

a sound relationship
Russound



SMZ16-PRE

16 Channel Matrix Pre-Amplifier with Streaming

INSTALLATION GUIDE

Download the
Latest Manual



Russound.com/
smz16-pre-manual

NOTICE

NOTICE: INTERNET CONNECTION REQUIRED FOR PRODUCT INSTALLATION

There are two things that must be done at the time of installation of this product that require a working internet connection:

- 1. Enter valid Russound Certified Installer credentials. The SMZ16-PRE is shipped in a locked state so that it cannot be operated without first being configured by a Russound Certified Installer.



IF YOU ARE NOT A RUSSOUND CERTIFIED INSTALLER, YOU WILL NOT BE ABLE TO INSTALL AND CONFIGURE THIS PRODUCT.

If you are a custom installation professional and wish to become authorized as a Russound Certified Installer, please contact your Russound Sales Representative for more information.

Note: If you are a Russound Certified Installer and you plan on installing this product on a job site that may not have working internet access, please configure the unit at your shop or other location where internet access is available BEFORE you take it to the job site.

- 2. Firmware may be updated through the Web Config configuration webpage. By default, available updates will be installed automatically at the time configured in Web Config.

Note: If an internet connection will not be available at the installation location, please download the latest firmware from the Russound website to your laptop before going to the job site and use the "File Update" option in Web Config.

The screenshot shows a web browser window with the "Russound" logo and "Support" link in the top left. A red banner message states: "This device must be configured by a Russound Certified Installer." Below this, the heading "Installer Credentials" is followed by two input fields: "Username" and "Password". The "Password" field has a toggle icon to the right. An "Apply" button is at the bottom left. At the very bottom, small text reads: "RussoundPMP, Inc. ©2024 | www.russound.com".

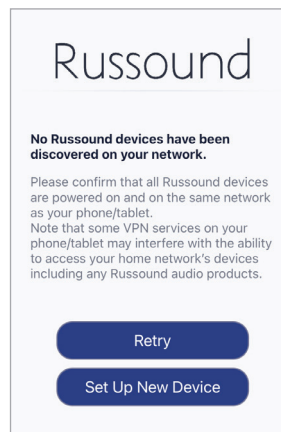
Russound Certified Installer credentials can be entered through the Web Config configuration webpages.

LOCKDOWN FEATURE

When the SMZ16-PRE is shipped from Russound or when reset to factory default conditions, it will only operate in a “locked” state. In this state, no audio or control is available. In order to unlock the system, valid Russound Certified Installer credentials must be entered using our convenient Web Config browser-based configuration utility or through the Russound app.

Adding a new device is simple from the Russound App. If it is the first Russound product, simply select “Set Up New Device” from the Russound app’s main screen as shown below. Follow the instructions in the app to configure Wi-Fi, update the firmware, add support for Google Home, etc.

When the Controller is first powered on, a message will appear on any compatible user interfaces and the Russound App indicating that the device must be unlocked. The message will contain the IP address of the controller. Using your mobile device or computer, browse to the controller’s IP address (type `http://` and then the IP address).



If you are using the Russound App, the IP address appears in the Admin Setup menu (press and hold the Gear Icon in the upper right for a few seconds until the Admin Setup menu appears) as well as includes a device settings button link that will directly take you to Web Config via your device’s web browser. If you do not have a valid Russound Certified Installer credential, please contact your Russound Sales Representative.

CONFIGURATION PASSWORD

In order to prevent unauthorized changes to configuration settings, a default password option is available. When enabled through the Web Config settings, a password of **russound123** will be required to be entered prior to changing any configuration settings. Enter this password if prompted for a Configuration Password.

This password is separate from the Russound Certified Installer password that is used to unlock the controller and cannot be modified. The default password cannot be changed or modified and will always be **russound123**

KEY FEATURES

Thank you for choosing the Russound SMZ16-PRE 16 x 16 Pre-Amp DSP Audio Matrix with Built-in Streamer to enhance your audio system with advanced source control including 7-band EQ on all 16 zones.

