### FS-252 WIRELESS BOOKSHELF SPEAKER USER GUIDE







343 Vanderbilt Avenue Norwood, MA 02062 Telephone: (781) 762-6300 Fax: (781) 762-6868

#### **Important Safety Instructions**

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT USE THIS PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

# CAUTION RISKOFELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



instructions in the literature

accompanying the appliance.

#### **Important Safety Instructions**

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other . A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.



- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power- supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15. 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.

Alternate Warnings—This product is equipped with a three-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.

- 16. Ventilation—Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- 17. The MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
- 18. CLASS II apparatus with double insulation, and no protective earth provided.
- 19. CAUTION: Danger of explosion if the remote control battery is incorrectly replaced. Replace only with the same or equivalent type.
- 20. WARNING: The remote control battery (battery or batteries or battery pack) shall not be exposed to excessive heat such as sunshine, fire or the like.
- 21. No naked flame sources, such as lighted candles, should be placed on the apparatus.

#### **Important Safety Instructions**

#### **FCC Compliance Statement**

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 interfer- ence that may cause undesired operation.

#### **FCC WARNING**

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 inerference 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 the receiver.
- Connect the equipment into an outlet different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. Caution: To comply with the limits for an FCC Class B comput ing device, always use any shielded signal cord supplied with this unit.

The Federal Communications Commission warns that changes or modifications of the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Radio Frequency Interference Statement

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.

## **European Union Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)**

This symbol on the product(s) and / or accompanying documents means that used electrical and electronic products should not be mixed with general household waste. For proper treatment, recovery and recycling, please take this product(s) to designated collection points where it will be accepted free of charge.

Alternatively, in some countries you may be able to return your products to your local retailer upon purchase of an equivalent new product. Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest desig- nated collection point.

Penalties may be applicable for incorrect disposal of this waste, in accordance with you national legislation.

For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

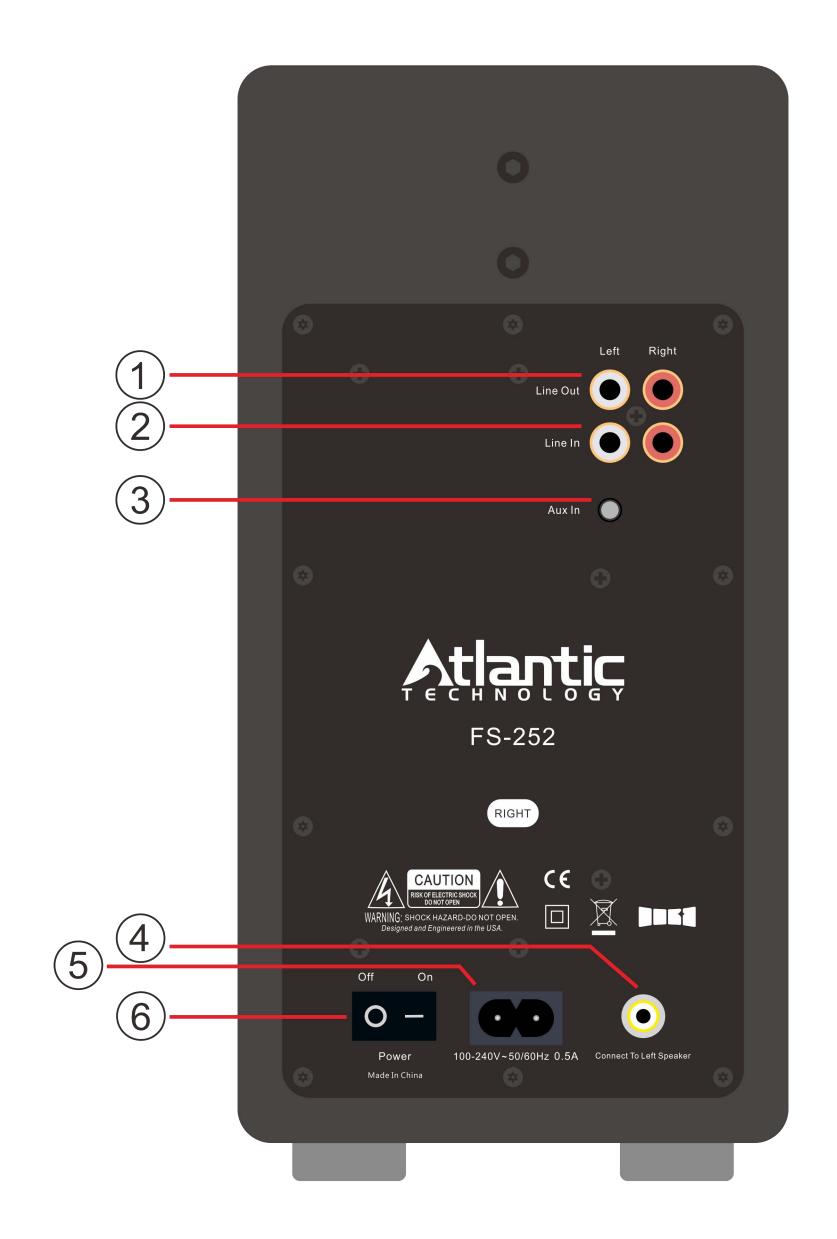
Information on Disposal in other Countries outside the European Union This symbol is only valid in the European Union. If you wish to discard this product please contact your local authorities or dealer and ask for the cor- rect method of disposal.



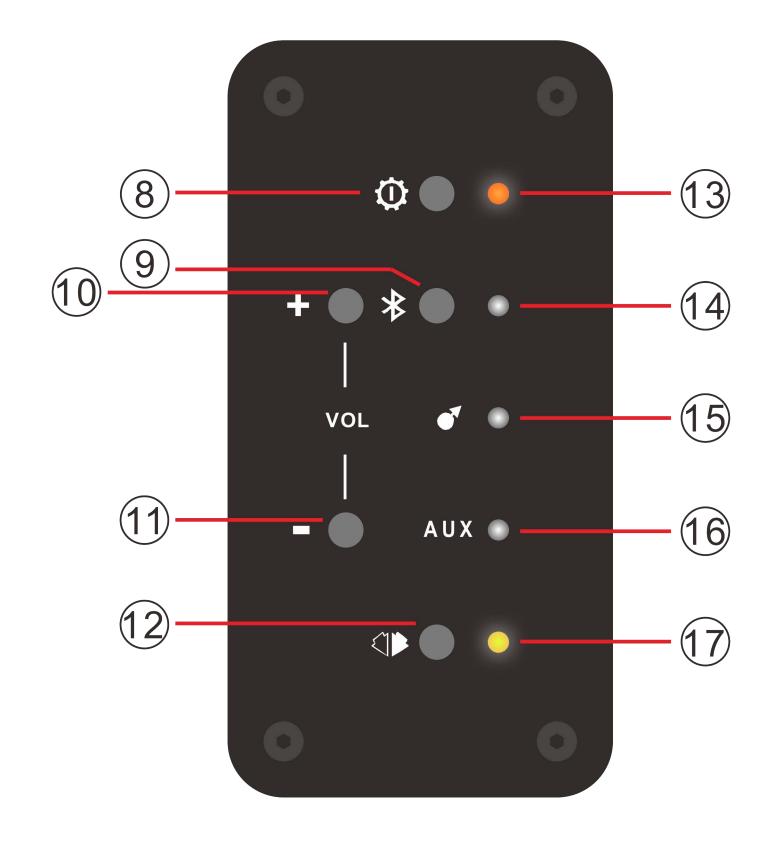
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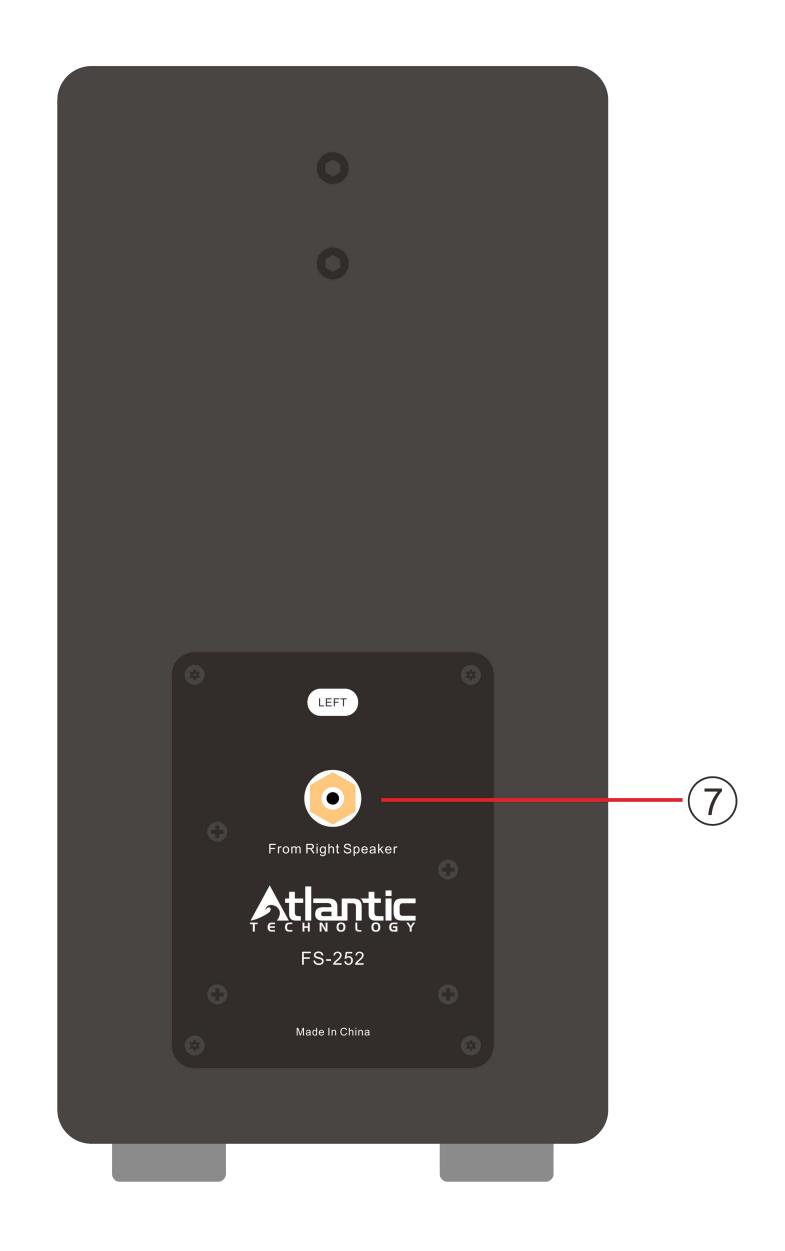
### Introduction



