

ROKU™



SoundBridge™ Network Music Player

User Guide | Software v2.5

Welcome

Thanks for purchasing Roku SoundBridge! We hope you enjoy using it as much as we've enjoyed creating it.

SoundBridge is a network music player that connects to your stereo or powered speakers to play your Mac or PC digital music library in any room of the house. You can even play thousands of free Internet radio stations on SoundBridge without the computer on. SoundBridge works with your Wi-Fi or Ethernet home network and is compatible with popular music servers such as iTunes, Windows Media Connect, Rhapsody and more. Enjoy!

Run the Latest Software!

We are always working on improving the software for our products. Your SoundBridge will let you know when a software update is available. We recommend you accept new software updates when they are offered. The update just takes two minutes, and enhances the features of your SoundBridge. All you need is an active Internet connection. See "Options for System Configuration" on page 46 for easy instructions.

Register Your SoundBridge!

It's quick, easy and ensures that you are notified of the latest software updates for SoundBridge. Of course, we won't share your personal information with anyone else. Visit www.rokulabs.com/support.

Download the Latest User Guide!

When our software changes, so does our user guide. Visit www.rokulabs.com/support to download the latest version as a PDF document and learn about the latest features.

Visit **www.rokulabs.com/support** to register your SoundBridge.

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SECTION 1: GETTING STARTED

To use SoundBridge you will need to do the following (detailed explanations follow):

- I. Make sure you have a compatible music server installed. Compatible music servers include iTunes,[®] Microsoft[®] Windows[®] Media Connect, Rhapsody,[™] Musicmatch,[®] and others.
[Note: If you plan only to listen to Internet radio, you can skip this step because no music server is needed.]
- II. Connect SoundBridge to your Ethernet or Wi-Fi home network.
- III. Connect SoundBridge to powered speakers or your home stereo system's receiver or amplifier.
- IV. Plug in SoundBridge to AC power (there is no "on/off" switch).
- V. Put batteries into your SoundBridge remote control.
- VI. Establish a network connection. If you are using Wi-Fi and have WEP security enabled, you will need to enter your security key with SoundBridge's remote control.
- VII. Enable any music sharing options required by your music server:
 - a. **Windows Media Connect:** authorize SoundBridge as a recognized device.
 - b. **iTunes:** enable Music Sharing feature in Preferences menu.
 - c. **Rhapsody:** enable Music Sharing from the UPnP tab in the Options menu.
 - d. **Musicmatch:** enable Music Sharing feature and UPnP option in Options menu.
- VIII. Select and connect to your music library.
- IX. Play music: Using your remote control, find a song you want to play, then press **Play [▶]** to play it immediately or **Add [⊕]** to add it to the Song Queue.

I. Music Server Software Requirements

Roku SoundBridge is designed to act as a remote client for several kinds of music libraries, including Windows Media Connect, Rhapsody, Musicmatch and iTunes. You can also play WMA and DRM WMA files purchased from popular online music stores such as Napster.[™] (Apple's policy does not allow SoundBridge to support playback of protected AAC files purchased from the iTunes Music Store.)

What Is a “Music Server”?

SoundBridge is a network music player. That is, it doesn’t store any music, but plays files that you have stored on a computer connected to your home network. (It can also play Internet radio without connecting to your computer, using a direct connection to the Internet.) To play the music files stored on your computer, SoundBridge needs to receive data from software installed on the computer that “serves” the music. This “music server” is responsible for streaming the music to SoundBridge. It is also responsible for sending the list of music you have available to SoundBridge (when asked), and performing searches of the music library at SoundBridge’s request.

You probably already have a music server but perhaps didn’t realize it. For example, iTunes acts as a music server when it shares music to another iTunes user on the network. Microsoft has released its own music server, Windows Media Connect.

The most common music servers are iTunes, Windows Media Connect, and Rhapsody. But there are others. If you want to use a Microsoft PlaysForSure music service, you must use Windows Media Connect. If you want to use the Rhapsody music service, you currently must use Rhapsody as your music server. One of the benefits of SoundBridge is that it supports all the common servers out there with an easy-to-use interface.

Note: For playing back Internet radio using SoundBridge’s “Radio Favorites” library, you don’t need a music server, because SoundBridge receives the radio stream directly from the Internet.

SoundBridge Has Two UI Modes

Each music server has different capabilities. To experience the full SoundBridge user interface, which includes searching and robust browsing modes, you must use a server that supports these functions, such as iTunes or Windows Media Connect. Some other servers don’t have the functionality required to deliver the full SoundBridge feature set. For example, you won’t be able to search, and the browse modes will vary by server.

You have several options for connecting your music library to SoundBridge:

Music Server	Recommended for Users of ...	Notes
Windows Media Connect (UPnP Windows Media DRM 10 protocols)	Windows XP with SP2	A free media server from Microsoft. Works with any music jukebox, but optimized for Windows Media Player v.10. Supports SoundBridge's full Browse, Search and Display feature set. Plays: WMA, DRM WMA*, WMA Lossless, MP3, WAV, playlists created in jukebox software such as Windows Media Player 10.
iTunes (Bonjour, formerly known as Rendezvous, for discovery; iTunes DAAP for communication)	PC/Mac	A free music server and jukebox software from Apple. Plays: AAC, MP3, WAV, AIFF (no support for protected AAC iTunes Music Store files). Also plays playlists and Smart Playlists created in iTunes. Built-in Internet radio tuner streams Internet radio to SoundBridge.
Rhapsody (UPnP and proprietary Rhapsody protocol)	Rhapsody Subscribers	Server required to run the Rhapsody Music Service, which includes access to popular music and Internet radio.
Musicmatch Jukebox (UPnP AV protocol)	Windows 98 SE/Me/XP/2000 (SP3 or above)	Popular jukebox software and music service. Has a built-in UPnP AV server supported by SoundBridge. You can also use Windows Media Connect with Musicmatch, which is more feature-rich. Plays: WMA, MP3, WAV (DRM WMA and Musicmatch playlists supported only if using Windows Media Connect Server).
Firefly Media Server	PC/Mac/Linux	This high quality "open source" media server will serve music in many formats (WMA, MP3, AAC, FLAC, Apple Lossless and Ogg Vorbis). It integrates directly with iTunes and can share your iTunes music library, or any music library. As with all non-apple products, it does NOT support Protected AAC files. It does not support protected WMA files. It does support SoundBridge's full Browse, Search and Display feature set as well as playlists and Smart Playlists created in iTunes.

For a more detailed comparison of compatible music servers and links to download them, visit www.rokulabs.com/products/SoundBridge/servernotes.php.

Installing a Compatible Music Server

To access network music sharing, make sure you have a compatible music server installed. Compatible music servers are listed on the previous page. To install one of these, follow the instructions below.

Installing Windows Media Connect

1. If not already installed, install Windows XP Service Pack 2, a free download from Microsoft or via Windows Update Installer.
2. Download the latest version of Windows Media Player, v.10, a free download from Microsoft or via Windows Update Installer.
3. Download Windows Media Connect, a free download from Microsoft, or via Windows Update Installer.
4. Continue to "Enabling Windows Media Connect."

Installing Firefly Media Server

1. Download and install Firefly Media Server from www.rokulabs.com/firefly.
2. Continue to "Enabling Firefly Media Server."

Installing iTunes

1. If you don't already have iTunes, download and install it from www.itunes.com. SoundBridge requires v. 4.0 or later.
2. Continue to "Enabling iTunes."

Installing Rhapsody

1. If not already installed, download Real Networks' Rhapsody client from www.rhapsody.com.
2. Continue to "Instructions for Enabling Rhapsody."

Installing Musicmatch Jukebox

1. If not already installed, download a free version of Musicmatch Jukebox 9.0 on your PC from www.musicwatch.com.
2. Continue to "Enabling Musicmatch Jukebox."

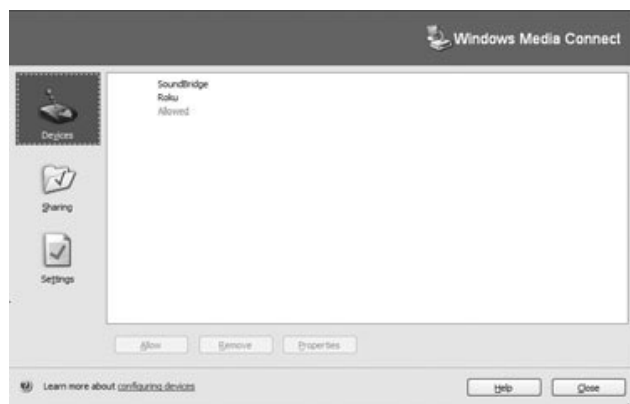
II. Enabling Music Sharing

After installing a music server, you need to enable your music server to share data with your SoundBridge.

Enabling Sharing in Windows Media Connect

To authorize SoundBridge as a permitted client for Windows Media Connect, follow these steps:

1. Click the Windows Media Connect tray icon or open Windows Media Connect through the Windows Control Panel. The SoundBridge device appears in the notification area in the bottom-right corner of the window.
2. Open the Wizard window, click the SoundBridge device and then click Allow. Windows Media Connect will now authorize SoundBridge.



3. Click Close.

Enabling Sharing in Firefly Media Server

You do not need to enable the Firefly Media Server to share music. However, the program must be running in order to play music on your SoundBridge.

Enabling Sharing in iTunes

To turn on the Music Sharing option,

1. Select iTunes/Preferences menu (Mac) or Edit/Preferences (PC).
2. In the dialog box that appears, click the Sharing tab.
3. Verify that the Share My Music option to enable sharing on your local network is selected.

Note: iTunes must be running to play music from your library.

Enabling Sharing in Rhapsody

1. Make sure the Rhapsody application is running.
2. Select User Settings from the Options menu.
3. Navigate to the UPnP tab, and then click Start to start the server.
4. Select the Start UPnP server once logged in option so that the server starts each time you run the Rhapsody application.

Your Rhapsody server should now appear in your list of music servers on SoundBridge, and you can play all your songs and Rhapsody radio stations.

Note: Rhapsody must be running to enable automatic log in.

Enabling Sharing in Musicmatch

1. Select Options/Settings.
2. Click the CD Lookup/Connectivity tab.
3. Select Enable Music Server and then select Universal Plug and Play. You can close Musicmatch if you like — the UPnP server will keep running in the background.

III. Hooking Up Your Home Network Hardware (Wired Ethernet or Wireless)

Ethernet Connection

Plug your cable into the jack provided on the right side of the rear of the unit. Connect your Ethernet cable to a hub, switch or router on your home network. Alternatively, you can connect SoundBridge directly to your computer (and bypass a hub/switch/router), but only with a “crossover” cable (sold separately). Connect the other end of the cable to your network.

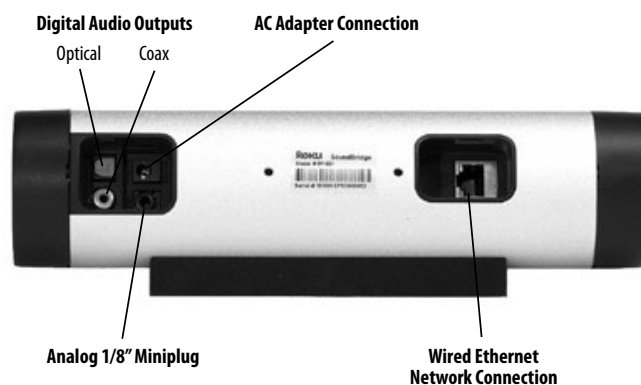
Wireless Connection

No need to install any additional hardware into SoundBridge. Please note that most, but not all, wireless access points are compatible with SoundBridge. You can find a list of supported wireless hardware at www.rokulabs.com/support.

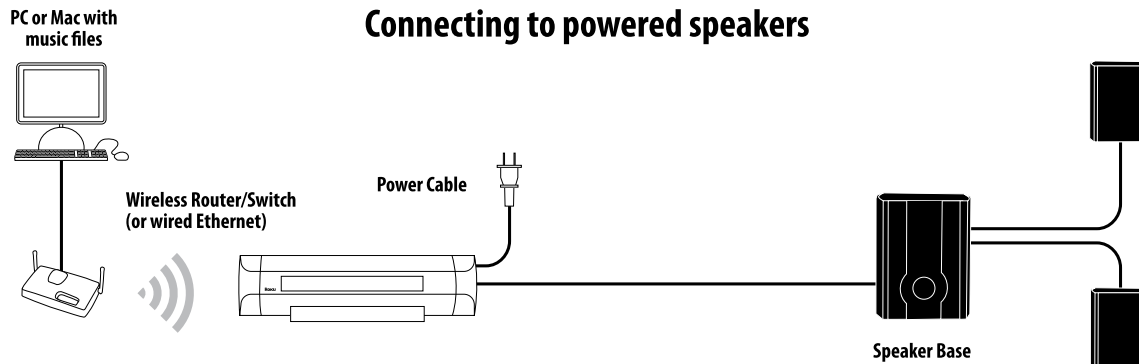
IV. Hooking Up Your Speakers or Stereo System

Connect your choice of audio cables into the back left side of SoundBridge depending on your preferred connection option.

Audio cable connectors

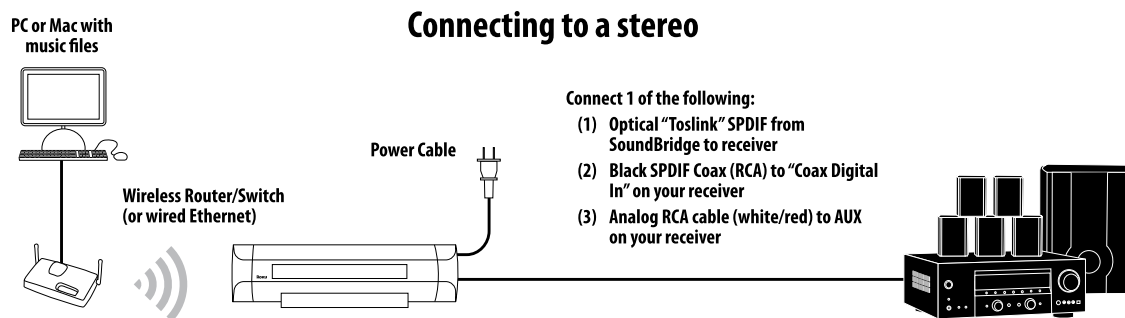


Your SoundBridge has several audio connection options:



- a. Connect your SoundBridge to a set of powered speakers by inserting the 1/8" cable from your powered speakers into the Analog 1/8" Miniplug connector on SoundBridge.

Note: If your speakers have a male connector, you will need a female-to-female coupler available from Radio Shack.



- b. Connect the RCA (red/white) audio cable included with your SoundBridge to your stereo system's Aux or other "Line Input" and connect the other end of this cable to SoundBridge's Analog 1/8" Miniplug connector.
- c. Connect to your stereo system using either coaxial SPDIF digital or optical SPDIF digital (the SoundBridge has connectors for both) — cables sold separately.

V. Connecting SoundBridge to AC Power

If you plan to use an Ethernet connection, be sure the cable is plugged in to the unit. Plug the power cord into the SoundBridge unit, and plug the other end into to a wall outlet.

Hint: There is no power switch to turn on SoundBridge. As soon as you plug in the power, you should quickly see the welcome message “Roku SoundBridge.” If not, please stop and ensure that your power cable is connected properly on both ends.

VI. Using Your Remote Control

The SoundBridge remote control is an infrared remote, so it needs “line of sight” to SoundBridge in order to operate. Point the remote in the direction of your SoundBridge, and make sure that the IR receiver window is not blocked by another object..

VII. Establishing a Network Connection

Note: Do not plug in an Ethernet cable if you plan to use your wi-fi network to avoid confusion in the setup of the device. Also, if you plan to use an Ethernet connection, make sure the cable is connected before powering up the device.

Wired Ethernet Network: After you have connected SoundBridge to your computer via a switch/hub/router (or directly to your computer via crossover cable) and powered up the unit, SoundBridge will auto-configure its network settings (using DHCP or AutoIP). There is nothing you need to do. If for some reason you have trouble connecting to your network, select the “System Configuration” option, then select “Show Wired Ethernet Status.”

Wireless Network: If you have an open and visible Wi-Fi network in your home (one which broadcasts its name, and which has no security keys set) then SoundBridge will auto-connect to your wireless network. However, you will be asked to enter your network’s name (SSID) if:

- SoundBridge detects more than one Wi-Fi network (as some advanced users have in their home, or if your neighbor’s signal is leaking over), or
- Your Wi-Fi network does not broadcast its name (for security reasons)

In these cases, enter the SSID using the remote control. Use the left/right ◀ ▶ arrows to choose letters, and use the up/down ▲ ▼ arrows to change to Uppercase and to other character sets (numbers, international characters) and to enter “Space”, “Delete” and “OK” when you’re done.

