VSSL™

— A.3 —

PRODUCT GUIDE

WELCOME TO VSSL

VSSL is the music system you always wanted.

- Out of sight.
- No other apps.
- Just the music you love.

VSSL strives to deliver you the best music listening experience based on your music ecosystem. By incorporating Apple Airplay, Google Chromecast, and Spotify Connect to every zone, you can choose your favorite music app, device, and ecosystem.

Note: Your favorite music apps are maintained outside of the VSSL system. These apps may be subject to updates or changes and could affect the performance of your music system.

PRODUCT OVERVIEW

Front

Power Indicator	Indicates the power state of the device. There are 2 power states, on and sleep.
	Solid bright - device is on *Solid dim* - device is in sleep

Zone Status Indicators	Indicates the status of the zones. See the Device Status section for more details.
	Flashing red - zone is powering up and connecting to network *Solid red* - zone has a connection error *Solid white* - zone is active with audio playing via analog input or streaming *Off* - zone is not active

Rear

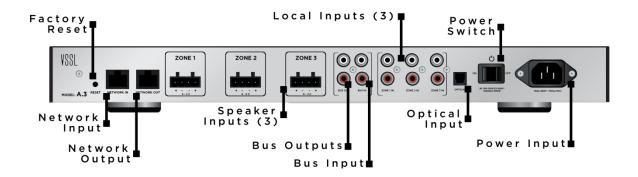|	
Bus Inputs (1)	Analog RCA global inputs. Any of the zones can be set to play either of the two inputs. Can be set up using the VSSL app.
Local Inputs (3)	Local analog RCA inputs.
Network Input	Ethernet LAN connection. Use a standard ethernet cable to connect your A.3 to a high speed data network.
Network Output	Ethernet connection to extend the network to other devices.
Optical Input	A global digital input. Use a TOSLINK cable.
Power Input	100-120/220-240 VAC 50/60 Hz Use the power cord supplied with the unit. Adapters can be used for international power connections.
Speaker Output	Use the phoenix connectors supplied, 1 connecter for each zone. Output is not bridgeable. The L+, L- are positive and negative outputs for the left channel speaker while the R+, R- are the positive and negative outputs for the right channel speaker.
Bus Outputs (1)	Analog RCA outputs. The output can be variable or fixed and is designed to work with external amplified systems like subwoofers, home theater receivers, or higher powered amplifiers for outdoor audio.

Accessories

Rack Ears	Used for installation in a standard equipment rack.
Phoenix Connectors (3)	Can accept size 14-20 gauge speaker wire.
Power Cord	Standard 3 prong power adapter for the US.

SPECIFICATIONS

Zones	3
Channels	6
Amplifier	Class D - 50 watts/ch RMS @ 8/4 ohm
Inputs	(1) Network input, (1) bus line level, (3) local line level, (1) optical
Wireless Inputs	3 - Airplay/Chromecast built-in/Spotify Connect
Outputs	(1) selectable line level, (1) Network output
EQ	7 band parametric adjustable
S/N Ratio	>100 dB A-weighted
Frequency Response	20 - 20,000 Hz
Rack Space	1U
Dimensions No Feet	17" W x 3.37" H x 14" D
Dimensions With Feet	17" W x 4.15" H x 14" D
Shipping Weight	10.3 lbs

NETWORK REQUIREMENTS

High-speed data network

VSSL needs to be installed with a high-speed network switch, router, or Wi-Fi/router combo.

High-speed internet connection

In order to access all of the internet music services and receive automatic updates, you need to have a high-speed internet connection, such as a high-speed DSL/Cable modem, fiber-to-the-home broadband, or a high-speed wireless internet provider.
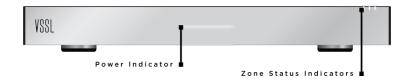
Wi-Fi / WLAN

For VSSL to work with your wireless phone, tablet, laptop or computer, you must have a wireless router or wireless access point installed. To ensure proper function, you should ensure that a strong wireless signal from your network is present to all the areas/zones you want to use VSSL.