Key Features:

- Built-in Audio Streamer – The SMZ16-PRE includes the same hi-res audio streamer that is used in the popular Russound MBX-PRE and MBX-AMP products. Add additional MBX-PRE streaming pre-amplifiers (up to 15 per SMZ16-PRE) as needed. Russound recommends having a separate streamer for every user so that everyone can listen to their favorite music anytime and anywhere
- HDMI ARC Input – Connect a TV to this input and have the ability to share this source anywhere for synchronized audio without any lip synch issues
- Advanced DSP – 7 Band Graphical EQ with built-in presets for Russound Speakers
- Easily accessible configuration options via Russound Web Config using a computer, tablet, or smartphone
- Digital Audio Input Options (4 coax, 6 optical)
- Up to 16 Sources delivered to up to 16 zones for sharing music anywhere
- Scalable up to 48 distinct zones
- Built-in Bluetooth extension input to connect an optional BTC-2X receiver. The BTC-2X allows for easy-to-use Bluetooth up to 500' away from the SMZ16-PRE (152m) via a CAT5 cable connection
- Supports up to 32 Global System Favorites as well as 4 Zone Favorites for every zone
- Audio paging input with configurable options for selected rooms/zones
- Advanced Multiroom Options: Party mode, Do Not Disturb, and source / zone linking
- Alarm clock, scheduler and sleep timer options per zone with the Russound app
- IR Control of Source Devices - simplified programming and control via intelligent IR learning capabilities for quick setup
- Fixed/Variable line level outputs for all zones.

- Routed IR source control outputs for up to 8 sources, with shared IR available for up to 16 sources and one common IR output.
- Built-in 2-port Ethernet Switch – If using a wired ethernet connection, the SMZ16-PRE has a “port-saver” extra ethernet port that you can use to connect another wired ethernet device.
- Available User interfaces: The SMZ16-PRE works with the IPK-1 Keypad, XTS7 wall-mounted touchscreen, and the Russound App. For information about user interfaces, go to the Russound website www.russound.com
- 3rd Party Control – The SMZ16-PRE uses Russound’s RIO protocol for 3rd party control. Drivers are available for popular control platforms such as Control4, RTI, and URC. The API for using RIO is available on the Russound website.
- Firmware Updatable – As new features or software improvements are released by Russound, your SMZ16-PRE can be kept up to date with an option for automatically updating
- Web Config – Web Config is a hosted webpage on the SMZ16-PRE where all of the installation configuration and settings are maintained. It can be accessed from any browser on the same network as the SMZ16-PRE by simply navigating to the SMZ16-PRE’s IP address.

WEB CONFIG FEATURES

- Rename Zones and Sources
- Adjust Network and Wi-Fi Settings
- Adjust Zone Volume Trim Levels
- Set Up Macros
- Adjust Zone Paging Settings
- Pair IPK-1 Keypads
- Adjust Zone Settings
- Configure Source Types
- Update Firmware
- Configure IR Commands for Sources
- Backup/Restore Configuration Files
- Configure Source and Zone Linking
- Configure Amazon Alexa™ Integration
- Set Time Zone

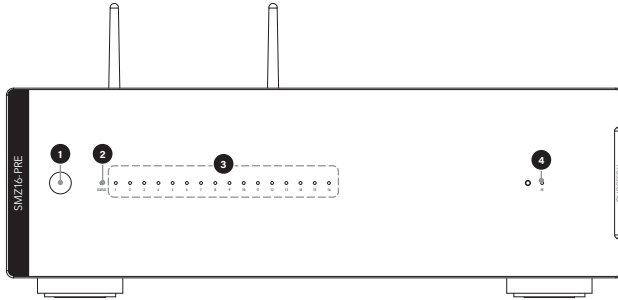
PRODUCT OVERVIEW

WHAT'S IN THE BOX

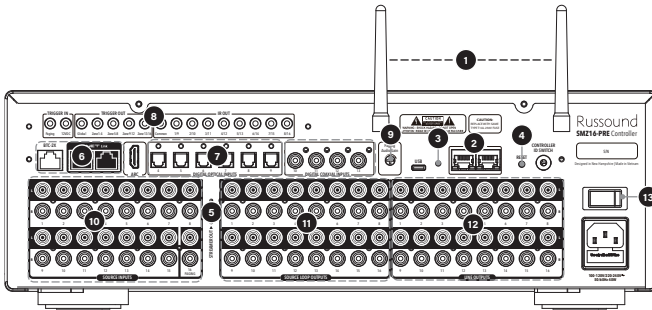
- 1 Russound SMZ16-PRE 16 x 16 Pre-amp DSP Audio Matrix
- 1 6' (1.82 m) Power Cord (International Model Available with UK, EURO, and AUS cords)
- 1 Set of Rack Mount Ears with Mounting Screws (Rack Mount Screws Not Included)
- 2 Wi-Fi/Bluetooth Antennas
- 1 Owner's Manual

