfaceName = ModuleName.SSHClass('192.168.254.254', 22023, Credentials=('admin', 'extron'),  
Model='SMD 101')
```

#No Password Required

```
InterfaceName = ModuleName.SSHClass('192.168.254.254', 22023, Credentials=('admin', ''),  
Model='SMD 101')
```

Renamed Commands and Values for the SMD 101

The following commands and values have been renamed or changed. Please make appropriate changes in any Set, Update, ReadStatus, or SubscribeStatus method calls that use these commands and values within your GS project.

Previous Command Name	Previous Value Name	New Command Name	New Value Name
OutputResolution	'576p'	-	'576p (50Hz)'
Pattern	-	TestPatterns	-
PlaylistStatus	-	CurrentPlaylistTrack	-
PowerSaveMode	'On'	PowerMode	'Full Power'
PowerSaveMode	'Off'	PowerMode	'Low Power – Standby State'
ScreenSaver	'Black'	-	'Black Screen'
ScreenSaver	'Blue'	-	'Blue Screen with OSD text'
ScreenSaver	'Custom'	-	'Custom color set via webpage'
TemperatureStatus	-	Temperature	-
VideoMute	'Black'	-	'Video Mute'
VideoMute	'Sync and Video'	-	'Sync and Video Mute'
VideoMute	'Off'	-	'Unmute'
FavoritesList	-	FavoritesItemSearchResults	-
FileListFavorite	-	FavoritesItemNavigation	-
LoadFileFavorite	-	LoadSelectedFavoritesItem	-
FileList	-	FileSearchResults	-
FileListNavigation	-	FileNavigation	-
LoadFileNavigation	-	LoadSelectedItem	-
RefreshFileList	-	FileandFolderUpdate	-
HistoryList	-	HistoryListSearchResults	-
LoadFileHistory	-	LoadSelectedHistoryItem	-
PresetList	-	ChannelListSearchResults	-
PresetRecall	-	ChannelPresetRecall	-
PresetRecallStep	-	ChannelPresetRecallStep	-

Renamed Commands and Values for the SMD 202

The following commands and values have been renamed or changed. Please make appropriate changes in any Set, Update, ReadStatus, or SubscribeStatus method calls that use these commands and values within your GS project.

Previous Command Name	Previous Value Name	New Command Name	New Value Name
OutputResolution	'576p'	-	'576p (50Hz)'
PlaylistStatus	-	CurrentPlaylistTrack	-
PowerSaveMode	'On'	PowerMode	'Full Power'
PowerSaveMode	'Off'	PowerMode	'Low Power – Standby State'
ScreenSaver	'Custom color set via DWP'	-	'Custom color set via webpage'
VideoMute	'Black'	-	'Video Mute'
VideoMute	'Sync and Video'	-	'Sync and Video Mute'
VideoMute	'Off'	-	'Unmute'
FileListNavigation	-	FileNavigation	-
FileList	-	FileSearchResults	-
RefreshFileList	'Current Director'	FileandFolderUpdate	'Current Directory Only'
FilterFilesByExtension	-	FilterItemsByExtension	-
Playback	'Next Track'	-	'Next'
Playback	'Previous Track'	-	'Previous'
Subtitles	-	ClosedCaption	-
PresetRecall	'0' – '99'	ChannelPresetRecall	1 – 999
PresetRecallStep	-	ChannelPresetRecallStep	-

Playback Commands

- LoadFileCommand
 - This command will load the media item in the file path specified in the 'String' value directly to the SMD.
 - Example: `InterfaceName.Set('LoadFileCommand', 'Folder1/File1.mp4')`
- LoadPlaylistCommand
 - This command will load a playlist in the playlist path specified in the 'String' value directly to the SMD
 - Example: `InterfaceName.Set('LoadPlaylistCommand', 'Folder1/Playlist1.jspf')`

Manually Changing Directories and Viewing Current Directory

- ChangeDirectory
 - This command is used to manually change directories on the SMD. It requires a 'Directory Path' qualifier value to specify which directory to change to.
 - Directory Path examples:
 - To change to root directory: "*root*" or leave blank
 - To change to directories within the root directory: "*root/Folder1/Folder2*" or "*/Folder1/Folder2*"
 - Folder names are case-sensitive and cannot contain any of the following characters: / ; * ? " < > | (the / character is used for navigating only)
- CurrentDirectory
 - This command displays the current directory that the device is in

Configuring Advanced Applications

This module consists of several different command groups that can provide powerful applications. These applications include viewing, navigating, and loading various items configured on the SMD to allow for a very user-friendly experience. These applications make it much easier to manage and manipulate information on the SMD. To get a general idea of how to create an application using these command groups, please continue reading the sections below.



File and Folder Navigation Commands

These commands provide a way to view, navigate, and load the files configured on the SMD via an Extron user interface (e.g. TLP or Extron Control). These commands offer both a way to view and load files (or other media items), as well as navigating through the folders that files reside in. Because of the additional folder navigating capabilities, the File and Folder command group is separated into two sub-groups. One sub-group handles the viewing and loading of files, and the other sub-group handles the folder navigation. Commands apart of these two sub-groups should remain separate from each other to work properly. Notice that each command has a unique tag included in the name to identify which commands belong together. One of the tags is the word 'File' (or 'Item') and the other tag is the word 'Folder'.

- The File and Folder Navigation group consists of the variables *NumberofFileSearch* and *NumberofFolderSearch*, as well as the following commands
 - 1) FileandFolderUpdate
 - 2) FileSearchResults
 - 3) FolderSearchResults
 - 4) FileNavigation
 - 5) FolderNavigation
 - 6) LoadSelectedItem
 - 7) FolderAction
 - 8) FilterItemsByExtension
 - 9) FolderUpOneDirectory

CAUTION: These commands are only intended to be used together, not separate or combined with other commands, as doing so may produce unpredictable or undesired results.

