

**SIMPLWINDOWS
NAME:**

xiva Setup Version 4

CATEGORY:

TRANSPORT DECKS

VERSION:

1.0

SUMMARY:

Controls all functions needed for playlist/database setup

GENERAL NOTES:

xiva is a communications protocol which is utilized by multiple manufacturers. Since these different manufacturers use the same communications protocol, this single set of Crestron control modules can be used to control multiple devices made by multiple manufacturers. If the device indicates it is "powered by xiva", then you can probably use this set of modules to control it.

This module provides all controls necessary for setting up playlists, as well as for modifying database contents on the xiva system.

This module must be used in conjunction with the xiva Global Processor module. The Global processor will process all the information received from the xiva system, and will decode the information relevant to setup functions. SETUP-INFORMATION\$ input of this module should be connected to the SETUP-INFORMATION\$ output of the global processor module. Also, the *-MARKER\$ and *-COUNT\$ inputs should be connected to the corresponding outputs of the global processor module.

The principle for modifying database contents is that you will first select an album/artist/genre. Then you can choose to modify the artist name, album name, track name, playlist name, or genre associated with an entry.

The principle for setting up playlists is that you will first browse to an existing database, or choose to create a new database. Then you will browse to an album and select it. Next you can choose to add a single track, or all tracks from that album, or all tracks by that artist, to the existing or new database.

You can browse by either title, artist, category, or playlist. Start by selecting the browse method with the BROWSE-BY-* inputs. As soon as one of these is selected, the first entry found will be displayed at the BROWSE-*\$ outputs. You can then scroll through the selections using the BROWSE-FWD and BROWSE-REV inputs. When you find the entry you want, pulse the BROWSE-SELECT input. If you were browsing by Disc or playlist, pulsing the BROWSE-SELECT input will immediately select the disc. If you were browsing by artist or category, pulsing BROWSE-SELECT will select the currently displayed artist or category, and you will now be browsing through the discs associated with that artist or category. Pressing BROWSE-SELECT a second time will actually select the album.

Note that only certain text fields will be updated depending which type of browsing is being performed. For Browse by disc or category, the disc, artist, and genre fields will be updated. For browse by artist, the disc and artist fields will be updated. For browse by playlist, only the playlist field will be updated. Typically, a separate subpage would be used for each type of browsing to display only the relevant text fields.

In addition to browsing through the available discs, you can also search for the first letter, or up to 20 letters of

a disc, artist, genre, or playlist. Choose the type of search to perform using the BROWSE-BY-* inputs. The letter(s) can be entered two different ways. Using the SEARCH-LETTER-UP, SEARCH-LETTER-DOWN and SEARCH-LETTER/TEXT-ENTER inputs, you can scroll through the letters of the alphabet and select the first letter for which to search. This is useful on small touch panels where space is limited. Using the SEARCH-TEXT-* and SEARCH-LETTER/TEXT-ENTER inputs, you can implement an alpha-numeric keyboard, allowing up to 20 characters to be entered and searched for. This is applicable to larger touch panels. Once a search has been performed, you can use the BROWSE-FWD/REV/SELECT inputs to scroll through the entries and select the desired disc.

This module also implements a scroller for tracks. Using the TRACKS-PER-SCREEN (1d-8d) parameter, you can define how many entries the scroller should have. It can contain from 1 to 8 entries. It will display the available tracks on the disc using the TRACK-* -TITLE\$ outputs. It will allow the direct selection of any of the displayed tracks using the TRACK-* inputs. You can scroll through multiple screens using the TRACKS-FIRST/PREVIOUS/NEXT/LAST inputs.

To limit the number of inputs on this module, the same text keypad inputs (TEXT-*) are used for both searching for albums/artists, as well as entering new database/playlist information.

The procedure for modifying database contents would be as follow:

1. Browse to and select an album or playlist. If an album was selected, it is valid to modify the album name, artist, genre, or current track title. If a playlist was selected, it is only valid to modify the album name, and track title.
2. Select which field you would like to modify, and turn on a text keypad. Use the MODIFY-* inputs
3. Using the keypad, enter the new data. It will be reflected at the TEXT\$ output
4. Now pulse the MODIFY input on the module. The new data will replace the old.

Note that for modifying the Genre, you just select from a list of available genres. You can scroll through this list using the NEW-GENRE-FWD/REV inputs. The new Genre will be reflected at the NEW-GENRE\$ output.

The procedure for deleting database contents would be as follows:

1. Browse to and select an album or playlist. If an album is selected, it is valid to delete the album or current track. If a playlist is selected it is valid to delete the playlist or current track.
2. Pulse the appropriate DELETE-* input. The appropriate entry will be deleted immediately. It would be a good idea to display a warning sub page to confirm the deletion before activating the function.

The procedure for creating a new playlist is as follows:

1. Display a text keypad and allow a new playlist name to be entered. The name will be reflected

- at the TEXT\$ output.
- 2. When the enter button is pressed on the keypad, pulse the CREATE-NEW-PLAYLIST input. The new name will be reflected at the CURRENT-PLAYLIST\$ output.
- 3. Browse to and select the desired album.
- 4. Use the PLAYLIST-ADD-TRACK/ALBUM input to add either the current track, or all tracks on the current album. Some simple progress status will be displayed at the STATUS\$ output. Depending how many tracks are involved, this process may take some time.

The procedure for adding to an existing playlist is as follows:

- 1. Browse to and select a playlist. The name of the selected playlist will be displayed at the CURRENT-PLAYLIST\$ output.
- 2. Browse to and select an album.
- 3. Use the PLAYLIST-ADD-TRACK/ALBUM input to add either the current track, or all tracks on the current album. Some simple progress status will be displayed at the STATUS\$ output. Depending how many tracks are involved, this process may take some time.