DEVICE STATUS

There are several ways to determine the status of your device. The VSSL app can be referenced to see the real time status of your A.3 system. There are also several indicators on the A.3 meant to indicate the status of the system. See the Quick Reference section below.

Power Indicator   Zone Status Indicators

Boot Up Sequence

1. During boot up, the zone indicators will flash pink as the device initializes.
2. After the device initializes, all of the zone indicators will flash red. The zone indicators flash red while the streaming services for each zone are started.
3. The zone indicator will briefly show white to indicate the zone is ready and connected to the network.
4. The zone indicators then turn off until streaming or audio is started in the zone.
5. If there is an error, the zone indicator will display solid red.
6. If no network is connect, all the zone indicators will show solid red.
7. If a system update is available the device will enter update mode. See the 'System Updates' section for more details on updates.

Power Modes

The A.3 is equipped with the HiNA functionality of a network switch. The A.3 device is a networking device with high network availability and provides network switching when operational.

The A.3 device has two power modes, 'Always On' and 'Auto'. These modes can be changed by using the VSSL iOS or Android app.

Always On

When in 'Always On' mode, the device will never go into network standby mode or a low power sleep mode.

Auto

The 'Auto' mode allows the device to network standby mode after 15 minutes of no music output. To wake the device from network standby mode, the user can start a music stream to the device.

While in network standby mode, if the network is disconnected, the device will immediately enter a lower-power mode. To wake the device from the lower-power mode, the user can turn off the power switch on the back of the unit, wait 5 seconds, then turn power switch on. Network standby mode and low-power mode are indicated by the power indicator on the front of the device.

Updating

During system updates the zone indicators will flash red from left to right. See the 'System Updates' section for more details on updates.

LED Status Quick Reference

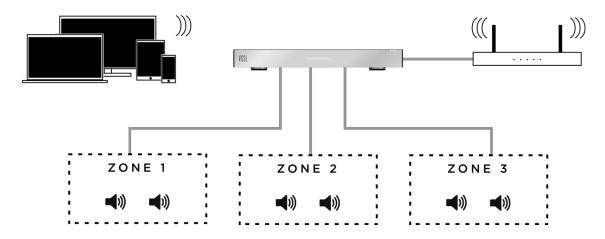|	
All zones blinking red	The device is booting up.
All zones are solid red	The device has lost connection to the network, check the ethernet cable or networking device. See the troubleshooting section of this guide.
A single zone is solid red	The zone has a connection error, see troubleshooting section of this guide.
A single zone is solid white	The zone is active.
Zone indicators flashing from left to right	The device is in FW update mode.
Power indicator is solid bright	The device is on and ready.
Power indicator is solid dim	The device is in a low power sleep mode, to wake the device start a music stream, or turn on an analog source.
Ethernet connection indicator is solid green	The network connection is good.
Ethernet connection indicator is flashing orange	There is network activity on the connection.

INSTALLATION

Tabletop Installation

For cabinet or countertop installation, ensure the location has adequate ventilation and at least 1.75" of headroom above the device.

Rack Installation

For rack installation, the A.3 comes with rack ear adapters and can be installed in a standard 19" wide equipment rack. The device requires 2U of space for mounting and 1U for ventilation above the device. Remove the feet before installing into the rack space.
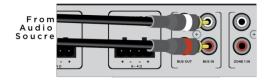

Connecting

1. Leaving the power switch in the off position, make all of the connections to the A.3. First terminate the speaker cables to the included phoenix connectors.

2. Connect all phoenix connectors, auxiliary audio sources, and external audio subsystems.

3. Use an ethernet cable to connect the device to a high speed data network. **Make sure to connect to the 'Network In' port.**

4. Once all the connections are made, power the device on.

5. See the Device Status section of this guide for details about the boot up sequence.

Note: For any unused zones, you can use the VSSL app to disable the streaming services for that zone. This will make it so you can't inadvertently connect to a zone that is not used.

Configuration

First download the Google Home and VSSL app from Google Play store or Apple App store. Set up first with Google Home app, then sse the VSSL app to adjust all settings for the VSSL system. Using the VSSL app you can set the inputs, and configure zone output settings like EQ, max volume, or mono/stereo output.