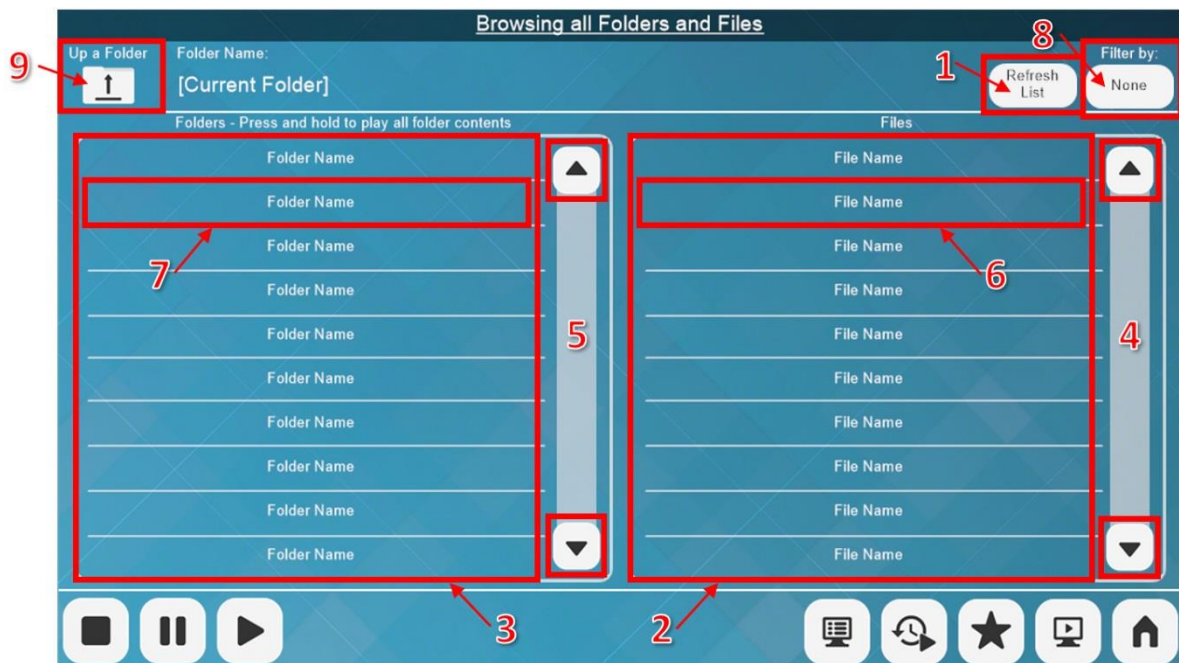


Figure 1:
Example
GUI
template
for
File

and Folder Navigation command group

- NumberofFileSearch* and *NumberofFolderSearch*
 - These variables are used to specify how many results to show for *FileSearchResults* and *FolderSearchResults*, respectively. They are set to a default value of '5' and should be updated accordingly if the user wants to see more results.

- **FileandFolderUpdate**
 - This command is used to either request the initial or most recent files and folders on the SMD. The *Directory* qualifier is used to specify what results are desired to be shown, either from the *Current Directory Only* or the *Current Directory and Below*. Sending this command will populate results for both the *FileSearchResults* and the *FolderSearchResults*. **Note:** only folders with playable files in them will be shown
- **FileSearchResults** and **FolderSearchResults**
 - These commands are used to display the results obtained from the SMD after sending *FileandFolderUpdate*. The *Position* qualifier is used to determine the order that results will be written. The amount of results written is dependent on the value of the *NumberofFileSearch* and *NumberofFolderSearch* variables.
- **FileNavigation** and **FolderNavigation**
 - These commands are used to navigate through the results that are written for *FileSearchResults* and *FolderSearchResults*. The user has the option to navigate *Up*, *Down*, *Page Up*, or *Page Down* through the results. The *Page Up* and *Page Down* amount is determined by the *NumberofFileSearch* and *NumberofFolderSearch* variables.
- **FolderAction**
 - This command is used to either step into a folder or load a folder itself with all its contents. Sending this command will repopulate new results shown for *FileSearchResults* and *FolderSearchResults*, therefore *FileandFolderUpdate* is not required to use again to view the new results.

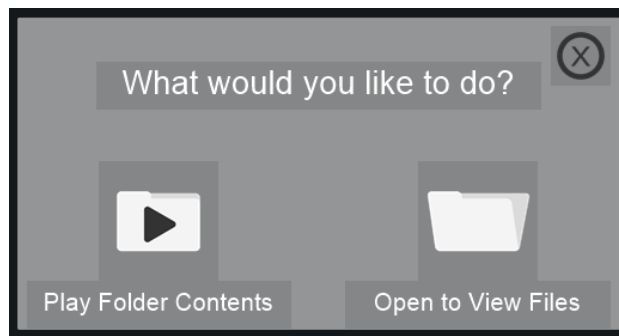


Figure 2: This window pops up upon pressing #7 in Figure 1

- **FolderUpOneDirectory**
 - This command is used to step out of a folder once a folder is stepped into. Sending this command will also repopulate new results shown for *FileSearchResults* and *FolderSearchResults*, therefore *FileandFolderUpdate* is not required to use again to view the new results.
- **FilterItemsByExtension**
 - This command is used to filter the results shown for *FileSearchResults* and *FolderListResults*. The *File Extension* qualifier is used to determine which file extensions the user wants to view at a given time.