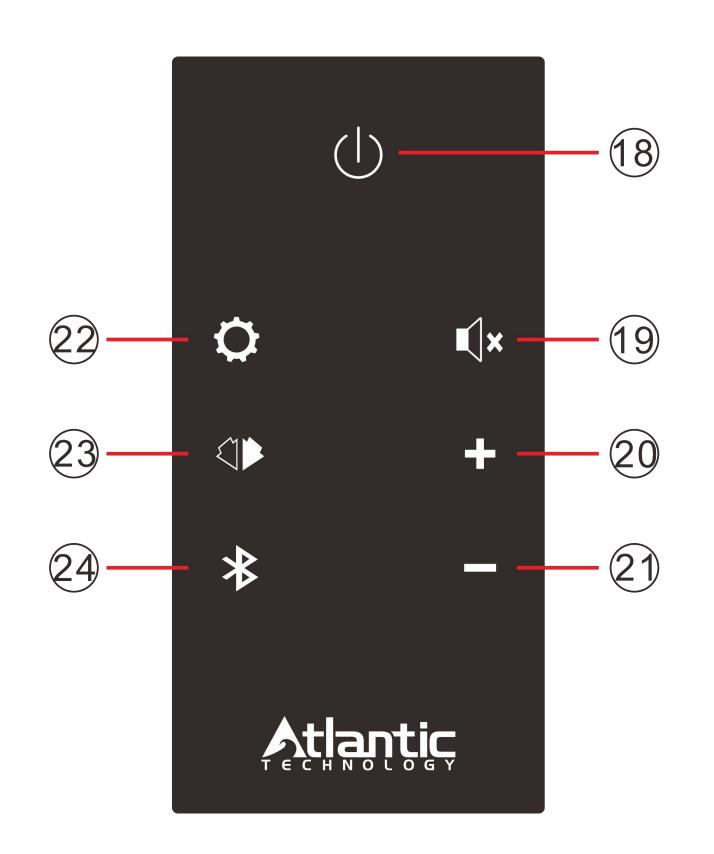
Right Speaker



**Control Panel** 



Left Speaker



Remote control

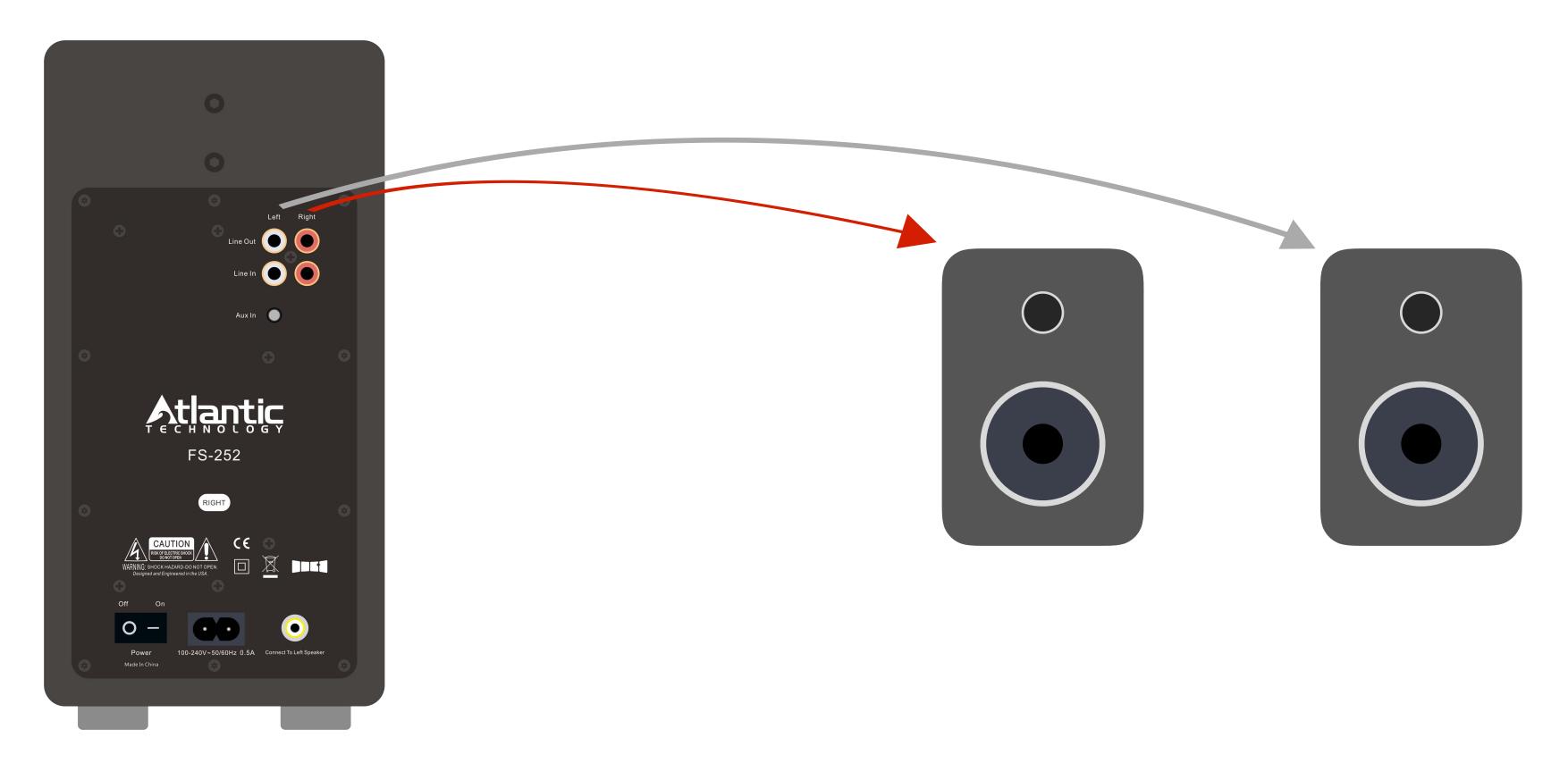
#### Introduction

- 1. Line Out Jack, See Page 6 For Detail
- 2. Line In Jack, See Page 12 For Detail
- 3. Aux Input Jack, See Page 12 For Detail
- 4. Left Speaker Output, See Page 6 For Detail
- 5. Main Power 100-240 volts
- 6. Main Power On/Off
- 7. Left Speaker Input, See Page 6 For Detail
- 8. Gear Button Click To Switch Modes, Hold To Power On/Off, See Page 7 For Detail
- 9. Bluetooth Button, See Page 8-9 For Detail
- 10. Volume Down Button
- 11. Volume Up Button
- 12. Skaa Bond Button, See Page 10-11 For Detail
- 13. Power Led Red: On, Not Light: Off
- 14. Bluetooth Led, See Page 8-9 For Detail
- 15. Relay Led, See Page 13-14 For Detail
- 16. Aux Led, See Page 12 For Detail
- 17. Skaa Indicator Led, See Page 11 For Detail
- 18. Power On/Off Button
- 19. Mute Button
- 20. Volume Up Button
- 21. Volume Down Button
- 22. Gear Button, See Page 7 For Detail
- 23. Skaa Bond Button, See Page 11 For Detail
- 24. Bluetooth Button, See Page 8-9 For Detail

