



SqueezeCenter Player Control Module Application Guide

****Please be Sure to Read Setup & Programming Recommendations on Page 2****

Description

This module allows any Ethernet-equipped Crestron 2-series processor to control a compatible player associated with a Squeezebox Server. Multiple players may be controlled using multiple instances of this module.






Although this module is expected to work across the spectrum of players and server configurations that are available, ControlWorks Consulting is only able to support this module when used in conjunction with a Windows PC-based implementation of the Squeezebox Server software and a SlimDevices/Logitech Squeezebox, Duet, Boom, Radio, Touch, or Transporter.

Before implementing this module you should have the Squeezebox Server software installed and running with at least one player associated with the Server. You should also have an understanding of the operation of the Server and Player. ControlWorks does not provide support for software that is not provided by ControlWorks.

Please note that at this time it is only possible to control a player that is associated with a Squeezebox Server. It is not possible to control a player on a standalone basis or a player associated with the MySqueezebox.com.

Supported Processors

This module is supported on any 2-series processor with Ethernet. Control of the player or server via infrared (IR) or serial connection is not supported by this module.

Compatibility			Processor Requirements	
 2-Series Compatible	 NOT CNMSX Compatible	 NOT System Builder Compatible	 Ethernet REQUIRED	 Compact Flash NOT NEEDED

Setup & Programming Recommendations

*We recommend that this module be used with any of the players that come with an IR remote. It will work with the Duet, but the Duet lacks some commands in the firmware (mainly IR related) that can cause some confusion.

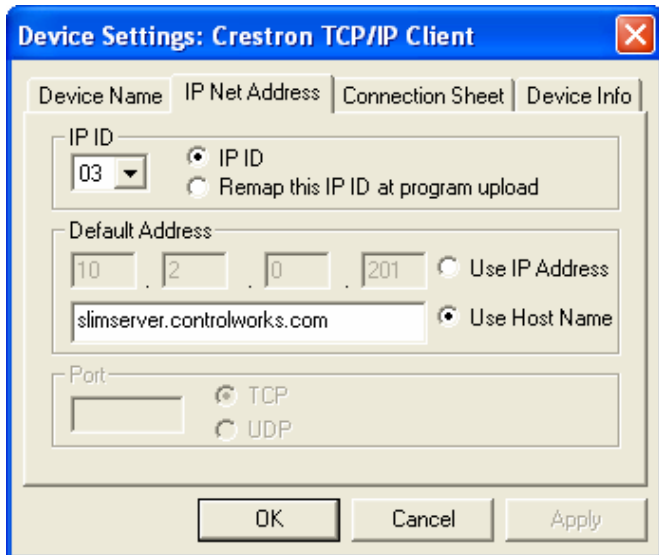
*We have had reports, and have been able to reproduce ourselves, communication issues when our module is used with Squeezebox Server installed on a Windows Vista PC. The issue is that the Vista PC will ignore polling requests for extended periods of time and then spit out all of the responses at once. This causes a buffer overflow to show up in your error log and will also cause the module to slow down and even cease to operate at times. We have communications started with the developers of Squeezebox Server and will report if and when there is any update to this problem.

*Although more than one squeezebox can be controlled when multiple instances of this module are used, it is recommended to only control one squeezebox if possible. If more than one squeezebox is to be controlled, be sure to use one TCP/IP module for each player and only allow the "Connect" input of the TCP/IP modules to be active when its respective player is in use.

