General Information	
Simple Windows Name:	Lode Audio v 1.5.0
Catagory:	Audio Distribution
Version	1.5.0
Summary	The Lode Audio Server Crestron Module
Crestron Hardware Required	Crestron series 2 processor or above.

Input			
PLAY	D	Pulse to play the current track.	
PAUSE	D	Pulse to pause the current track.	
PREVIOUS	D	Pulse to skip to the previous track in the queue.	
NEXT	D	Pulse to skip to the next track in the queue.	
SHUFFLE	D	High to enable shuffle mode. Shuffle mode will randomly choose the next track from the queue.	
REPEAT	D	High to enable repeat mode. Repeat mode will play circulate the next track from the queue (randomly if shuffle mode is enabled).	
PARTY	D	Pulse to group all zones together.	
VOL_IN	A	Analog input to set the volume.	
FASTFORWARD	D	High to fast forwarding playing media.	
REWIND	D	High to rewind playing media	
MUTE	D	Pulse to mute the selected zone	
UNMUTE	D	Pulse to unmute the selected zone.	
VOL+	D	Pulse to increase the volume by 5%	
VOL-	D	Pulse to decrease the volume by 5%	
SEEK	A	Analogue value to seek to a position within a track	
ADD_TO_FAV	D	Pulse to add selected item to favourites	
DELETE_FAVS	D	Pulse to delete selected favourite item	
ZONE{1..32}	D	Pulse to select a zone.	
ZONE_SELECT	D	Pulse to set the context to the selected zone. Note. In the case the zone has been set within the parameters, this action will override the current zone context.	
ZONE_ADD	D	Pulse to group the selected zone with the current zone.	
ZONE_REMOVE	D	Pulse to remove the selected zone from the current group.	
BROWSE{1..32}	D	Pulse to select the item.	
BROWSE_BACK	D	Pulse to move up the browse tree.	
BROWSE_HOME	D	Pulse to move to the top of the browse tree.	
BROWSE_PAGE+	D	Pulse to paginate the children of the current browse tree down.	
BROWSE_PAGE-	D	Pulse to paginate the children of the current browse tree up.	
PLAY_OPTIONS_CANCEL	D	Pulse to hide the play options.	
PLAY_NOW	D	Pulse to add to the queue the selected media and play immediately.	
PLAY_NEXT	D	Pulse to add to the queue the selected media after the currently playing track.	

REPLACE_QUEUE	D	Pulse to replace the queue with the selected media and play the first element.
ADD_TO_QUEUE	D	Pulse to add the selected media to the queue.
CLEAR_QUEUE	D	Pulse to clear the track queue.
DELETE_PLAYLIST	D	Pulse to delete current selected playlist
RENAME_PLAYLIST	D	Pulse to rename current selected playlist with the name in TEX$
QUEUE_PAGE+	D	Pulse to paginate the track queue down.
QUEUE_PAGE-	D	Pulse to paginate the track queue up.
SAVE_QUEUE	D	Pulse to save the current zone queue to a playlist.
QUEUE{1..32}	D	Pulse to select the item.
SEARCH_SOURCE{1..32}	D	Pulse to select the search source.
SEARCH_CRITERIA{1..32}	D	Pulse to select the search criteria.
SEARCH_TEXT	S	Serial input for the search term.