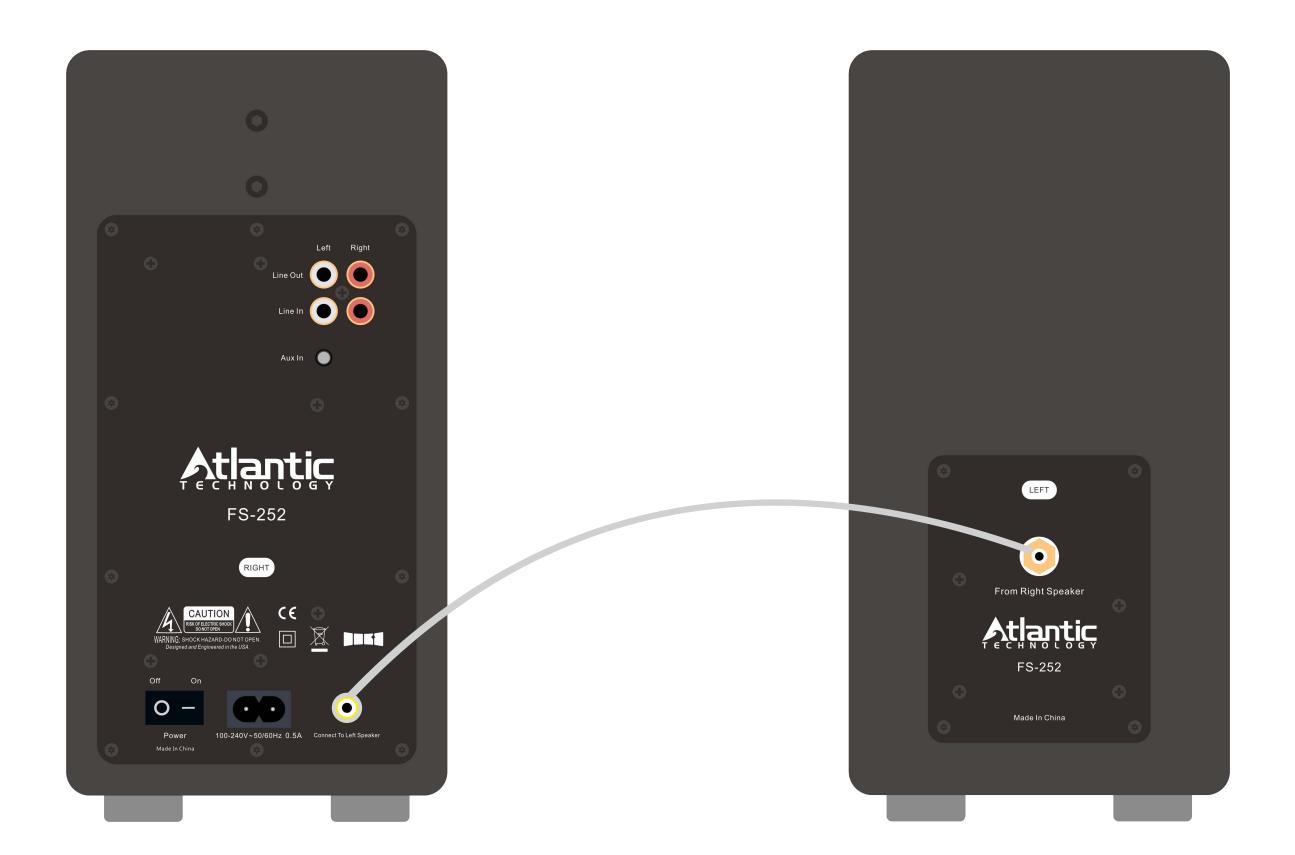
### **Initial Setup**

The FS-252 supports both active and passive speakers.

If you are connecting active speakers (i.e. if your speakers use power cables), connect them to the output labeled "Line out".



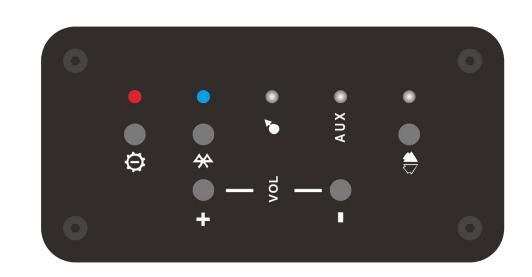
You have to connect FS-252 Right Speaker to FS-252 Left speaker by cable



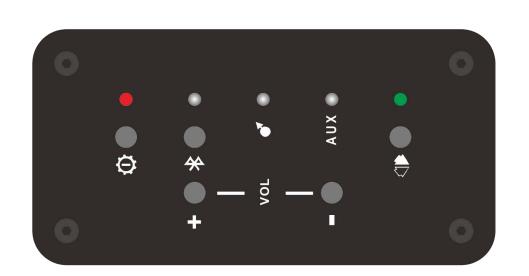
### **Initial Setup**

Before attempting to use any buttons on the control plate, ensure that the power switch on the back of your FS-252 is flipped to the "On" position. Next, hold the Gear button for two seconds to power on the unit. Once the power LED is illuminated, click the Gear button to cycle through modes.

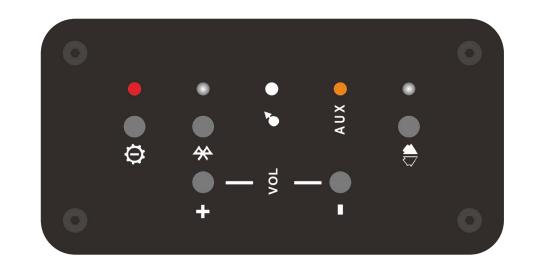
Works as an ordinary BT speaker. Use the Bluetooth button to pair with your phone.



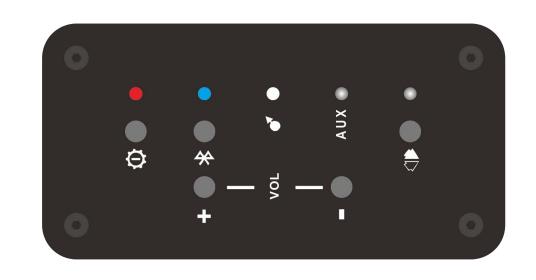
It's a fully-functional SKAA receiver. Feed it audio with any SKAA hardware transmitter, or any other FS-252 in Relay mode.



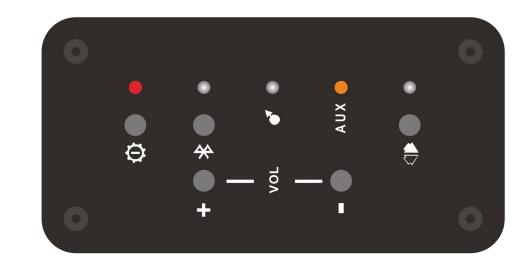
Same as AUX, but this mode rebroadcasts that AUX audio to up to 4 more speakers via SKAA!



Same as BT, but this mode rebroadcasts that BT audio to up to 4 more speakers via SKAA!

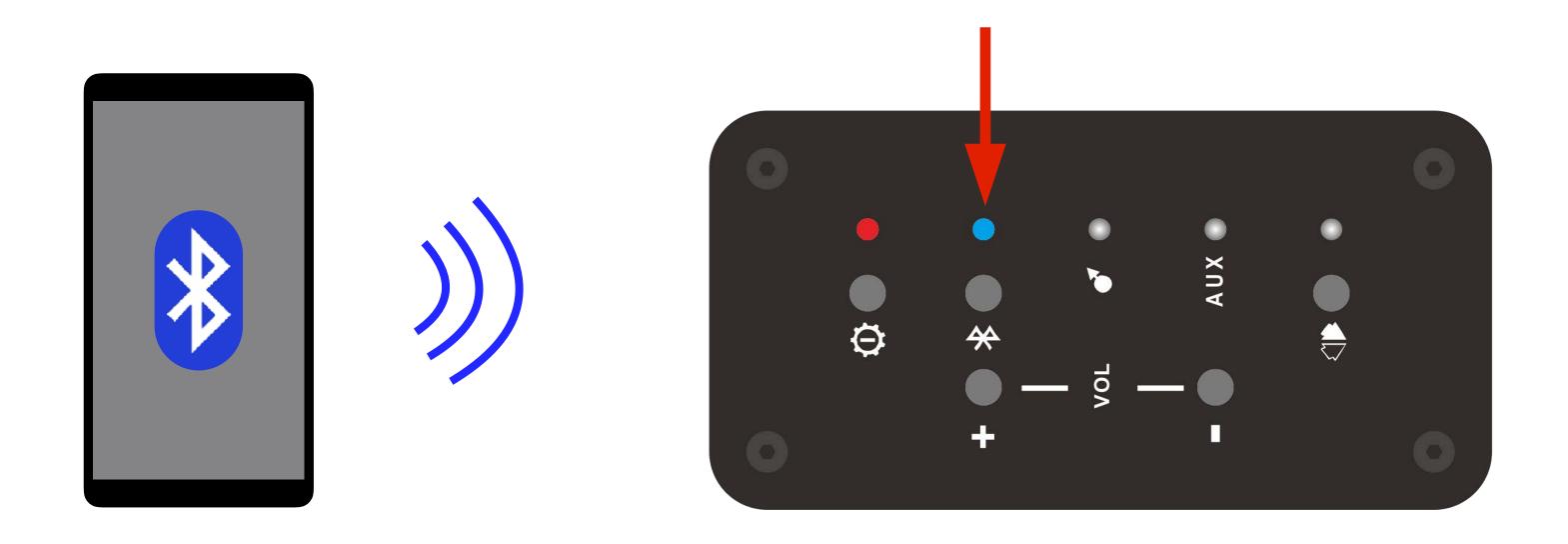


Plug in any 3.5 mm stereo audio source into the AUX jack, or any RCA line level source into the Line In input on the back.