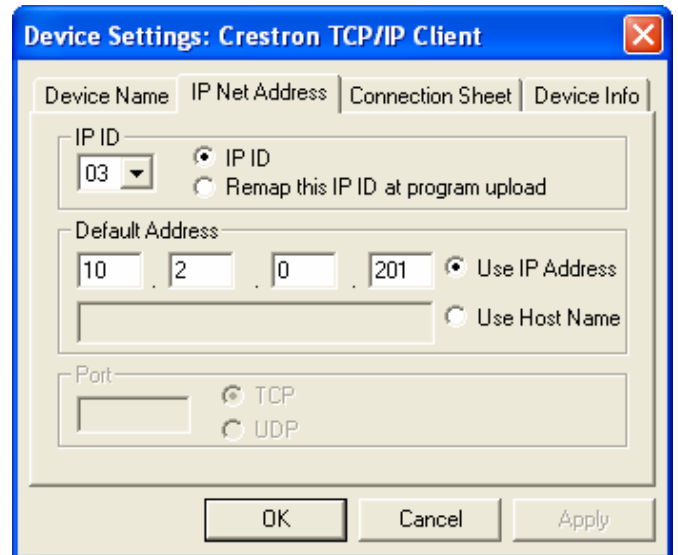
*You'll notice a new parameter named "Time Update Interval". This should be used whenever possible. If you are not displaying the [track_time_elapsed_in_seconds] or [track_progress_fb] on your panels then set this parameter to "Never". This was put in place due to processors low in memory having issues with the constant polling. If you would like to display the track progress with a gauge only then setting this to a higher number than "1 Second" will still look nice and cut the polling down drastically.

Ethernet Configuration Information

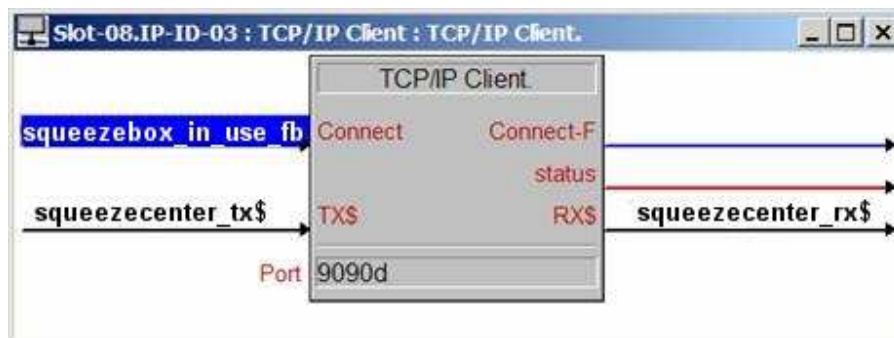
This module requires one TCP/IP client connection to the CLI port on the PC running the Squeezebox Server software, CLI port unless changed from the default is 9090. Ensure that the IP address or host name in the IP table is that of the hardware running the Squeezebox Server software and *not* that of an individual player.



or



The connection to the Squeezebox Server should be kept open at all times once established. This allows for the module to receive unsolicited status feedback and also improves the perceived performance of the module. However, if more than one player will be tied into your Crestron system, it is recommended to close each connection when it's respective player is not in use.

