

SIMPLWINDOWS NAME: Linn Genki

CATEGORY: CD

VERSION: 1.0

SUMMARY: Controls all basic functions on a Linn Genki CD Player

GENERAL NOTES: This module will control a Linn Genki CD Player. This device must be polled for status. There are three types of polling:

1. Use the POLL-ALL input to poll all the parameters of the Ikemi. This should only need to be done once, upon startup of the system, to get the Crestron system in synch with the Ikemi. The POLL-ALL-BUSY output will be high while this poll is in progress.
2. Poll the transport status using the POLL-TRANSPORT input. This will return the current stats of play/stop/pause. If used, this input should be driven by an Oscillator with a high time of .1 sec and a low time of 1.9 sec. It is only necessary to enable this polling while the touch screen is actually displaying a CD control screen.
3. Poll the current track using the ENABLE-TRACK-POLL input. You should put a 0 or a 1 on this input, to enable/disable track polling respectively. If a 1 is on this input, whenever the transport is polled, (using the POLL-TRANSPORT input), the track will also be polled.

Note that Crestron must wait for a reply to every command before sending the next command. Therefore, the speed at which we can send commands to the Ikemi is limited by the Ikemi. Some commands which are known to take a significant amount of time to execute are:

1. INTRO-PLAY-ON - Can take at least 6 seconds to execute
2. RANDOM-PLAY-ON - Can take at least 20 seconds to execute
3. SHUFFLE-PLAY-ON - Can take at least 20 seconds to execute

This module will prevent any other commands from being sent to the Genki while the previous command is being executed. The BUSY output will be high while a command is being executed.

CRESTRON HARDWARE REQUIRED: CNXCOM,
ST-COM

SETUP OF CRESTRON HARDWARE: Baud Rate -9600
Parity - Even
Data Bits - 7
Stop Bits - 1

VENDOR FIRMWARE: None

VENDOR SETUP: None

CABLE NUMBER: Use the cable that is included with the Genki

CONTROL:

PLAY	D	Issues Play command
STOP	D	Issues Stop command
PAUSE	D	Issues Pause command
SEARCH-PREV	D	Searches backward within a track as long as button is held
SEARCH-NEXT	D	Searches forward within a track as long as button is held
TRACK-PREV	D	Reverses Disc One Track
TRACK-NEXT	D	Advances Disc One Track
INDEX-PREV	D	Reverses To Previous Index
INDEX-NEXT	D	Advances To Next Index
TRACK-KEY-0-9, CLEAR	D	Keypad used to enter a new track number. Track entered will be reflected at the NEW-TRACK-NUMBER output
TRACK-KEY-ENTER	D	Pulse to activate the track entered
VOLUME-UP/DOWN	D	Raise of lower volume while held high. Current volume level will be reflected at the VOLUME-BAR output
VOLUME-MUTE-ON/OFF-TOG	D	Activate/Deactivate the volume mute function
BALANCE-LEFT/RIGHT/CENT	D	Adjust balance to left, right or center. Relative balance position will be reflected at the BALANCE-BAR output
INTRO-PLAY-ON/OFF	D	Activates/Deactivates Intro Play Mode
DIGITAL-OUTPUT ON/OFF	D	Activates/Deactivates the digital output
RANDOM-PLAY-ON/OFF	D	Activates/Deactivates Random Play Mode
SHUFFLE-ON/OFF	D	Activates/Deactivates Shuffle Play Mode
PROGRAM-CLEAR	D	Clears current program in Genki
REPEAT-ON/OFF	D	Activates/Deactivates Repeat Function
REPEAT-START/END	D	Sets the repeat start and end points
IR-ON/OFF	D	Enable/Disable control from the IR Remote
POLL-TRANSPORT	D	Pulse to poll the transport status
ENABLE-TRACK-POLL	D	Use a 0 or 1 to enable/disable track polling whenever transport status is polled
POLL-ALL	D	Pulse once on startup to poll all settings for the Genki
GENKI-RX\$	S	Serial signal to be routed from a 2-way RS232 port

FEEDBACK:

BUSY	D	High while a command is being executed
POLL-ALL-BUSY	D	High while a POLL-ALL is in progress
NO-DISC-ERROR	D	No disc is loaded
PLAY-FB	D	Disc is playing
STOP-FB	D	Disc is stopped
PAUSE-FB	D	Disc is paused
CURRENT-TRACK-NUMBER	A	True feedback indicating the track currently playing
NEW-TRACK-NUMBER	A	Indicates the new track number being entered
VOLUME-BAR	D	Indicates the current volume level. Should be routed to a bargraph on a touchpanel

VOLUME-MUTE-FB	A	Indicates when mute is active
BALANCE-BAR	S	Indicates the relative balance position. Should be routed to a single line bar display on a touchpanel
BALANCE-DISPLAY\$	D	Text indicating the current balance setting from -9 to 9. Could be routed to an indirect text field on a touchpanel
INTRO-PLAY-ON/OFF-FB	D	Indicates the state of intro play
DIGITAL-OUTPUT-ON/OFF-FB	D	Indicates the state of the digital output
RANDOM-PLAY-ON/OFF-FB	D	Indicates the state of random play
SHUFFLE-ON/OFF-FB	D	Indicates the state of shuffle play
REPEAT-ON/OFF-FB	D	Indicates the state of the repeat function
REPEAT-START/END-FB	D	Repeat start/end points set
REPEAT-BAD-COMMAND-FB	D	Error issued when bad repeat command is issued
IRON/OFF-FB	D	Indicates IR control is enabled/disabled
GENKI-TX\$	S	Serial signal to be routed to a 2-way RS232 port

.UPZ FILE USED FOR TESTING: 5.12.01x.upz
COMPILER USED FOR TESTING: SimplWindows Version 1.52.01
SAMPLE PROGRAM: Linn Genki Demo Program
REVISION HISTORY: None