SoundBridge Wi-Fi Setup Instructions





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 <u>www.rokulabs.com</u>/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:

- 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".

000				S	Select Base S	Station	0	\supset
Other R	U lescan	Configure	Multiple					
Name				IP Address				
Roku Airp	port			192.168.0.3			Name: Roku Airport Ethernet ID: Description: Base Station V3.83 Serial Number: Restarted: 12/9/03, 14:05:03	
								1

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.)

🥤 🧉 🛛 AirPort Admin Utili	ty File Edit Base Station View Window Help	
00	Airport	
Restart Upload Default Pass Click the buttons below to set up or make changes to your AirPort Base Station.	To connect to the AirPort network created by this base station from a computer not using AirPort software, you should use the following: Hex equivalent password (WEP ker): 4C474D7AEC OK	
To configure or change advanced settings, click Show All Settings.	Apple AirPort Extreme Base Station	
	Base Station Name: Airport	
	Wireless Network Name: Roku	
	Firmware Version: 5.4	
	Wireless Channel: 10	
Show Summary	Wireless Security: 40 bit WEP	
	Connected to the Internet via: Ethernet	
Name and Password	Public (WAN) IP Address: 192.168.0.3	
	Antenna: Internal	
Internet Connection	USB Printer:	
Show All Settings		
?	e	Revert Update

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.

💦 Configure "Airp	oort" Base Station			X
File Base Station Help				
Summary AirPort Inte	met Network Port Mapping	Access Control Authe	entication Dial-In WDS	
Information in this secti	on is used to identify and configu	ra tha hasa station		
information in this sect	on is used to identify and conligu	re the base station.		
- Identity				
Name: Aim	oort		Change Password	
Contact:				
Location:				
WAN Privacy				
Enable WAN Por	t Configuration 📃 Enable S	NMP Access 🗌 En	able Remote Printer Access	
- AirPort Network				
Use base station to:	Create a Wireless Network	~	Security Options	
Network Name	myairport	v	Create a closed network	
Channel	10		Enable interference robustness	
Station density	~		Transmitter Power	
Multicast rate:	: 1 🔽 r	nb/s		
Mode	802.11 b/g Compatible 🔽	10	% 25% 50% 100%	
)	
			Cancel Update	

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

S	Config	ure "A	irport	" Base	Station					×
File	Base St	ation He	lp							
S	ummary	AirPort	nternet	Network	Port Mappi	ng /	Access Control	Authentica	ation Dial-In WDS	_
	Informati	on in this s	ection is	used to ide	ntify and co	nfigur	re the base static	on.		
	dentity									
		Name:	Airport						Change Password	
		Contact:								
	1	location:								
	-WAN F	nivacy								
	Ena	able WAN	Port Con	figuration	Enab	ole SN	NMP Access	Enable	Remote Printer Access	
	A: D . I									
	AirPort	Network -			In an Minternal			C Com		
	Use b	ase station		eate a vvire	less ivetwon	K.	~	Sect	Unty Options	
	IN	etwork Na	me: my	airporti				Crea	te a closed network	
		Chan	nel: 10			*		Enat	ble interference robustness	
	9	Station den	isity:			~			Transmitter Power	
		Multicast r	ate: 1			Ƴ m	ıb/s	1	<u> </u>	
		Mo	ode: 80	2.11 b/g Co	ompatible	*		10%	25% 50% 100%	
									Cancel Update	

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

S	Configure "Airp	ort" Base Station			×		
File	Base Station Help						
S	Choose Other Re-scan	Ctrl-R	g Access Control	Authentication Dial-In WDS			
	Restart		figure the base statior	n.			
	Upload Software M	ultiple					
	Upload Default Soft	ware					
	Equivalent Network	Password		Change Password			
	Configure Multiple B	lase Stations					
	Location:		· · · · · · · · · · · · · · · · · · ·				
	-WAN Privacy						
	VAN Privacy Departure Configuration Departure Configuration Departure Configuration Departure Configuration Departure Configuration						
			IC SINIMI ACCESS	_ Linable Melliote Hillter Access			
	AirPort Network						
	Use base station to:	Create a Wireless Network	c 🗸	Security Options			
	Network Name:	myairport		Create a closed network			
	Channel:	10	*	Enable interference robustness			
	Station density:		~				
	Multicast rate:	1	✔ mb/s	Iransmitter Power			
	Mode:	802.11 b/g Compatible	~	10% 25% 50% 100%			
				Cancel Update			

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.

😽 Configure "Airpo	ort" Base Station			
File Base Station Help				
Summary AirPort Internet	Network Port Mapping	Access Control A	uthentication Dial-In	WDS
Information in this section	is used to identify and configu	ure the base station.		
- Identity				
Name: Airpor	t		Change	Password
Conta Equiv	alent Network Pass	word		
Locati	To connect to the AirPort r Base Station from a compo	network created by t uter not using AirPort	he selected AirPort software, you may	
~WAN Privacy	use the following equivaler	nt network password	i:	
Enable V	ASCII: (not printable) Hex: 49F65DFCC5			Access
Use base st				ptions
Networ				vork
Channel:	10 💌		Enable interference	e robustness
Station density:	~		T D	
Multicast rate:	1 💌 r	mb/s	i ransmitter Po	wer
Mode:	802.11 b/g Compatible 🛛 👻		10% 25% 5	0% 100%
			Cancel	Update

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:

🕱 Linksys - Mozilla	
Eile Edit View Go Bookmarks	<u>T</u> ools <u>W</u> indow <u>H</u> elp
Home Bookmarks	Search Search Search
	Setup Password AP Mode Status Log Help Advanced
Setup	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.
Firmware Version:	v1.08, Aug 05, 2003
AP Name:	Linksys WAP54G
LAN	MAC Address: 00:0C:41:12:41:00
Configuration Type:	Static IP Address
IP Address:	192 . 168 . 0 . 2 This is the IP address, Subnet Mask and Default
Subnet Mask:	255 . 255 . 0 Gateway of the Access Point as it is seen by
Gateway:	192 . 168 . 0 . 1 your local network.
102-1	
Wireless	MAC Address: 00:06:25:49:30:00
2.4 GHz	Mode: Mixed Y
Wireless_G	Channel: 3 (Pegulaton/Demain: USA)
Wireless-O	
	vvireless Security: Chable Obisable Edit Security Settings
	Apply Cancel Help
<u> </u>	

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:

💓 s	🛿 Security Settings - Mozilla				
	2,4 GHz 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:				
	WEP Encryption:	64 bits 10 hex digits 💌			
	Passphrase:	passphrase Generate			
	Key 1:	49774B692D			
	Key 2:	B703120019			
	Key 3:	938969B47C			
	Key 4:	DA9515EE03			
		Apply Cancel Help			

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 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 <u>www.rokulabs.com/support</u> or email <u>support@rokulabs.com</u>. 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.