WHAT YOU NEED FOR THE INSTALLATION

- Internet Connection (Wired or Wi-Fi)
- #2 Philips Screwdriver for attaching the included rack mount ears (Optional)
- Audio Source Connection Cables (as needed, stereo analog RCA, HDMI, Digital Optical, Digital Coax, etc.)
- Miscellaneous Cables (as needed 3.5mm for 12v triggers, etc)



1. Standby Power Button – Pressing button will cause the device to stop all playback and enter low power mode.
2. Status Indicator – Multi-color LED Indicates Standby, Network, Update and Error states.
3. Zone Status Indicators (8) – Provides playback status of each zone.
4. IR Config and Status Center – Control of third-party devices (i.e., TV, cable boxes, Blu-ray players) can be configured here.



1. Wi-Fi/Bluetooth Antennas (2) – Diversity antennas support both 2.4GHz and 5GHz Wi-Fi Bands. Supports b/g/n/ac standards.
2. Ethernet Ports (2) – Provides wired LAN connectivity. Includes a two-port ethernet switch.
3. USB C Port – Used for updates and USB media playback.
4. Reset Switch
5. Media Streamer Audio Output
6. Proprietary connections to other Russound products.
7. Digital Inputs- ARC, Optical and Coax - for audio connections to other source devices
8. Triggers and IR Output Ports – For control of source devices.
9. Paging Gain Control – Used for optional integration with paging system.
10. Analog Audio Inputs (8) – Audio connections for third-party devices (i.e., TV, cable boxes, Blu-ray players).
11. Analog Loop Outputs (8) – Buffered loop output for each input.
12. Zone Line Outputs (8) – Provides zone audio output for up to 16 zones.
13. AC Power Input and Power Switch – 100-120VAC ~60Hz or 220-240VAC ~50Hz

CONNECTIONS

INTERNET CONNECTION

IMPORTANT NOTE: The SMZ16-PRE is a network-based device that requires an internet connection for its operation.

Wired Ethernet Connection If you are going to be using the built-in wired ethernet connection, simply connect your SMZ16-PRE to an available port on your router. Russound recommends that the SMZ16-PRE be connected directly to your router rather than through a network switch. The default setting for the SMZ16-PRE network is DHCP-enabled but it may be configured with a static IP address if required. Russound recommends using an IP reservation on your router rather than a static IP address whenever possible. By using an IP reservation, the SMZ16-PRE remains in a DHCP-enabled state and can be assigned an IP address by any router. The SMZ16-PRE includes a built-in 10/100 2-port Ethernet Switch in a port-saver configuration. When using a wired connection, either of the 2 ports can be used.

When either of the 2 ports is connected to the network, the second port can be used to connect an additional network device.

Please note that if the Wi-Fi connection is used for the SMZ16-PRE, a device connected to the SMZ16-PRE ethernet port will NOT receive network connectivity.

Wi-Fi Connection – The Wi-Fi connection can be set up in several ways: 1) by using the Russound app to add the SMZ16-PRE to your network; 2) by connecting a wired ethernet connection and then using any browser to configure the Wi-Fi settings using the SMZ16-PRE's Web Config settings; and 3) Using an iOS device on the same network as the SMZ16-PRE.

Option 1 – Using the Russound App

Using the Russound App is the easiest way to configure the SMZ16-PRE Wi-Fi settings. With the SMZ16-PRE powered on, simply open the Russound app. Go into the Settings menu by tapping the Settings gear icon in the upper right corner. Select "Set Up New Device" to begin the setup process. Select the device you want to set up from the list shown. If you do not see your device on the list or if no device was discovered, make sure your phone/tablet is in the same room as the device and select "Retry".

The app will then prompt you to select the Wi-Fi network that you want to use with your SMZ16-PRE. Select that network, enter the network password and tap "Connect".

Option 2 - Use a Wired Connection and enter the Wi-Fi settings using Web Config.

A quick way to enter the Wi-Fi settings is by briefly using a wired ethernet connection to access Web Config. Once you are connected via the wired connection, you can use the Russound app to obtain the IP address by pressing and holding the Settings gear icon on the top right for a few seconds until the Admin Setup menu appears. You can directly enter the device settings in Web Config by tapping on the Device Settings tab. The IP address will also appear at the top of the menu. Note: If you have multiple Russound devices, the IP address and settings option shown in the Russound app will be that of the first Russound device identified by the app and may not necessarily be your SMZ16-PRE. It may be necessary to navigate to the SMZ16-PRE Web Config by tapping on the device list in the upper right-hand corner of Web Config of the other Russound device which was discovered.