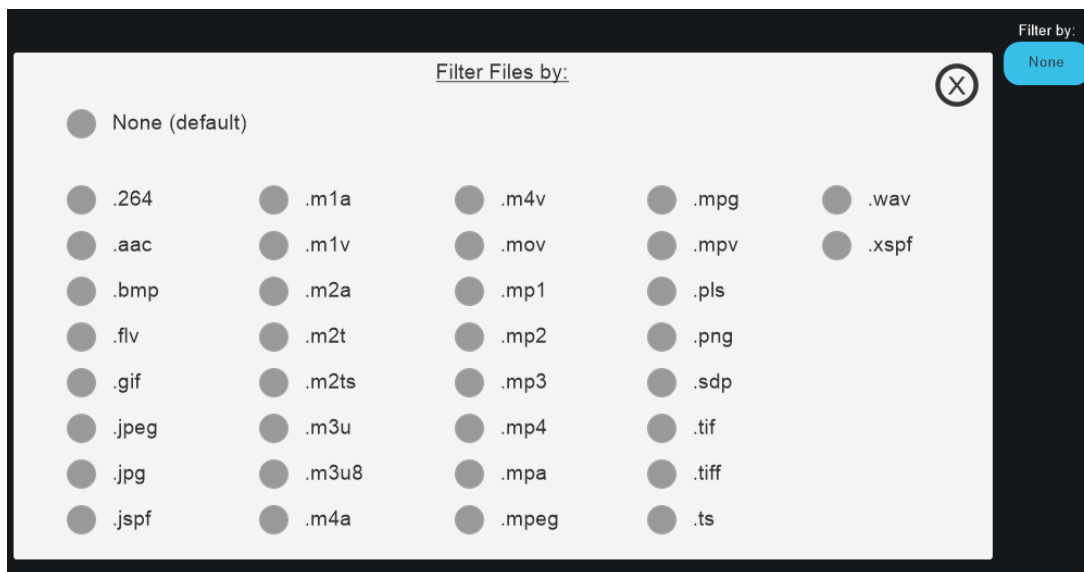


Figure 3: This window pops up upon pressing #8 in Figure 1

- **LoadSelectedItem**
 - This command is used to load an item on the SMD selected for *FileSearchResults*. The state selected for this command corresponds to the value of the *Position* qualifier for *FileSearchResults*.

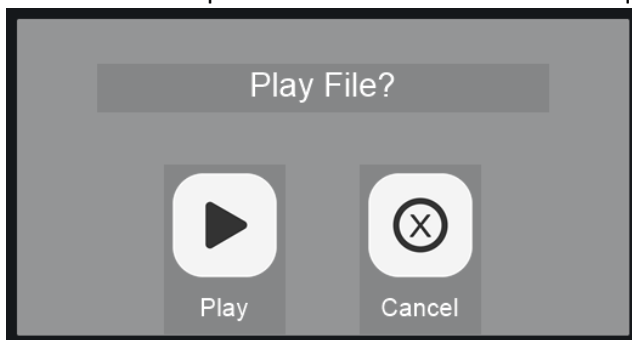


Figure 4: This window pops up upon pressing #6 in Figure 1

Channel List Commands

These commands provide a way to view, navigate, and load the channel presets configured on the SMD via an Extron user interface (e.g. TLP or Extron Control). The results shown can either be the channel number, channel name, or channel URI.

- The Channel List group consists of the following commands/variable:
 - *NumberOfChannelListSearch* (variable)
 - *ChannelListUpdate*
 - *ChannelListSearchResults*
 - *ChannelListNavigation*
 - *FilterChannelListByExtension*
 - *LoadSelectedChannel*

CAUTION: These commands are only intended to be used together, not separate or combined with other commands, as doing so may produce unpredictable or undesired results.

- *NumberOfChannelListSearch*
 - This variable is used to specify how many results to show for *ChannelListSearchResults*. It is set to a default value of '5' and should be updated accordingly if the user wants to see more results.
- *ChannelListUpdate*
 - This command is used to either request the initial or most recent configured channel presets on the SMD. The *Type* qualifier is used to specify what type of results will be shown: channel number, channel name, or channel URI.
- *ChannelListSearchResults*
 - This command is used to display the results obtained from the SMD after sending *ChannelListUpdate*. The *Position* qualifier is used to determine the order that results will be written. The amount of results written is dependent on what is set for the *NumberOfChannelListSearch* variable.
- *ChannelListNavigation*
 - This command is used to navigate through the results that are written for *ChannelListSearchResults*. The user has the option to navigate *Up*, *Down*, *Page Up*, or *Page Down* through the results. The *Page Up* and *Page Down* amount is determined by the *NumberOfChannelListSearch* variable.
- *FilterChannelListByExtension*
 - This command is used to filter the results shown for *ChannelListSearchResults*. The *File Extension* qualifier is used to determine which file extensions the user wants to view at a given time.
- *LoadSelectedChannel*

-
- This command is used to load an item on the SMD selected for *ChannelListSearchResults*. The state selected for this command corresponds to the value of the *Position* qualifier for *ChannelListSearchResults*.

Favorites Item and Folder Navigation Commands

These commands provide a way to view, navigate, and load the favorites configured on the SMD via an Extron user interface (e.g. TLP or Extron Control). These commands offer both a way to view and load favorite items, as well as navigating through the folders that items reside in. Because of the additional folder navigating capabilities, the Favorites command group is separated into two sub-groups. One sub-group handles the viewing and loading of favorite items, and the other sub-group handles the favorite folders navigation. Commands apart of these two sub-groups should remain separate from each other to work properly. Note that each command has a unique tag included in the name to identify which commands belong with one another. One of the tags is the word '**Item**' and the other is the word '**Folder**'.

- The Favorites Item and Folder Navigation group consists of the following commands/variables:
 - *NumberOfFavoritesItemSearch* (variable)
 - *NumberOfFavoritesFolderSearch* (variable)
 - *FavoritesItemandFolderUpdate*
 - *FavoritesItemSearchResults*
 - *FavoritesFolderSearchResults*
 - *FavoritesItemNavigation*
 - *FavoritesFolderNavigation*
 - *FavoritesFolderUpOneDirectory*
 - *FilterFavoritesItemsByExtension*
 - *LoadSelectedFavoritesItem*
 - *StepIntoFavoritesFolder*

CAUTION: These commands are only intended to be used together, not separate or combined with other commands, as doing so may produce unpredictable or undesired results.

- *NumberOfFavoritesItemSearch* and *NumberOfFavoritesFolderSearch*
 - These variables are used to specify how many results to show for *FavoritesItemSearchResults* and *FavoritesFolderSearchResults*, respectively. They are set to a default value of 5 and should be updated accordingly if the user wants to see more results.
- *FavoritesItemandFolderUpdate*
 - This command is used to either request the initial or most recent favorite items and folders on the SMD. Sending this command will populate results for both the *FavoritesItemSearchResults* and the *FavoritesFolderSearchResults*.
- *FavoritesItemSearchResults* and the *FavoritesFolderSearchResults*
 - These commands are used to display the results obtained from the SMD after sending *FavoritesItemandFolderUpdate*. The *Position* qualifier is used to determine the order that results will be written. The amount of results written is dependent on what is set for the *NumberOfFavoritesItemSearch* and *NumberOfFavoritesFolderSearch* variables.