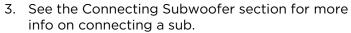**Video Guide:** For a video walk through on set up on in the VSSL and Google Home app follow this link: https://www.youtube.com/watch?v=vf4ptjJ-GcE
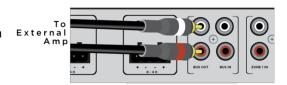
Connecting to External System

External Amplifier (Output)

You can connect your A.3 to an external amplifier system, for example a home theater receiver, powered subwoofer or passive subwoofer with separate amplifier.

1. Connect the external amplifier to the bus output.
2. The output from the bus output is variable, which allows you to control the volume of the external system from your phone or other streaming device.
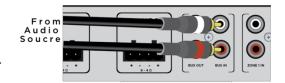3. See the Connecting Subwoofer section for more info on connecting a sub.

Note: The A.3 outputs should only be connected to another amplifier system and not a system that redistributes the signal, such as an audio matrix. Doing so may cause unintended consequences and cannot be guaranteed.

External Audio Source (Input)

Add external audio inputs by connecting the audio source to the analog inputs on the A.3. You can wire the output of any RCA analog source, like a Satellite TV box, to any of the local inputs or bus inputs. Each zone can select one of the local, bus 1, or bus 2 inputs.

Note: The analog source selection can only be adjusted in the settings of the VSSL app. Once chosen in the settings, the A.3 will always play the analog input until a stream is started. Streams override the analog, but once it stops the A.3 will switch back to the analog input.

Connecting to an Automation System

You can extend the functionality of your A.3 by connecting it to an automation system. The automation system can control the matrixing abilities of the amplifier. Through the automation driver, any of the 6 local inputs or 2 global bus inputs can be routed to any of the speaker outputs. The streaming inputs are always set to the same zone and cannot be changed.

Use with AppleTV

Through AirPlay on the VSSL A.3 you can connect a zone of your A.3 directly to an AppleTV. This is an easy way to get audio from the TV to inceiling speakers. However, this will only work when using the AppleTV as a source.
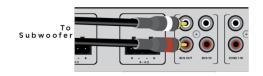
In the settings of the Apple TV, you can navigate to the audio settings to select an Airplay speaker as the audio output device. From this menu, you can select an zone on the VSSL A.3 to output to. Please reference the AppleTV manual for details on the audio settings of the AppleTV.
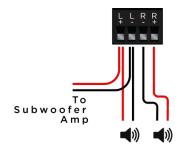
Connecting a Subwoofer

A subwoofer is a great way to add more bass to your VSSL system. To connect a subwoofer, you can use one of the bus outputs or the speaker outputs.

To use the bus outputs, use the VSSL app to set the bus output to the zone you wish to add the subwoofer to. From the bus output use an RCA cable to connect to the RCA input on a subwoofer amplifier. You can also use a Y RCA adapter to combine the stereo inputs to a mono RCA input on the subwoofer amplifier. The bus outputs are full range outputs. For best results, reference the subwoofer amplifier manual to ensure the RCA input is passed through the local cross over on the subwoofer.

To connect a sub to the high level speaker outputs, you need to use an amplifier that is capable of receiving a high level input signal. Reference the subwoofer amplifier manual to ensure proper connection and settings on the amplifier.

PLAYING MUSIC

Listening to music with VSSL is easy. Use your favorite music app and connect to VSSL using AirPlay, Chromecast built-in, or Spotify Connect.

AirPlay®

iOS® Device

1. Connect your iOS device to the same Wi-Fi network as the VSSL A.3.
2. On your iOS device swipe up from the bottom of your screen to open Control Center.
3. In Control Center, swipe horizontally to find the Now Playing screen.
4. Tap to open a list of available AirPlay devices.
5. Select the zone/room you wish play to.

macOS™/OS X® Device

1. Connect your computer to the same Wi-Fi network as the VSSL A.3.
2. In the menu bar find the speaker icon.
3. Hold down the option key and clidk the icon.
4. Select the zone/room you wish play to.

iTunes®

1. Connect your computer to the same Wi-Fi network as the VSSL A.3.
2. Open iTunes on your computer.

3. To the right of the volume slider in iTunes, click . You'll see this icon only when an AirPlay-enabled device is on the same Wi-Fi network.