Option 3 (iOS Devices Only)

You can set up the SMZ16-PRE Wi-Fi information using any IOS device on the same network by using its "Add an AirPlay speaker" function from its Wi-Fi setup screen.

1. From an iOS device that is on the Wi-Fi network that you would like to use with the SMZ16-PRE, go to Settings - Wi-Fi - Set up new AirPlay speaker. The SMZ16-PRE will be listed there as "SMZ16-PRE-XXXX" with XXXX being the last 4 digits of the SMZ16-PRE MAC ID.
2. Select the SMZ16-PRE.
3. Rename the SMZ16-PRE. The device name will be used to identify its built-in audio streamer when it is selected as the audio source, so for example, a suggested name might be "Streamer" or, if everyone in the home will have their own streamer by adding additional Russound MBX-PRE streaming sources, an appropriate name might be "Bob's Streamer" or "Mary's Streamer".
4. Follow the prompts to connect to the appropriate Wi-Fi network.
5. The SMZ16-PRE will attempt to connect to the selected network and the front panel LED will turn solid blue when the connection is successful.

ACCESSING WEB CONFIG FIRST TIME SETUP

Web Config is a hosted web page within the SMZ16-PRE used to configure all settings and to perform firmware updates. It is accessed by navigating any web browser to the SMZ16-PRE's IP address on your home network.

The first time that a user navigates to the SMZ16-PRE Web Config page, Web Config will open automatically in First Time Setup mode.

First Time Setup is designed to help configure a few basic system settings as well as to provide for a quick method of enabling Google Cast.

Using a web browser from any device (phone, tablet, or computer) that is on the same network as the SMZ16-PRE, navigate to the SMZ16-PRE's Web Config page by entering one of the following:

- 1. SMZ16-PRE IP address – Example: if the IP address is 192.168.0.105, enter http://192.168.0.105 into the web browser. If you don't know the IP address, you can use a network scanning app such as Fing (Free for iOS and Android) to discover the IP address.
- 2. SMZ16-PRE Hostname – The hostname is printed on a label on the rear of the SMZ16-PRE. The hostname is formatted as SMZ16-PRE-XXXX where XXXX is the last four digits of the SMZ16-PRE's MAC ID. Example: If the hostname is SMZ16-PRE- 1234, enter http://SMZ16-PRE-1234 into the web browser.

FIRST-TIME SETUP

Device Name

Russound Support

First Time Setup:

Prev

Next

Done

Device Name

SMZ16-9627

Russound/FMP, Inc. ©2024 | www.russound.com

The first item you will see on the first-time setup screen is the device name. The default device name is the hostname SMZ16-PRE-XXXX. If you have previously edited the name, the name will be whatever you entered. The name

can be changed at any time. The name will primarily be used for identifying its built-in audio streamer, so a name such as "Streamer", "Streamer 1", "Bob's Streamer", "Mary's Streamer", etc. are all good choices.

As you type the new name, it will be saved automatically and you will see a check mark appear to confirm that the new name has been properly saved.

Networking

The second item you'll find in the First Time Setup is Networking. Here you can configure for Wired, Wireless, or Automatic (both wired and wireless are available) network connections. If set to "Wired", the Wi-Fi connection will be disabled but please note that due to some 3rd party requirements, if an internet connection is not present on the wired connection, the SMZ16-PRE will enter soft AP mode and broadcast a local AP.

The screenshot shows the 'First Time Setup' page for a Russound device. At the top, there is a 'Russound Support' link. Below it, the 'First Time Setup:' section has 'Prev', 'Next', and 'Done' buttons. The 'Networking' section is active, showing 'Type' with 'Automatic', 'Wired', and 'Wireless' buttons. Under 'Wired', there is a 'DHCP' section with 'Enabled' and 'Disabled' buttons. Under 'Wireless', there is a 'Wi-Fi Select' section with a 'Junction' dropdown, a 'Password' field with a toggle icon, and a 'DHCP' section with 'Enabled' and 'Disabled' buttons. At the bottom, there is an 'Apply' button.

