



# SpeakerCraft Integration Guide

Manufacturer:	Fusion Research
Model Number(s):	<b>Ovation Series OMS0, OMS1, OMS2, OMS3</b>
SpeakerCraft App Version:	1.2 and above
Comments:	Ovation Software 2.1; Fusion Version 13.8.20.0
Document Revision Date:	7/15/14

**Note:** This document refers to using the Fusion Ovation server. If you are using a Logitech Media Server with attached Squeezebox Players, please see the Logitech Media Server Integration Note.

## OVERVIEW AND SUPPORTED FEATURES

The Fusion Ovation is a combined server and player product that is compatible with the Logitech Media Server/Squeezebox API. The Ovation Server allows streaming of both local content and streaming internet radio. Local content may be stored on the Ovation (depending on model) and may play multiple file formats from included audio outputs. Internet radio options are available from multiple streaming sources.

The **SpeakerCraft App** system is capable of communicating with the Ovation Media Server to control what is playing on each player over a standard network connection, providing full 2-way feedback and control.

**Bear in mind that SpeakerCraft App's driver is written to be compatible with the Logitech Media Server open source API, and the Ovation is developed to be compatible with this same standard, but it is not a Logitech product.**

### THE FOLLOWING PLAYBACK OPTIONS ARE SUPPORTED BY THE LOGITECH MEDIA SERVER:

- Control of the Logitech Media Server (Squeezenet) compatible server and players integrated in the Fusion Research Ovation product through the standard Logitech Media Server driver.
- Play digital audio from local or streaming internet sources through the Ovation Server and its internal audio outputs. Note that each audio output will appear as its own Player (aka Squeezebox).
- Play and index digital music stored locally or on a network drive, also including iTunes libraries.
- Browse local music library by Artist, Album, Genre, Tracks or Playlists.
- Stream Internet Radio through Mysqueezebox.com—See **Streaming Radio** section for details.
- Now Playing and Play Queue information including metadata and album art (as available) is presented in the **SpeakerCraft App** Viewer. Note that availability and level of detail of metadata will vary when using Internet Radio.
- The **SpeakerCraft App** driver supports a maximum of 2 Logitech Media Servers and 4 players. The Fusion Research Ovation product is one server with 1-4 players, depending on model.
- The SpeakerCraft App system can control the Logitech Media Server from all interfaces (PC, Mac, SpeakerCraft touch panels, Android, iOS), and nHR200.

**The following playback options are NOT supported by the Logitech Media Server:**

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- Some available streaming services are not supported in the **SpeakerCraft App** interface -- see **Streaming Radio** section for details. Note the list of available services for the Ovation server may be different from the standard supported LMS list.
- Volume control of attached SqueezeNet players (Ovation outputs) is not available from **SpeakerCraft Auriel**.
- The Logitech Media Server is controlled almost entirely through dynamic data and is not available for translation through the **SpeakerCraft App** Internationalization feature.
- DRM Protected music formats are not supported by the Logitech Media Server.
- Sort and play by Composer, Conductor or Band/Orchestra is not supported. The “My Music” Settings include an option within LMS to place these fields in the Artist tab. If this is enabled odd results will appear in the My Music section. SpeakerCraft recommends keeping all of these options disabled. Note: these options appear in standard LMS but were not present in the prototype Ovation unit.
- More than 2 servers and 4 players in an install is not supported.
- The Ovation product supports some features beyond what is normally available within LMS, such as FLAC/MP3 mirroring and potentially auto-syncing files from other sources. These features have not been evaluated by SpeakerCraft, and SpeakerCraft makes no claims over their support or is not responsible for any odd behavior caused by their use.
- The Ovation product makes no mention of connecting Logitech Squeezebox devices to it as additional players, and such integration is untested and unsupported by Elan.
- Any special features or third-party plugins not specifically mentioned as supported in this document should be considered unsupported.

**Important! The SpeakerCraft driver was tested to integrate the version indicated at the top of this document. Any future software changes by Fusion Research may impact integration. Use of other versions may negatively impact integration.**

Any feature not specifically noted as supported should be assumed to be unsupported.