Output		
PLAY_FB	D	High to indicate the selected zone is playing.
PAUSE_FB	D	High to indicate the selected zone is paused.
SHUFFLE_FB	D	High to indicate the selected zone is in shuffle mode.
REPEAT_FB	D	High to indicate the selected zone is in repeat mode.
TRACK$	S	Serial text of the current track.
ARTIST$	S	Serial text of the current artist.
ALBUM$	S	Serial text of the current album.
ALBUM_ART$	S	Serial text containing the URL of the current track's album art.
ZONE_NAME$	S	Serial text of the currently selected zone name.
SELECTED_TITLE$	S	Serial text of the selected track.
SELECTED_ALBUM_ART$	S	Serial text containing a URL of the selected track.
NEXT_TRACK$	S	Serial text of the next track.
VOL_OUT	A	Analog value of the volume (0-65535)
MUTE_FB	D	High to indicate the selected zone is muted.
SHOW_TRACK_PROGRESS	D	High to indicate the current media has track progress. Radio; for example, would not.
TRACK_PROGRESS	A	Analog value of the track progress (0-65535)
TRACK_OFFSET$	S	Serial text of the format "MM:SS" of the track progress offset.
TRACK_DURATION$ DEPRECATED	S	Serial text of the format "MM:SS" of the track duration.
TRACK_TO_GO$	S	Serial text of the format "MM:SS" of the track progress duration minus the offset.
BROWSE_AT_HOME	D	High to indicate root of the browse tree.
BROWSE_SCROLL_POSITION	A	Analog value (0-65535) of pagination offset of the browse children.
QUEUE_SCROLL_POSITION	A	Analog value (0-65535) of pagination offset of the track queue.
BROWSE_LIST_TOTAL	A	Total number of results returned by a browse query. To be used for dynamic list generation.

QUEUE_LIST_TOTAL	A	Total number of results contained within the queue. To be used for dynamic list generation.
PLAYER_LIST_TOTAL	A	Total number of results returned by a player query. To be used for dynamic list generation.
CONNECTED_TO_LODE	D	High to indicate the module is connected to the Lode box.
ZONE_NAME{1..32}$	S	Serial text of the zone names.
BLOCK_BROWSE_INTERACTION DEPRECATED	D	High to indicate that browse events should not be sent.
BROWSE_CONTEXT$	S	Serial text of the current browse context.
PLAY_OPTIONS	D	High to show the play options.
SELECTED_ITEM_ATTRIBUTE_PLAYABLE	D	High to show that selected item is Playable
SELECTED_ITEM_ATTRIBUTE_QUEUEABLE	D	High to show that selected item is Queueable
SELECTED_ITEM_ATTRIBUTE_PLAYLIST	D	High to show that selected item is Playlist
SELECTED_ITEM_ATTRIBUTE_FAVOURITE	D	High to show that selected item is Favourite
SELECTED_ITEM_ATTRIBUTE_FAVOURITEABLE	D	High to show that selected item is Favouriteable
ZONE_OPTIONS	D	High to show the Zone options
BROWSE_TEXT{1..32}$	S	Serial text of the browse items.
BROWSE_SUB_TEXT{1..32}$	S	Serial text of the browse items subtexts.
QUEUE_TEXT{1..32}$	S	Serial text of the queue items.
QUEUE_SUB_TEXT{1..32}$	S	Serial text of the queue items subtexts.
SEARCH_SOURCE{1..32}$	S	Serial text of the search sources.
SEARCH_CRITERIA{1..32}	S	Serial text of the search criterias.

PARAMETERS		
BROWSELISTLENGTH	A	Number of items in the browse list.
MAXBROWSETEXT	A	Maximum number of characters for each browse list item.
QUEUELISTLENGTH	A	Number of items in the track queue.
MAXQUEUETEXT	A	Maximum number of characters for each queue list item.
HOST	S	IP/Host name of the Lode Audio controller.
PORT	A	Port number of the Lode Audio controller – normally 6667.
ZONE	S	Either "" to indicate that the zone content for this module instance will be dynamically selected, or the zone name if it is to be locked to a particular zone.

Testing	
Simpl Windows used for testing	4.02.20
Simpl+ Used for testing	4.02.21
CRES DB Used for Testing	41.01.005.00
Device Database	51.07.005.00
Simpl+ Cross Compiler	1.3
VisionToold Pro-e Version	5.3.19
Sample Program	Lode Audio Demo v1.5.0
Revision History	1.5.0 – Initial Release