Type - The default type of networking is automatic. This is recommended for almost all installations. When set to "automatic", the SMZ16-PRE will always prioritize a Wired Ethernet connection if available. If a wired connection is

ACCESSING WEB CONFIG FIRST TIME SETUP

not available, it will attempt to connect to the last properly configured Wi-Fi network. Because it works with both types of connections and prioritizes wired whenever it is available, the “automatic” setting is always recommended.

When set to “Wired”, the SMZ16-PRE’s Wi-Fi radio will be disabled. The only way to connect the SMZ16-PRE to a network will be by use of the Wired Ethernet connection.

As noted above, the Wi-Fi radio will turn itself on in soft AP mode when an internet connection is not available via the Wired connection.

When set to “Wireless”, the SMZ16-PRE will disable the Ethernet port and will only be able to connect to a network using Wi-Fi.

Adding Wi-Fi configuration info - Under “Wireless”, choose “Select Wi-Fi”. A list of available Wi-Fi networks will appear. If you would like to manually enter an SSID and password, simply select “Enter Manual SSID” from the choices and enter the network configuration information following the user prompts.

Note: If you enter new Wi-Fi information here and apply the changes, your SMZ16-PRE will attempt to connect to that Wi-Fi network and its network IP address will change. If necessary, enter the new IP address or hostname in your browser again in order to return to the First Time Setup screen.

The other configuration option is to “Enable/Disable” DHCP. If you are using a static IP addressing scheme on your network, set this to “Disabled”. For most networks, Russound recommends keeping this setting at the default “Enabled” position and whenever a particular IP address is desired, to use a DHCP reservation on the router instead of a static IP address.

Google Cast Permissions

The next item in First Time Setup is the Google Cast Permissions screen which allows you to review and approve Google’s terms of service and privacy policy regarding Google Cast as well as an option to share data with Google to improve its service. Accepting the terms of service is required in order to enable Google Cast. The option to help improve Google Cast by sharing data is not required.

Date and Time

The next screen of First Time Setup is for the Time Zone Country and Region. This is important to set properly because the SMZ16-PRE has advanced alarm and scheduling functions that require knowing the exact time in order to function properly. For example, you can have your favorite music wake you up every morning. The SMZ16-PRE uses internet time but requires setting the proper time zone by selecting the country and region where your SMZ16-PRE is located.

Russound Support

First Time Setup:

Prev Next Done

Date and Time

Current Network Time
Jun 9, 2024 9:13:00 PM

Time Zone ⓘ

Country
United States

Region
America/New_York

RussoundFMP, Inc. ©2024 | www.russound.com

Simply select your country and region from the drop down lists and confirm that the “Current Network Time” shows the accurate time for your area when finished.

Firmware Update

The final screen of First Time Setup is the Firmware Update screen where the SMZ16-PRE firmware can be updated if necessary. This screen will automatically show you if the firmware has an available update or if it is running the most recent firmware for the device. Russound always recommends using the most recent available firmware in all of its products. When performing a Firmware Update, do not disconnect or power down the SMZ16-PRE until the update process is complete. Firmware updates include a device reboot and take several minutes to complete. When the SMZ16-PRE has the most recent firmware, the “Software is up to date ” message will appear as shown here:

Russound Support

First Time Setup:

Prev Next Done

Firmware Update

Web Update ⓘ Software is up to date

RussoundFMP, Inc. ©2024 | www.russound.com

ACCESSING WEB CONFIG FIRST TIME SETUP

Note: Updating the SMZ16-PRE will not erase any of the settings or configuration steps that you have already done.

Select “Done” to exit the First Time Setup menu and the SMZ16-PRE will take you to the Web Config Status page for further configuration steps. If the SMZ16-PRE has not yet been unlocked, the next step will be to unlock the product for use.

LOCKDOWN FEATURE

The SMZ16-PRE is a specialized audio device designed to be installed and configured by a Russound Certified Installer. In order to assure that an audio system is properly installed and configured to interact with all of your other home devices, it must be installed and configured by a professional.

When the SMZ16-PRE is shipped from Russound, it will only operate in a “locked” state. In this state, no audio or control is available. In order to unlock the system, valid Russound Certified Installer credentials must be entered using our convenient Web Config browser-based configuration utility.

If you do not have a valid Russound Certified Installer credential, please contact your Russound Sales Representative.

Note: If you are a Russound Certified Installer and you plan on installing this product on a job site that may not have working internet access yet, please configure the unit at your shop or other location where internet access is available BEFORE you take it to the job site.