4. Click the zone/room you wish play to. Each VSSL zone will have speaker icons next to them.

Note: There are slight variations to the AirPlay instructions depending on your OS version. For details please see the Apple Support website. https://support.apple.com/

Chromecast built-in

Chromecast built-in is a platform that lets you cast your favorite music from your phone, tablet or laptop right to your speakers. Easily control your speakers with apps you already know and love from your iPhone®, iPad®, Android phone or tablet, Mac® or Windows® laptop, or Chromebook.

With Chromecast built into your VSSL A.3, your phone becomes your remote. Simply tap the Cast button from the app you already know and love to stream music/tunes/podcasts/ playlists from your phone, tablet or laptop to your VSSL A.3.

Note: Go to the Chromecast built-in website for a full list of Chromecast enabled apps https://www.google.com/cast/apps

Android™

1. Connect your Android device to the same Wi-Fi network as the VSSL A.3.
2. Go to your favorite Chromecast-enabled music app and play music.
3. While in the music app look for the Cast button and press.
4. Select the zone/room/group you wish play to.

Mirror your Android phone or tablet

You can hear anything playing on your Android device on your speakers connected to a VSSL A.3 zone.

1. From your Android phone or tablet, open the Google Home app.
2. Tap the left hand navigation to open the menu.
3. Tap "Cast screen/audio" and select the zone/room/group you wish to play to.

iOS

1. Connect your iOS device to the same Wi-Fi network as the VSSL A.3.
2. Go to your favorite Chromecast-enabled music app and play music.
3. While in the music app look for the Cast button and press.
4. Select the zone/room/group you wish play to.

Mac®/PC

1. Connect your Mac or PC device to the same Wi-Fi or wired network as the VSSL A.3.

2.   Make sure you have the latest version of Chrome installed.
3.   In the top right corner of your Chrome browser, press the Cast button 🔲.
4.   Select the zone/room/group you wish play to.

Note: For configuring groups and volume control of Chromecast sessions, you must use the Google Home app. The Google Home app is available on iOS and Android in the Apple App Store and the Google Play store.

Spotify Connect® 🔊

You'll need Spotify Premium to use Connect. See: https://www.spotify.com/us/premium/.

1.   Connect your phone, tablet, or PC/Mac to the same Wi-Fi network as the VSSL A.3.
2.   Open the Spotify app on your phone, tablet or PC/Mac, and play any song.
3.   If you're using the app on a phone - tap the song image in the bottom left of the screen. For tablet and PC move to step 4.
4.   Tap the Connect 🔊 icon
5.   Select the zone/room you wish play to. If you can't see it, just check it's connected to the same wifi network as your phone, tablet or PC.

Note: The Spotify software is subject to third party licenses found here: www.spotify.com/connect/third-party-licenses

Local Music Library

For local music you can use any DLNA based streaming app to play content to your VSSL A.3. You can also use a DLNA streaming app to access local music from a NAS drive.

VSSL APP

Use the VSSL app for:
- Volume control of all zones.
- Quickly see the system and errors.
- Groupings with local content or DLNA sources.
- Adjust system settings like zone mono/stereo output, EQ, and max volume.

VSSL App (iOS)

Available in the Apple App store for iPhone, iPad, and iPod touch with iOS 7.0 or later.

VSSL App (Android)

Available in the Google Play store for all Android devices with Android 5.0 or later.

Note: When using Chromecast built-in, you must use the Google Home app for zone

groups, volume, and set up.

SYSTEM UPDATES

Your VSSL system will update automatically. This ensures delivery of important updates and will keep your system running bug free. When the A.3 is in update mode, the zone status indicators will flash a single light red from left to right. Each zone will update one by one.

