

**SIMPLWINDOWS
NAME:**

xiva Recording Version 4

CATEGORY:

TRANSPORT DECKS

VERSION:

1.0

SUMMARY:

Controls all recording functions/feedback

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 recording functions and feedback for axiva system. It allows the selection of which tracks to record, as well as what recording quality to use. It also gives access to online lookups for information on new albums.

This module must also 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 the recording functions. This information will be available at the RECORD-INFORMATION\$ output, which should be connected to the RECORD-INFORMATION\$ input of this module.

This module implements a scroller for track selection. 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 RECORD-TRACK-*\$ outputs. It will allow the direct selection of any of the displayed tracks using the TRACK-* inputs, and it will indicate which of the tracks is currently selected using the TRACK-* -FB output. You can scroll through multiple screens using the TRACKS-FIRST/PREVIOUS/NEXT/LAST inputs. You can also select all or none of the tracks on the disc using the SELECT-ALL and SELECT-NONE inputs.

After a disc has been inserted into the xiva system, the information on the disc can be requested by pulsing the REQUEST-RECORD-DATA input. If information about the new disc is not already in the xiva database, it can be requested via an online lookup. To request the xiva system to go online, pulse the GO-ONLINE input. Then pulse the UPDATE-DATABASE input to update all previously missing data. Lookup status will be reflected at the ONLINE-UPDATE-STATUS\$ output.

You can also select the quality of recording. Use the RECORD-QUALITY-UP/DOWN inputs to scroll through the available qualities. The quality information will be reflected at the RECORD-TYPE\$/BPSS\$/BITS\$/FREQUENCY\$/FREE-SPACE\$ outputs. Higher quality recordings will result in less space available on the system.

Once the tracks have been selected, recording can be started using the RECORD input. Recording status will show which track is currently being recorded, as well as the total number of tracks being recorded. If it is desired to stop the recording process, you can pulse the ABORT-RECORD input. Keep in mind that while recording is in progress, other functions on the xiva system may react

more slowly, and data could be missed. Therefore it is advisable to limit the use of other xiva functions while recording is in progress.

Note that before doing any recording, the ENABLE-RECORD-UPDATES input should be pulsed. This will cause the xiva system to send real-time status updates to the Crestron system. Typically, this input would be pulsed when entering the recording page on the touch panel.

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:

SELECT-ALL	D	Pulse to select all tracks for recording
SELECT-NONE	D	Pulse to select no tracks for recording
TRACKS-FIRST	D	Go to the first screen of tracks
TRACKS-PREVIOUS	D	Go to the previous screen of tracks
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
RECORD	D	Pulse to begin recording the selected tracks
ABORT-RECORD	D	Pulse to abort the recording process
REQUEST-RECORD-DATA	D	Pulse to read the information from the disc, and display the track titles on the touch panel
LOAD/EJECT-ALBUM	D	Pulse to load or eject the current disc
GO-ON/OFFLINE	D	Pulse to request the xiva system to go on or offline. You must go online before using the UPDATE-DATABASE input.

UPDATE-DATABASE	D	Pulse to request a lookup of all the missing data for all albums on the xiva system
RECORD-QUALITY-UP/DOWN	D	Pulse to scroll through the available compression options for recording.
ENABLE-RECORD_STATUS	D	Pulse to enable real-time updates for this recording. Must be done for feedback to be displayed properly
DISABLE-RECORD-STATUS	D	Pulse to disable real-time status updates for this recording
AUTO-DISCONNECT	D	If held high, when using a modem connection for updates, it will cause the modem to disconnect automatically when the lookup is finished
RECORD-INFORMATION\$	S	Record status information to be routed from the xiva Global Processor module
TRACKS-PER-SCREEN (1D-8D)	P	Indicates how many tracks are to be diaplyed per screen

FEEDBACK:

TRACK-* -FB	D	Indicates which of the displayed tracks is currently selected
RECORD-FB	D	Indicates when recording is in progress
RECORD-ALBUM-NAME\$	S	Indicates the title of the album to be recorded
RECORD-ALBUM-ARTIST\$	S	Indicates the artist of the album to be recorded
RECORD-ALBUM-GENRE\$	S	Indicates the genre of the album to be recorded
CURRENT-RECORD-TRACK	A	Analog signal indicating which track is currently recording
TOTAL-RECORD-TRACK	A	Analog signal indicating the total number of tracks to be recorded
RECORD-* \$	S	Indicates information related to the quality of the recording
ONLINE-UPDATE-STATUS\$	S	Indicates the progress of an online lookup
CONNECTION-STATUS\$	S	Indicates the state of the modem connection (if used)
ALBUMS-LOOKED-UP\$	S	Indicates the total number of albums that were looked up
ALBUMS-NOT-FOUND\$	S	Indicates the number of albums that were not identified in the online lookup
RECORD-TRACK-* \$	S	Contains the names of the appropriate track
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 - Corrected a problem with extra characters being displayed in one of the Record Quality text fields