SoundBridge supports networks with WEP security. WPA is not yet supported. If you have a WEP security key, you will need to enter your WEP key manually into SoundBridge. This is the same key you have entered into your Access Point and your computer. Your screen will look something like this:

No Music Libraries Found (Why?)
System Configuration

Scroll down using your remote control’s Down ▼ arrow until the option “System Configuration” is highlighted, and press **Select [✓]** on your remote control. You will see a screen that looks like this:

Software Version & Updates
Select Wi-Fi SSID & Password
Show Wired Ethernet Status
Show Wi-Fi Status

Navigate down to “Select Wi-Fi SSID & Password” and enter your wireless network name and password.

For additional help connecting to your network, including password help, see the Wi-Fi setup section in the appendix of this guide.

Personal Firewall

If you are using iTunes and have trouble connecting, your computer may have a firewall installed that is not set correctly. Make sure your firewall is configured to allow iTunes music sharing by doing the following:

Mac users:

1. Open System Preferences.
2. Select Sharing and click the Firewall tab.
3. Select the iTunes Music Sharing option.
4. Restart your SoundBridge by unplugging, wait 5 seconds, then plug it back in.

PC users:

1. Refer to your firewall's documentation for opening incoming ports.
2. Configure your firewall to allow incoming connections on port TCP 3689 and UDP 5353.

WindowsXP Service Pack 2 users:

1. Open Security Center and click on "Windows Firewall" at the bottom right of the window.
2. In the window that pops up, click on the Exceptions tab.
3. Verify that iTunes appears in the list of Programs and Services. If iTunes is not listed, select the iTunes check box and then click OK.

After these changes have been made, restart your SoundBridge by unplugging it, waiting 5 seconds, and plugging it back in.

For additional help with Firewall troubleshooting, please visit the troubleshooting section of our support area at www.rokulabs.com/support or visit our user forums at www.rokulabs.com/forums.

VIII. Setting Display Preferences

The brightness of your display can be adjusted by pressing the **Bright** [⌘] button.

Text size and fonts can also be controlled for the SoundBridge M1000's VFD display by pressing the **Bright** [⌘] button.

Also, from the Home Menu, you can navigate down to the "Settings" option to change certain options, such as the style of music visualizer, whether the music visualizer appears full screen during playback, and what kind of information is displayed when a song is playing.

For a complete list of SoundBridge settings, please see the "Advanced Features" section of this user guide.

IX. Checking for the Latest Software

When a software update is available, your SoundBridge will automatically offer you the choice to upgrade. Please take a minute to do so. You'll just need SoundBridge connected to a network with a high-speed Internet connection.

Note: You will be offered the chance to upgrade when coming out of standby mode or after accessing your "source" menu (which lists your available music libraries and Internet radio). If for some reason you never access this menu, like you always stay connected to the same library, we recommend checking for new software manually.

See Options for System Configuration section for instructions on how to check for new software manually. Roku will release a revised user guide in PDF format periodically to explain new features or functions that have been added to the SoundBridge software. Please visit **www.rokulabs.com/support** to download the latest manual.

X. Wall or Under-Cabinet Mounting (optional)

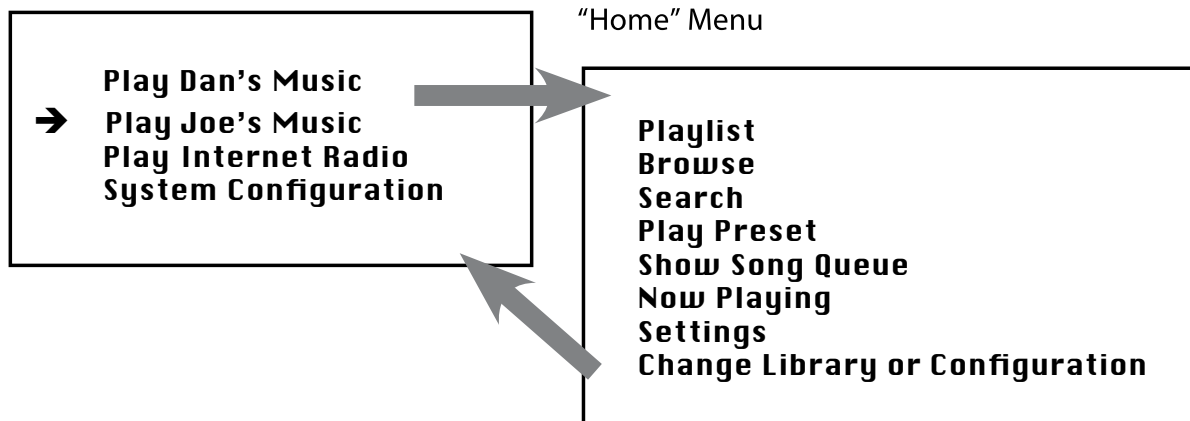
SoundBridge ships with a portable black rubber table stand which looks great on your shelf or nightstand. An optional wall mounting kit is available for sale at www.rokulabs.com/buy. This allows SoundBridge to be mounted to the wall or under a cabinet using a sleek, hidden bracket which screws into your wall. For more information, please visit the Roku web site at **www.rokulabs.com**.

SECTION 2: BROWSING MUSIC

Choosing Your Music Library

Once SoundBridge is successfully connected to your network and your server's music sharing options are enabled, SoundBridge will automatically find any supported music libraries on the network. You will be prompted to choose the library you would like to access from a screen that looks something like the one on the left:

"Change Library or Configuration" Menu



Navigate to your preferred library (in this example, "Joe's Music") and press **Select** [✓]. You will then see the "Home Menu" (see above at right), where you can begin browsing and playing your music.

To change to a different library, or to play Internet radio, select the "Change Library or Configuration" option located at the bottom of SoundBridge's Home Menu (accessible by pressing the **Home Menu** [🏠]).

Hint: SoundBridge will automatically connect to the last library you were connected to when awakened from Standby. Use the "Change Library or Configuration" option to select a different library.

Remote Control Quick Reference























Current Remote



New Remote (Rendering)

Button old remote	Button new remote	Name	Action
▲ ▼	↓ ↑	Up/Down	Navigates through available selections in the list.
◀ ▶	← →	Left/Right	“FastBrowse.” When browsing for an artist alphabetically, you skip from one letter of the alphabet to another.
✓	✓	Select	Selects any item shown on the SoundBridge display. Pressing Select is like clicking your mouse on a highlighted item.
▶	▶	Play	Begins playing current selection.
⏸	⏸	Pause	Pauses currently playing song.

Button old remote	Button new remote	Name	Action
+	+	Add	Adds current selection to your Song Queue.
		Home	Takes you to the Source or Home Menu.
		Search	Displays text based search options.
		Browse	Browse through songs by title, artist, album, composer or genre.
		Exit	Takes you one step backward and works like the Back button on your Internet browser. Pressing Exit repeatedly displays information about the song currently playing.
		Standby	Stops playing the current selection and puts SoundBridge Radio in standby mode.
		Adjust Display	Adjusts brightness and size of display information when used with Up/Down and Left/Right buttons.
		Volume	Adjusts the volume.
		Next/Previous Track	Moves you forward or backward in your Song Queue, one song at a time.
		Shuffle	Plays Song Queue in random order.
		Repeat	Continuously plays back your Song Queue.
		Internet Radio	Searches for Internet radio stations.
		Server	Returns you to the last music server accessed.

Use these commands on your remote control to select and play music:

- Use the Up and Down arrow buttons to take you through a list item by item. Use the **Select** [✓] button to take you one level down into the highlighted item (think of it as double-clicking a selected item).
- Use the Left and Right ◀ ▶ arrow buttons to “fast browse” a list of music options by skipping to the next or previous letter of the alphabet, or if your list is not arranged alphabetically, by about 5% of your list at a time. Then use the **Select** [✓] button to choose an item to play.
- Use the **Back** [↶] button to go one step backward while browsing, much like the Back button on your Internet browser. (Pressing Back repeatedly displays the “Now Playing” screen, with information about the song currently playing.) On the new remote use the
- The **Search** [🔍] button takes you to your text-based search options (if supported by your music server).
- When you find a selection you want to play, you can use the **Play** [▶] button to play it, or the **Add** [+] button to add your current selection to the end of your Song Queue.
- The [⏸] button pauses playback of audio currently playing; pressing again resumes playback.
- ⏮ ⏭ The Next Track and Previous Track buttons advance or retreat playback of your Song Queue (or Internet Radio menu) one song at a time.
- Press the **Home Menu** [🏠] button at any point to return to the beginning menu.

The Home Menu

To begin navigating through your music, start on your “Home” menu, by pressing the **Home Menu** [🏠] button. The display on SoundBridge should look something like this:

Home Menu Overview

➔ **Playlists**
Browse

Only the first two lines of the Home Menu are displayed at once (or one line if you are using an M1000 with the largest font size), but you can use the Down ▾ arrow on your remote control to scroll through all these options:

Playlists	【Displays all the playlists available for the selected music library from your network.】
Browse	【Browse the music library by artist, album, song, genre, and composer】
Search	【Enter text for song title, album, artist, composer, and keyword.】
Play Preset	【Select one of 18 different preset stations or playlists.】
Show Song Queue	【Shows past and upcoming songs selected for playback】
Show Now Playing	【Shows song now playing. Press Select to get more info about the selection.】
Settings	【Set options for the music visualizer, iTunes playback, and memorizing radio playlists.】
Change Library or Configuration	【Exit the current music library and connect to another one, or change your network or system configuration.】

The ➔ arrow to the left of a menu item denotes the current item. You can also refer to the scroll bar (at the right of your display) to see your position in the list.

Browsing Your Music by Album

From the Home Menu, press the Down ▾ button until you see the “Browse” option highlighted and press **Select [✓]**. You will see a list of options:

- ➔ **Browse Artists**
- Browse Albums**

If you scroll down, you will see these browsing options:


- Browse Songs**
- Browse Genres**
- Browse Composers**


Now, if you navigate to the “Browse Albums” option and press **Select [✓]**, you will see an alphabetical listing of Albums found in your music library. The screen will look something like this:

➔ Parachutes Paul's Boutique

Navigate to the album that you want to hear using the Up/Down \triangle ∇ arrow buttons — in our example, “Parachutes.” Or, for faster browsing, press the right arrow to skip ahead in the album list to the next letter of the alphabet. When the album you want is selected, press the **Select** [✓] button for a listing of songs found on this album.

➔ Don't Panic Shiver

The music note  next to each song name indicates the selection is an individual track (and not a playlist, album or other collection of songs).

Note: Songs purchased from the Apple Music Store will be displayed with a padlock  icon. SoundBridge is not able to play back these “locked” files — they will simply be skipped during playback.

Use the Up/Down \triangle ∇ arrows again to highlight the song you want to play. Press the **Play** [▶] button (or press the Select button twice) to start that song playing. When the song begins playback, the display will switch to the “Now Playing” screen, which looks something like this:

Don't Panic 0:10/2:17 ▶
Coldplay - Parachutes (2000) (|||-----)

Please note that the artist and album information may be abbreviated, or appear one line at a time, if the total number of characters exceeds what can be displayed at once. See the “Settings” chapter at the end of this manual for more information on display options.

Hint: If you would like to go back to the above “Now Playing” screen at any time in order to see what’s playing, press Back [◀] several times until you see this screen. Alternatively, press **Home Menu** [⬅], then scroll down to the “Show Now Playing” option and press **Select** [✓]. This screen also appears by default after a few minutes of inactivity on the remote control.

If you press **Play** [▶] on an album track, that track will play, followed by each track remaining on the album. For example, if you press Play on track #5 on an album containing 10 tracks, then

tracks #5–#10 will play. (For continuous playback of the entire album, press **Repeat** [↺] on your remote control — the album will play until the end, then start again at the beginning.)

You can also browse to an album, artist or genre selection and press **Play** [▶] to start playing the entire contents of the selected category.

If you are not sure what you have selected to play, simply press the down ▾ arrow from your “Now Playing” screen (the screen that displays the currently playing song). This is a shortcut to the Song Queue, which shows your upcoming songs (see upcoming section).

Hint: If you navigate to a new song and press Play while your original selection is playing, you will overwrite the old selection (called the “Song Queue”) and begin playing your new selection. Therefore you should only press Play when you want to clear your previous music selections. Use the **Add** [+] button to add your new selection to the end of your Song Queue.

Browsing by Artist or Composer

Browsing by artist or composer works similarly to browsing by Album, as described above. After entering your desired artist or album, you will see a screen that lists the albums available by that artist:

➔ <Show all matching songs>
Medusa

You can add all songs by this artist to your existing Song Queue by pressing **Add** [+] while the first menu item <Show all matching songs> is active. Or, press **Play** [▶] to play all songs by this artist and replace your existing Song Queue. (Songs will play in the order they appear on each album, with each album played in alphabetical order).

Hint: Artist names starting with “the,” such as The Beatles, will be found under the first letter of the word following “the” — in this case, “B” for “Beatles”.

You can choose specific albums or songs to play by navigating down to your desired album and pressing **Add** **[+]** to add to an existing Song Queue, or **Play** to replace an existing Song Queue.

Hint: if your selected album contains songs by different artists, such as compilation albums or movie soundtracks, only the song(s) by your selected artist will be played. Browse by Album instead to play all the tracks.)

Browsing by Song

Browsing by song displays a list of all the songs in your music library, listed in alphabetical order. Use the Left/Right ◀ ▶ arrows to “fast browse” through the list, or up/down ▲ ▼ to move through the list one item at a time.

Browsing by Genre

Browsing by genre displays an alphabetical listing of genres that describe the artists in your music library. To add all songs within a genre to your Song Queue, highlight that Genre and press Add.

To browse within a genre, such as Hip Hop/Rap, press Select on your desired genre. You will see a list of artists in that genre, with the option to see a list of all albums in that genre. Or you can navigate to an artist and press Select to view albums of the selected genre by that artist.

Hint: Information about your music, including Song Name, Artist, Album, and Genre is usually created automatically by the software you used to save your audio CD files on your computer’s hard drive (aka “ripping”). This process creates data called “ID3 tags” to describe each track. If this data is missing from your audio files, they will not appear when you browse by that data category. If you need to edit your ID3 tags, or if you are not satisfied with the description of genres (or other data) assigned to your music file, it is possible to edit that data in iTunes, Windows Media Player or other supported music jukebox programs. (In iTunes, select the file(s) to edit, click on File/Get info, then click on the Info tab.)

SECTION 3: THE SONG QUEUE

SoundBridge automatically builds a song queue every time you select a song or album to play. This section will tell you how to build a song queue, review a song queue and erase a song queue.

Building a Song Queue

Let's say you would now like to choose several different songs or selections to play in a row. This is called building a "Song Queue." SoundBridge automatically builds a new Song Queue every time you select a song or album to play. You can add to that list by navigating to your preferred music and pressing **Add [+]**. The selection will be added to the end of the current Song Queue.

You may add a single song, an entire album, all songs by an artist, all songs in a genre, or any search result — just browse to the selection you prefer and press **Add [+]**. For example, if you would like to play all songs by Coldplay, select Home menu > Browse > Browse artists. Navigate to Coldplay in your artist list and press **Add [+]**. All songs on all albums by Coldplay will be played in the order they appear on each album. See "Browse" and "Search" for more information.

You have several other options for building a Song Queue. After you press Select while browsing on a song, a "Song" menu appears with the following options:

- Play Songs, Starting With selected song name (and clear previous Song Queue)**
- Get Song Info**
- Play Song (and clear previous Song Queue)**
- Add Song to Song Queue (same as pressing the Add [+] button)**

The first, "Play Songs" option is described in the section above — it starts playing your album (or other browsed list), beginning with the current track.

If you choose "Play Song" on any track in your selection, the entire list is added to the Song Queue, but playback starts on the chosen track. If you have the **Repeat [↺]** option selected, the earlier tracks in the queue will play after the last song. If you have the **Shuffle [↻]** option selected, then the chosen track will play first, followed by all the other tracks in the list in random order.

The "Add song to Song Queue" option behaves similarly to the **Add [+]** button— it places the current song at the end of your playlist.

You can add an almost unlimited number of songs to your Song Queue. Each selection will be played in the order it was entered (unless you have chosen to Shuffle your Song Queue).