## INSTALLATION OVERVIEW – LOCAL PC

1. Install the Fusion Research Ovation product at the head end, and pull power, network and audio cabling as appropriate.
2. Configure the Ovation product basic settings through the installer interface. See **Ovation Setup** for details.
3. Configure the Logitech Media Server software including the mysqueezebox.com account (required for streaming services). See **LMS Configuration** for details.
4. Test standalone function of device for playing local and streaming content as desired.
5. Integrate the Logitech Media Server into the **SpeakerCraft App** system and test proper operation. This step is outlined in **SpeakerCraft App Configuration Documentation**.

## OVATION SETUP

The following section details basic Ovation configuration as a standalone product. These steps are required prior to integrating the Ovation with the **SpeakerCraft App** system.

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**Note:** these steps assume a factory fresh unit and were developed using a prototype. Some differences may exist if your unit has been previously configured or if your unit is a final shipping product or has newer software than the prototype Elan used for development.

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1. Install the Ovation product electrically per Fusion Research documentation. The unit should have power, network and audio cables wired appropriately prior to powering it on.
2. The Ovation product is headless and all configuration is done through a local computer with a web browser. To complete configuration, connect a computer to the same LAN as the Ovation.
3. Open a Web Browser (such as FireFox or IE) and type in <http://fusionmusic:4742> to connect to the Ovation System Configurator page. If this does not work, enter your Fusions IP address and port number, for example 192.168.1.60:4742. This IP address can be found in your router.
4. From the Home Page, check the Software Version listed. Note Elan tested the version at the top of this document and if your version is newer, some differences may exist.
5. Click the Network tile at the top of the screen to enter Network Configuration.
6. Set the Network Configuration for the unit to a static IP compatible with your network. SpeakerCraft recommends setting the IP of the first server to 192.168.0.60, the second to 192.168.0.61, and so on. See the screenshot for typical settings below. Note multiple DNS servers are optional.

**Fusion** Research *Fusion Music Server Configurator*

Information System Network (Wired) Player(s) Remote Folders

**Network (Wired)**

**MACAddress** b8:27:eb:11:e5:4f

**System Name** FusionMusic

**Workgroup** WORKGROUP

**Mode**  
 DHCP  
 Static

**Apply & Reboot** **Notice:** Changing the network settings will require a reboot of this device.

Static Settings:

**IP Address** 192.168.0.60

**Subnet Mask** 255.255.255.0

**Gateway** 192.168.0.1

**DNS 1** 8.8.8.8

**DNS 2**

- 7.
8. Click Apply & Reboot when done, and wait for the server to reboot. Note the IP address in your SpeakerCraft System Worksheet.
9. Re-connect to the server at <http://fusionmusic:4742> once it has completed rebooting, and select the System tile. Correct the time zone for your area and click Submit when finished.
10. Click the Player(s) tile to enter the Configure Player section.
11. Name the Players as desired and un-check the “Soft Vol” option if it is not already done. Note that this will set the Audio Output to Fixed. The **SpeakerCraft App** System does not support

controlling the volume on the outputs when they are set to variable. Click Submit when finished.

The screenshot shows the 'Fusion Music Server Configurator' interface. At the top, there is a navigation bar with icons for Home, CD Ripper, FLAC Mirror, Network, System, and Player(s). Below this is a section titled 'Configure Player' which contains a table with columns for Name, MAC address, Audio Device, and Soft Vol. The table lists three analog outputs: 1-Green (analog), 2-Blue (analog), and 3-Pink (analog). Each output is associated with a specific MAC address and an audio device (analog1A, analog1B, and analog1C respectively). There are checkboxes for 'Soft Vol.' for each output, all of which are currently unchecked. A 'Submit' button is located at the bottom left of the configuration area.