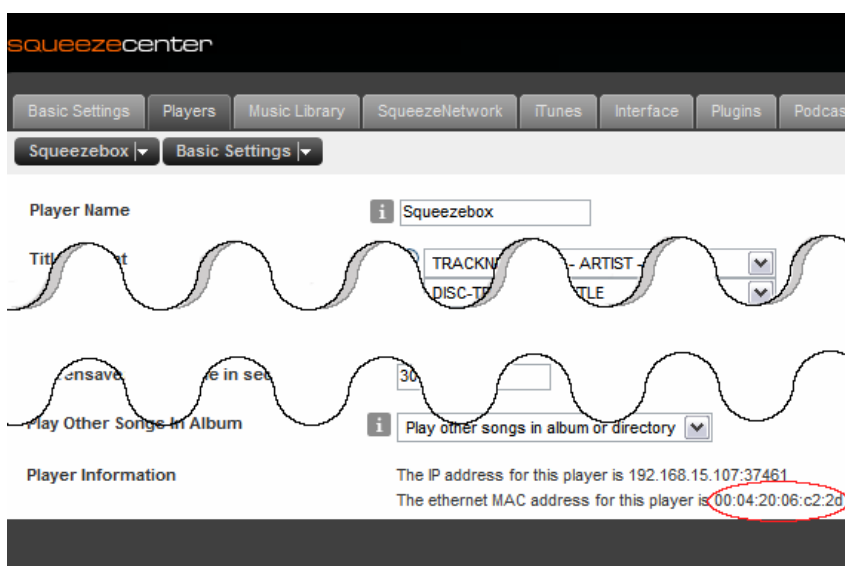


Module Application

It is important to note that this module includes a player ID parameter; for the module to function properly, the Player ID must match the Player ID (which is typically, but not always, the Ethernet MAC address) of a player associated with the Squeezebox Server.

The Player ID parameter is case sensitive; the most reliable way to determine the Player ID is to copy it from the "Player Information" page from the Squeezebox Server's web administration console. To do this:

- 1) Open an Internet browser and access the page <http://servername:9000/> where "servername" is the name or IP address of the hardware running the Squeezebox Server software.
- 2) In the lower right, click the "Settings" button
- 3) Click on the "Players" Tab and then locate the player that you wish to control. If the player has been previously given a name, the name will be displayed; otherwise the player's IP address will be displayed.
- 4) Once the player has been selected, the settings for that player will be displayed. The player ID is located at the bottom of this pane. The Player ID parameter must be entered exactly as shown on this page.



If the player_connected_fb digital output remains low even when the player is connected, the first detail that should be verified is that the value Player ID parameter of the module exactly matches that of the desired player. The MAC address is case sensitive so a player ID of 00:04:20:06:c2:2d is not equivalent to 00:04:20:06:C2:2D.

It is suggested that a "1" be placed on the [subscribe_to_status_updates](#) digital input of all modules. If it is necessary to control subscriptions, you should use this input on one player module and place a "0" on all other modules. If you elect not to subscribe to status updates, some player feedback, including current track information will not function as expected. If a "1" is placed on this input, the module will subscribe to status updates when the program is first started and every 5 minutes thereafter.

Note about Internet Radio and Music Apps

Version 2 (and later) of this module supports control of Squeezebox Server Streaming Music Plug-ins. Due to the fact that these plug-ins request information from the Internet (both for playing back audio and providing lists of available content), you may notice a delay between making a request and seeing the results of that request, especially on slower Internet connections or during periods of heavy use. In order to take advantage of Internet Radio plug-ins you *must* be running Squeezebox Server Version 7.2.0 (Windows) or later.

Not all Internet Radio streams or Podcasts report the same meta data; this means for example that any given podcast may be lacking a title or the `track_total_time_in_seconds` and `track_progress_fb` outputs may report 0.

Transporter External Inputs

This module includes 4 digital inputs to activate the digital audio inputs that are present on the audiophile-grade Transporter. These inputs should only be used when the target player is a Transporter; they will not work when used for a different player (i.e. a SqueezeBox) and the player may react erratically.

Monitoring the Squeezebox Server Connection

The Squeezebox Server software does not provide an indication when the software (or hardware running the software) is being shut down. Should this information be necessary in your application, it will be necessary to build logic that monitors the "connect-fb" digital output of the TCP/IP Client symbol in SIMPL Windows.