For the first time out of the box or after factory reset, if there is an update available each zone is updated after setting up the Chromecast Built-in for the zone in the Google Home app.

LED notification details:
1. Zone indicators flash from left to right while the update is downloading.
2. When finished downloading, the zone indicators flash left to right to indicate the update is processing.
3. The power LED will flash on and off during installation.
4. After installation, the zone's indicator LED of the zone that was updated will flash white and red.
5. When complete the device will reboot.

The system will check for updates on reboot and at night. If an update is available at night, the system will only update if there is no music playing.

TROUBLESHOOTING

No music output

1. First ensure the device is powered on by checking the power indicator light or opening the VSSL app.
2. Make sure the device is connected to the local network and check to see the network indicator light is solid green.
3. Check your speaker connections. Make sure all the cables are properly terminated in the phoenix connectors and that there or wires touching other ports.
4. You can use a toner to ensure the wire connections are not cut to the speaker in the zone.
5. Open the VSSL app to make sure the zone you're playing to is not muted or the volume is turned up.
6. Check your internet connection by loading web pages on a computer/phone/tablet or checking status indicators on your internet modem (see you modem manual to identify the proper status indicator).
7. Check the
8. If these suggestions don't solve the issue contact VSSL support.

Poor Playback

Poor playback can be caused by high network traffic or other networking issues.

1. Check your internet connection by loading web pages on a computer/phone/tablet.
2. Try reducing wireless interference by moving closer to the Wi-Fi router or access point.
3. If these suggestions don't solve the issue contact VSSL support.

Check the Music App

Playback issues can be caused from the music app installed on your phone, tablet, computer, or other device.

1. Restarting the app by closing and reopening the app to solve playback issues.
2. Check the music services online site to find reports of service outage.
3. If these suggestions don't solve the issue contact VSSL support.

System Status Screen

You can use the system status screen to get an overview of the status of all the devices in your network.

1. On the system status screen, if any of the devices show red, this indicates an error.
2. To resolve the issue verify your network connection and if needed reboot the device.

Device Reboot

You can reboot your A.3 through the VSSL app.
1. In the VSSL app navigate to the device settings.
2. Under device settings you will see an option to restart the device.
3. You can also do a hard reset by toggling the power switch on the back of the A.3.

Restore Factory Defaults

You can restore the factory settings of your A.3 through the VSSL app.
1. In the VSSL app navigate to the device settings.
2. Under device settings you will see an option to restart the device.
3. You can also perform a factory reset by holding the 'Reset' button on the back of the A.3 for 10 sec.

Note: For more support and other questions please see vssl.com/support

NETWORK STANDBY MODE AND OFF MODE

The A.3 is equipped with HiNA functionality of a network switch.

The A.3 is a networking device with high network availability function and provides network switching function when operational.

The device can enter the network standby mode or the off mode when the device is not in use.

The A.3 enters the network standby mode and the power consumption is 4,84W after 15 minutes of no music output.

When in network standby mode, to wake the device, the user can start a music stream to the device.

When in network standby mode, if the network is disconnected, the device will immediately enter off mode and the power consumption will be only 0,31W.

When in off mode, to wake the device, the user can turn off the power switch on the back of the unit, wait 5 seconds, then turn on the power switch.

Network standby mode and off mode are indicated by the power indicator on the front of the device.

IMPORTANT SAFETY INFORMATION

1. Read these instructions.
2. Keep these instructions.
3. Heed all warning.
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 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 lighting 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 cold or plug is damaged, liquid has been spilled or object have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING
▪To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture
▪The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus
▪An appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

FCC 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 interference that may cause undesired operation.

Cet appareil est conforme à la section 15 des réglementations de la FCC. Le fonctionnement de l'appareil est sujetaux deux conditions suivantes :
(1) cet appareil ne doit pas provoquer d'interférences néfastes, et
(2) cet appareil doit tolérer les interférences reçues, y compris celles qui risquent de provoquer un fonctionnement indésirable.

Note: This product 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 product 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 product 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.

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) this device may not cause interference, and
(2) this device must accept any interference, including interference that may cause undesired operation of the device.
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.