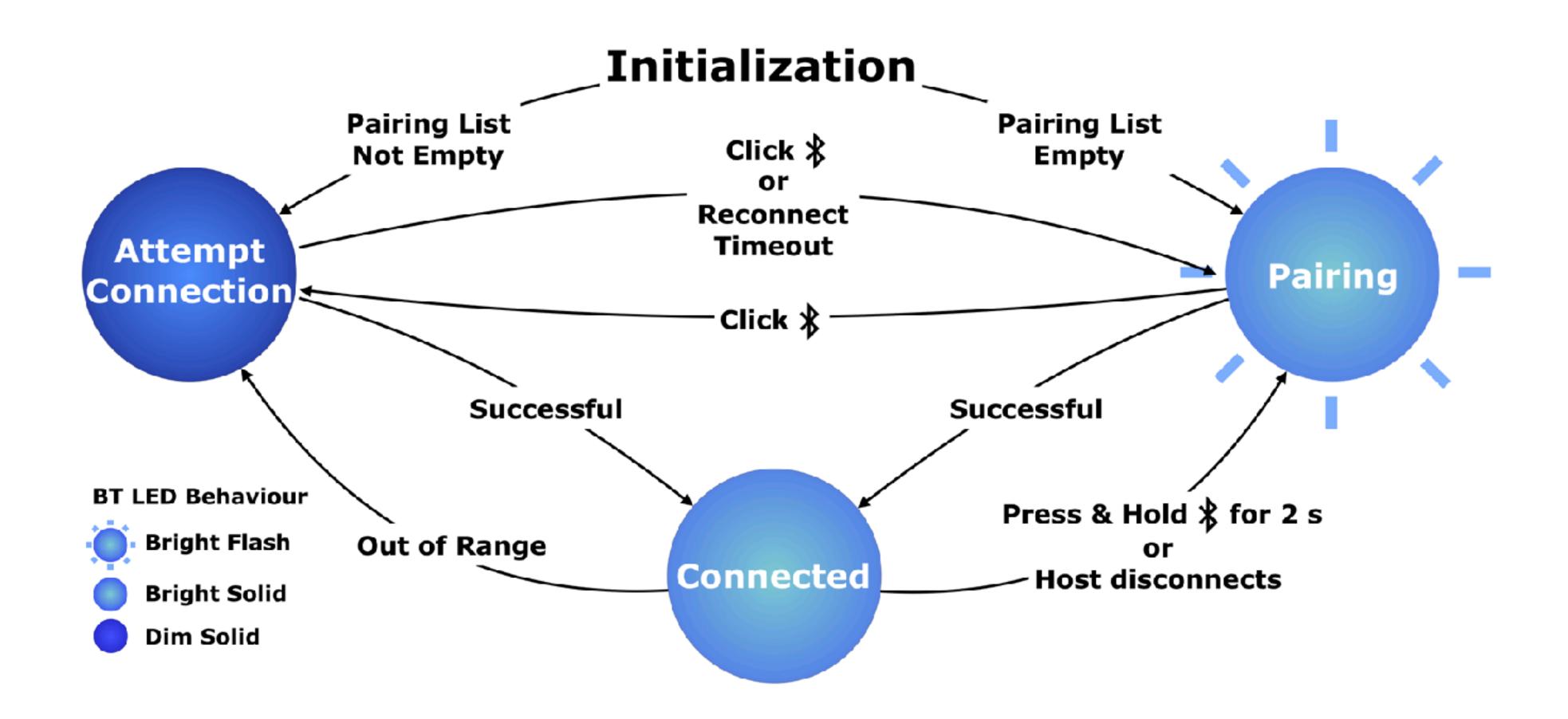
### **Connecting a Bluetooth Source**

Cycle to Bluetooth mode by clicking the Gear button. When in Bluetooth mode, the Bluetooth LED will be illuminated.

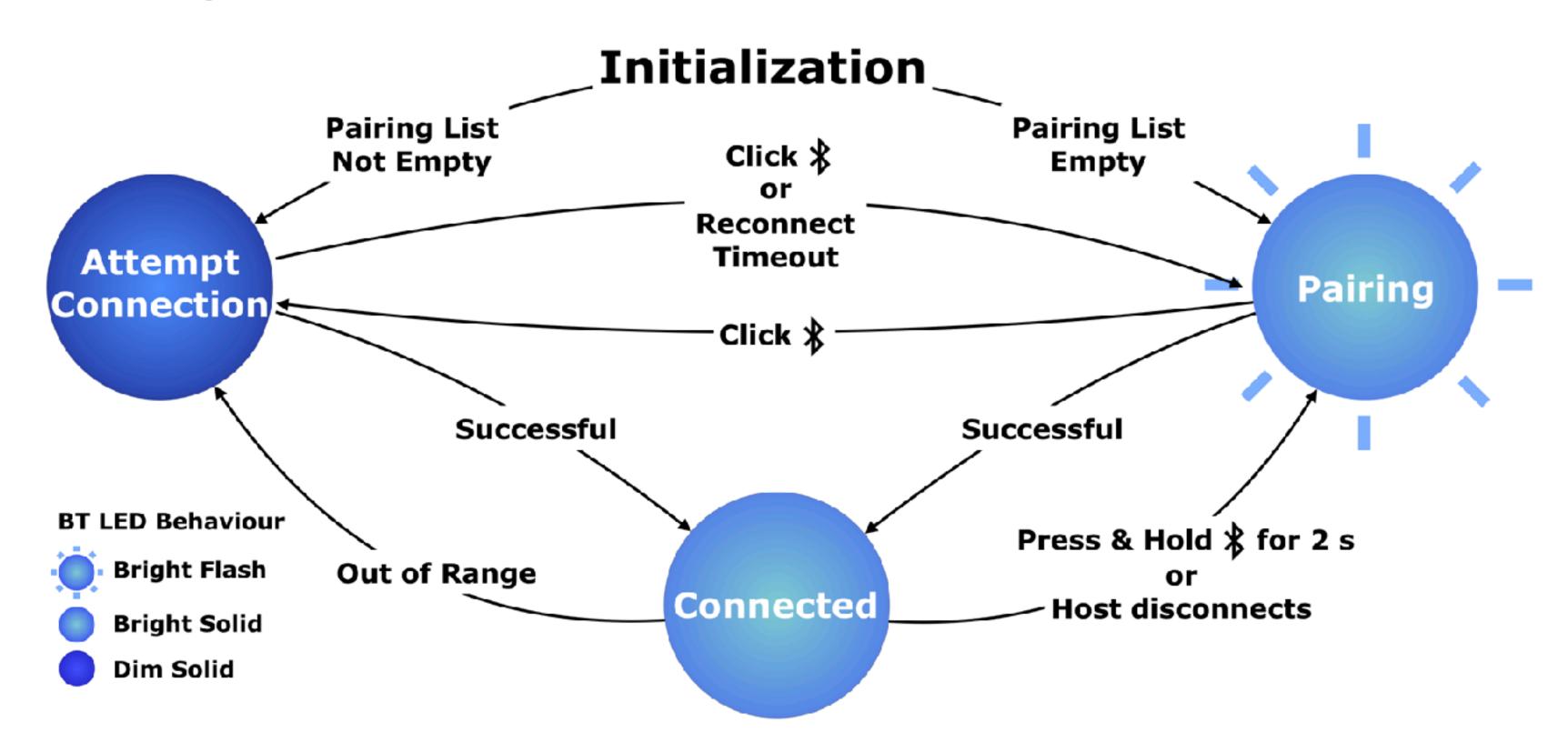


Enter pairing mode on the Bluetooth device you want to connect to the FS-252 and select the FS-252 from the discoverable devices list.

This diagram represents the Bluetooth behavior of the FS-252



### **Connecting a Bluetooth Source**



#### Initialization

Initialization begins when the user enters BT Mode or BT Relay Mode from any other mode, by clicking the Gear button. Initialization also begins if the user powers on the FS-252 in either BT Mode or BT Relay mode.

### **Pairing List**

The Paired List contains up to eight of the most recent hosts which have successfully paired and connected with the FS-252.

#### \* Button

Clicking the \$\\$ button toggles between the Attempt Connection state and the Pairing state. From the Connected state, a two-second press and hold of the \$\\$ button will force the FS-252 to drop the connection to its currently connected device and enter the Pairing state. A ten-second press & hold of the \$\\$ button will clear the Paired List and enter the Paring state.