Name	MAC address	Audio Device	Soft Vol.
1- Green (analog)	00:04:20:AE:FF:6C	analog1A	<input type="checkbox"/>
2- Blue (analog)	00:04:20:8B:E9:DF	analog1B	<input type="checkbox"/>
3- Pink (analog)	00:04:20:FB:D8:7F	analog1C	<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

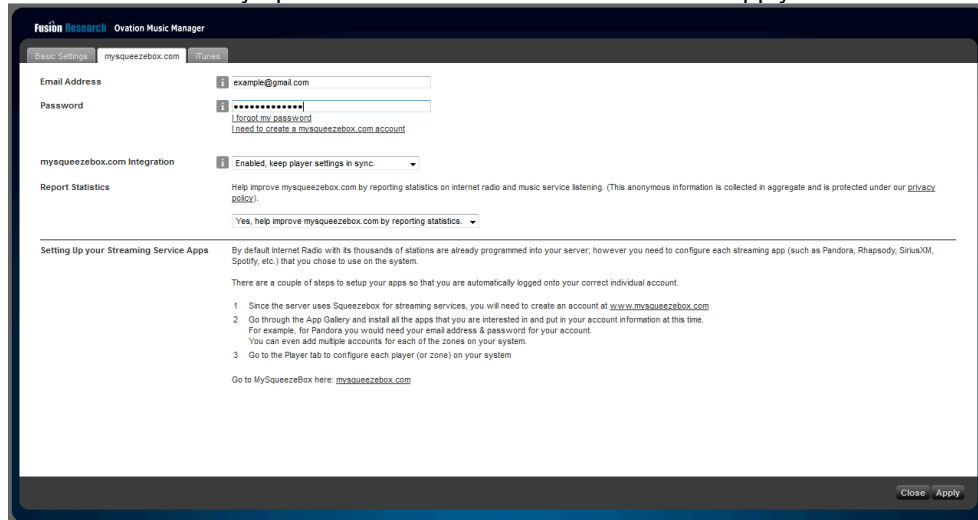
Submit

# LMS CONFIGURATION

## STREAMING RADIO CONFIGURATION

To setup Streaming Internet Radio, you must first configure a Squeezebox account at <http://mysqueezebox.com> (formerly <http://squeezenetwork.com>) and associate the desired streaming radio service(s) with the account. Options available may or may not require accounts or paid subscriptions, and setup requires use of existing credentials or requires the creation of a new account. See Logitech for full details.

1. Open a browser, navigate to [mysqueezebox.com](http://mysqueezebox.com) and login to your account.
2. Add the desired APP to [mysqueezebox.com](http://mysqueezebox.com)
  - a. Click APP Gallery and select desired Streaming service App
  - b. Click install APP
  - c. Enter account info if needed. Note this step may require you follow links present on the [mysqueezebox.com](http://mysqueezebox.com) App page to create free or paid accounts.
3. Enter the [mysqueezebox.com](http://mysqueezebox.com) account info on the Ovation's LMS server page:
  - a. Enter the Fusion Research LMS page by opening a web browser page to <http://fusionmusic:9000>
  - b. The standard LMS Player control page is displayed. To enter Settings, find the Settings option in the lower right corner of the page and click it. A new window opens automatically.  

  - c. Click the [mysqueezebox.com](http://mysqueezebox.com) tab.
  - d. Enter the desired [mysqueezebox.com](http://mysqueezebox.com) account info and click Apply.



The screenshot shows the 'Basic Settings' tab for 'mysqueezebox.com' in the 'Ovation Music Manager'. The page includes fields for 'Email Address' (example@gmail.com) and 'Password' (masked with dots). Below these is a section for 'mysqueezebox.com Integration' with a dropdown menu set to 'Enabled, keep player settings in sync'. There is also a 'Report Statistics' section with a checkbox for 'Yes, help improve mysqueezebox.com by reporting statistics'. At the bottom, there is a 'Setting Up your Streaming Service Apps' section with instructions and a list of steps. The page has a 'Close' button and an 'Apply' button in the bottom right corner.

4. Test Streaming Music service through the Players. This may be easily done by returning to the LMS Player webpage as depicted in step 3a.

## STREAMING RADIO AVAILABILITY

Refer to the below chart which details what Streaming Radio Services are supported and have been tested for integration with **SpeakerCraft App**, and special notes on their features. It is important to additionally note that some services are not available depending on the type of server configuration you are using.