Signal and Parameter Descriptions

Bracketed signals such as "[signal_name]" are optional signals

DIGITAL INPUTS

subscribe_to_status_updates.....	Required. Determines if the player will provide unsolicited feedback. See note above for further details.
[poll_for_status_now].....	Pulse to manually poll for the current status of the player.
[power_on]	Pulse to turn the player's power on
[power_off]	Pulse to turn the player's power off
[power_toggle]	Pulse to toggle the player's power
[play]	Pulse to send the Play command to the player
[stop]	Pulse to force the player to Stop playback
[pause_on].....	Pulse to force the player into the "Pause" mode
[pause_off]	Pulse to force the player out of the "Pause" mode
[pause_toggle]	Pulse to toggle the player's pause state
[previous_track]	Pulse to go to the previous track in a playlist; if the first track is reached, the player will wrap to the last track.
[next_track]	Pulse to go to the next track in a playlist; if the last track is reached, the player will wrap to the first track
[player_shuffle_off].....	Pulse to disable shuffle mode
[player_shuffle_songs]	Pulse to shuffle by song
[player_shuffle_albums]	Pulse to shuffle by album
[player_repeat_none]	Pulse to repeat no tracks
[player_repeat_one].....	Pulse to repeat the current track
[player_repeat_all].....	Pulse to repeat all tracks in a playlist
[volume_up].....	Ramp the player's volume up
[volume_down].....	Ramp the player's volume down
[volume_mute]	Pulse to mute or unmute the player's audio output
[browse_home]	Pulse to generate the "Home" browse menu, which provides options to browse Songs, Albums, Artists, etc.
[browse_songs]	Pulse to browse available songs, equivalent to touching the "Browse Songs..." option on the home browse screen.
[browse_artists].....	Pulse to browse available artists, equivalent to touching the "Browse Artists..." option on the home browse screen.
[browse_albums]	Pulse to browse available albums, equivalent to touching the "Browse Albums..." option on the home browse screen.
[browse_genres]	Pulse to browse available playlists, equivalent to touching the "Browse Playlists..." option on the home browse screen.
[browse_playlists]	Pulse to browse available playlists; equivalent to touching the "Browse Playlists..." option on the home browse screen
[browse_radio]	Pulse to browse available Internet Radio plugins; equivalent to touching the "Browse Radio..." option on the home browse screen.
[browse_back].....	Pulse to go back one level when browsing
[scroll_first]	Pulse to scroll to the first screen of results
[scroll_previous]	Pulse to scroll back one screen of results
[scroll_next].....	Pulse to scroll forward one screen of results
[scroll_last].....	Pulse to scroll to the last screen of results

[line_select_play_now]	Valid only when browsing or searching songs. Pulse to dump the currently playing playlist and play the selected track immediately.
[line_select_play_next]	Valid only when browsing or searching songs. Pulse to play the selected song immediately after the currently playing song has finished.
[line_select_play_last]	Valid only when browsing or searching songs. Pulse to add the song to the end of the current playlist.
[select_line1...15]	Pulse to select the information displayed on the selected line.
[play_line1...15]	Pulse to play the information displayed on the selected line and clear the current playlist.
[add_line1...15]	Pulse to add the information displayed on the selected line to the current playlist.
[search_now]	Pulse to perform a search of the Squeezebox Server database looking for [search_string\$]
[search_artist]	Pulse to look for [search_string\$] in artist fields when searching
[search_by_song]	Pulse to look for [search_string\$] in song title fields when searching
[search_by_album]	Pulse to look for [search_string\$] in the album name when searching
[search_by_genre]	Pulse to look for [search_string\$] in the genre field when searching
[search_by_playlist]	Pulse to look for [search_string\$] in the playlist name when searching
[transporter_input_balanced_aes-ebu]	Pulse to activate the AES-EBU external input [Valid on Transporter only]
[transporter_input_bnc-spdif]	Pulse to activate the BNC SPDIF external input [Valid on Transporter only]
[transporter_input_rca-spdif]	Pulse to activate the RCA SPDIF external input [Valid on Transporter only]
[transporter_input_toslink]	Pulse to activate the optical Toslink external input [Valid on Transporter only]
[fav_delete_line1...15]	Pulse to delete the "favorite" displayed on the selected line from the Squeezebox Server favorites list
[clear_queue]	Pulse to clear the current queue and stop playback
[love_track]	Pulse to tell the Pandora, Slacker, or Last.FM service to add the currently playing song to your list of "liked" songs
[ban_track]	Pulse to tell the Pandora, Slacker, or Last.FM service to add the currently playing song to your list of "disliked" songs.
[add_to_favorites]	Pulse to store the currently playing track to your list of Favorites. If you are on an internet radio station it will store the station but label the favorite as whatever is in the "Title" field.
[create_pandora_station]	Pulse after entering an artist or song name to instantly create and start playing a new Pandora station
[scan_database]	Pulse to update your Squeezebox Server database
[close_keyboard]	Pulse to hide the Pandora or rhapsody keyboard page
[randomplay_tracks]	Pulse to play a random selection of tracks
[randomplay_albums]	Pulse to play a random album
[randomplay_contributors]	Pulse to play tracks from a random artist
[randomplay_year]	Pulse to play tracks from a random year