#### **Timeouts**

From Initialization, the FS-252 attempts to connect to the most recently connected host for ten seconds. After ten seconds, if a successful connection has not been established, the FS-252 will enter the Pairing state.

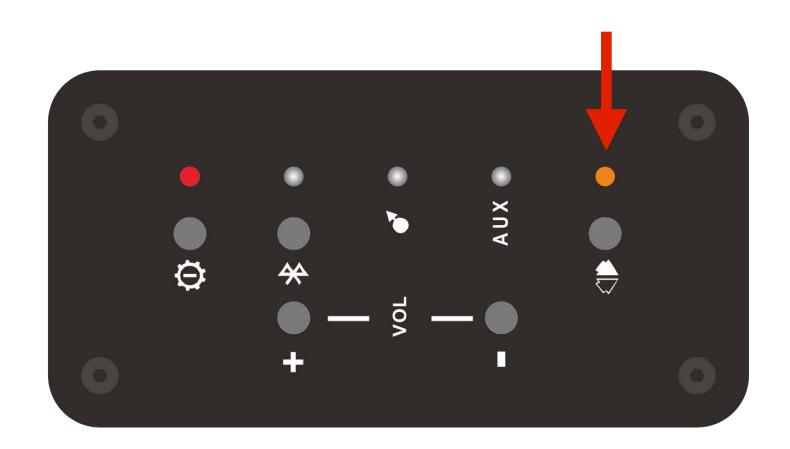
If the connected host goes out of range, the FS-252 attempts to reconnect to that host for 60 seconds. After 60 seconds, if a successful connection has not been established, the FS-252 will enter the Pairing state.

### Using your FS-252 as a SKAA receiver

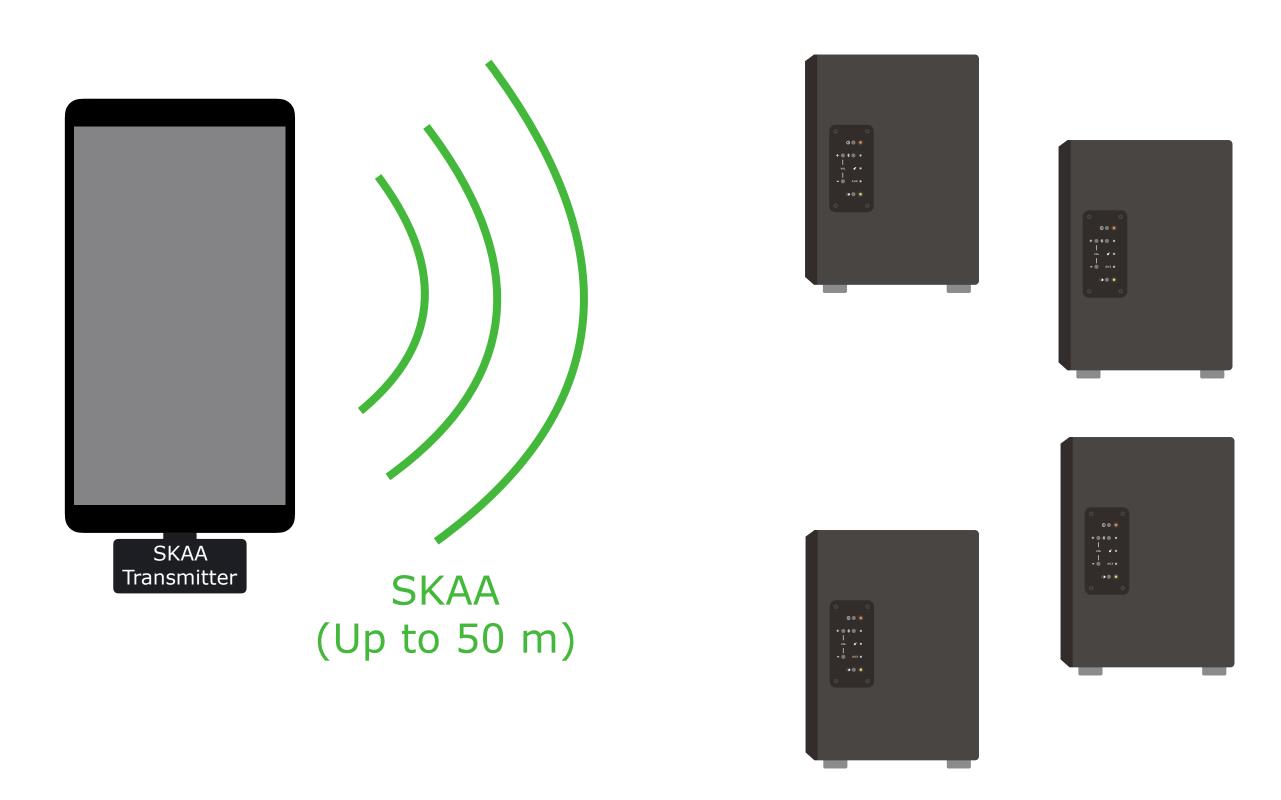
The FS-252 can be used as an SKAA receiver when in SKAA mode. An SKAA receiver receives wireless audio from any SKAA transmitter. For a complete list of SKAA transmitters visit https://shop.atlantictechnology.com/product/FS-252

Ensure your SKAA transmitter is powered, and that your host device is playing audio. For example, if you are using a smart phone, make sure that your SKAA transmitter is plugged into your smart phone and that music is playing.

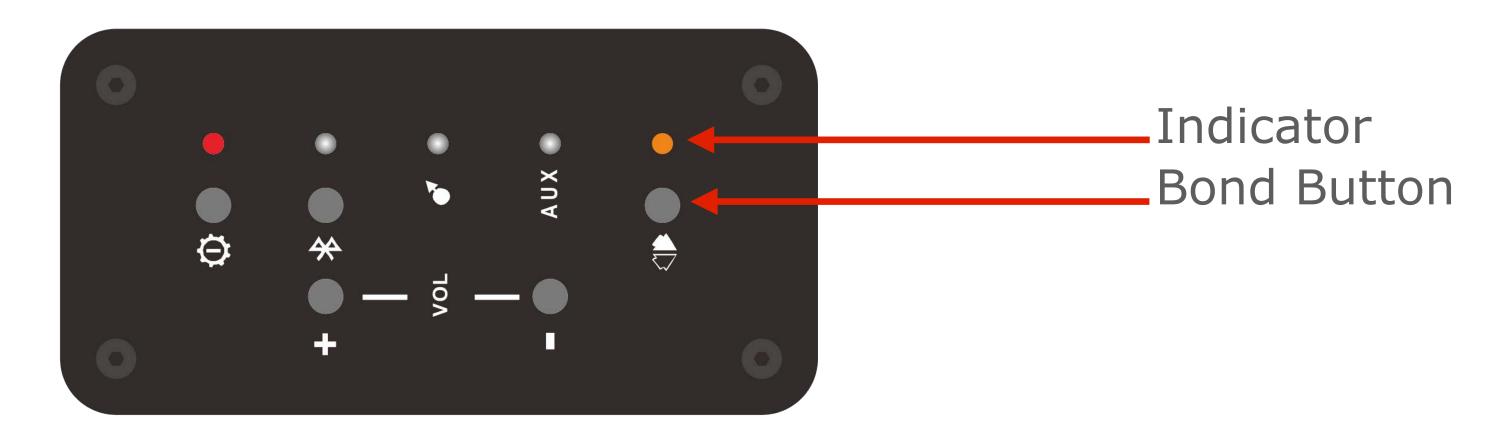
Click the Gear button to cycle through modes. The SKAA Indicator LED will illuminate once you have entered SKAA mode. When in SKAA mode, your FS-252 should automatically begin playing the audio received over SKAA through the speakers you have connected.



One SKAA transmitter can serve up to four SKAA receivers.



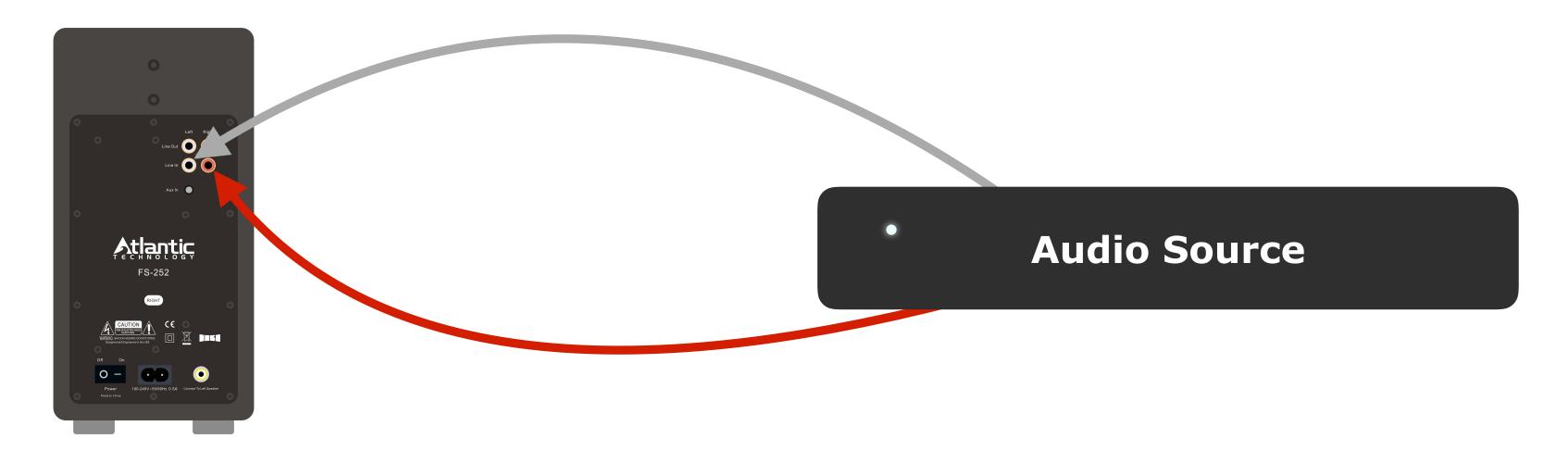
### Using your FS-252 as a SKAA receiver