Hint: After you have selected multiple songs to be played in turn, you can use the “Next Track” ⏮ and “Previous Track” ⏭ buttons to skip from song to song in your Song Queue.

Reviewing a Song Queue

At any point, you can review what’s in your Song Queue by pressing the Down ▾ arrow from the Now Playing screen, which is the default screen that appears while SoundBridge is playing. The Now Playing screen looks something like this:

Don’t Panic **0:10/2:17** ▶
Coldplay **Parachutes (2000)** (|||-----)

Alternatively, you can press **Home Menu** [🏠], then select the “Show Song Queue” option. You will see the entire list of songs in your song queue; refer to the scroll bar on the right side of the screen to determine where in the list you are located. Press the Up/Down arrows △ ▾ to see the entire list of selections in your Song Queue. The currently playing selection is indicated by a speaker 🗣).

You cannot save a Song Queue that you have created — it’s only held in memory temporarily until you build your next Song Queue. If you would like to build a Song Queue that you can save, please build a Playlist in your music jukebox software (see “Playing a Saved Playlist” below).

When the Song Queue has played all the way through, it will stop (unless repeat has been selected). You will see the Stop icon ■ on the right side of your display. To start playing your Song Queue again at the beginning, press the Play button.

Erasing a Song Queue

If you decide you don’t want to play the Song Queue you’ve just created, simply select something else to play. Navigate to another selection (song, playlist, etc.) and press **Select** [✓] or **Play** [▶] (not **Add** [+]). This selection immediately replaces your old Song Queue.

SECTION 4: ADDITIONAL PLAYBACK OPTIONS

Playing a Playlist

To play a playlist that you have created in your music jukebox software such as iTunes or Windows Media Player, select the Playlist option from the **Home Menu** [🏠]. Use your Up/Down Δ ∇ arrows to browse your playlists one by one, find the one you want to play, then press **Play** [▶] to play all songs on the playlist immediately or **Add** [+] to add the playlist to your Song Queue. Playlists can include audio tracks, Internet radio streams, even iTunes' Smart Playlists. If your playlist was created in Windows Media Player or other software using Windows Media Connect, be sure to save your playlist in the My Music/. My Playlist folder on your hard drive, or configure Windows Media Connect to share the directory on your hard drive containing the playlist.

Repeat and Shuffle

Pressing **Repeat** [↺] once makes your Song Queue play continuously. You will see the Repeat icon (↺) displayed on the right side of your "Now Playing" screen below the Play ▶ icon. Pressing Repeat again makes the current song play over and over; you will see another Repeat icon, a circle with just one arrow (↻). Press Repeat a third time and you will remove the repeat command altogether.

Pressing **Shuffle** [↻] while playing a Song Queue will give you the following options:

Shuffle On — will play everything in your Song Queue in random order. (The shuffled order of songs will be displayed in the Song Queue.) An icon with two crossing arrows (↻) will be displayed on your Now Playing screen.

Shuffle Off — will play everything in your Song Queue in the original order.

You can execute the Repeat and Shuffle command from any menu in SoundBridge. Even though you can only see the mode change on the Now Playing screen, the command is taking effect.

Search Options

To search for a specific selection by spelling it out, you can press the **Search** [🔍] button on your remote control, or navigate down to the “Search” option from the Home Menu.

(**Note:** Unfortunately, Rhapsody and MusicMatch don’t support searching on SoundBridge at this time. If searching is not available, the Search menu item will not appear, and pressing the Search key on the remote will display a message.)

Whether you use the Search menu or the remote button, you will see the following options:

- Search for Titles**
- Search for Albums**
- Search for Artists**
- Search for Composers**
- Search Keywords**

Press Select on the option you would like to search with. Then, use your Left/Right ◀ ▶ arrows on the remote control to enter characters for spelling your selection and then pressing Select. When you are done spelling, use the Down ▾ button to go to the OK option and press Select. (If you make a mistake, use the Down ▾ button to go to the Delete option and press Select.)

Hint: Partial spelling is OK — the Search function searches for letters anywhere in the word, as opposed to just at the beginning. For example, to search for Radiohead, you can enter any combination of letters found in the word (“RA,” “DI,” “HE,” etc.), and the results will return all Artists containing those letters (e.g., if you enter “DI” you may get Radiohead, India Arie, and Diana Krall).

When you find the music you like, use the **Add** [+] button to add it to your Song Queue. If searching for albums or artists, you can press **Select** to navigate down to individual tracks.

SECTION 5: PRESETS

Your SoundBridge includes 18 positions in its internal memory, which can store a variety of selections for your quick and easy recall. You can save just about anything to Presets that you can play on the SoundBridge by highlighting it and pressing the Play key. For example, you can save all tracks by a single artist, a Playlist, an Internet Radio Station, or a set of search results. Simply navigate to your selection and press the Play button to begin playing it. Then press **Select [✓]** and scroll down to the option “Save Preset: [Name of selection]”. Each position is numbered: A1-A6, B1-B6, and C1-C6. Choose which preset you would like to replace, and your preset will be saved.

For example, let’s say you want to save all tracks by the artist Coldplay as one preset. Select the Browse/Browse Artists options and scroll down to the listing “Coldplay”. Press **Play [▶]**, and then press Select. Scroll down to the option “Save Preset: Tracks by Coldplay” and press Select. Note: You cannot make a preset out of a Song Queue that was created using the Add key or menu command. The selection must be playable simply by hitting the Play key on the remote. Individual tracks cannot be saved as Presets. When an Internet Radio station is playing, even if it was part of a larger list, only the individual station is saved.

Recalling Presets

You can access your Presets in several ways:

From the Home Menu of any music library, scroll down to “Play Preset” and press Select. Scroll down to the preset you would like to play and press **Select [✓]**.

While listening to any selection (music, Internet radio, etc.) press Select from the Now Playing menu and scroll down to the “Play Preset...” option.

Editing Presets Using the Web Interface

You can also edit your presets in the SoundBridge web interface. See page 35 for instructions on connecting to your web interface. Click on the link to the “Presets” page. Here, you can:

- Re-name a Preset by typing a new name into the web form.
- Reorder the selections in the list by pressing and dragging the “Move” button.

- Play back the selection by pressing the “Play” button next to the selection. (If your SoundBridge is in Standby mode when you press Play, it will power up and start playing.)
- Enter a stream URL for an Internet radio station from an external source. (For help with locating and importing stream URL’s, see the link on the top of the web page. For more information about playing Internet radio streams, see the “Internet Radio” section of this user guide.)

When you are finished editing your Presets, click on the “Update Presets” button at the bottom of the page.

Presets commands can also be programmed into a universal remote control. For more information, see the “Programming a Universal Remote Control” section in the Advanced Features chapter of this document.

SECTION 6: INTERNET RADIO

You can listen to Internet radio in one of three ways. First, you can listen to SoundBridge's built-in set of radio stations located in the "Internet Radio" Library. Your computer does not need to be on - all you need is an active Internet connection on your home network. Second, you can enter a URL of a radio station playlist on the Internet Radio tab of the SoundBridge web page. (This feature is described more in the "Web Page Control" chapter of this user guide.) Be sure to try using Roku Radio Snooper to easily find the urls, test the streams, and set new Internet radio stations as presets. Third, you can use iTunes to tune in to other stations, and then play them back on SoundBridge. (Note: You can use iTunes for radio tuning even if you normally use Windows Media Connect as your music server.)

The easiest way to play Internet Radio on SoundBridge is through the "Internet Radio" Library, where you can access a large and growing number of Internet Radio stations, browseable by Name, Genre, Language, and Location. To navigate to the "Internet Radio" Library, follow these steps:

1. Press **Home Menu** [🏠]. Navigate down to "Change Library or Configuration" and press **Select** [✓].
2. Your available music libraries will be displayed, including the one named "Internet Radio." Select that library and you will see a list of Internet radio stations. These are your Presets, and they are pre-loaded when your SoundBridge is first set up. See below for more information on how to edit these Presets.
3. Scroll to the station you want to play and press **Play** [▶]. (Alternatively, you can press **Select** [✓] and choose "Get Station Info" to view the genre/format of the station, its language and location.)

When the station is playing, the "Now Playing" screen looks similar to this,:

Michelle Shocked – Black Widow
<http://www.radioparadise.com>
RadioParadise.com

The song and artist information is provided by each Internet radio station. Therefore, it may not be available for every Internet radio station, or it may look slightly different.

Browsing Internet Radio Stations

You can browse SoundBridge's built-in stations by Name, Genre, Language or Location. From anywhere in the Internet Radio Library, press **Home Menu** [🏠]. You will see the following options:

- My Favorites**
- Browse**
- Play Preset**
- Show Now Playing**

Select "Browse" and choose the method of browsing that you prefer:

- Browse Names**
- Browse Genres**
- Browse Locations** (by country of origin)
- Browse Languages**

Hint: You can "Fast Browse" a list of results by pressing the Left/Right ◀ ▶ arrows on your remote; your results will skip to the next letter of the alphabet.

Choose your desired browse option and press Select. Scroll down to the station you would like to hear and press Play (or Select twice) to begin playback.

Find Station URLs Using Roku Radio Snooper

Roku Radio Snooper is a free Windows application that enables you to quickly and easily discover the URL for your favorite Internet radio stations and determine if the station is supported by SoundBridge and then make it one of your 18 SoundBridge presets with the click of a button. Go to www.rokulabs.com/snooper to download Roku Radio Snooper. Once launched, the lightweight application runs in the background. And while you are listening to any Internet radio stream on your PC, Snooper will test the stream, determine compatibility in an instant, and then present you with the option to set a compatible station as a preset with one button click. Snooper requires version 2.5 or later software running on your SoundBridge.

Playing Internet Radio from iTunes

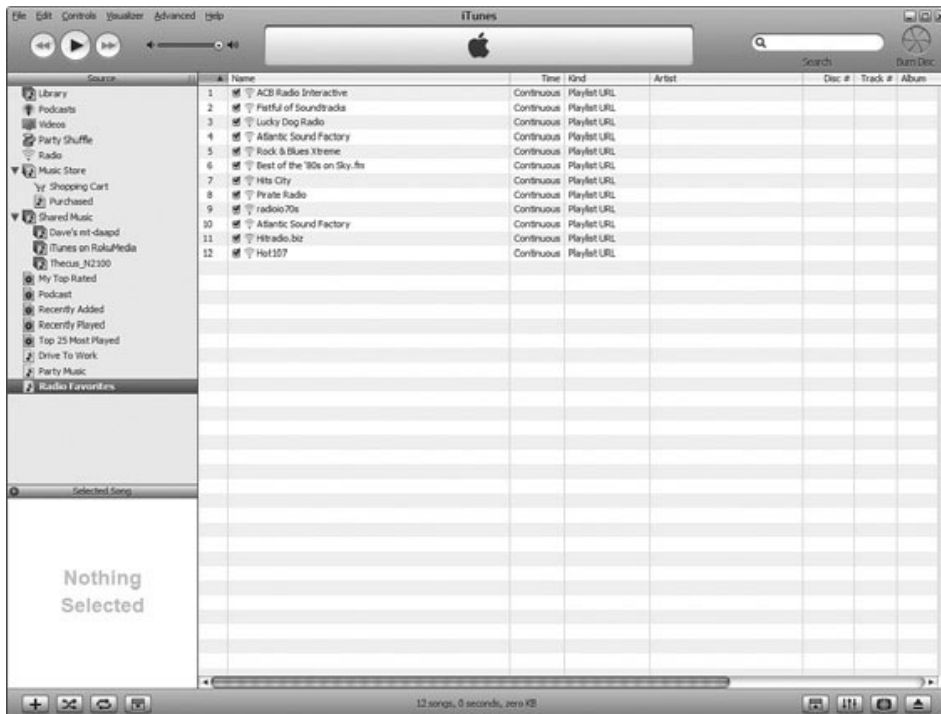
If you want to listen to a station that is not among SoundBridge's built-in list of stations, you

can use iTunes to “tune in” to that station, and then listen to it on SoundBridge. (Windows Media Connect users can continue to use WMC for your music library, and just use iTunes for this feature.)

To play Internet radio stations with the iTunes music server on SoundBridge:

1. In iTunes, create a new playlist (for example, let’s call it “RadioFavorites”).
2. Find the stations that you would like to play on SoundBridge; browse the iTunes Internet radio station list by clicking on the Radio button on the Source tray of iTunes, or import a specific URL from its online source.
3. Drag and drop the stations you like into the “RadioFavorites” playlist.

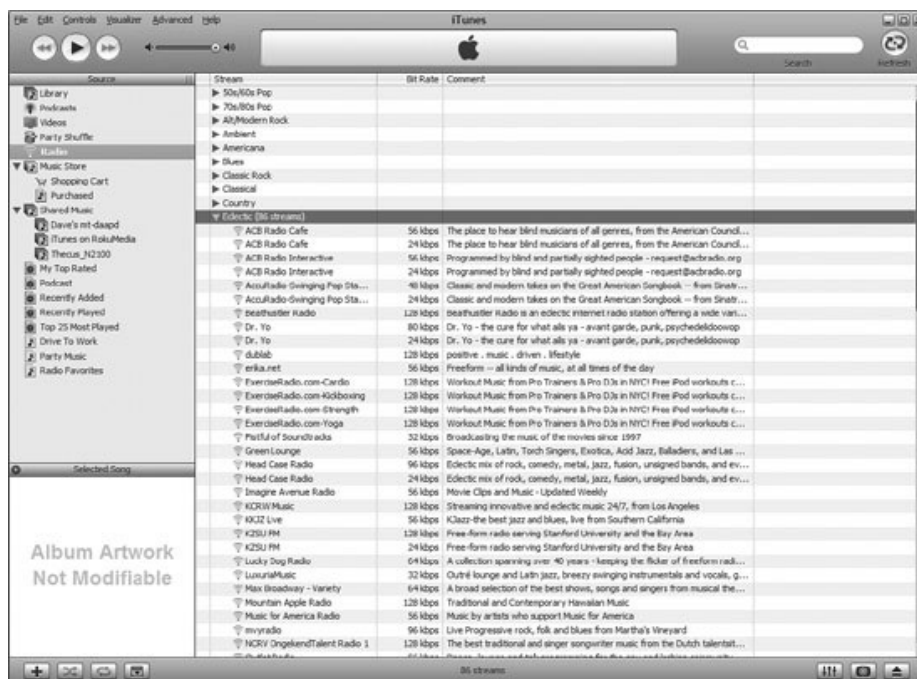
The result is an iTunes playlist that contains your favorite radio stations.



4. Play this playlist on SoundBridge. Connect to your iTunes Music Library by choosing the “Change Library or Configuration” option from your Home Menu and select the name of your library. Once connected, select “Playlists.” Scroll down to the saved playlist (in our example, “RadioFavorites”) and select it. You can now scroll through your favorite radio stations. Press **Play** [▶] to start playing your desired station.

Customizing Favorites and Presets for Internet Radio

There are two ways to save Internet radio stations for easy playback. The first way has already been discussed, and that is to save the station as a Preset. Whether the station was found by browsing SoundBridge’s built-in Internet Radio Library, by playing it from iTunes, or by entering it manually on the web page, it can be stored in a Preset slot and played back easily via the “Play Preset” command.



The second way is to mark a station from the built-in Internet Radio Library as a favorite. When

a station is marked as a favorite, it appears in the “My Favorites” list in the Internet Radio library, but does not use up one of the 18 Preset slots.

Note: If a station is saved as a Preset, then it is assumed to also be a “favorite”, and will always appear at the front of the “My Favorites” list.

There are several important differences between Presets and My Favorites:

- ➔ Presets are accessible from any Library, while My Favorites only appear in the Internet Radio Library.
- ➔ My Favorites may only contain stations found by browsing the Internet Radio Library. Presets may contain stations from the built-in library, or saved from iTunes, or entered via the web page.
- ➔ Presets can recall content other than Internet Radio stations, like playlists or selections that you have browsed to from SoundBridge (such as all songs by a particular artist, etc). My Favorites include only Internet radio stations.
- ➔ When displaying My Favorites, Internet radio station Presets are also included at the beginning of the list.
- ➔ Presets can be programmed and played from the preset web page (see page 25 for more information.)
- ➔ Presets can be programmed as discrete commands on a custom remote control. (For more information about customizing your remote for SoundBridge control and a pronto CCF file, please visit the Support section of our web site.)