- *FavoritesItemNavigation* and *FavoritesFolderNavigation*
 - These commands are used to navigate through the results that are written for *FavoritesItemSearchResults* and *FavoritesFolderSearchResults*. The user has the option to navigate

Up, Down, Page Up, or Page Down through the results. The *Page Up* and *Page Down* amount is determined by the *NumberOfFavoritesItemSearch* and *NumberOfFavoritesFolderSearch* variables.

- *StepIntoFavoritesFolder*
 - This command is used to step into a favorites folder. Sending this command will repopulate new results shown for *FavoritesItemSearchResults* and *FavoritesFolderSearchResults*, therefore *FavoritesItemandFolderUpdate* is not required to use again to view the new results.
- *Favorites Folder Up One Directory*
 - This command is used to step out of a favorites folder once a folder is stepped into. Sending this command will also repopulate new results shown for *FavoritesItemSearchResults* and *FavoritesFolderSearchResults*, therefore *FavoritesItemandFolderUpdate* is not required to use again to view the new results.
- *FilterFavoritesItemsByExtension*
 - This command is used to filter the results shown for *FavoritesItemSearchResults* and *FavoritesFolderSearchResults*. The *File Extension* qualifier is used to determine which file extensions the user wants to view at a given time.
- *LoadSelectedFavoritesItem*
 - This command is used to load a favorites item on the SMD selected for *FavoritesItemSearchResults*. The state selected for this command corresponds to the value of the *Position* qualifier for *FavoritesItemSearchResults*.

History List Commands

These commands provide a way to view, navigate, and load the previously played items on the SMD via an Extron user interface (e.g. TLP or Extron Control).

- The History List group consists of the following commands/variable:
 - *NumberOfHistoryListSearch* (variable)
 - *HistoryListUpdate*
 - *HistoryListSearchResults*
 - *HistoryListNavigation*
 - *FilterHistoryListByExtension*
 - *LoadSelectedHistoryItem*

CAUTION: These commands are only intended to be used together, not separate or combined with other commands, as doing so may produce unpredictable or undesired results.

- *NumberOfHistoryListSearch*
 - This variable is used to specify how many results to show for *HistoryListSearchResults*. It is set to a default value of '5' and should be updated accordingly if the user wants to see more results.
- *HistoryListUpdate*
 - This command is used to either request the initial or most recent history items from the SMD.
- *HistoryListSearchResults*
 - This command is used to display the results obtained from the SMD after sending *HistoryListUpdate*. The *Position* qualifier is used to determine the order that results will be written. The amount of results written is dependent on what is set for the *NumberOfHistoryListSearch* variable.
- *HistoryListNavigation*
 - This command is used to navigate through the results that are written for *HistoryListSearchResults*. The user has the option to navigate *Up*, *Down*, *Page Up*, or *Page Down* through the results. The *Page Up* and *Page Down* amount is determined by the *NumberOfHistoryListSearch* variable.
- *FilterHistoryListByExtension*
 - This command is used to filter the results shown for *HistoryListSearchResults*. The *File Extension* qualifier is used to determine which file extensions the user wants to view at a given time.
- *LoadSelectedHistoryItem*
 - This command is used to load a history item on the SMD selected for *HistoryListSearchResults*. The state selected for this command corresponds to the value of the *Position* qualifier for *HistoryListSearchResults*.

Control Commands

Format with Qualifier:

InterfaceName.Set(Command, Value, {'Qualifier Key': 'Qualifier Value'})

Format with Qualifier:

InterfaceName.Set(Command, Value)

Command AspectRatio	Value 'Zoom'	Value 'Fill'	Value 'Follow'
# AspectRatio example InterfaceName.Set('AspectRatio', 'Zoom')			
Command AudioMute	Value 'On'	Value 'Off'	
# AudioMute example InterfaceName.Set('AudioMute', 'On')			
Command ChangeDirectory	Value None		
Qualifier Key 'Directory Path'	Qualifier Value 'String'		
# ChangeDirectory example InterfaceName.Set('ChangeDirectory', None, {'Directory Path': 'String'})			
Command ChannelListNavigation	Value 'Up' 'Page Down'	Value 'Down'	Value 'Page Up'
# ChannelListNavigation example InterfaceName.Set('ChannelListNavigation', 'Up')			
Command ChannelListUpdate	Value None		
Qualifier Key 'Type'	Qualifier Value 'Channel'	Qualifier Value 'Name'	Qualifier Value 'URI'
# ChannelListUpdate example InterfaceName.Set('ChannelListUpdate', None, {'Type': 'Channel'})			
Command ChannelPresetRecall	Value 1 – 999		
# ChannelPresetRecall example InterfaceName.Set('ChannelPresetRecall', 999)			
Command ChannelPresetRecallStep	Value 'Next'	Value 'Previous'	
# ChannelPresetRecallStep example InterfaceName.Set('ChannelPresetRecallStep', 'Next')			
Command ClosedCaption ¹	Value 'On'	Value 'Off'	
# ClosedCaption example InterfaceName.Set('ClosedCaption', 'On')			
Command FavoritesFolderNavigation	Value 'Up' 'Page Down'	Value 'Down'	Value 'Page Up'
# FavoritesFolderNavigation example InterfaceName.Set('FavoritesFolderNavigation', 'Up')			
Command FavoritesFolderUpOneDirectory	Value None		
# FavoritesFolderUpOneDirectory example InterfaceName.Set('FavoritesFolderUpOneDirectory', None)			
Command FavoritesItemandFolderUpdate	Value None		
# FavoritesItemandFolderUpdate example			

InterfaceName.Set('FavoritesItemandFolderUpdate', None)			
Command FavoritesItemNavigation	Value 'Up' 'Page Down'	Value 'Down'	Value 'Page Up'