Bond Button	Command	Indicator Meaning
Hold a few seconds	Add / Delete Manually add / delete the current transmitter to / from your Green List	<pre>to = Added (flash) = Deleted</pre>
-	Auto Add SKAA will automatically add the current Amber transmitter to your Green List if you listen to it for 30 minutes	oto = Added
1 Click	<u>Green Mode</u> Rotate through your list of favourite transmitters (Green List) — when a favourite transmitter is found, the search stops and audio plays from that transmitter	<ul><li>(dim) = Hunting</li><li>(flash) = Next one</li><li>(bright) = Bonded</li></ul>
2 Clicks	Amber Mode Explore for new, unknown transmitters (ones which are not already on your Green List)	(dim) = Hunting (bright) = Bonded

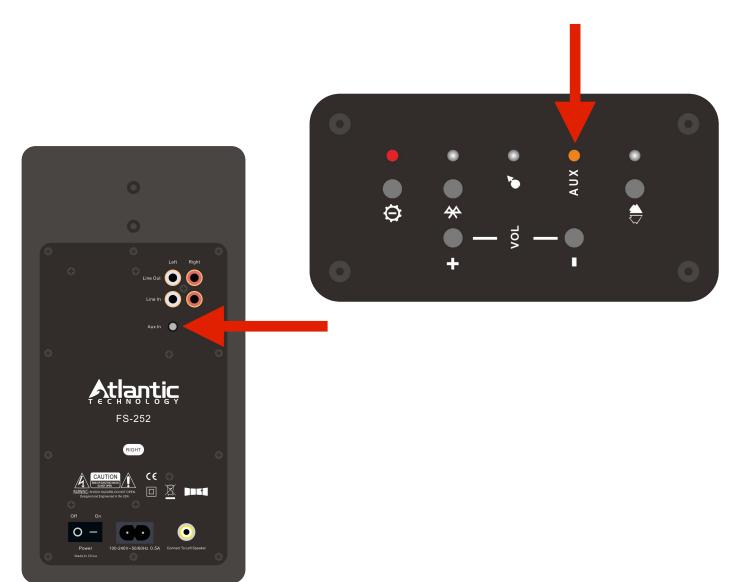
Bond Button	Command	Indicator Meaning
3 Clicks	Mute do again to Unmute; any Click command will first Unmute and then do its function	O, Or ■ = Muted (slow flash)
4 Clicks	Red Mode If you have 2 or more transmitters on your Green List, power on just the one you want to hear and it plays automatically.	<pre>(dim) = Hunting (bright) = Bonded</pre>
6 Clicks	Factory Reset Clear Green List. Start Over!	(flash) = Reset Done
Hold during power on	<ul> <li>Make a Cluster of Receivers:</li> <li>1. Power off all transmitters and receivers</li> <li>2. Power on the Master receiver while holding down its Bond Button—hold the button down until the Indicator begins to flash Red</li> <li>3. With the remaining receivers within 3 meters of the Master receiver, power on the first one, wait for its Indicator to flash Red and then power on the second one; continue until all of them are powered on</li> <li>4. Once all of the Indicators stop flashing (turn solid Red), power off all of the receivers</li> </ul>	<ul> <li>(flash) = Receiver has entered `Cluster Up' mode</li> <li>(bright) = The Cluster has been successfully made</li> </ul>

### **Using the Line in Analog Audio Input**



Connect your line level input to the input labeled "Line in" on the back of your FS-252.

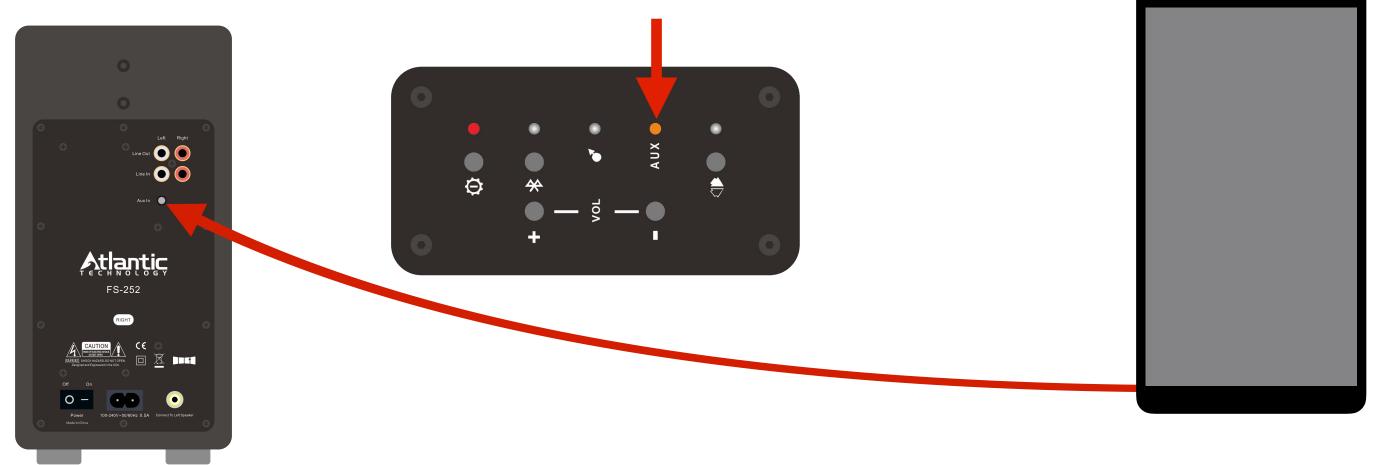
Click the Gear button to cycle to AUX mode. When in AUX mode, the yellow LED above AUX will illuminate.



Make sure no cables are plugged into the AUX in jack located on the back of the FS-252. A plug in the AUX in jack will block any audio signal from the Line in input on the back.

### **Using the AUX Audio Input**

Click the Gear button to cycle to AUX mode. When in AUX mode, the yellow LED above AUX will illuminate.