To save an Internet radio station to My Favorites:

1. From the “Internet Radio” library, Scroll down to the “Browse” menu item. Navigate to the station you would like to save.
2. Press **Select [✓]**, then press the Down ▾ arrow to display these options:

Play [Station name]
Get Station Info

Add Station to My Favorites

3. Scroll down to the option “Add Station to My Favorites” and press Select. You will see the message “Station added to your favorites”. Next time you view My Favorites, you will see that station displayed in the list.

You can also save a station to My Favorites while it is playing. Simply press Select to display these options:

Get info for “[Station name]”
Play Preset...
Save Preset: [Station name]
Add Station to My Favorites
Stop

Select the option “Add Station to My Favorites” and press Select.

Note: Only stations that you have accessed via the browse feature in the Internet Radio Library can be saved to your Favorites. Stations that are played from an iTunes playlist or from a URL manually entered as a preset cannot be saved to your Favorites.

To save an Internet radio station to your Presets:

Play a radio station and press Select. You will see the following list of options:

Get info for “[Station name]”
Play Preset... (this displays a list of your 18 presets)
Save Preset: [Station name]
Add Station to My Favorites
Stop

Select the option “Save Preset: [Station name]” and press Select. Scroll down to the position you want to replace and press Select. Next time you view Presets, you will see that station displayed in the position you have chosen. You will also see Presets displayed first in the list of My Favorites.

Saving Stations Originating in iTunes to Presets

You can save Internet radio stations from an iTunes playlist to your SoundBridge Favorites by pressing **Select [✓]** while the station is playing in SoundBridge. You will see the following options:

**Get info for [Station name]
Play Preset...
Save Preset: [Station name]
Add Station to My Favorites
Stop
Turn Screen Off**

Scroll down to “Save Preset” and press **Select [✓]**. You will see a numbered list of existing presets starting with A1, A2, etc. Select the preset you would like to replace and press **Select [✓]**. You will see the confirmation message “Preset Saved”.

Hint: You cannot save stations imported from iTunes or Windows Media Connect as Favorites, only Presets. (However, stations saved as Presets will always be displayed at the front of the list of “My Favorites”.)

Memorizing a Radio Playlist

You can also replace some or all of your existing presets with the contents of an Internet radio playlist in iTunes.

1. If you are still in the “Internet Radio” music library, exit it and enter your iTunes library. (See page 16 for changing music libraries.)
2. Create a playlist in iTunes containing your favorite radio stations, as described previously in this chapter.

Hint: Your playlist can contain as many Internet radio stations as you like, but only the first eighteen will be saved to your Presets. You can rearrange them by dragging and dropping to their desired order inside the iTunes playlist, or (after saving them) on the SoundBridge web page (see the “SoundBridge Web Interface” chapter of this document for more information).

3. On the Home Menu of your iTunes music library, select “Settings”, then “Memorize Radio Playlist”.
4. Follow the instructions to navigate to the playlist you want to save, and press OK.
5. You will receive a confirmation of what Internet radio streams were saved (up to the first 30 characters of the name will be saved). You can press **Back [↶]**, or navigate to your desired

audio stream and press **Select** [✓] to play it immediately.

If your list contains fewer than eighteen stations, SoundBridge will replace the Presets in the corresponding slots (starting with A1), and the remaining Presets will remain unchanged.

Playing Stations Saved as “My Favorites” or “Presets”

From anywhere in the Internet Radio Library, press the **Home Menu** [⬆]. Choose the “My Favorites” option. You will see a list of your Internet radio Presets followed by your Favorites. Navigate to the station you would like to play and press **Select** [✓]. You will have the option to play it, get station info, or “Remove station from My Favorites”.

You can also just press the Down ▾ arrow on the Now Playing screen of an Internet radio station. Since there is no Song Queue when listening to Internet radio, this shortcut takes you directly to My Favorites. If the currently-playing station appears in My Favorites, it will be marked with the speaker icon [🔊].

To play your Presets, you can also choose the Play Preset option from the Home Menu of any music library (not just the Internet Radio Library). Choose the station you would like to play, then press Select,

Playback Limitations of Internet Radio Streams

SoundBridge currently supports MP3 and WMA Internet radio stations. RealAudio and AACplus stations are not supported at this time. However, stay tuned for additional formats that may be supported in future software releases.

Unfortunately, there are few standards in Internet radio (especially for MP3 stations), and sometimes a station will do something out of the ordinary that will prevent the SoundBridge from being able to play it. See our online document at <http://www.rokulabs.com/support/internetradio.php> for more information.

Discovering More Internet Radio Stations

Our online user forums have an active discussion dedicated to helping SoundBridge users find good Internet Radio stations in a variety of genres. Visit our Forums (accessible from www.rokulabs.com/support) and look for the discussion topics related to Internet Radio stations if you would like to find more stations in a particular genre or would like to suggest a station or offer help to others on this topic.

SECTION 7: SOUNDBRIDGE WEB INTERFACE

Use SoundBridge's web page to control SoundBridge playback remotely, configure your SoundBridge or reconfigure your preset Internet radio stations by entering the stream URL directly into the web page. There are several ways to access the web page:

Launching the Roku Web Interface

PC/Windows users:

You can configure your computer to display UPnP devices including SoundBridge in your My Network Places window.

Windows XP Service Pack 2 (SP2) users:

1. Open My Network Places
2. Click on "Show icons for networked UPnP devices" in the Common Task panel on the left side of the My Network Places window. If the Common Task panel is not visible
 - a. Select Tools>Folder Options in the My Network Places window
 - b. Under the *Tasks* section, choose "Show Common Tasks in Folders" and click OK.
3. Choose OK when asked to open the UPnP firewall ports.

Windows XP Service Pack 1 (SP1) users:

From the Control Panel, click Add or Remove Program.

1. Click Add/Remove Windows Components.
2. From the Windows Component list, select Network Services and then click Details.
3. Select the UPnP Interface check box.
4. Click OK and then Next.. The Configuring Window appears.
5. When the configuration is completed, click Finish.
6. Navigate to My Network Places and double-click the SoundBridge icon. You are now ready to access SoundBridge's web interface.

Apple/OSX users:

Follow these steps to access the web page:

1. Launch the Safari web browser. Because SoundBridge uses the Bonjour protocol (formerly known as Rendezvous), the device automatically announces itself.
2. In Safari, be sure you have your bookmark list showing. If it is not showing, go to the Bookmark menu and select Show All Bookmarks.
3. Click on the Bonjour option in the bookmark list to reveal your SoundBridge. If more than one device is connected, they will be named SoundBridge, SoundBridge (2), and so on.
4. Double-click the name of your device to open the SoundBridge web page.

The web page includes four tabs:

Now Playing

Allows for control of playback of current music selection, including Pause, Play, Next/Previous Track, Stop, Repeat and Shuffle. You can also change the volume level.

Presets

On this page, you can:

- Specify up to eighteen of your favorite music selections, such as Internet radio streams, search results, or Playlists, to be stored in your Presets. (See p 26 for more info about Presets.)
- Change the name of a preset.
- Click and drag the “Move” button to change the order of items in your Preset list.
- Press the “Play” button to play a preset item on your SoundBridge.

Why eighteen presets? Roku’s new Wi-Fi Radio includes eighteen preset buttons on the top of the unit– which makes playing and changing presets quick and easy.

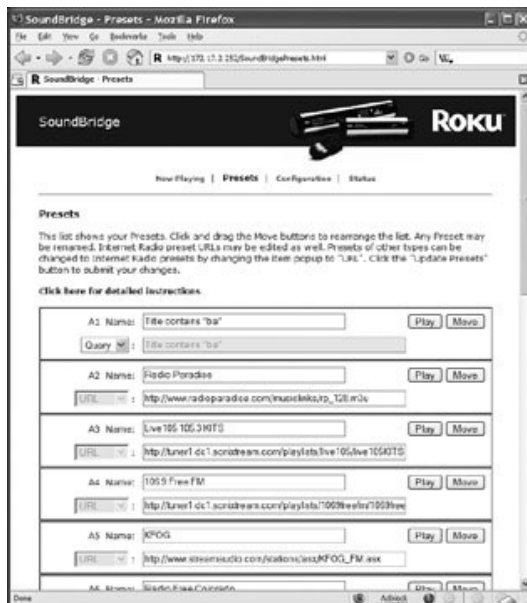
If you experience problems with playback of an Internet radio stream you copied from a web browser, make sure that copied the correct URL. Usually, an MP3 stream URL ends with the

“.pls,” or “.m3u” extension, and a WMA stream ends with “.asx”. Currently, SoundBridge can stream MP3 and WMA formats. RealAudio streams (ending in .ram or .rm) are currently not supported. AACplus stations may use the same extensions as MP3 stations, but will not be able to be played. Usually, an Internet Radio station’s web site will say which format is being used. Stay tuned for additional format support in future software updates.

You may wish to use fewer than the 18 available Preset slots. If you want to leave a slot empty, ensure that the menu below the “Name” label reads “URL”, and then ensure that both the name and location boxes are empty. When you save changes, the Preset will be marked as empty. When you are finished editing your presets, click on the “Update Presets” button at the bottom of the page.

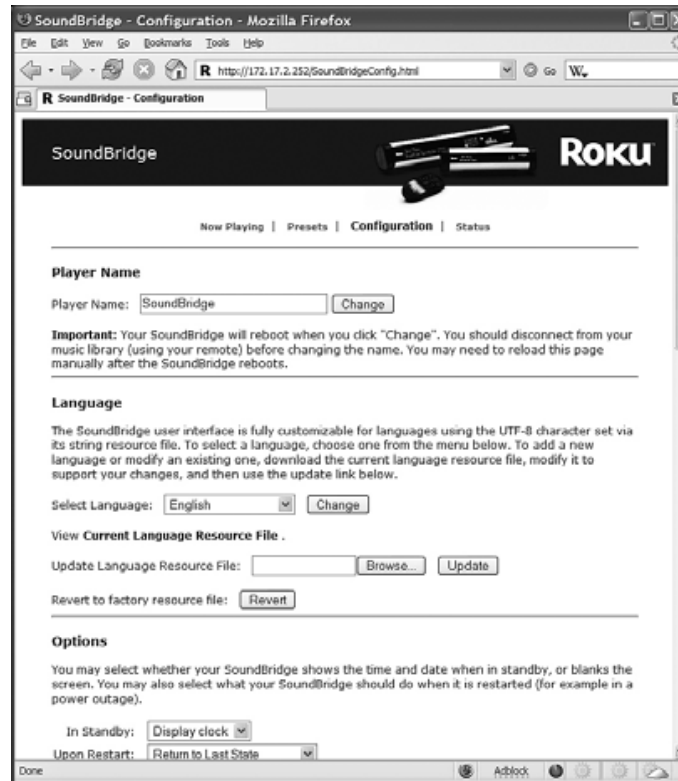
Hint: If for some reason you insert a URL that is too long to fit inside the text field (longer than 250 characters), SoundBridge will automatically revert to the previous URL that was in your list before.

Please see the “Internet Radio” section for information about accessing and playing your stored stations from your presets.



Configuration

Use this page to enter a unique name for your SoundBridge unit, choose a language other than English, or set options for displaying the time and date on your SoundBridge when it is in Standby mode. See the “Clock Settings” and “Language Setup” sections of the Advanced Features chapter at the end of this manual for more information.



Status

Use this page to view the version of software currently running on your SoundBridge. You can also review your network connection information, including IP address and MAC addresses. If you are using a Wi-Fi connection, this page will display your Wi-Fi signal strength and the name of the network to which you are connected. When you are finished using your web page, simply close your browser window.

SECTION 8: WHEN YOU ARE FINISHED USING SOUNDBRIDGE

When you are finished playing music and using your SoundBridge altogether, just press the **Standby** [⏻] button on your remote. In Standby mode, SoundBridge can display the date and time or a blank display, depending on your preference. (See page 40 for more information about setting these preferences.)

If you were playing Internet radio when you pressed Standby, then pressing Standby again will resume playback of that station. Otherwise it will return you to the music library to which you were most recently connected.

If you plan to disconnect SoundBridge from AC power after you are done using it, be sure to press the Standby button first. This logs you out of the music server software running on your computer.

Note: Wait approximately 10 seconds after pressing **Standby** [⏻] before unplugging SoundBridge; this gives SoundBridge time to flush its settings for a clean reboot.

Hint: If you unplug the SoundBridge from AC power five times without pressing **Standby** [⏻] on your remote first, iTunes may lock you out of connecting to the server. That's because iTunes allows a maximum of five users to connect at one time, and if you don't put SoundBridge into standby mode first, iTunes may believe you are still connected. To restore your access to the iTunes server, close iTunes and then restart it. You should then have no trouble connecting to the iTunes server as before.

SECTION 9: ADVANCED FEATURES

Brightness, Contrast, Font, and Text Display

The **Bright** [☼] button on your remote lets you change the brightness of your display using the Left/Right arrows ◀ ▶. For SoundBridge M1000, text size and font options can be controlled using the Up/Down arrows ▲ ▼. (M1000 can display one line or two lines at once.)

Brightness & Time Format While in Standby

While your SoundBridge is in Standby mode (when the unit displays the time and is not playing music), you can adjust the brightness and format of the time on the display.

- Use the Right/Left [◀ ▶] to adjust the brightness of your display. Pressing Left [◀] dims the clock display; pressing Right [▶] brightens it. These settings do not affect the brightness settings of the display when playing Internet or network music libraries.
- Use Up/Down [▲ ▼] arrows to change the time format. You can display large or small fonts, display the time but not the date, and display the time and date. These settings do not apply to when you are listening to the radio or your music libraries.

Settings

SoundBridge display and playback settings can be changed in the “Settings” option located at the bottom of the Home Menu. Your Settings screen will show the following options (scroll down using your remote control to see the complete list):

- **Visualizer Settings....**
 - ✓ **Return to Now Playing when idle**
 - ✓ **Scroll long info in Now Playing**
 - ✓ **Display composer for classical works**
- **Skip items un-checked in iTunes**
- **Memorize Radio Playlist...**

For more information about memorizing a radio playlist, refer to page 34 in the Internet Radio section of this manual.

Music Visualizer Settings

You can customize the kind of visualizer to display, whether it appears full-screen or on the right

side of the Now Playing screen, and other options. Use the “Visualizer Settings” command on the Settings screen to explore these options. (See appendix for full listing of visualizer options.)

Clock Settings

When in Standby mode, SoundBridge can display the date and time, similar to the screen below.

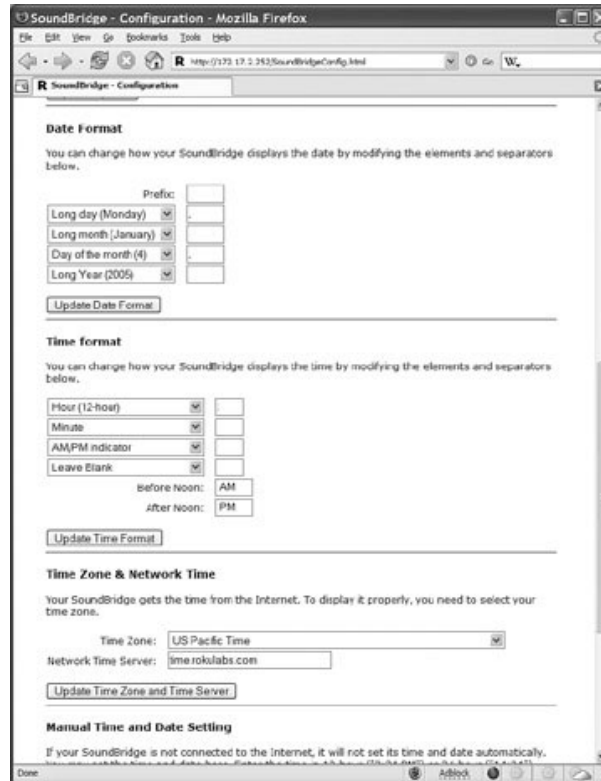
1:17:49 PM
Monday, April 17, 2006

You can customize the clock display in a number of ways:

1. When in Standby mode, use the Left/Right ◀ ▶ arrows to adjust the brightness of the clock display. (This will not affect the brightness settings of the display when in regular playback mode.) Turn the brightness all the way down until you see the word “Standby” to have the screen go completely blank when in Standby. If the screen is blank, pressing the **Select [✓]** key will momentarily display the time and date.
2. When in Standby mode, use the up/down ▲ ▼ arrows to cycle through modes of display. For example, you can display large and small fonts, display the time but not the date, etc. (Again, these settings will not be applied to your display when you resume SoundBridge’s regular playback mode.)
3. Use the SoundBridge web page to configure the format of the date and time. You can also turn off the clock display altogether. Please see the “SoundBridge Web Interface” chapter of this user guide for instructions on launching your SoundBridge web page.