ANALOG INPUTS

[volume_level_slider]	Full range input to set the volume level on the player
[track_progress_slider]	Full range input to force the player to a specific location within a track (NOTE: Some players react erratically to this input, in addition some versions of VisionTools do not properly support transparent sliders)
[scroll_slider]	Full range input to allow the user to jump to an arbitrary location within the results list; functions like a scroll bar in Windows.

SERIAL INPUTS

squeezecenter_rx\$	Tie to the RX\$ line of the TCP/IP client symbol
[search_string\$]	Contains the string to search for when [search_now] is pulsed. Typically tied to an ASCII PAD.

DIGITAL OUTPUTS

[player_connected_fb]	High when the Squeezebox Server reports that the player is connected (Occasionally the Squeezebox Server may still believe that a player is connected even when it is disconnected).
[player_power_on_fb]	High when the Squeezebox Server reports that the player's power is on
[player_power_off_fb]	High when the Squeezebox Server reports that the player's power is off
[player_mode_play_fb]	High when the player is reported to be playing
[player_mode_stop_fb]	High when the player is reported to be stopped
[player_mode_pause_fb]	High when the player is reported to be paused
[player_shuffle_off_fb]	High when the player is not shuffling
[player_shuffle_songs_fb]	High when the player is shuffling songs
[player_shuffle_albums_fb]	High when the player is shuffling albums
[player_repeat_none_fb]	High when the player is not repeating any songs
[player_repeat_one_fb]	High when the player is repeating one song
[player_repeat_all_fb]	High when the player is repeating all songs in a playlist
[browse_back_enable_fb]	High when it is possible to browse back a level
[scroll_first_enable_fb]	High when it is possible to scroll to the first screen of results
[scroll_previous_enable_fb]	High when it is possible to scroll to the previous page of results.
[scroll_next_enable_fb]	High when it is possible to scroll to the next page of results.
[scroll_last_enable_fb]	High when it is possible to scroll to the last page of results.
favorites_delete_controls_enable_fb	High when browsing the music library and permits playing deletion of a selection
play_now_controls_enable_fb	High when browsing the music library and permits playing a music directory and adding items to the current playlist.
[playlist_controls_enable_fb]	High to indicate that playlist management controls are available (when browsing or searching songs outside of an album or playlist). See the demo program for the suggested use of this signal.
[line_select_play..._fb]	High when selecting a song will cause the behavior described in for the corresponding [line_select_play...] digital input
[select_line1...15_fb]	Feedback to indicate when the selected line is active.

[search_cancel]	Pulsed when any active search should be canceled (typically when the user selects a different browse mode)
[search_by_artist_fb]	High when searches would be conducted by artist name
[search_by_song_fb]	High when searches would be conducted by song name
[search_by_album_fb]	High when searches would be conducted by album name
[search_by_genre_fb]	High when searches would be conducted by genre name
[search_by_playlist_fb]	High when searches would be conducted by playlist name
[show_category_art]	High when you are on the main menu. This drives the subpage that contains the category artwork.
[show_love/ban_controls]	High when extra controls for Pandora, Slacker, & Last.FM are needed. This drives the subpage for the "Love Track" & "Ban Track" buttons.
[show_search_keyboard]	High when doing a search within online music apps
[playing_from_pandora_fb]	High when a song is playing from the Pandora service
[playing_from_lastfm_fb]	High when a song is playing from the Last.fm service
[playing_from_slacker_fb]	High when a song is playing from the Slacker service
[playing_from_rhapsody_fb]	High when a song is playing from the Rhapsody service
[playing_from_napster_fb]	High when a song is playing from the Napster service
[playing_from_mediafly_fb]	High when a song is playing from the Mediafly service
[scanning_database]	High when a database scan is in progress