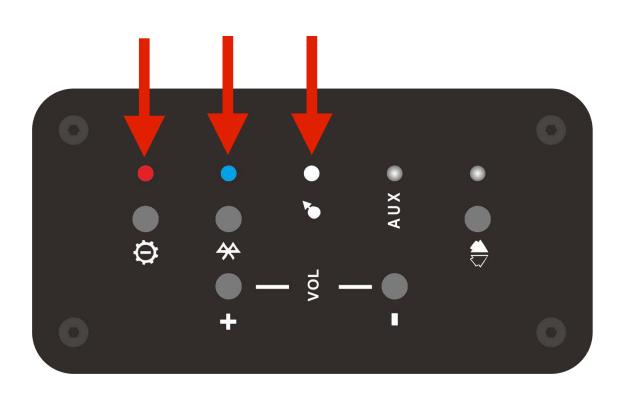


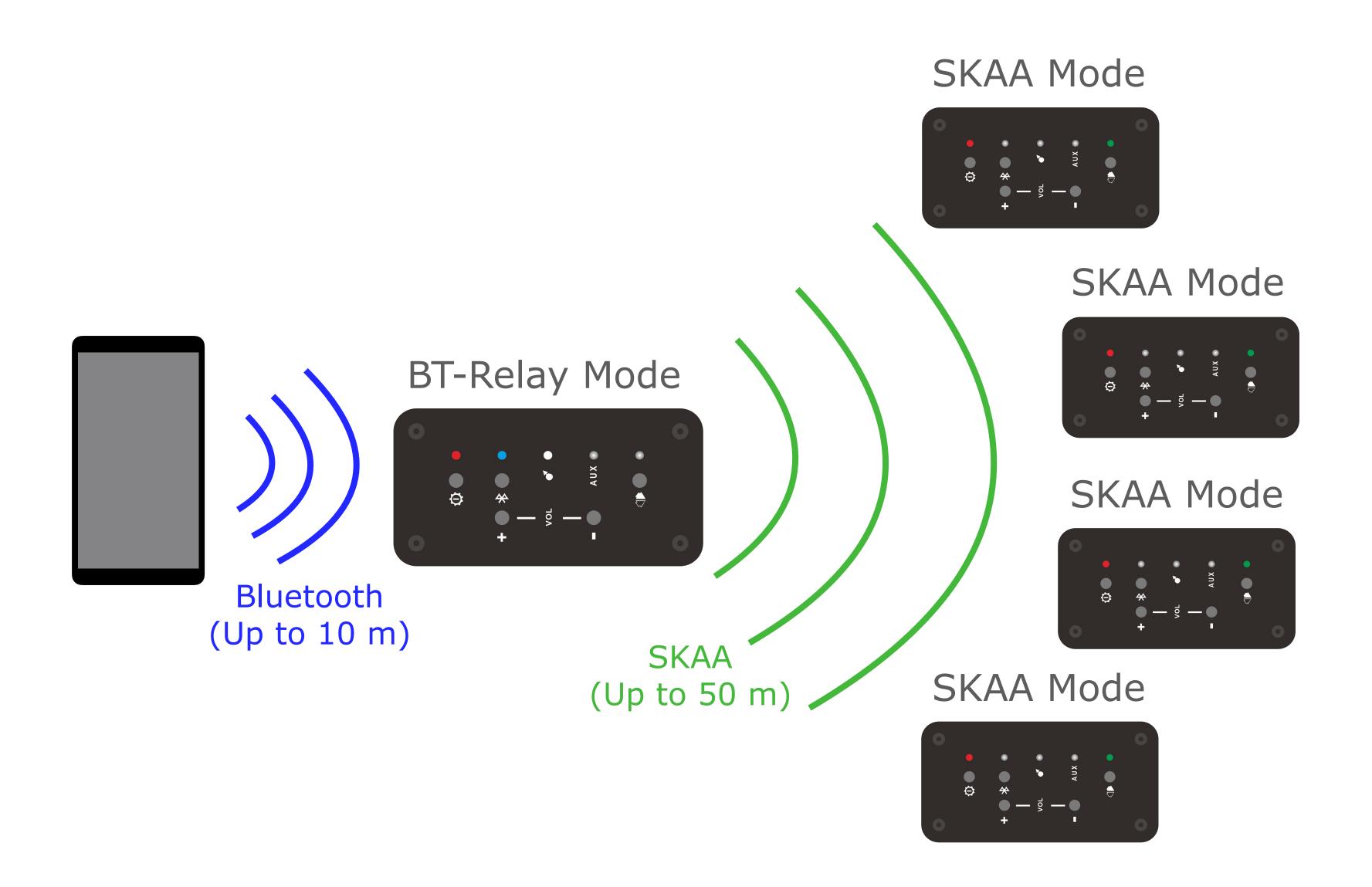
Plug your audio device into the AUX jack located on the back of the FS-252.

### Using Several FS-252 Units Together in a SKAA Network

Both Bluetooth and AUX modes come equipped with an optional Relay mode. When in either BT Relay or AUX Relay modes, the white Relay LED will be illuminated in addition to the Bluetooth or AUX LEDS. When in one of the Relay modes, your Bluetooth or AUX signal is relayed over SKAA to up to four more SKAA receivers.