After your web page is launched, click on the Configuration tab. Scroll down on the page until you see a screen that looks similar to the one on page 43.

Here, you can customize how your time appears and correct errors in the display of your date and time. First, be sure that your time zone is selected correctly. SoundBridge uses an Internet connection to display the proper time for your time zone. If your Internet connection is not available, SoundBridge will be unable to display the date and time in Standby mode.



Note that the default configuration of the date and time fields depends upon the language you have selected for your SoundBridge display, but may be edited to suit your needs.

Format your time display by choosing what to display in each of four fields. SoundBridge “strings together” all the fields to create the time display. For example, if you don’t want to see seconds, or don’t want to see “AM/PM”, select the hour and minute format, then choose the “Leave Blank” in the remaining drop down menus. Take note of the small text-entry boxes to the right of the pop-up menus. This is where you enter the character that should appear between the sections of the time. For example, enter a colon (“:”) for the usual “12:15” format.

The date selection works the same way — you can choose the format that best fits your geographic standard or your personal preference.

To disable the date/time display altogether when SoundBridge is in standby, select the corresponding option on this page.

Don't forget to click the "Update" button for the date or time configuration once you've changed it. Since the update buttons correspond separately to date, time, time zone, etc, you should only update one section at a time, then press the appropriate update button.

When you are finished, simply close your web page.

Language Setup

SoundBridge will prompt you for your desired language the first time you set up the unit. If you would like to change the language after the initial setup, use the SoundBridge web page. Please see section 7 of this user guide for instructions on launching your SoundBridge web page. Then, choose the "Configuration" tab. You can choose your language in one of two ways:

1. From the drop down menu titled "Select Language", choose from the options available. (Currently, SoundBridge ships with the following language options: English, French, German, Spanish, Swedish, Japanese, Traditional Chinese and Simplified Chinese. Click the "Change" button to switch to the chosen language.
2. If your language is not listed in the above options, you can upload a Language Resource File containing the instructions to display another language. To see if a third-party translation already exists for your desired language, please visit: www.rokulabs.com/support/international. To download and edit or "translate" this file for your language, click on the "View Current Language Resource File" link. To upload a resource file that you or another third party has created, use the Browse button on the web page to locate the file on your computer's hard drive, then click "Update" to load it into SoundBridge.

Hint: You can always revert to SoundBridge's built-in default languages by clicking the Revert button on the bottom of the Language settings area.

When you are finished editing your language settings, simply close your web page.

Standby and Reboot Options

On the SoundBridge “Configuration” Web page, under “Options”, you can specify how SoundBridge behaves while in Standby mode and after powering up. Standby options include: Display clock, Screen off. Reboot options include: Return to last state, Enter Standby, Reconnect to last source, and Show Server List. (These options are useful if, for example, your SoundBridge is connected to a power strip with other equipment, and you would like it to remain in standby even after the power returns to the unit.)

WMA Lossless Transcoding

This is an option that only needs adjusting if you are having trouble with WMA Lossless playback. Reducing the Bitrate will help SoundBridge tell the difference between WMA and WMA Lossless based on the Bitrate of the stream. (For more information about this feature, please visit Roku’s user forum at rokulabs.com/support.)

FLAC and Ogg-Vorbis Transcoding

You can use the Firefly media server to transcode your audio files from FLAC or Ogg-Vorbis to be playable on SoundBridge. For more information about the Firefly media server, please see the Music Server section of the Getting Started chapter of this manual.

Programming a Universal Remote Control

Roku has made available for download a “CCF file” with all of the remote control codes supported by the SoundBridge and SoundBridge Radio. A CCF file is a remote control configuration file compatible with Pronto programmable universal remotes made by Philips and other brands. Some other programmable universal remotes can also use or import CCF files. Please consult the instructions for your particular remote control to see if you can use a CCF file.

The SoundBridge CCF file includes all of the functions available on the standard SoundBridge remote, as well as some additional special-purpose and direct-access commands that may be of interest to some users. These functions include: discrete power on/off; stop; Preset keys for all 18 Presets; keys for all the Browse options; and, keys to directly access Internet radio, AM/FM radio (SoundBridge Radio only), and the last-used music server library.

SECTION 10: OPTIONS FOR SYSTEM CONFIGURATION

If you need to change your network settings or other system-level options, go to any Home Menu and select “Change Library or Configuration”. Choose “System Configuration” at the bottom of the next screen. You will see the following options:

Software Version & Updates: This option shows you which software version you have on SoundBridge and allows you to check if a newer version is available for download. SoundBridge will notify you automatically when a new software update is available after coming out of Standby mode or after accessing your “source” menu. Use this option to check for new software manually.

Select Wi-Fi SSID & Password: This option allows you to check the name of the wireless network to which you are connected and select another one. Use this option to enter your network security key. See Appendix section “Wi-Fi Setup” for more information.

Show Wired Ethernet Status: This option displays your connectivity status, IP address and MAC address, among others.

Show Wi-Fi Status: Displays Wi-Fi signal strength.

Network Control: Enables or disables control of SoundBridge by a remote UPnP device.

Reset to Factory Defaults: Reset to original factory settings. Important: This will erase all Presets, Internet Radio favorites, network settings, and any other customizations made via the Settings menu or web page.

Restart SoundBridge: Power cycles SoundBridge and reboots the system.

Safe Mode

Safe Mode runs automatically in the unlikely event that Soundbridge software becomes corrupted. While in Safe Mode you can download a new version of software from Roku or restore factory settings. When Soundbridge enters Safe Mode, you will see the text “Safe Mode” displayed superimposed over the Roku logo during the startup animation.

Safe Mode can also be entered manually by powering Soundbridge off by unplugging it from power, then plugging it in again while pressing and holding any button on the remote control during boot-up.

While in Safe Mode, your stored settings will not be recalled. Therefore, you will be prompted to enter your language and Wi-Fi region again. If you need to update the software on your SoundBridge, you will also need to select a network and enter the WEP key (if needed) or use SD card mode.

In Safe Mode, SoundBridge goes directly into the System Configuration menu, with options limited to checking for software update and resetting factory defaults. The Roku logo is displayed next to the menu with “Safe Mode” superimposed on it, like the startup animation.

Roku Control Protocol (RCP)

SoundBridge supports a sophisticated control protocol called the Roku Control Protocol (RCP). Look for third party applications that run on your PC, Mac, or PDA that allow remote Wi-Fi control of your SoundBridge using RCP. If you are a developer, see the Community tab on our web site for more information. There, you can find links to third-party software and discussion of controlling SoundBridge in our user Forums (look for the Control Forum.) A link to the forums can be found in the support tab on our web site.

Geeks — Read This

The SoundBridge has a command line interface that you can “telnet” to for piddling about. You will need to telnet to port 4444. You can quickly get to a Telnet prompt by going to the built-in web page’s “Status” tab and clicking on the SoundBridge’s IP address. Type “?” at the command prompt to see a list of commands. See the developer section of our web site for more details, including the RCP remote control protocol.

SoundBridge has a built-in UPnP AV “media renderer.” This protocol can be used to control the SoundBridge from your own software. Please watch the developer section of our web site for updates on this feature.

SECTION 11: APPENDIX 1A: MENUS OVERVIEW

Home - Music Library

Playlists (►Alpha list of Playlists available in current music library)
Browse (►Artists/Albums/Songs/Genres/Composers)
Search (►Text entry for keyword search)
Play Preset (►List of Presets numbered A1:C6 ►Select ►Plays station)
Show Song Queue (►List of songs in queue)
Show Now Playing (►Now playing screen)
Settings (►[see menu below])
Change Library or Configuration

Home - Internet Radio Library

My Favorites (►Preset stations, then favorite Internet radio stations ►Select ►Play station/Get station info/Remove from My Favorites)
Browse (browse Internet radio stations -by Name/Genre/Location/Language)
Play Preset (►List of Presets numbered A1:C6 ►Select ►Plays station)
Show Now Playing (►Now playing screen)
Settings (►[see menu below])
Change Library or Configuration (► [see menu below])

Change Library or Configuration

Music Library 1
Music Library 2
Play Internet Radio (►List of Presets and Favorites ►Select ►Play station/Get station info/
Remove station from My Favorites)
Change Library or Configuration (► [see menu below])

System Configuration

Software Version and Updates
Select Wi-Fi SSID & Password
Show Wired Ethernet Status
Show Wi-Fi Status

Network Control (►Set preference to Enable/Disable network control via UPnP)

Reset to Factory Defaults

Restart SoundBridge

Exit

System Configuration> Show Wi-Fi Status

Connected to [Network name]

Quality: xx Signal: xxdBm

Technical Details:

Connected to an open-system access point...

MAC Address:

IP Address:

Netmask:

Gateway:

DNS 1:

DNS 2:

Home> Settings

Visualizer Settings...

Return to Now Playing When Idle

Scroll Long info in Now Playing

Display Composer for Classical Works

Skip Items Un-checked in iTunes

Memorize Radio Playlist... (►"Select a playlist to save the first 18 Internet radio stations in that playlist as your Presets." Note-only works if connected to music library in which the playlist is contained..")

Home> Settings> Visualizer Settings

Select Visualizer... (►Clock/Frequency Analyzer/Horizontal VU-Meter/Oscilloscope/Vertical VU-Meter/Voice Print)

No Visualization

Partial-screen Visualization

Full-screen Visualization

APPENDIX 1B: SCREEN ICONS QUICK REFERENCE

In all menus and song lists:

- ➔ The arrow icon indicates the menu item being selected.

In song lists and the “Song Queue” screen:

- 🎵 The music note icon denotes a single track (as opposed to a collection of tracks).
- 🔊) The speaker with audio waves shows current song playing (only on the “Song Queue” screen).
- 🔊 The speaker without audio waves shows current song paused (only on the “Song Queue” screen).
- 📶 The upward facing radio transmission signal indicates an Internet radio station.
- 🔒 The padlock icon indicates protected content that cannot be played. AAC songs purchased from the Apple Music Store will have this icon; these songs are not available for playback by SoundBridge. If you see this icon on a DRM WMA song, and are playing from WMC or another DRM-compatible server, then the SoundBridge may not have completed the authentication process with the server yet. Try waiting a minute or two, then hit the Back key and re-load the song list.
- X This indicates an unsupported file format.

On your “Now Playing” screen:

- ▶ The Play icon indicates SoundBridge is in playback mode.
- ⏸ The Pause icon indicates playback has been paused.
- The Stop icon indicates playback has been stopped.
- 🔀 The Shuffle icon (with two crossed arrows) indicates playback of your Song Queue is happening in random order.
- 🔁 The Repeat icon indicates continuous playback of your Song Queue.
- 🔁 The Repeat Single Track icon indicates continuous playback of the currently playing track.

APPENDIX 2: WI-FI SETUP HELP

Wi-Fi Setup Instructions

SoundBridge is configured to automatically connect to your Wi-Fi network during initial setup. If you are not able to access Internet radio or music libraries on your Mac or PC, first check your network connection by following these steps:

1. From the Source menu, choose System Configuration and press **Select [✓]**.
2. Scroll down to Show Wi-Fi Status and press **Select [✓]**. If connected, a message displays telling you that your wireless network is connected and the name of your network displays.

Multiple Wi-Fi Networks

If SoundBridge detects more than one Wi-Fi network, you will be asked to select which SSID (network name) you want to use. You will only be asked to select an SSID if you have more than one wireless network at your location. If you have more than one network, scroll down to select from the Wi-Fi networks you have and press **Select [✓]**.

You can also enter the name of a Wi-Fi network. To enter a network name, follow these steps:

1. From Select Wi-Fi SSID and Password, select Specify a wireless network and press **Select [✓]**.
2. Use Right/Left [\triangleleft \triangleright] to find letters, number and spaces in the Wi-Fi network name and then press **Select [✓]** for each letter, number and space you choose.
3. Use Up/Down [\triangle ∇] for "OK," spaces, delete, commas, periods, accent letters, numbers and uppercase or lowercase letters.

For additional help connecting to your network, including password help, see "Appendix 2: Wi-Fi Access Point Password."

Entering a Security Key

If you have a security key, you will need to enter your WEP [Wired Equivalent Privacy (802.11 encryption protocol)] key. This is the same key you entered into your Access Point and your computer. To find more information about your Access Point, see "Appendix 2: "Wi-Fi Access Point Password."

As of this writing, the SoundBridge software is version 2.5 and does not support “WPA”. Check for software updates if you need this feature.

Troubleshooting Wi-Fi Setup

If you have problems connecting to the SoundBridge to your music library, please check the following:

1. Is the SoundBridge is powered on (is the screen lit)?
2. Is SoundBridge within range of your wireless network signal? (Performance varies depending on wireless network hardware, physical barriers such as walls, and signal interference.)
3. Is your computer on and is your Wi-Fi access point plugged in?
4. Is your music server software running on your computer? Are your music sharing options enabled? (See “Enabling Music Sharing” on page 7.)
5. If you have a password, did you enter it correctly, including case sensitive characters?
6. Is your wireless access points (WAP) compatible with SoundBridge? For a list of compatible Wi-Fi access points that Roku has tested, please visit www.rokulabs.com/support.

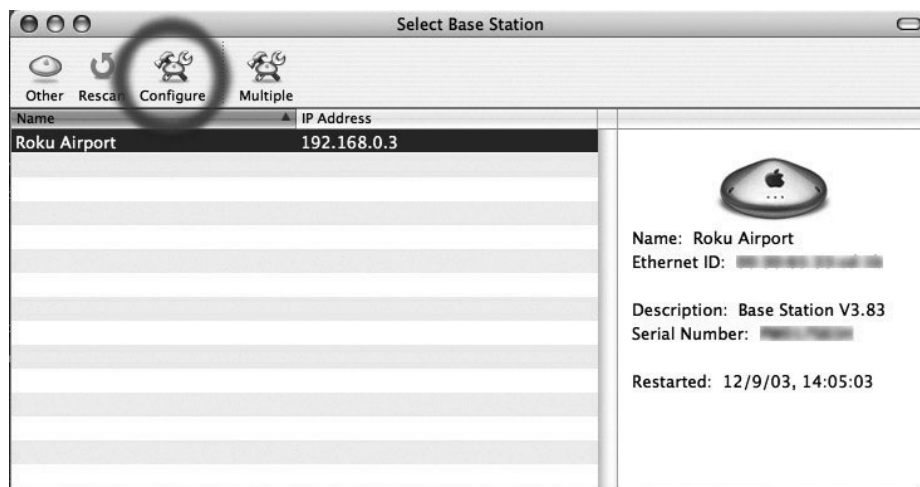
Obtaining Your Wi-Fi Network Name (SSID) and Password (WEP key)

Your Wi-Fi network’s SSID and password (also known as your Wireless Equivalent Password/ WEP key) can be obtained from the software that came with your wireless access point. Pay attention to uppercase vs. lowercase characters. Please note that some wireless access points allow you to create another password/passphrase that they use to generate the WEP key. You want the WEP key itself, and not that other password. Below are detailed instructions for where to find your SSID and WEP key for several common wires access points. More information is also available in the support area of our web site (www.rokulabs.com/support) and in our user forums.

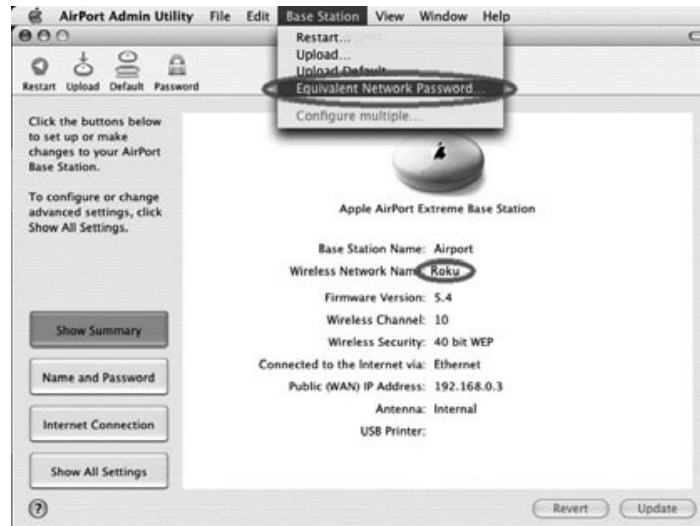
Apple AirPort (Mac Users)

To see the name and password of your AirPort, follow these steps:

1. From the Utilities folder, open your AirPort Admin Utility.
2. Select your AirPort and choose Configure.



You should then see the display shown on the following page. The line labeled “Wireless Network Name” is the name of your network (SSID).