# FavoritesItemNavigation example InterfaceName.Set('FavoritesItemNavigation', 'Up')			
Command FileandFolderUpdate	Value None		
Qualifier Key 'Sort'	Qualifier Value 'Alphanumeric'	Qualifier Value 'Date Modified'	
Qualifier Key 'Directory'	Qualifier Value 'Current Directory Only'	Qualifier Value 'Current Directory and Below'	
# FileandFolderUpdate example InterfaceName.Set('FileandFolderUpdate', None, {'Sort': 'Alphanumeric', 'Directory': 'Current Directory Only'})			
Command FileNavigation	Value 'Up' 'Page Down'	Value 'Down'	Value 'Page Up'
# FileNavigation example InterfaceName.Set('FileNavigation', 'Up')			
Command FilterChannelListByExtension	Value None		
Qualifier Key 'File Extension'			
# FilterChannelListByExtension example InterfaceName.Set('FilterChannelListByExtension', None)			
Command FilterFavoritesItemsByExtension	Value None		
Qualifier Key 'File Extension'			
# FilterFavoritesItemsByExtension example InterfaceName.Set('FilterFavoritesItemsByExtension', None)			
Command FilterHistoryListByExtension	Value None		
Qualifier Key 'File Extension'			
# FilterHistoryListByExtension example InterfaceName.Set('FilterHistoryListByExtension', None)			
Command FilterItemsByExtension	Value None		
Qualifier Key 'File Extension'			
# FilterItemsByExtension example InterfaceName.Set('FilterItemsByExtension', None)			
Command FolderAction	Value '1' – '100'		
Qualifier Key 'Action'	Qualifier Value 'Step into Folder'	Qualifier Value 'Load Folder'	
# FolderAction example InterfaceName.Set('FolderAction', '1', {'Action': 'Step into Folder'})			
Command FolderNavigation	Value 'Up'	Value 'Down'	Value 'Page Up'

	'Page Down'		
# FolderNavigation example InterfaceName.Set('FolderNavigation', 'Up')			
Command FolderUpOneDirectory	Value None		
# FolderUpOneDirectory example InterfaceName.Set('FolderUpOneDirectory', None)			
Command HistoryListNavigation	Value 'Up' 'Page Down'	Value 'Down'	Value 'Page Up'
# HistoryListNavigation example InterfaceName.Set('HistoryListNavigation', 'Up')			
Command HistoryListUpdate	Value None		
# HistoryListUpdate example InterfaceName.Set('HistoryListUpdate', None)			
Command Input	Value 'Decoder'	Value 'HDMI'	
# Input example InterfaceName.Set('Input', 'Decoder')			
Command LoadFileCommand	Value 'String'		
# LoadFileCommand example InterfaceName.Set('LoadFileCommand', 'FileName')			
Command LoadPlaylistCommand	Value 'String'		
# LoadPlaylistCommand example InterfaceName.Set('LoadPlaylistCommand', 'PlaylistName')			
Command LoadSelectedChannel	Value '1' – '100'		
# LoadSelectedChannel example InterfaceName.Set('LoadSelectedChannel', '1')			
Command LoadSelectedFavoritesItem	Value '1' – '100'		
# LoadSelectedFavoritesItem example InterfaceName.Set('LoadSelectedFavoritesItem', '1')			
Command LoadSelectedHistoryItem	Value '1' – '100'		
# LoadSelectedHistoryItem example InterfaceName.Set('LoadSelectedHistoryItem', '1')			
Command LoadSelectedItem	Value '1' – '100'		
# LoadSelectedItem example InterfaceName.Set('LoadSelectedItem', '1')			
Command LoadSourceCommand	Value 'String'		
# LoadSourceCommand example InterfaceName.Set('LoadSourceCommand', 'String')			
Command LoopPlay	Value 'On'	Value 'Off'	
# LoopPlay example InterfaceName.Set('LoopPlay', 'On')			
Command OutputResolution	Value '576p (50Hz)'	Value '640x480 (50Hz)'	Value '640x480 (60Hz)'

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	'800x600 (50Hz)'	'800x600 (60Hz)'	'1024x768 (50Hz)'
	'1024x768 (60Hz)'	'1280x1024 (50Hz)'	'1280x1024 (60Hz)'
	'1366x768 (50Hz)'	'1366x768 (60Hz)'	'1600x1200 (50Hz)'
	'1600x1200 (60Hz)'	'1920x1200 (50Hz)'	'1920x1200 (60Hz)'
	'480p (59.94Hz)'	'480p (60Hz)'	'720p (50Hz)'
	'720p (60Hz)'	'1080i (50Hz)'	'1080i (59.94Hz)'
	'1080i (60Hz)'	'1080p (23.98Hz)'	'1080p (24Hz)'
	'1080p (25Hz)'	'1080p (29.97Hz)'	'1080p (30Hz)'
	'1080p (50Hz)'	'1080p (59.94Hz)'	'1080p (60Hz)'
	'720p (59.94Hz)'	'Auto'	'1280x800 (50Hz)'
'1280x800 (60Hz)'			
# OutputResolution example InterfaceName.Set('OutputResolution', '576p (50Hz)')			
Command Playback	Value 'Stop' 'Next'	Value 'Play' 'Previous'	Value 'Pause'
# Playback example InterfaceName.Set('Playback', 'Stop')			
Command PowerMode	Value 'Full Power'	Value 'Low Power - Standby State'	
# PowerMode example InterfaceName.Set('PowerMode', 'Full Power')			
Command ScreenSaver	Value 'Custom color set via webpage'	Value 'Black Screen'	Value 'Blue Screen with OSD Text'
# ScreenSaver example InterfaceName.Set('ScreenSaver', 'Custom color set via webpage')			
Command Seek ²	Value 'Forward'	Value 'Backward'	
Qualifier Key 'Step'	Qualifier Value 1 to 65535 in steps of 1		
# Seek example InterfaceName.Set('Seek', 'Forward', {'Step': 65535})			
Command StandbyTimer	Value 0 – 500		
# StandbyTimer example InterfaceName.Set('StandbyTimer', 500)			
Command StepIntoFavoritesFolder	Value '1' – '100'		
# StepIntoFavoritesFolder example InterfaceName.Set('StepIntoFavoritesFolder', '1')			
Command TestPatterns	Value 'Off' 'Crosshatch' 'Grayscale'	Value 'Alternating Pixels' 'Color Bars' 'Ramp'	Value 'Alternating Lines' '4x4 Crosshatch' 'White Field'
# TestPatterns example InterfaceName.Set('TestPatterns', 'Off')			
Command VideoMute	Value 'Video Mute'	Value 'Sync and Video Mute'	Value 'Unmute'

# VideoMute example InterfaceName.Set('VideoMute', 'Video Mute')	
Command Volume	Value -100 to 0 in steps of 1
# Volume example InterfaceName.Set('Volume', 0)	

¹ Not supported for SMD 101

² Specify how many seconds to seek forward/backward. Requires *CurrentClipLength* and *CurrentTimecode* status for this command to work. Setting a repeatTime for the button that calls this command is not recommended, but if necessary, a longer repeatTime is recommended.