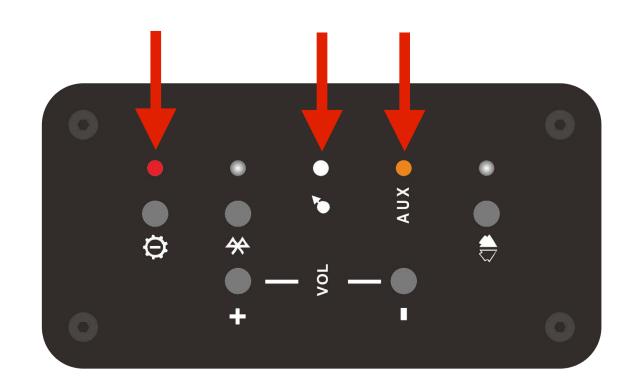
#### Bluetooth Relay

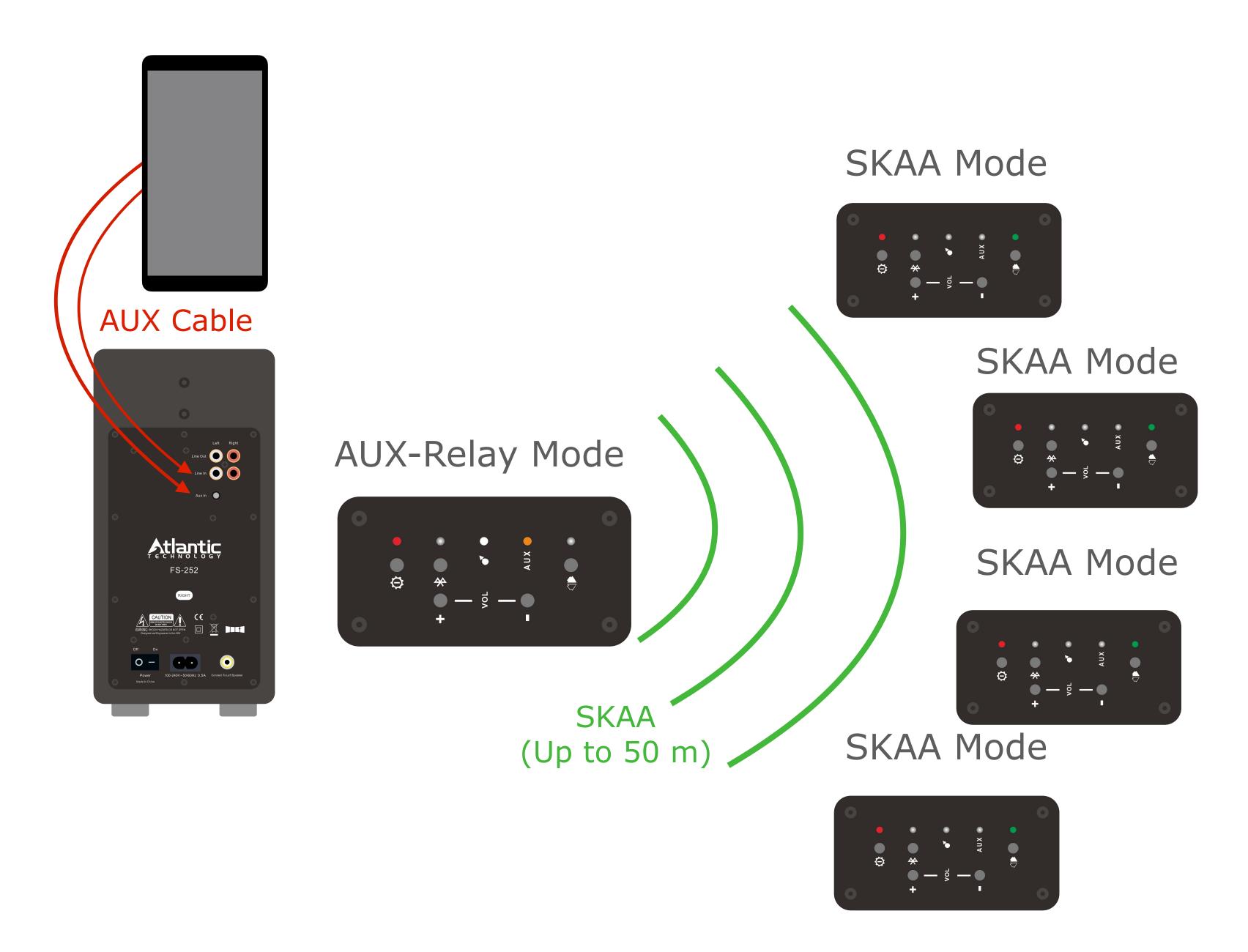




### **Using your FS-252 Together in a SKAA Network**

### **AUX Relay**

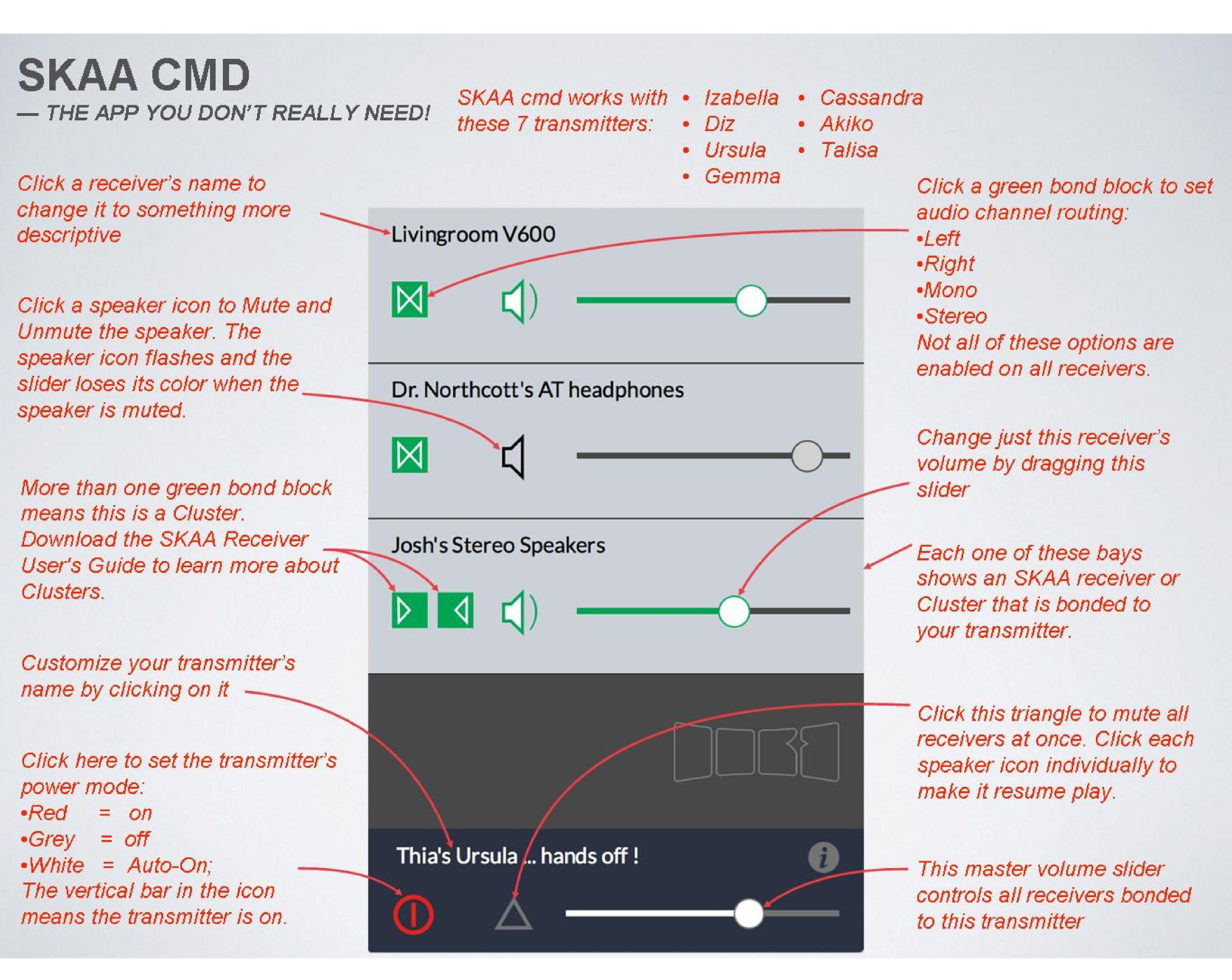




This will also work with an RCA line level source plugged into the Line In input on the back of the FS-252. In this case, make sure there is nothing plugged into the Audio Input jack on the back.



SKAA cmd is an optional App available for iPhone, iPad, iPod, Android, Mac and PC. You can find it on our website www.skaa.com/tlc/ or in the iOS App store and Google Play. SKAA cmd is great for getting the most out of your FS-252. To use SKAA cmd, throw your FS-252 into SKAA mode, download the app, insert a SKAA transmitter and check out all of the customizable features of SKAA. SKAA cmd only works with seven specific SKAA transmitters: Izabella, Diz, Ursula, Gemma, Akiko, Talisa and Cassandra. The FS-252 will not work with SKAA cmd unless you are using one of the supported transmitters.



#### **FS-252 Specifications**

Channels	2.0 stereo
Power	2*25W @ 4ohm
Inputs	SKAA wireless technology AUX IN LINE IN
Outputs	PRE OUT SKAA wireless
Transformer	In-built, wide-range voltage
Operation	Remote control and control panel
Display panel	LED
Dimensions	W145*H285*D215mm
Weight	R speaker 4.2kg L speaker 3.6kg



The test was performed according to the following European standards:
Draft ETSI EN 301 489-1 V2.2.0(2017-03); Draft ETSI EN 301 489-17 V3.2.0 (2017-03); ETSI EN 301 893 V2.1.1 (2017-05); ETSI EN 300 328 v2.1.1 (2016-11); EN 62311:2008

#### **Safety Comments**

The appliance is only suitable for moderate climates.

The maximum ambient temperature during use of the appliance must not exceed 40°C/105°F.

Do not drop the appliance or expose it to any other type of impact.

Do not place the appliance in an area exposed to heat, direct sunlight, dampness, moisture, rain, vibration, shock, dust or sand.

Only use a dry brush or cloth to clean the appliance.

#### Note:

Use this appliance in a temperature range between -20°C and 45°C (-4°F and 113°F).

#### **Symbols Used**

**Indoor Use Only** 



Protection class II appliance (ONLY FOR CLASS II EQUIPMENT)



Do not dispose of the appliance along with normal waste. Recycle the appliance.

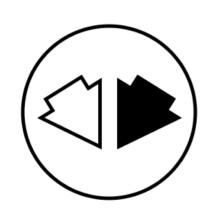


#### **Trouble Shooting Guide**

The purpose of this guide is to provide answers to frequently asked questions when using FS-252 products for the first time.

Note: SKAA provides a very simple, one-button, one-LED, interface. These two components are called, and will be referred to as, the Bond Button and the SKAA Indicator.

At any time, when interacting with SKAA, the user may locate the Bond Button and rapidly click it six times to reset SKAA to its factory settings. In some cases, it can prove useful to factory-reset an SKAA receiver. If an SKAA transmitter is available and transmitting audio, the factory-reset automatically Bonds to the transmitter and resets the volume.



Bond Button Icon

Before proceeding with reading the following frequently asked questions and answers, please make sure that your SKAA devices are powered, in SKAA-mode (if applicable) and in range of one another ( $\sim$ 20 m).

# 1. When I power on my SKAA speaker, the Indicator is dim green and when I play audio from my SKAA transmitter, no sound comes from the speaker.

Most likely your SKAA speaker is hunting for one of your favorite transmitters. Simply press the Bond Button once, in order to switch to another favorite transmitter. If no other favorite transmitters are saved on the Green List, pressing the Bond Button once will not have an effect. In this case, double-click the Bond Button in order to put the speaker into Amber Mode. Amber Mode will explore for new, unknown transmitters in the area that are currently playing audio. If the issue persists, you can always factory reset the SKAA receiver by six-clicking the Bond Button. The SKAA Indicator will flicker red for one second and the speaker will return to Amber Mode. If six-clicking the Bond Button has no effect, see the next trouble-shooting item.

# 2. When I power on my SKAA speaker and attempt to play audio from a SKAA transmitter, I hear no sound, the Indicator is dim green and no matter how many times I click the Bond button, nothing changes.

In this case, your SKAA speaker is a Slave speaker in a Cluster of speakers. This means that this speaker was probably sold with at least one other speaker, and one of these other speakers is the Master speaker. The Master speaker is responsible for controlling all Slave speakers. A Slave speaker will always follow the Master speaker. Some Slave speakers still contain a Bond Button in order to mute the speaker (this can be accomplished by triple-clicking the Bond Button). Any SKAA speaker with a Bond Button on it can be a stand-alone speaker, however it will have to be "unclustered" See the SKAA Receiver User's Guide for the unclustering procedure.

#### **Trouble Shooting Guide**

# 3. What is the difference between Green Mode and Amber Mode and how do I use them?

1 Click	<b>Green Mode</b> - Rotate through your list of favourite transmitters (Green List) - when a favourite transmitter is found, the search stops and audio plays from that transmitter.	<ul><li>(dim) = Hunting</li><li>(flash) = Next one</li><li>(bright) = Bonded</li></ul>
2 Clicks	Amber Mode - Explore for new, unknown transmitters (ones which are not already on your Green list)	<ul><li>(dim) = Hunting</li><li>(bright) = Bonded)</li></ul>

When you power on a SKAA speaker for the first time, it will be in Amber Mode. You can identify a speaker in Amber Mode by the behavior of its SKAA Indicator (if the SKAA Indicator is amber, the speaker is in Amber Mode). When in Amber Mode, the speaker will explore for new, unknown transmitters in the area that are currently playing audio. Once found, it will Bond to that transmitter, the SKAA Indicator will switch from dim amber to bright amber and the speaker will start playing audio. The speaker is now Bonded and in Amber Mode. Green Mode can be achieved after an SKAA speaker is Bonded and in Amber mode. Once a speaker is Bonded and in Amber Mode, simply hold down the Bond Button for three seconds. The SKAA Indicator will switch from bright amber to bright green. Now, the next time you power down your SKAA speaker(s) and transmitter(s) and power them back on again, the SKAA speaker(s) will be waiting for the transmitter on the Green List. When the transmitter becomes available, it will automatically Bond to it. SKAA speakers can store up to ten transmitters on a Green List. To cycle through transmitters on a Green List, simply click the Bond Button once to cycle to the next transmitter on the Green List.

#### 4. How do I know which SKAA compatible receivers work with each other?

All devices running SKAA OS 2.1 and newer are designed to work together seamlessly. These three lines should be single spaced, not double spaced.

support@skaa.com and we will help you.

contact us via:



343 Vanderbilt Avenue Norwood, MA 02062 Telephone: (781) 762-6300 Fax: (781) 762-6868