Service	Notes	SpeakerCraft			
		Fusion Ovation LMS	SpeakerCraft App support	App Beta - Untested. Use at own risk.	SpeakerCraft App Unsupported - Do Not Use
LastFM	Paid account required. Custom Internet Radio.	x	x		
MOG	MOG "Primo" subscription required. Music on Demand and Custom Internet Radio.	x	x		
MP3Tunes	Free or Paid account. Music on Demand.		x		
Pandora	Paid account. Custom Internet Radio.	x	x		
Rhapsody	Paid account required. Music on Demand.		x		
SHOUTcast	Free. No account needed.	x	x		
SiriusXM Internet Radio	Paid account required.	x	x		
Slacker Radio	Free or Paid account. Note slacker will only play on one player at a time. Custom Internet Radio.	x	x		
Spotify	Paid "Premium" account required. Music on Demand.		x		
TuneIn Radio	Free account required. Note the built in "Internet Radio" option utilizes TuneIn and requires no account setup.	x	x		
Internet Radio	Built in service installed by default. Powered by TuneIn.	x	x		
Absolute Radio UK	Free Internet Radio.	x		x	
Accu Radio	Free Internet Radio.	x		x	
BBC	Free Internet Radio.	x		x	
CBC	Free Internet Radio.	x		x	
CBS Radio	Free Internet Radio.	x		x	
Classical.com	Paid account required. Music on Demand.	x		x	
Live Music Archive	Free Live Music recording library. Music on Demand.			x	
Live365	Free Internet Radio.	x		x	
Orange Liveradio	Free Internet Radio.	x		x	
RadioFeeds UK & Ireland	Free Internet Radio.			x	
radioio	Free Internet Radio.			x	
Radionomy	Free Internet Radio.	x		x	
SKY.FM	Free Internet Radio.	x		x	
SomaFM	Free Internet Radio.			x	
Amazon CD Store	Music Storefront.				x
Digitally Imported	Free Internet Radio.				x
Facebook	Free Social Network.				x
Flickr	Free picture site.				x
Podcasts	Podcast player.				x
Sounds & Effects	Free looping sounds and effects.				x
Napster	Now part of Rhapsody.				x

The following issues have been observed when integrating Mysqueezebox.com Streaming Services:

- Rhapsody: Options for Instant Playlist appear and are non-functional. The issue is present in standalone Squeezebox as well and is not a **SpeakerCraft App** issue. No bad behavior has been observed but these options are not functional.
- Rhapsody: When browsing music that is already in your library, the option exists to add the music to your library. This does not cause any bad behavior and the behavior is consistent in both **SpeakerCraft App** and the Squeezebox.
- Some services such as Spotify & Rhapsody allow you to drill down to the track level. At the track level there are options to look at the tracks "On Pandora/Rhapsody/LastFM (etc.)" or "Look up on Amazon", or "Share on Facebook (etc.)". None of these options are supported and their use is not recommended.
- Slacker Favorites must be configured externally before any content will appear in this area in **SpeakerCraft App**.
- Some services provide links to descriptions that are not optimized for viewing within the **SpeakerCraft App** Viewer. Examining descriptions, reviews or similar items is not recommended.
- MP3Tunes SmartPlay mixes were not functional in testing.



- Note that with all streaming services, there are variations on what sort of meta-data, play queue and album art is provided. It should be expected that what info is available will vary based on both the service and the type of stream you are listening to.
- Note that all streaming services will provide the **SpeakerCraft App** Viewer with meta-data and artwork with a slight delay. This is normal behavior

## COMMON MISTAKES

1. Not completing proper programming of the Squeezebox. The Squeezebox should be configured according to the instructions above.
2. Not adding Streaming Services properly. To use streaming radio, you must have the following:
  - Mysqueezebox.com account configured.
  - Apps installed on mysqueezebox.com (App Gallery/My Apps) for all desired services.
  - All necessary login information for streaming accounts setup in mysqueezebox.com
  - Mysqueezebox.com account associated with LMS.
  - Services added within in **SpeakerCraft App Fusion interface**.
3. Configuring your unit to use DHCP will lead to eventual connectivity and control problems. It is recommended to set the Ovation up with a Static IP address for reliable control. Please see the Ethernet Configuration guide for instructions.