Status Available

For all commands except for AspectRatio, ChannelPresetRecall, ClosedCaption, CurrentClipLength, CurrentDirectory, CurrentSourceItem, CurrentTimecode, LoopPlay, ScreenSaver, Temperature, and TestPatterns, Update should be called only once since the command's status will be updated automatically as the device's status changes. ConnectionStatus, ChannelListSearchResults, FavoritesFolderSearchResults, FavoritesItemSearchResults, FileSearchResults, and HistoryListSearchResults do not support the Update function. ConnectionStatus is triggered by the device providing a successful response to other Update function calls.

Format with Qualifier:

```
InterfaceName.Update(Command, {'Qualifier Key': 'Qualifier Value'})
Value = InterfaceName.ReadStatus(Command, {'Qualifier Key': 'Qualifier Value'})
InterfaceName.SubscribeStatus(Command, {'Qualifier Key': 'Qualifier Value'},
```

```
FeedbackHandler)
```

FeedbackHandler will be called only when the specified qualifier gets a new status.

Format without Qualifier:

```
InterfaceName.Update(Command)
Value = InterfaceName.ReadStatus(Command)
InterfaceName.SubscribeStatus(Command, None, FeedbackHandler)
FeedbackHandler will be called when any qualifier gets a new status.
```

Command	Value	Value	Value
AspectRatio	'Zoom'	'Fill'	'Follow'
# AspectRatio example InterfaceName.Update('AspectRatio') Value = InterfaceName.ReadStatus('AspectRatio') InterfaceName.SubscribeStatus('AspectRatio', None, FeedbackHandler)			
Command	Value	Value	
AudioMute	'On'	'Off'	
# AudioMute example InterfaceName.Update('AudioMute') Value = InterfaceName.ReadStatus('AudioMute') InterfaceName.SubscribeStatus('AudioMute', None, FeedbackHandler)			
Command	Value		
ChannelListSearchResults	'String'		
Qualifier Key	Qualifier Value		
'Position'	'1' – '100'		
# ChannelListSearchResults example Value = InterfaceName.ReadStatus('ChannelListSearchResults', {'Position': '1'}) InterfaceName.SubscribeStatus('ChannelListSearchResults', None, FeedbackHandler)			
Command	Value		
ChannelPresetRecall	1 – 999		
# ChannelPresetRecall example InterfaceName.Update('ChannelPresetRecall') Value = InterfaceName.ReadStatus('ChannelPresetRecall') InterfaceName.SubscribeStatus('ChannelPresetRecall', None, FeedbackHandler)			
Command	Value	Value	
ClosedCaption¹	'On'	'Off'	
# ClosedCaption example InterfaceName.Update('ClosedCaption') Value = InterfaceName.ReadStatus('ClosedCaption') InterfaceName.SubscribeStatus('ClosedCaption', None, FeedbackHandler)			
Command	Value	Value	
ConnectionStatus	'Connected'	'Disconnected'	

# ConnectionStatus example Value = InterfaceName.ReadStatus('ConnectionStatus') InterfaceName.SubscribeStatus('ConnectionStatus', None, FeedbackHandler)	
Command CurrentClipLength ²	Value 'String'
# CurrentClipLength example InterfaceName.Update('CurrentClipLength') Value = InterfaceName.ReadStatus('CurrentClipLength') InterfaceName.SubscribeStatus('CurrentClipLength', None, FeedbackHandler)	
Command CurrentDirectory	Value 'String'
# CurrentDirectory example InterfaceName.Update('CurrentDirectory') Value = InterfaceName.ReadStatus('CurrentDirectory') InterfaceName.SubscribeStatus('CurrentDirectory', None, FeedbackHandler)	
Command CurrentPlaylistTrack	Value 'String'
# CurrentPlaylistTrack example InterfaceName.Update('CurrentPlaylistTrack') Value = InterfaceName.ReadStatus('CurrentPlaylistTrack') InterfaceName.SubscribeStatus('CurrentPlaylistTrack', None, FeedbackHandler)	
Command CurrentSourceItem	Value 'String'
# CurrentSourceItem example InterfaceName.Update('CurrentSourceItem') Value = InterfaceName.ReadStatus('CurrentSourceItem') InterfaceName.SubscribeStatus('CurrentSourceItem', None, FeedbackHandler)	
Command CurrentTimecode	Value 'String'
# CurrentTimecode example InterfaceName.Update('CurrentTimecode') Value = InterfaceName.ReadStatus('CurrentTimecode') InterfaceName.SubscribeStatus('CurrentTimecode', None, FeedbackHandler)	
Command FavoritesFolderSearchResults	Value 'String'
Qualifier Key 'Position'	Qualifier Value '1' – '100'
# FavoritesFolderSearchResults example Value = InterfaceName.ReadStatus('FavoritesFolderSearchResults', {'Position': '1'}) InterfaceName.SubscribeStatus('FavoritesFolderSearchResults', None, FeedbackHandler)	
Command FavoritesItemSearchResults	Value 'String'
Qualifier Key 'Position'	Qualifier Value '1' – '100'
# FavoritesItemSearchResults example Value = InterfaceName.ReadStatus('FavoritesItemSearchResults', {'Position': '1'}) InterfaceName.SubscribeStatus('FavoritesItemSearchResults', None, FeedbackHandler)	
Command FileSearchResults	Value 'String'