See the demo program for an example of how this is implemented.

Several xiva systems can be controlled either using RS232 control, or using TCP/IP control. All sixteen zones can be controlled through a single RS232 port, or a single TCP/IP Client. Due to the large amount of data being transferred, you must enable RTS/CTS handshaking when using RS232 control. If using TCP/IP control, use port number 6789d. You will need to establish the TCP/IP connection before any control will be possible. See the demo program for an example of the TCP/IP application.

**CRESTRON
HARDWARE
REQUIRED:** CNXCOM
ST-COM
CNXENET+
C2-COM

**SETUP OF CRESTRON
HARDWARE:** **For RS232:**
Baud Rate - 38400
Parity - Even
Data Bits - 7
Stop Bits - 1
RTS/CTS handshaking must be enabled

For ethernet communications:
Must have a CNXENET+ card
Use the TCP/IP Client
Use port # 6789d

VENDOR FIRMWARE: xiva-Link Version 1.03
VENDOR SETUP: None
CABLE NUMBER: CNSP-532

CONTROL:

TRACKS-FIRST D Go to the first screen of tracks
TRACKS-PREVIOUS D Go to the previous screen of tracks

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| TRACKS-NEXT | D | Go to the next screen of tracks |
| TRACKS-LAST | D | Go to the last screen of tracks |
| TRACK-* | D | Select a specific track from the list currently displayed |
| BROWSE-BY-DISC | D | Activate browse-by-disc mode |
| BROWSE-BY-ARTIST | D | Activate browse-by-artist mode |
| BROWSE-BY-CATEGORY | D | Activate browse-by category-mode |
| BROWSE-BY-PLAYLIST | D | Activate browse-by-playlist mode |
| BROWSE-FWD/REV | D | Browse to the next or previous entries in the previously selected browsing mode |
| BROWSE-SELECT | D | Select the currently displayed selection |
| MODIFY-ALBUM-NAME | D | Pulse to indicate that the album name will be changed |
| MODIFY-ALBUM-ARTIST | D | Pulse to indicate that the album artist will be changed |
| MODIFY-ALBUM-GENRE | D | Pulse to indicate that the album genre will be changed |
| MODIFY-TRACK-NAME | D | Pulse to indicate that the track name will be changed |
| MODIFY | D | When pulsed, the text currently displayed at the TEXT\$ output will replace whichever parameter was previously selected for modification |
| CANCEL-MODIFY-MODE | D | When pulsed, will clear all of the modification selections |
| PLAYLIST-ADD-TRACK | D | When pulsed, will add the current track to the previously selected playlist |
| PLAYLIST-ADD-ALBUM | D | When pulsed will add all the tracks on the current album to the previously selected playlist |
| CREATE-NEW-PLAYLIST | D | Pulse to create a new playlist with the name reflected at the TEXT\$ output. |
| SEARCH-LETTER-UP/DOWN | D | Increment/decrement the letter for which to search |
| SEARCH-TEXT-* | D | Used to implement a full alpha-numeric keypad for searching |
| SEARCH-LETTER/TEXT-ENTER | D | Pulse to search for the previously entered letter or text string |
| SETUP-INFORMATION\$ | S | Setup information to be routed from the xiva Global Processor module |
| GENRE-MARKER/COUNT\$ | S | Global status information to be routed from the corresponding output of the xiva Global Processor module |
| ARTIST-MARKER/COUNT\$ | S | Global status information to be routed from the corresponding output of the xiva Global Processor module |
| MEDIA-MARKER/COUNT\$ | S | Global status information to be routed from the corresponding output of the xiva Global Processor module |
| PLAYLIST-MARKER/COUNT\$ | S | Global status information to be routed from the corresponding output of the xiva Global Processor module |
| FEEDBACK: | | |
| BROWSE-BY-*-FB | D | Indicates which browse mode was last selected |
| MODIFY-*-FB | D | Indicates which field was selected to be modified |

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| TEXT-* -FB | D | Indicates if shift or shift-lock is active |
| ALBUM-NAME\$ | S | Indicates the title of the current album |
| ALBUM-ARTIST\$ | S | Indicates the artist of the current album |
| ALBUM-GENRE\$ | S | Indicates the Genre of the current album |
| TRACK-NAME\$ | S | Indicates the title of the current track |
| CURRENT-PLAYLIST\$ | S | Indicates which playlist is being added/modified |
| TRACK-* -TITLE\$ | S | Indicates the titles of the tracks on the current album |
| BROWSE-TITLE\$ | S | Indicates the disc title which has been browsed to |
| BROWSE-ARTIST\$ | S | Indicates the disc artist which has been browsed to |
| BROWSE-GENRE\$ | S | Indicates the category which has been browsed to |
| BROWSE-PLAYLIST\$ | S | Indicates the playlist which has been browsed to |
| SEARCH-LETTER\$ | S | Indicates which single letter has been entered for searching |
| TEXT\$ | S | Indicates the string of letters which has been entered for new database contents or searching |
| NEW-GENRE\$ | S | Indicates teh available genres |
| ALBUM-ARTIST/GENRE-MODE | A | Could be used to drive multi-modal buttons indicating which modify options are currently valid. When this output has a value of 0, all options are valid. When this output is 1, only MODIFY-ALBUM-NAME and MODIFY-TRACK-NAME are valid. |
| STATUS\$ | S | Provides simple status while playlists are being created and modified. |
| xiva-TX\$ | S | Serial signal to be routed to a 2-way RS232 port |

OPS USED FOR TESTING: v3.029.cuz
COMPILER USED FOR TESTING: SimplWindows Ver 2.03.18
SAMPLE PROGRAM: xiva Demo Program Version 4
REVISION HISTORY: Version 4 - Removed "add all tracks by artist" function