ANALOG OUTPUTS

[volume_level_fb]	Full range analog value containing the current volume level of the player
[track_time_elapsed_in_seconds]	Analog value representing the number of seconds that have elapsed in the currently playing track
[track_total_time_in_seconds]	Analog value representing the total number of seconds in the currently playing track
[track_progress_fb]	Full range analog value representing the percentage position of the current track
[scroll_position_fb]	Full range analog value representing the position (0-100%) within the currently displayed results
[line1...15 play/add_state]	Represents whether or not the play/add buttons should show for its respective line. (a value of 1 = show button and a value of 0 = hide button)
[line1...10_icon]	Used to drive the multistate graphics for the category art 0d=No Icon, 1d=Songs, 2d=Artists, 3d=Albums, 4d=Genres, 5d=Playlists, 6d=Radio & Sirius, 7d=Favorites, 8d=Rhapsody, 9d=Slacker, 10d=Podcasts, 11d=Pandora, 12d=Last.FM,

SERIAL OUTPUTS

squeezecenter_tx\$	Tie to TX\$ line of TCP/IP client symbol
[current_albumcover\$]	Album cover art address for dynamic graphic
[player_name\$]	Indicates the name of the player as assigned in the Squeezebox Server software

[current_track_title\$]	Title of the track that is currently playing. For Internet Radio stations this is often the artist name AND title of the current track.
[current_track_artist\$]	Name of the artist that is currently playing. For Internet Radio stations this is often the name of the station or the URL of the file, if specified.
[current_track_album\$]	Name of the album that is currently playing
[current_track_genre\$].....	Name of the genre that is currently playing
[current_station_playlist\$]	Name of the station or playlist that is currently playing
[line1...15_text\$]	Text associated with each line

PARAMETERS

Player ID.....	Enter the player ID, typically the MAC address, of the player that you would like to control. The MAC address is case sensitive.
Ramp Time.....	The time, in seconds, to ramp from 0 to 100% for volume adjustments
Lines To Display	The number of lines of information to output; the minimum setting is six lines (6d), the maximum is fifteen lines (15d)
Main Menu Line 1...10	Allows customization of the main menu. Put items in any order or delete specific items on the main menu.
Time Update Interval.....	Allows customization of the amount of delay between requests for the currently playing songs progress time (for the song progress bar). Default is 1s and there are options for 5s and 10s. This has been found to help with systems that are low in memory.
Server IP and Port.....	The IP address of the PC that Squeezebox Server is running on with port number. The standard port number is 9000. An example of this would be 10.2.0.201:9000. This is being used to retrieve the album art information.

Support

This module is supported by ControlWorks Consulting, LLC. Should you need support for this module please email support@controlworks.com or call us at 440-449-1100. ControlWorks normal office hours are 9 AM to 5 PM Eastern, Monday through Friday, excluding holidays.

Before calling for support, please ensure that you have loaded and tested operation using the included demonstration program and touchpanel(s) to ensure that you understand the correct operation of the module. It may be difficult for ControlWorks to provide support until the demonstration program is loaded.

Updates, when available, are automatically distributed via Email notification to the address entered when the module was purchased. In addition, updates may be obtained using your username and password at <http://www.thecontrolworks.com/customerlogin.aspx>.

Distribution Package Contents

The distribution package for this module should include the following files.