Qualifier Key 'Position'	Qualifier Value '1' – '100'
# FileSearchResults example Value = InterfaceName.ReadStatus('FileSearchResults', {'Position': '1'}) InterfaceName.SubscribeStatus('FileSearchResults', None, FeedbackHandler)	

Command	Value		
FolderSearchResults	'String'		
Qualifier Key	Qualifier Value		
'Position'	'1' – '100'		
# FolderSearchResults example Value = InterfaceName.ReadStatus('FolderSearchResults', {'Position': '1'}) InterfaceName.SubscribeStatus('FolderSearchResults', None, FeedbackHandler)			
Command	Value		
HistoryListSearchResults	'String'		
Qualifier Key	Qualifier Value		
'Position'	'1' – '100'		
# HistoryListSearchResults example Value = InterfaceName.ReadStatus('HistoryListSearchResults', {'Position': '1'}) InterfaceName.SubscribeStatus('HistoryListSearchResults', None, FeedbackHandler)			
Command	Value	Value	
Input	'Decoder'	'HDMI'	
# Input example InterfaceName.Update('Input') Value = InterfaceName.ReadStatus('Input') InterfaceName.SubscribeStatus('Input', None, FeedbackHandler)			
Command	Value	Value	
LoopPlay	'On'	'Off'	
# LoopPlay example InterfaceName.Update('LoopPlay') Value = InterfaceName.ReadStatus('LoopPlay') InterfaceName.SubscribeStatus('LoopPlay', None, FeedbackHandler)			
Command	Value	Value	Value
OutputResolution	'576p (50Hz)'	'640x480 (50Hz)'	'640x480 (60Hz)'
	'800x600 (50Hz)'	'800x600 (60Hz)'	'1024x768 (50Hz)'
	'1024x768 (60Hz)'	'1280x1024 (50Hz)'	'1280x1024 (60Hz)'
	'1366x768 (50Hz)'	'1366x768 (60Hz)'	'1600x1200 (50Hz)'
	'1600x1200 (60Hz)'	'1920x1200 (50Hz)'	'1920x1200 (60Hz)'
	'480p (59.94Hz)'	'480p (60Hz)'	'720p (50Hz)'
	'720p (60Hz)'	'1080i (50Hz)'	'1080i (59.94Hz)'
	'1080i (60Hz)'	'1080p (23.98Hz)'	'1080p (24Hz)'
	'1080p (25Hz)'	'1080p (29.97Hz)'	'1080p (30Hz)'
	'1080p (50Hz)'	'1080p (59.94Hz)'	'1080p (60Hz)'
	'720p (59.94Hz)'	'Auto'	'1280x800 (50Hz)'
	'1280x800 (60Hz)'		
# OutputResolution example InterfaceName.Update('OutputResolution') Value = InterfaceName.ReadStatus('OutputResolution') InterfaceName.SubscribeStatus('OutputResolution', None, FeedbackHandler)			
Command	Value	Value	Value
Playback	'Stop'	'Play'	'Pause'
	'Next'	'Previous'	
# Playback example InterfaceName.Update('Playback') Value = InterfaceName.ReadStatus('Playback') InterfaceName.SubscribeStatus('Playback', None, FeedbackHandler)			
Command	Value	Value	
PowerMode	'Full Power'	'Low Power - Standby State'	
# PowerMode example InterfaceName.Update('PowerMode')			

Value = InterfaceName.ReadStatus('PowerMode') InterfaceName.SubscribeStatus('PowerMode', None, FeedbackHandler)			
Command ScreenSaver	Value 'Custom color set via webpage'	Value 'Black Screen'	Value 'Blue Screen with OSD Text'
# ScreenSaver example InterfaceName.Update('ScreenSaver') Value = InterfaceName.ReadStatus('ScreenSaver') InterfaceName.SubscribeStatus('ScreenSaver', None, FeedbackHandler)			
Command Temperature	Value 0 – 100		
# Temperature example InterfaceName.Update('Temperature') Value = InterfaceName.ReadStatus('Temperature') InterfaceName.SubscribeStatus('Temperature', None, FeedbackHandler)			
Command TestPatterns	Value 'Off' 'Crosshatch' 'Grayscale'	Value 'Alternating Pixels' 'Color Bars' 'Ramp'	Value 'Alternating Lines' '4x4 Crosshatch' 'White Field'
# TestPatterns example InterfaceName.Update('TestPatterns') Value = InterfaceName.ReadStatus('TestPatterns') InterfaceName.SubscribeStatus('TestPatterns', None, FeedbackHandler)			
Command VideoMute	Value 'Video Mute'	Value 'Sync and Video Mute'	Value 'Unmute'
# VideoMute example InterfaceName.Update('VideoMute') Value = InterfaceName.ReadStatus('VideoMute') InterfaceName.SubscribeStatus('VideoMute', None, FeedbackHandler)			
Command Volume	Value -100 to 0 in steps of 1		
# Volume example InterfaceName.Update('Volume') Value = InterfaceName.ReadStatus('Volume') InterfaceName.SubscribeStatus('Volume', None, FeedbackHandler)			

¹ Not supported for SMD 101² Display format is the following: HH:MM:SS (HH = Hours, MM = Minutes, SS = Seconds)

Cable and Adapter Requirements

Captive Screw to Captive Screw RS-232 Serial Cable

Notes for the Device

Serial communication

Port Type: RS-232

Baud Rate: 9600

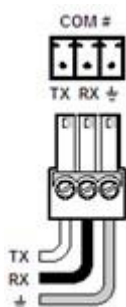
Data Bits: 8

Parity: None

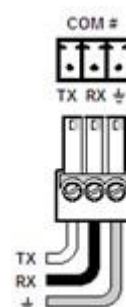
Stop Bits: One

Flow Control: None

Pin Assignments Diagram



Signal	Main Cable	Signal
TxD		TxD
RxD		RxD
GND		GND



Network communication

When configuring the Ethernet module, be sure device settings match those of the Global Scriptor ethernet interface.