3. If your network is password protected, you should choose Equivalent Network Password from the Base Station menu as shown above. Write down the value that appears in the dialog as shown below. This is your network password.



Apple AirPort (PC Users)

1. From Start/Programs/Airport Admin Utility, open the AirPort Admin utility.

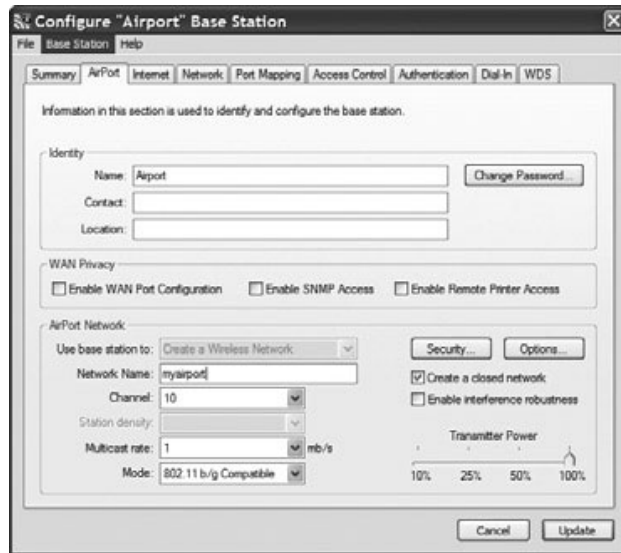
2. Select the network you would like to configure. You should then see the configuration display below.

The screenshot shows the 'Configure "Airport" Base Station' window with the 'AirPort' tab selected. The window has a menu bar with 'File', 'Base Station', and 'Help'. Below the menu bar are tabs for 'Summary', 'AirPort', 'Internet', 'Network', 'Port Mapping', 'Access Control', 'Authentication', 'Dial-In', and 'WDS'. The 'AirPort' tab contains the following sections:

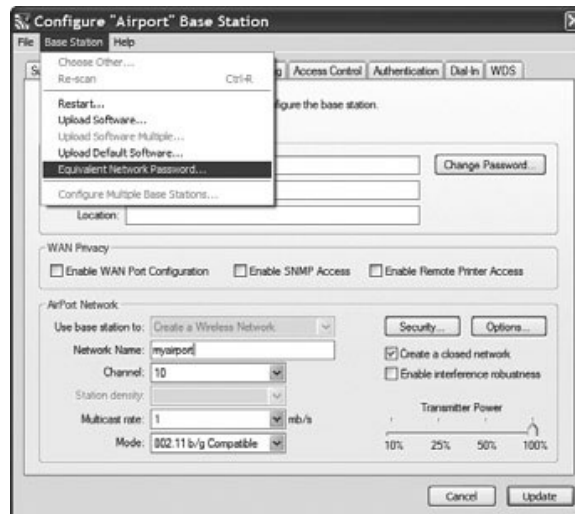
- Identity:** A section with three text fields: 'Name' (containing 'Airport'), 'Contact', and 'Location'. A 'Change Password...' button is located to the right of the 'Name' field.
- WAN Privacy:** A section with three checkboxes: 'Enable WAN Port Configuration', 'Enable SNMP Access', and 'Enable Remote Printer Access'. All are currently unchecked.
- AirPort Network:** A section with several controls:
 - 'Use base station to:' dropdown menu set to 'Create a Wireless Network'.
 - 'Network Name:' text field containing 'myairport'.
 - 'Channel:' dropdown menu set to '10'.
 - 'Station density:' dropdown menu.
 - 'Multicast rate:' dropdown menu set to '1' with 'mb/s' unit.
 - 'Mode:' dropdown menu set to '802.11 b/g Compatible'.
 - 'Security...' and 'Options...' buttons.
 - Checkboxes for 'Create a closed network' (checked) and 'Enable interference robustness' (unchecked).
 - 'Transmitter Power' slider ranging from 10% to 100%, currently set at approximately 75%.

At the bottom right of the window are 'Cancel' and 'Update' buttons.

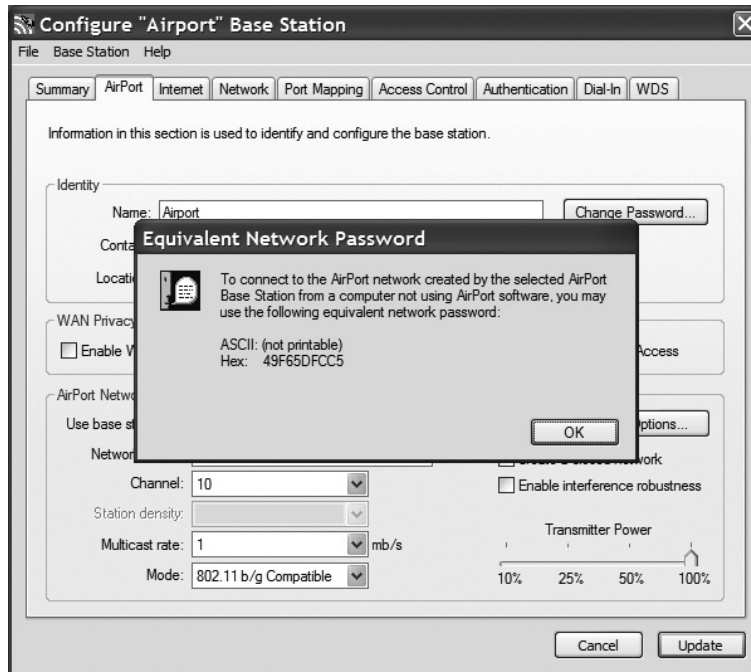
3. Make a note of the name of your Wi-Fi network in the Network Name field.



4. From the Base Station list, select Equivalent Network Password.



5. Write down the displayed password from the dialog box (as illustrated below).

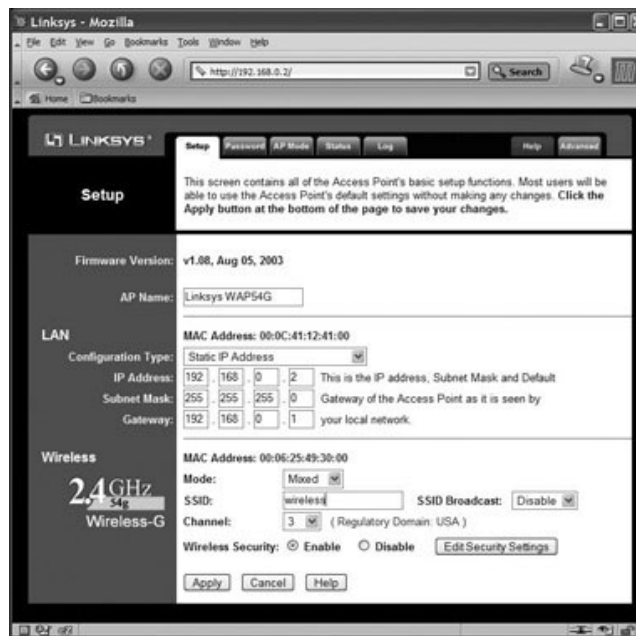


Linksys WAP54G

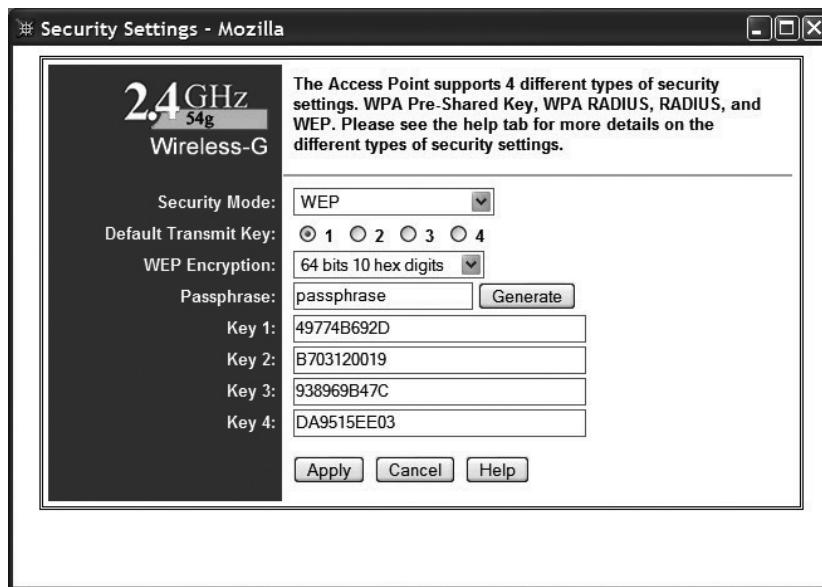
Follow these steps for obtaining the hexadecimal WEP key from the WAP54G:

1. Open a web browser and connect to the access point.

You connect to the access point by entering the access point's IP address in the location bar of your web browser. If you do not know the IP address of the access point, please refer to the software or manual that came with the access point in order to determine the IP address. After successfully logging in, you will see a page similar to the following:



2. Write down the Wi-Fi network name in the MAC Address SSID field.
3. Click Edit Security Settings to access the WEP setup page. When WEP Security is enabled, you can easily view the keys.



4. Key 1 is the default key used by SoundBridge. In this example, 49774B692D is the key value.

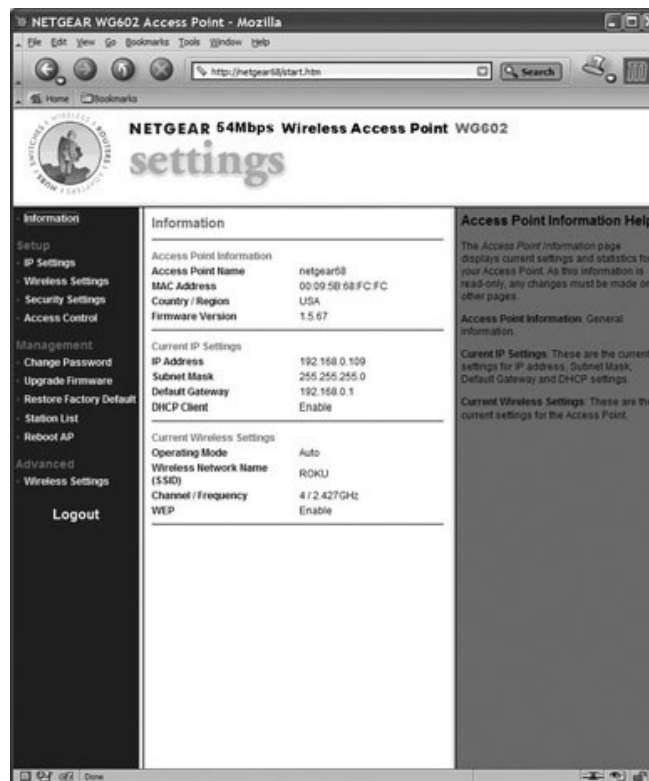
This is your Wi-Fi network password.

5. Close your web browser.

Netgear WG602

The Netgear WG602 is an 802.11g Wi-Fi Access Point. Its configuration can be accessed with a web browser.

1. Open a web browser and connect to the access point by entering the access point's IP address in the location bar of your web browser. If you do not know the IP address of the access point, please refer to the software or manual that came with the access point in order to determine the IP address. After successfully logging in, you will see a page similar to the following:



2. Note the value of “Wi-Fi Network Name (SSID)”.
3. Click “Security Settings” on the left side to access the WEP settings. If “WEP” is set to “Enable” (as below), you will need to obtain the hexadecimal key for your network.



Netgear unfortunately, does not allow you to view the current WEP key. However, if you re-enter the known passphrase and press “Generate Keys,” then it will regenerate the keys as before and allow you to view them:



4. Make a note of the value of the key with the active radio button (the default key, in this case “Key 1”: “562E7FF0A0”). This is the password that you will need to enter into your SoundBridge’s Wi-Fi setup “Password” field.

5. Close your web browser.

Customer Support

If you are having trouble setting up the SoundBridge, please browse our online support resources at www.rokulabs.com/support. There you will find troubleshooting documents and an active forum topic dedicated to “SoundBridge Set-up”. Check to see if other users have posted information that pertains to your situation. Our Forum is monitored by Roku engineers and by our customer support staff. If those options fail, please send an email to Customer Support.

APPENDIX 3: END USER SOFTWARE LICENSE AGREEMENT

IMPORTANT — READ CAREFULLY: By using the software in your SoundBridge, you agree to be bound by the license terms and conditions below. If you do not agree to these terms and conditions, you must immediately return your SoundBridge in its original condition and packaging to the point of purchase for a refund of your purchase price (after inspection).

iTunes Disclaimer

Roku SoundBridge interfaces to iTunes using the Apple DAAP protocol, under license from Apple. This license gives Apple the right to terminate the license for any reason. Roku has no control over this, and is not responsible in the unlikely event Apple does so. In this event, Roku will use commercially reasonable efforts to provide software that installs on your PC via a download that provides similar functionality, but Roku makes no representations or warranties regarding the features available in such a situation.

Roku Software License

Subject to these terms and conditions, ROKU grants you a non-exclusive license, with no right to sublicense, to execute the software included with the SoundBridge or subsequently provided to you by ROKU (together, the “Software”) on your SoundBridge solely for your personal use of the intended features and functions of the SoundBridge. The license may be transferred only with the transfer of the SoundBridge on which ROKU has installed the software; any transferee will be subject to the terms and conditions of this license. This license will terminate automatically, without notice, if you fail to comply with the terms and conditions, including the restrictions, of this license.

ROKU and its licensors own and retain all proprietary rights, including all patent, copyright, trade secret, trademark and other intellectual property rights, in and to the SoundBridge Software. You acknowledge that the license granted above does not provide you with title to or ownership of the Software, but only a right of limited use under these terms and conditions. The Software embodies ROKU’s trade secrets and other proprietary information and materials. Any attempt to modify, enhance, disassemble, decompile, reverse engineer or otherwise gain access to the source code to the Software, to remove or unbundle the Software from the SoundBridge, or to sublicense or distribute the Software is strictly prohibited, except as may be otherwise agreed by ROKU in writing.

Third Party License Information

Soundbridge includes AES code Copyright © 2003, Dr. Brian Gladman, Worcester, UK.

This product is protected by certain intellectual property rights of Microsoft Corporation. Use or distribution of such technology outside of this product is prohibited without a license from Microsoft or an authorized Microsoft subsidiary.

APPENDIX 4: LIMITED WARRANTY

Roku SoundBridge is covered by a one year parts and labor warranty.

Roku SoundBridge Limited Warranty

1. **Warranty.** ROKU, LLC ("ROKU") warrants your SoundBridge and any included accessories against defects in material or workmanship as follows:

For a period of one (1) year from the date of purchase ("Warranty Period"), if ROKU determines that the SoundBridge is defective, ROKU will repair the unit or replace the unit (with either a new or rebuilt SoundBridge unit), at its option, at no charge and, if applicable, will pay the labor charges incurred by any SoundBridge authorized service facility. If the Warranty Period has expired, the customer is responsible for the payment of all labor charges and may obtain parts from ROKU authorized service facilities or a SoundBridge service center at his or her own expense.

2. **Warranty Service Process.** To obtain warranty service, you must first obtain an RMA number (Return Merchandise Authorization) from a Technical Support Representative at ROKU. A Technical Support Representative may be reached by emailing support@rokulabs.com or calling our toll free number for customer care (1-866-400-7658 from the US). Once an RMA number is obtained, your SoundBridge must be shipped freight prepaid, in either its original packaging or packaging affording an equal degree of protection, to the SoundBridge authorized distribution facility. If ROKU determines that the returned unit is defective, ROKU will either repair the unit or will supply, at no charge and within a reasonable period of time, a new or rebuilt SoundBridge unit in exchange for the defective unit.

In addition, all accessories must be returned with the defective SoundBridge. A new or factory refurbished set of accessories will be furnished with the replacement SoundBridge. Failure to return any of the accessory items could result in a delay in receiving the replacement SoundBridge, and/or result in an invoice for the missing accessories.

Important: When emailing for an RMA number, please provide the following information:

- a. model number
- b. serial number
- c. problem description
- d. software version (located in System Configuration menu)
- e. date of purchase
- f. place of purchase (dealer or online place of purchase)
- g. return shipping address (no P.O. boxes)

Note: Proof of purchase will need to be included in the return shipment in order to ensure warranty coverage. In addition, we may attempt to further troubleshoot the problem prior to issuing an RMA number. Please be prepared to provide additional information upon request.