For this module:

Squeezecenter_Demo_Program_v9.smw Demo program for PRO2 processor
Squeezecenter_Player_Control_v9_Help.pdf Help file for Player Control module
Squeezecenter_Player_Control_v9.umc Crestron User Module for Player Control
cw_squeezecenter_player_engine_v9.usp SIMPL+ file used within the player control module
cw_squeezecenter_engine_v9.ush SIMPL+ header file
cw_squeezecenter_null_string_v9.usp SIMPL+ file used within the player control module
cw_squeezecenter_null_string_v9.ush SIMPL+ header file

For other modules included in this package:

Squeezecenter_IR_Emulation_v9.umc Crestron User Module for Emulation of remote control functions
Squeezecenter_Player_Text_Display_v9.umc Crestron User Module to display user-defined text on a player.
cw_squeezecenter_display_engine_v9.usp SIMPL+ file used within the player text display module
cw_squeezecenter_display_engine_v9.ush SIMPL+ header file
Squeezecenter_IR_Emulation_v9_Help.pdf Help file for IR Emulation module
Squeezecenter_Player_Text_Display_v9_Help.pdf Help file for Player Text Display module

Revision History

V9 steve@controlworks.com 2009.11.19

- Added Media Fly Support
- Added Napster Support
- Added SIRIUS Radio to Main Menu Parameters since it is no longer located within the Internet Radio menu structure
- Added ability to search within Mediafly and Napster
- Added ability to create a station in Last.FM
- Removed parameter used to define one or more players (no longer needed)
- Updated album art retrieval so it now works reliably with multiple players
- Combined all music services keyboards into one
- Fixed some bugs that popped up with Squeezebox Server v7.4
- Added "RandomPlay" commands for tracks, albums, contributors, and year.

V8 steve@controlworks.com 2009.07.06

- Consolidated a large portion of the S+ code to make the module more efficient
- Added Last.FM support
- Added ability to search within Rhapsody
- Added ability to create a station within Pandora
- Added ability to create a station within Last.FM
- Added "scan_database" input to add the ability to rescan the library
- Added "scanning_database" output to give feedback for when a scan is in progress
- Added "cur_station_playlist\$" output which provides the current station or playlist
- Added parameter to give options for the song progress update time so if just a progress bar is being used the polling frequency can be reduced.
- Added "close_keyboard" digital signal to provide an easy way to hide the keyboard subpages
- Added "add_to_favorites" digital signal to provide a way for the players without IR control to save the currently playing song to favorites.
- Changed "[show_pandora_controls]" to "[show_love/ban_controls]" and "[pandora_thumbs_up] & [pandora_thumbs_dwn]" to "[love_track] & [ban_track]" so these commands can now also be used with Slacker and Last.FM
- Fixed "add_to_favorites" so it now stores the current playlist or station name if available.
- Fixed some bugs that popped up in Slacker with the latest CLI change
- Fixed odd scrollbar behavior
- Fixed buggy "Browse Back" functionality
- Fixed bug that prevented scrolling within Internet Radio sections
- Changed Fonts to more commonly used fonts that are already installed on most PCs
- Updated UI to provide new functions/buttons and separate keyboard subpages for Search, Rhapsody, & Pandora

V7 steve@controlworks.com 2008.09.22

- Fixed bug that prevented using Internet Radio with SqueezeCenter 7.0.1 and up
- Fixed false scroll bar feedback readings when at top of list
- Fixed bug where scrolling of Genres stopped working
- Fixed bug where Live365 stopped working
- Made the main menu configurable (See Parameters)
- Added cover art support for any service providing it

SqueezeCenter Player Control v9

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ControlWorks Consulting, LLC

<http://www.controlworks.com>

- Added Rhapsody support
- Added Slacker support
- Added Podcast support
- Added Pandora support
- Added Category Icons to the GUI (Multi-Mode images)
- Updated the look of the example GUI

V6 steve@controlworks.com 2008.06.12

- Fixed issue where tracks would be arranged alphabetically instead of by track once the list was scrolled