Port Type: Ethernet

Default Port: 22023

Logon Credentials Supported: Yes

Default Username: admin

Default Password:

Multi-Connection Undetermined

Capabilities:

Port Changeability: Yes

Ethernet Module Configuration Description

Please refer to user manual for settings and changes to the network communication

Notes for the Device

Appendix A. Set Commands

Aspect Ratio Fill	w1*1ASPR\x0D
Aspect Ratio Follow	w1*2ASPR\x0D
Aspect Ratio Zoom	w1*0ASPR\x0D
Audio Mute Off	0Z
Audio Mute On	1Z
Change Directory None Directory Path testString	wtestString/CJ\x0D
Channel List Update None Type Channel	wGTVPR\x0D
Channel List Update None Type Name	wGTVPR\x0D
Channel List Update None Type URI	wGTVPR\x0D
Channel Preset Recall 1	1T
Channel Preset Recall 999	999T
Channel Preset Recall Step Next	+T
Channel Preset Recall Step Previous	-T
Closed Caption Off	wE1*0SUBT\x0D
Closed Caption On	wE1*1SUBT\x0D
Favorites Item and Folder Update None	wGFAVS\x0D
File and Folder Update None Sort Alphanumeric Directory Current Directory and Below	wdf\x0D
File and Folder Update None Sort Alphanumeric Directory Current Directory Only	wdf\x0D
File and Folder Update None Sort Date Modified Directory Current Directory and Below	wdf\x0D
File and Folder Update None Sort Date Modified Directory Current Directory Only	wdf\x0D
Folder Up One Directory None	w..CJ\x0D
History List Update None	wGHIST\x0D
Input Decoder	1!
Input HDMI	2!
Load File Command None	wU1*file:///FileNamePLYR\x0D
Load Playlist Command None	wL1*file:///PlayListPLYR\x0D
Load Source Command None	wU1*SourceNamePLYR\x0D
Loop Play Off	wR1*0PLYR\x0D
Loop Play On	wR1*1PLYR\x0D
Output Resolution 1024x768 (50Hz)	w14RATE\x0D
Output Resolution 1024x768 (60Hz)	w15RATE\x0D
Output Resolution 1080i (50Hz)	w35RATE\x0D
Output Resolution 1080i (59.94Hz)	w36RATE\x0D
Output Resolution 1080i (60Hz)	w37RATE\x0D
Output Resolution 1080p (23.98Hz)	w38RATE\x0D
Output Resolution 1080p (24Hz)	w39RATE\x0D
Output Resolution 1080p (25Hz)	w40RATE\x0D
Output Resolution 1080p (29.97Hz)	w41RATE\x0D
Output Resolution 1080p (30Hz)	w42RATE\x0D

Global Scriptor Module Communication Sheet

Output Resolution 1080p (50Hz)	w43RATE\x0D
Output Resolution 1080p (59.94Hz)	w44RATE\x0D
Output Resolution 1080p (60Hz)	w45RATE\x0D
Output Resolution 1280x1024 (50Hz)	w16RATE\x0D
Output Resolution 1280x1024 (60Hz)	w17RATE\x0D
Output Resolution 1280x800 (50Hz)	w27RATE\x0D
Output Resolution 1280x800 (60Hz)	w28RATE\x0D
Output Resolution 1366x768 (50Hz)	w18RATE\x0D
Output Resolution 1366x768 (60Hz)	w19RATE\x0D
Output Resolution 1600x1200 (50Hz)	w20RATE\x0D
Output Resolution 1600x1200 (60Hz)	w21RATE\x0D
Output Resolution 1920x1200 (50Hz)	w22RATE\x0D
Output Resolution 1920x1200 (60Hz)	w23RATE\x0D
Output Resolution 480p (59.94Hz)	w24RATE\x0D
Output Resolution 480p (60Hz)	w25RATE\x0D
Output Resolution 576p (50Hz)	w26RATE\x0D
Output Resolution 640x480 (50Hz)	w10RATE\x0D
Output Resolution 640x480 (60Hz)	w11RATE\x0D
Output Resolution 720p (50Hz)	w32RATE\x0D
Output Resolution 720p (59.94Hz)	w33RATE\x0D
Output Resolution 720p (60Hz)	w34RATE\x0D
Output Resolution 800x600 (50Hz)	w12RATE\x0D
Output Resolution 800x600 (60Hz)	w13RATE\x0D
Output Resolution Auto	w00RATE\x0D
Playback Next	wN1PLYR\x0D
Playback Pause	wE1PLYR\x0D
Playback Play	wS1*1PLYR\x0D
Playback Previous	wP1PLYR\x0D
Playback Stop	wO1PLYR\x0D
Power Mode Full Power	w0PSAV\x0D
Power Mode Low Power - Standby State	w1PSAV\x0D
Screen Saver Black Screen	wM1SSAV\x0D
Screen Saver Blue Screen with OSD Text	wM2SSAV\x0D
Screen Saver Custom color set via webpage	wM0SSAV\x0D
Standby Timer 0	wT0SSAV\x0D
Standby Timer 500	wT500SSAV\x0D
Test Patterns 4x4 Crosshatch	w5TEST\x0D
Test Patterns Alternating Lines	w3TEST\x0D
Test Patterns Alternating Pixels	w2TEST\x0D
Test Patterns Color Bars	w6TEST\x0D
Test Patterns Crosshatch	w4TEST\x0D
Test Patterns Grayscale	w7TEST\x0D
Test Patterns Off	w0TEST\x0D
Test Patterns Ramp	w8TEST\x0D

Global Scripter Module Communication Sheet

Revision: 12/11/2019

Test Patterns White Field	w9TEST\x0D
Video Mute Sync and Video Mute	2B
Video Mute Unmute	0B
Video Mute Video Mute	1B
Volume 0	0V
Volume -100	-100V

Appendix B. Update Commands

Aspect Ratio	w1ASPR\x0D
Audio Mute	Z
Channel Preset Recall	T
Closed Caption	wE1SUBT\x0D
Current Clip Length	wZ1PLYR\x0D
Current Directory	wCJ\x0D
Current Playlist Track	wL1PLYR\x0D
Current Source Item	wU1PLYR\x0D
Current Timecode	wK1PLYR\x0D
Input	!
Loop Play	wR1PLYR\x0D
Output Resolution	wRATE\x0D
Playback	wY1PLYR\x0D
Power Mode	wPSAV\x0D
Screen Saver	wMSSAV\x0D
Temperature	w20STAT\x0D
Test Patterns	wTEST\x0D
Video Mute	B
Volume	V