3. Scope of and Limitation on Warranty. The warranty on this product is limited to the repair or replacement of defective units as described in Section 1 above. This warranty does not cover customer training or education, installation, set up adjustments or signal reception problems. This warranty does not cover damage due to acts of God, accident, misuse, abuse, negligence, commercial use or modification of, or to any part of, your SoundBridge. This warranty does not cover damage due to improper operation or maintenance, connection to improper voltage supply or attempted repair by anyone other than a facility authorized by ROKU to service your SoundBridge. This warranty does not cover consumables (such as fuses and batteries). This warranty is valid only in the country of purchase from an authorized ROKU distributor or dealer. This warranty is invalid if the factory-applied serial number and/or "Warranty Void if Removed" sticker has been altered or removed from the SoundBridge.

REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. ROKU SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, ARISING OUT OF OR RELATED TO THIS PRODUCT OR ITS PURCHASE OR USE. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

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APPENDIX 5: REGULATIONS AND SAFETY

FCC Warnings and Safety Information

Communication Regulation & Safety Information

FCC Compliance

This section describes the requirements for compliance with Federal Communications Commission (FCC) Rules.

FCC Registration and Requirements

The following paragraphs describe requirements and information based on FCC rules.

FCC Rules, Part 15

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna;
- Increase the separation between the equipment and receiver;
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected;
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Responsible party (contact for FCC matters only): Roku, LLC, 399 Sherman Ave. #12, Palo Alto, CA 94306, 650-321-1394. For customer service questions go to: <http://www.rokulabs.com/support>.

CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

Canada Class B Statement

This Class B device meets all requirements of the Canadian interference-causing equipment regulations. Cet appareil numérique de la Class B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Important Safety Instructions

- 1. Read Instructions.** All the safety and operating instructions should be read before the product is operated.
- 2. Retain Instructions.** The safety and operating instructions should be retained for future reference.
- 3. Heed Warnings.** All warnings on the product and in the operating instructions should be adhered to.
- 4. Follow Instructions.** All operating and use instructions should be followed.
- 5. Cleaning.** Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- 6. Water and Moisture.** To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus. Do not use this product near water for example, near a bathtub, wash bowl, kitchen sink or laundry tub; in a wet basement; or near a swimming pool; and the like.
- 7. Accessories.** Do not place this product on an unstable cart, stand, tripod, bracket or table. The product may fall, causing serious injury to a child or adult and serious damage to the product. Use only with a cart, stand, tripod, bracket or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer. A product and cart combination should be moved with care. Quick stops, excessive force and uneven surfaces may cause the product and cart combination to overturn.

- 8. Power Sources.** This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
- 9. Grounding or Polarization.** This product may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- 10. Power Cord Protection.** Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles and the point where they exit from the product.
- 11. Overloading.** Do not overload wall outlets, extension cords or integral convenience receptacles as this can result in a risk of fire or electric shock.
- 12. Object and Liquid Entry.** Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
- 13. Servicing.** Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- 14. Damage Requiring Service.** Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - When the power-supply cord or plug is damaged,
 - If liquid has been spilled or objects have fallen into the product,
 - If the product has been exposed to rain or water,
 - If the product does not operate normally by following the operating instructions. Adjust

only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation,

- If the product has been dropped or damaged in any way, and
- When the product exhibits a distinct change in performance, this indicates a need for service.

15. Heat. The product should be situated away from heat sources such as radiators, heat registers, stoves or other products (including amplifiers) that produce heat.

Safety/Regulatory Information

User/Installer Caution

Your authority to operate this FCC certified equipment could be voided if you make changes or modifications not expressly approved by the manufacturer, who is responsible for compliance with Part 15 FCC rules.

European Community

Complies with EU Directive 89/336/EEC using EN55022:1998, EN55024:1998, EN61000-3-2:2000 and EN61000-3-3:1995.

CE Warning: This is a class B product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.



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SoundBridge Wi-Fi Setup Instructions



ROKU™

Revision 1.2 | August 31, 2004

Background

This manual is intended for customers who want to set up the SoundBridge for use with a Wi-Fi network. For complete instructions on using SoundBridge, please read the SoundBridge User Guide, included with your SoundBridge product or available for download at www.rokulabs.com/support in PDF format.

Why Wi-Fi?

With SoundBridge's wireless functionality, you can now stream music from computers on your wireless network to one or more Wi-Fi enabled SoundBridge devices via your wireless access point (WAP). You can even connect up to five SoundBridges to one iTunes music library and listen to different tunes in every room of your house.

Wi-Fi setup instructions

1. Verify that your wireless network is up and running on your computer. If you are setting up this wireless network for the first time, please make sure that you have followed your wireless vendor's instruction manual for proper configuration of your wireless access point.
2. Remove both the left and right end caps of SoundBridge by pressing on the two release tabs labeled "push". If your SoundBridge is currently powered on, press Standby on your remote and then disconnect SoundBridge from power by unplugging the AC power cord.
3. Remove the wireless card from its packaging and insert the card into the CF slot on the left side of SoundBridge. Make sure that the "Roku" label and two small status lights are facing *away* from you as you gently push the card into place. (Note: The LED lights will not be illuminated until you power on SoundBridge). Be careful, forcing the card into position may damage your device.
4. If you had been previously using a wired Ethernet connection, disconnect the cord from the SoundBridge. **Make sure you only have the Wi-Fi card or the wired Ethernet connection attached to the device— never both at the same time.**
5. Start up iTunes or SlimServer on your computer, which is connected to your wireless network.
6. Turn on your Soundbridge by plugging the power cord into the right side of the device, then into the wall AC outlet. Verify that the screen displays the Roku logo.
7. Upon startup, SoundBridge will attempt to connect to any wireless access point within range that does not require a password. If your home wireless network requires no password and there are no other wireless networks in the vicinity (such as those spilling over from a neighbor's house), then your SoundBridge should automatically connect with no additional configuration, and you will see a list of music servers on your network to connect to.

However, it's possible you will need to configure your wireless network as described below:

- If your SoundBridge detects more than one available wireless network, then you will need to configure SoundBridge's Wi-Fi settings. Choose "System Configuration" from the main menu, and then select "Select Wi-Fi SSID & Password." You will then see a list of available wireless networks. If you see your desired network, select it. If you don't see the desired network, make sure that your wireless router is within range and that it is functioning properly.
- Some wireless networks don't "advertise" themselves (a.k.a., "closed networks"). If your wireless access point is functioning properly but you do not see the network listed, you should enter your wireless network name by selecting "Specify a wireless network..." (Refer to your wireless access point's documentation or utility software if you don't know the name of your wireless network.)

- Next, your SoundBridge will ask you whether the wireless connection requires a password. If you do not have a wireless password, select "No" and skip to the next section. If you do have a wireless password, select "Yes". Read the instructions on the screen to determine what type of wireless password you have on your network. If you are unsure, you may wish to refer to your wireless router documentation. (See hints below for help finding your wireless access point's password.)
- Select "OK" to reboot the unit. Upon restarting, SoundBridge should automatically connect to the network you have specified.

If the connection is successful, all the available iTunes and/or SlimServer music libraries will be listed on your screen. Use the up and down arrows on your remote to navigate to your desired library and press **Select** to begin browsing your music library..

Troubleshooting

If you have problems connecting to the SoundBridge to your music library via Wi-Fi, please check the following:

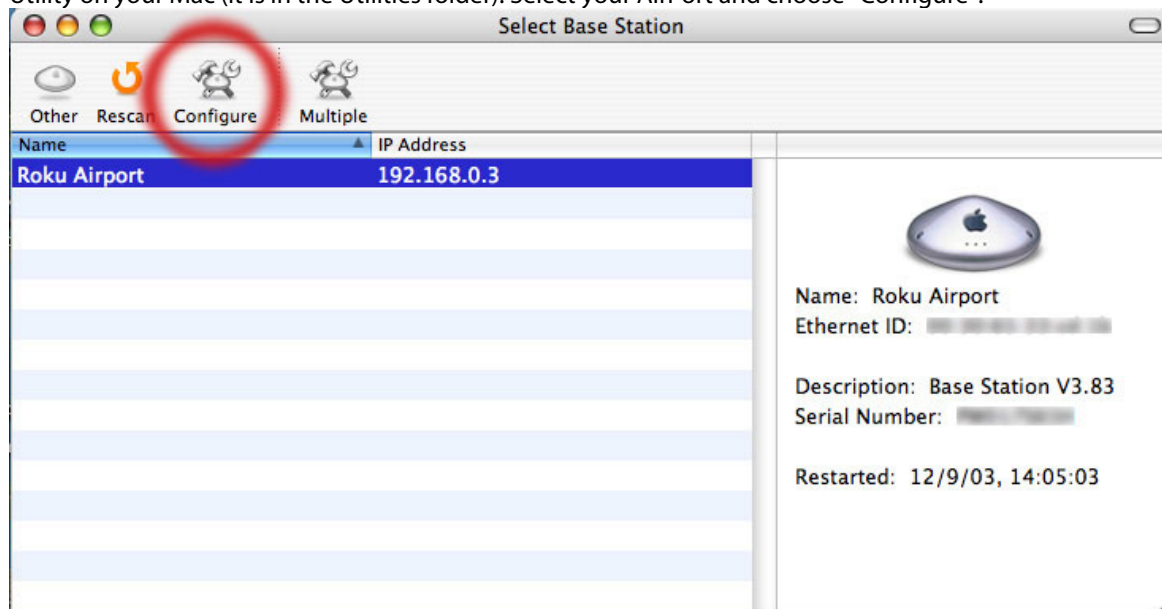
1. Are the LED lights lit up inside the CompactFlash Wi-Fi adapter? If not, your card is not receiving power. Make sure the SoundBridge is powered on (the LED screen is lit). Remove and re-insert the CF card with the label facing away from you. It should require gentle pressure to be inserted into the CF slot.
2. Is SoundBridge within range of your wireless network signal? (Performance varies depending on wireless network hardware, physical barriers such as walls, and signal interference.)
3. Is your computer on and your wireless access point plugged in?
4. Is iTunes or SlimServer running on your computer?
5. Did you enter your password correctly (if you have one), including case sensitive characters?

Obtaining your wireless access point's password

Follow these instructions to determine your wireless access point password, and be sure to have a pen ready to make a note of the case-sensitive password as well as the password type, either hexadecimal (hex) or ASCII.

Example 1: Apple AirPort (Mac Users)

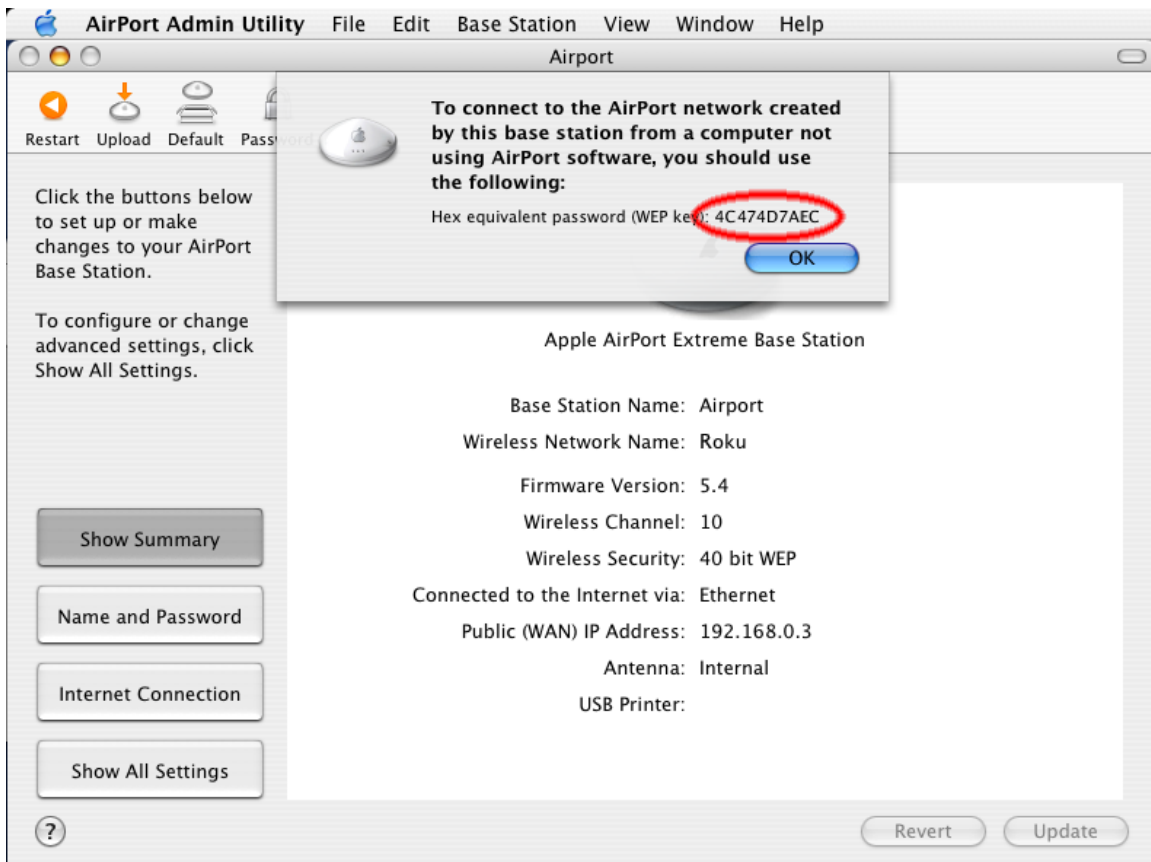
The Apple AirPort is a very popular access point. To see its configuration, open your AirPort Admin Utility on your Mac (it is in the Utilities folder). Select your AirPort and choose "Configure".



You may need to enter the password for your base station. You should then see the screen below. The line labeled "Wireless Network Name:" is the name of your network, also known as an "SSID". You will either select this network on the SoundBridge screen or enter it manually if your network is "closed".



If your network is password protected, you should choose "Equivalent Network Password" from the "Base Station" menu (see illustration above) and write down the value that appears in the dialog (see illustration below). This is the value you will enter into SoundBridge's wireless setup password field. (Select password type "hex" in the SoundBridge menu.)



Example 2: Apple AirPort (PC Users)

Step 1: Open the AirPort Admin utility (Start/Programs/Airport Admin Utility). Select the network you would like to configure. You should then see the configuration screen below.

The screenshot shows the 'Configure AirPort Base Station' window with the 'AirPort' tab selected. The window has a menu bar with 'File', 'Base Station', and 'Help'. Below the menu bar are tabs for 'Summary', 'AirPort', 'Internet', 'Network', 'Port Mapping', 'Access Control', 'Authentication', 'Dial-In', and 'WDS'. The 'AirPort' tab is active, displaying the following configuration options:

Information in this section is used to identify and configure the base station.

Identity

Name:

Contact:

Location:

WAN Privacy

☐ Enable WAN Port Configuration ☐ Enable SNMP Access ☐ Enable Remote Printer Access

AirPort Network

Use base station to:

Network Name:

Channel:

Station density:

Multicast rate: mb/s

Mode:

☒ Create a closed network

☐ Enable interference robustness

Transmitter Power

10% 25% 50% 100%

Step 2: Make a note of the name of your wireless network in the "Network Name" field (see below).

Configure "Airport" Base Station

File Base Station Help

Summary **AirPort** Internet Network Port Mapping Access Control Authentication Dial-In WDS

Information in this section is used to identify and configure the base station.