V5 steve@controlworks.com 2008.03.13

- Changed module name to SqueezeCenter due to the change of software name
- Added ability to clear the current Queue
- Added ability to play an entire artist, album, genre, playlist
- Added ability to add an artist, album, genre, playlist, or track to current playlist
- Added dynamic graphic generation for current playing song
- Added ability to browse, select, and delete "favorites"
- Fixed issue where title and artist were not properly displayed for radio stations

V4 lincoln@controlwoks.com 2008.01.11

- Added documentation for browse_genres, search by genres, line_select feedback, and playlist_controls_enable_fb

V4 lincoln@controlworks.com 2007.05.10

- Added [scroll_slider] input to allow arbitrary scrolling
- Added "please wait" notification when requesting results from an Internet radio plugin.
- Corrected behavior when scrolling through playlists
- Revised behavior of Live365 radio support. Note that at this time Live365 can not be reliably supported.

V3 lincoln@controlworks.com 2007.02.20

- Added Transporter digital input selection
- Changed behavior when parsing responses for Internet Radio to increase Podcast reliability
- Removed note about searching for playlists since problem seems to be resolved in SlimServer version 6.5.1 (windows)

V2 lincoln@controlworks.com 2006.11.01

- Added Internet Radio Support*
- Added ability to browse tracks within playlists*
- Added ability to select tracks from playlists (now same behavior as when an album is selected)*
- Noted problem with searching for playlists in 6.5.0

*- These changes require SlimServer Version 6.5.0 or later (Windows)

V1 lincoln@controlworks.com 2006.10.08
-Initial release

Development Environment

This version the module was developed on the following hardware and software. Different versions of hardware or software may or may not operate properly. If you have questions, please contact us.

SlimDevices	Software Version
Squeezebox Server	7.4.1
Crestron Hardware	Firmware Version
Crestron PRO2 Processor	4.001.1012
Software	Software Version
Crestron SIMPL Windows	2.11.27
Crestron Vision Tools Pro-e	4.0.11
Crestron Database	20.08.003.00
Device Database	20.09.002.00
Crestron Symbol Library	636
Crestron Device Library	636

ControlWorks Consulting, LLC Module License Agreement

Definitions:

ControlWorks, *We*, and *Us* refer to ControlWorks Consulting, LLC, with headquarters located at 701 Beta Drive, Suite 22 Mayfield Village, Ohio 44143-2330. *You* and *Dealer* refer to the entity purchasing the module. *Client* and *End User* refer to the person or entity for whom the Crestron hardware is being installed and/or will utilize the installed system. *System* refers to all components described herein as well as other components, services, or utilities required to achieve the functionality described herein. *Module* refers to files required to implement the functionality provided by the module and may include source files with extensions such as UMC, USP, SMW and VTP. *Demo Program* refers to a group of files used to demonstrate the capabilities of the Module, for example a SIMPL Windows program and VisionTools Touchpanel file(s) illustrating the use of the Module but not including the Module. *Software* refers to the Module and the Demo Program.

Disclaimer of Warranties

ControlWorks Consulting, LLC software is licensed to You as is. You, the consumer, bear the entire risk relating to the quality and performance of the Software. In no event will ControlWorks Consulting, LLC be liable for direct, indirect, incidental or consequential damages resulting from any defect in the Software, even if ControlWorks Consulting, LLC had reason to know of the possibility of such damage. If the Software proves to have defects, You and not Us must assume the cost of any necessary service or repair resulting from such defects.

Provision of Support

We provide limited levels of technical support only for the most recent version of the Module as determined by Us. We do not provide support for previous version of the module, modifications to the module not made by Us, to persons who have not purchased the module from Us. In addition, we may decline to provide support if the Demo Program has not been utilized. We may withdraw a module from sale and discontinue providing support at any time and for any reason, including, for example, if the equipment for which the Module is written is discontinued or substantially modified. The remainder of your rights and obligations pursuant to this license will not be affected should ControlWorks discontinue support for a module.

Modification of Software

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