Identity

Name:

Contact:

Location:

WAN Privacy

☐ Enable WAN Port Configuration ☐ Enable SNMP Access ☐ Enable Remote Printer Access

AirPort Network

Use base station to:

Network Name:

Channel:

Station density:

Multicast rate: mb/s

Mode:

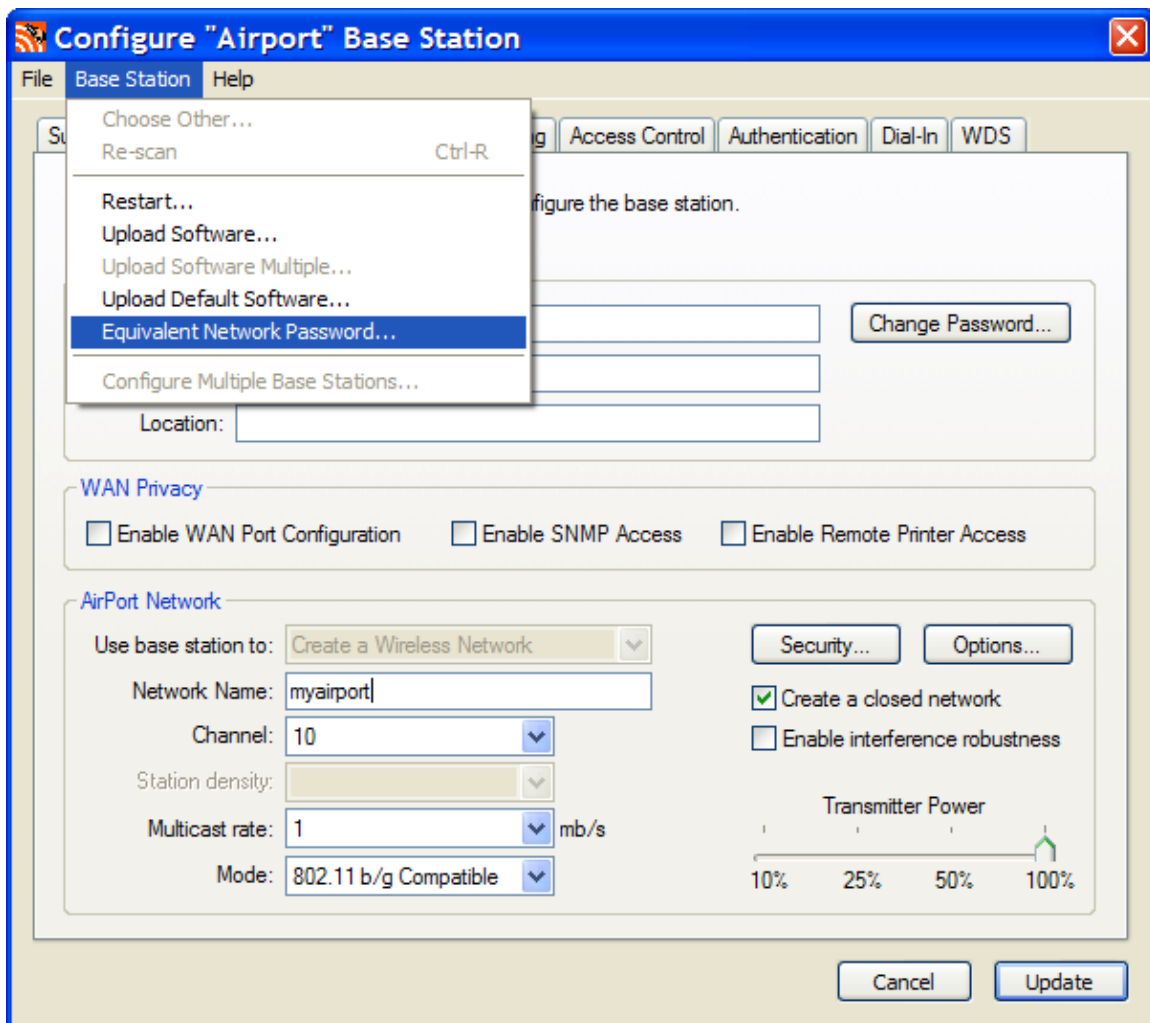
☒ Create a closed network

☐ Enable interference robustness

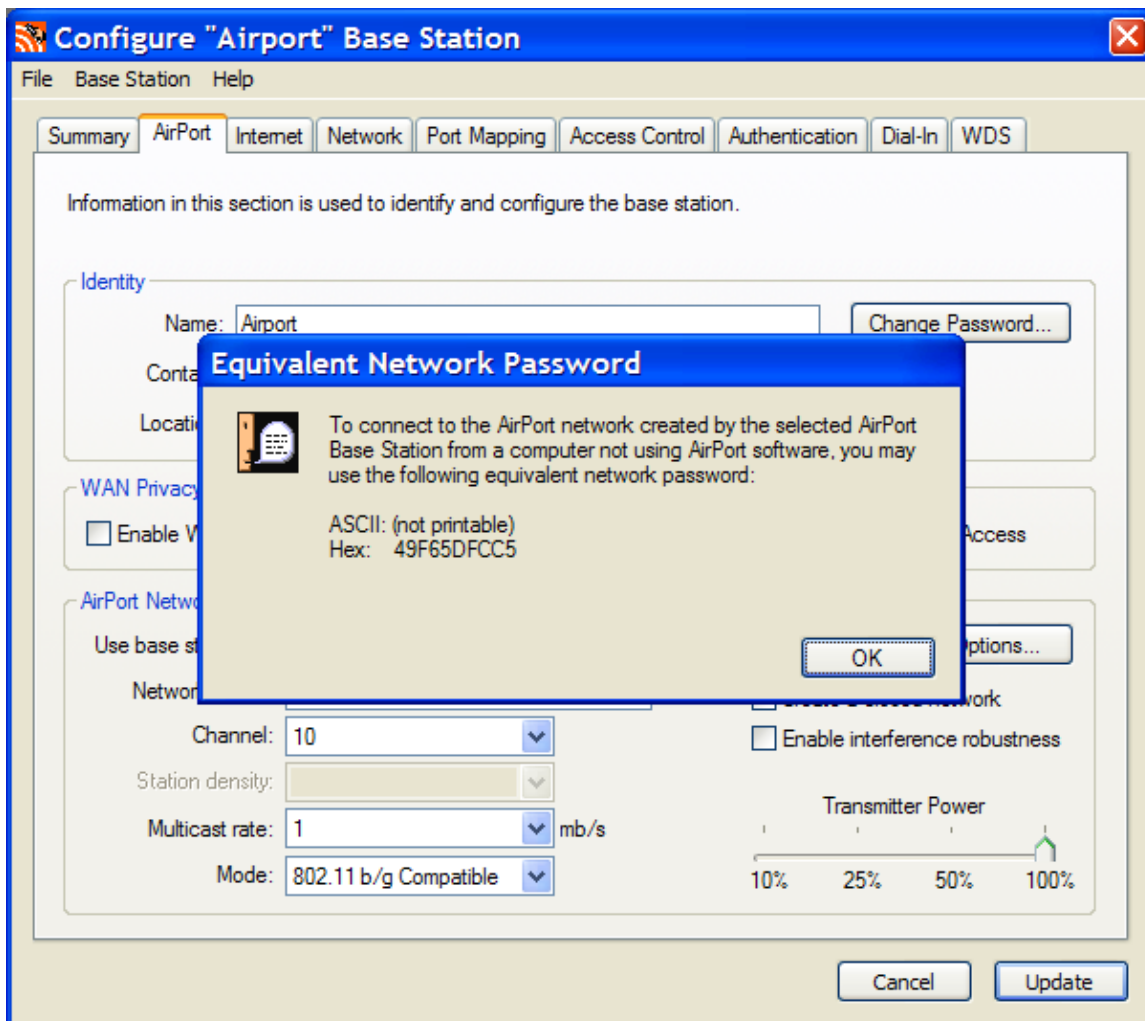
Transmitter Power

10% 25% 50% 100%

Step 3: Select the "Equivalent Network Password" from the "Base Station" drop down menu.



Step 4: Write down the displayed password(s), as well as their format ("hex" in the example below). Press OK to close the dialog box.



Example 3: Linksys WAP54G

The Linksys WAP54G access point is a popular 802.11g access point. Getting the hexadecimal WEP key from the WAP54G is an easy process. First, open a web browser and connect to the access point. Connecting to the access point is done by entering the access point's IP address in the location bar of your web browser. If you do not know the IP address of the access point, please refer to the software or manual that came with the access point in order to determine the IP address. After successfully logging in, you will see a page similar to the following:

The screenshot shows a Mozilla browser window titled "Linksys - Mozilla" with the address bar set to "http://192.168.0.2/". The web interface has a blue header with the "LINKSYS" logo and navigation tabs for "Setup", "Password", "AP Mode", "Status", and "Log". The "Setup" tab is active, displaying a message: "This screen contains all of the Access Point's basic setup functions. Most users will be able to use the Access Point's default settings without making any changes. Click the Apply button at the bottom of the page to save your changes." The left sidebar contains a "Setup" section with sub-sections: "Firmware Version: v1.08, Aug 05, 2003", "AP Name: Linksys WAP54G", "LAN", "Configuration Type: Static IP Address", "IP Address: 192.168.0.2", "Subnet Mask: 255.255.255.0", "Gateway: 192.168.0.1", "Wireless", "2.4GHz 54g Wireless-G", "MAC Address: 00:0C:41:12:41:00", "Mode: Mixed", "SSID: wireless", "SSID Broadcast: Disable", "Channel: 3 (Regulatory Domain: USA)", "Wireless Security: Enable", and buttons for "Apply", "Cancel", and "Help".

Make a note of the "SSID" (in this case "wireless"), this you will need to enter into the "SSID" field in SoundBridge's wireless setup.

As you can see in the next illustration, "Wireless Security" is enabled. Click on the "Edit Security Settings" button to access the WEP setup page:

Security Settings - Mozilla

2.4GHz
54g
Wireless-G

The Access Point supports 4 different types of security settings. WPA Pre-Shared Key, WPA RADIUS, RADIUS, and WEP. Please see the help tab for more details on the different types of security settings.

Security Mode: WEP

Default Transmit Key: ☒ 1 ☐ 2 ☐ 3 ☐ 4

WEP Encryption: 64 bits 10 hex digits

Passphrase: passphrase

Key 1: 49774B692D

Key 2: B703120019

Key 3: 938969B47C

Key 4: DA9515EE03

This Linksys access point allows you to easily view the keys. The default key is key number 1, so make a note of the value of the "Key 1" field ("49774B692D" in this case). This is the value you will enter into SoundBridge's wireless setup's "Password" field. You now have the information necessary to configure your SoundBridge to connect to your network. You may close you web browser.

Example 4: Netgear WG602

The Netgear WG602 is an 802.11g Wireless Access Point. Its configuration can be accessed with a web browser. First, open a web browser and connect to the access point by entering the access point's IP address in the location bar of your web browser. If you do not know the IP address of the access point, please refer to the software or manual that came with the access point in order to determine the IP address. After successfully logging in, you will see a page similar to the following:

The screenshot shows a Mozilla browser window titled "NETGEAR WG602 Access Point - Mozilla". The address bar displays "http://netgear68/start.htm". The page header features the Netgear logo and the text "NETGEAR 54Mbps Wireless Access Point WG602 settings". The left sidebar contains a navigation menu with the following items: Information, Setup (IP Settings, Wireless Settings, Security Settings, Access Control), Management (Change Password, Upgrade Firmware, Restore Factory Default, Station List, Reboot AP), Advanced (Wireless Settings), and Logout. The main content area is titled "Information" and contains three sections: "Access Point Information" (Access Point Name: netgear68, MAC Address: 00:09:5B:68:FC:FC, Country / Region: USA, Firmware Version: 1.5.67), "Current IP Settings" (IP Address: 192.168.0.109, Subnet Mask: 255.255.255.0, Default Gateway: 192.168.0.1, DHCP Client: Enable), and "Current Wireless Settings" (Operating Mode: Auto, Wireless Network Name (SSID): ROKU, Channel / Frequency: 4 / 2.427GHz, WEP: Enable). The right sidebar is titled "Access Point Information Help" and contains text explaining the purpose of the page and providing links to other sections.

Access Point Information	
Access Point Name	netgear68
MAC Address	00:09:5B:68:FC:FC
Country / Region	USA
Firmware Version	1.5.67

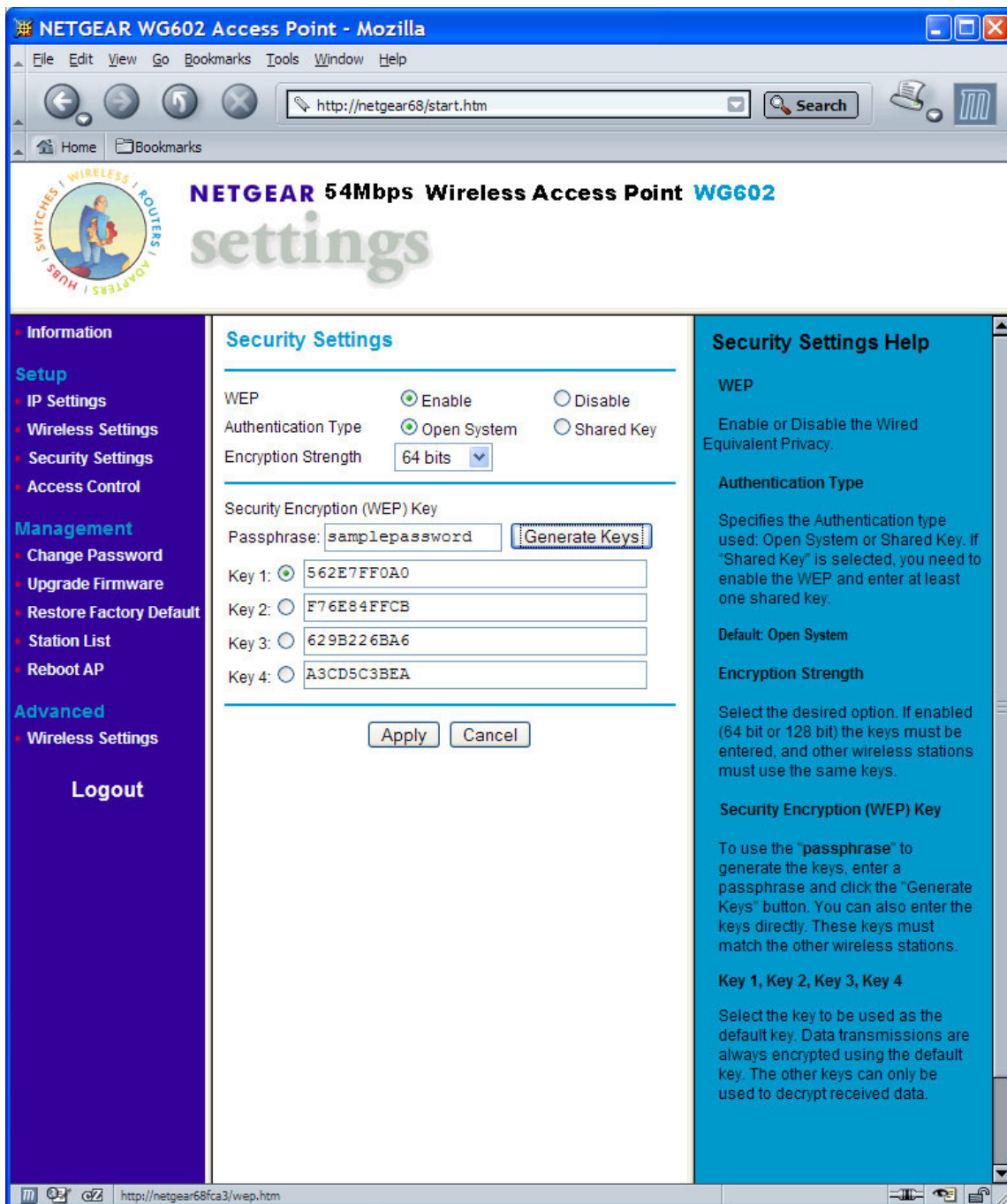
Current IP Settings	
IP Address	192.168.0.109
Subnet Mask	255.255.255.0
Default Gateway	192.168.0.1
DHCP Client	Enable

Current Wireless Settings	
Operating Mode	Auto
Wireless Network Name (SSID)	ROKU
Channel / Frequency	4 / 2.427GHz
WEP	Enable

The value of "Wireless Network Name (SSID)" is the SSID that you will enter into the SoundBridge's wireless setup. Next, click on "Security Settings" on the left side to access the WEP settings:



If "WEP" is set to "Disable", then you do not need to enter a password to access your wireless network. If "WEP" is set to "Enable", you will need to obtain the hexadecimal key for your network. Netgear unfortunately, does not allow you to view the current passphrase or keys. However, if you re-enter the known passphrase and press "Generate Keys", then it will regenerate the keys as before and allow you to view the keys:



Make a note of the value of the key with the active radio button (the default key, in this case "Key 1": "562E7FF0A0"). This is the password that you will need to enter into your SoundBridge's wireless setup "Password" field. You now have the information necessary to set up your wireless network from your SoundBridge. You may close your web browser.

Getting help

If you are still having trouble setting up your Wi-Fi connection, please browse our web site support resources at www.rokulabs.com/support or email support@rokulabs.com. We're available for you Monday-Friday 9am-5pm Pacific Time, and usually respond within 24 hours. If you prefer phone support, feel free to email us a phone number where you can be reached during business hours.