Note: You can obtain a 30-day trial of the SMZ16-PRE by entering ANY username/password combination in the Installer Credentials screen, even if it is invalid. We recommend always entering your correct RCI installer credentials as Russound will notify you via email about the device and its lock/unlock status so that the 30-day trial status can be resolved before it expires.

CONFIGURING STREAMING ACCOUNTS

Spotify® – Use your phone, tablet or computer as a remote control for Spotify. Go to *spotify.com/connect* to learn how.

SiriusXM® – SiriusXM account credentials are entered by using the Russound App or a connected Russound XTS7 in-wall touchscreen. Select the SMZ8 as the active audio source and then choose “SiriusXM” from its menu. If no account information has been entered, a login screen will be displayed.

vTuner® – No account information is needed to access vTuner
If you wish to associate an SMZ16-PRE with a vTuner account so that you can share vTuner favorites across multiple devices, you can select “Get Access Code” from the SMZ16-PRE vTuner menu and enter that code at *http://russound.vtuner.com* to associate an SMZ16-PRE with your vTuner account.

Airable – No account information is needed to access Airable internet radio.

TuneIn® – No account information is needed to access TuneIn internet radio. If you wish to associate an SMZ16-PRE with a TuneIn account so that you can share TuneIn favorites across multiple devices, you can select “Account Association” from the SMZ16-PRE TuneIn menu and enter that code in your account settings page at *http://www.tunein.com* to associate an SMZ16-PRE with your TuneIn account.

Deezer® – A Deezer subscription is required to use Deezer on your device. First, head to *deezer.com/offers* and sign up to start your free trial*. Next, Deezer account credentials are entered by using the Russound app or a connected Russound XTS7 in-wall touchscreen. Select the SMZ16-PRE built-in streamer as the active audio source and then choose “Deezer” from its menu. If no account information has been entered previously, a login screen will be displayed. ****terms and conditions apply***

CONFIGURING STREAMING ACCOUNTS

Napster - A Napster subscription is required to use this service. First, head to Napster.com to set up a Napster account. Next, select the SMZ16-PRE built-in streamer as the active audio source and select Napster. If no login information has been entered previously, a login screen will be displayed.

TIDAL - A TIDAL subscription is required to use this service. First, head to TIDAL.com/try-now and sign up to start your free trial. Next, enter your TIDAL account credentials on your SMZ16-PRE by using the Russound app and selecting TIDAL as the source. If no login information has been entered previously, a login screen will be displayed.

LISTENING TO AIRPLAY STREAMING

The SMZ16-PRE supports AirPlay 2 and requires iOS 11.4 or later. AirPlay is an Apple technology designed to control home audio systems and speakers in any room — with a tap or by just asking Siri — right from iPhone, iPad, HomePod, or Apple TV. Play a song in the living room and kitchen at the same time or adjust the volume in any room, all in sync.

Using AirPlay will instantly turn on the SMZ16-PRE and start playing music from your phone, tablet, or computer to the configured **primary** zone(s).

When AirPlay is selected from iTunes or an iOS mobile device and music is sent to the SMZ16-PRE, the SMZ16-PRE will activate and start playing the audio content. When the SMZ16-PRE is actively streaming AirPlay, the volume control on the SMZ16-PRE zone(s) and the AirPlay-enabled device are linked, which means a change in volume on the AirPlay-enabled device will also change the volume level of the SMZ16-PRE and vice versa.

AirPlay Password

The SMZ16-PRE supports an optional AirPlay password feature that when set, requires a password in order for an iOS device to stream to the SMZ16-PRE using AirPlay. You'll find the AirPlay password settings using Web Config in the "Setup" tab.

Under AirPlay Password, enter the desired password. When a password has been configured, any time that the SMZ16-PRE built-in streamer is selected from the list of available AirPlay devices, a message will appear on the iOS device, prompting for the AirPlay password. Once the correct password is entered, the iOS device can successfully stream music to the SMZ16-PRE. The iOS device will retain the password for future use.

MULTIPLE STREAMING PRODUCTS

Note that account settings are individual settings for each Russound streaming product. If you have multiple SMZ16-PRE or any of Russound's MBX-Series devices, each must be configured with the appropriate streaming account login information. This is done so that each streaming device can have its own independent user so that users will not have to share accounts or favorites with anyone else if so desired. The ideal installation is for each user to have their own personal MBX-Series streaming device so that each user always has access to their favorite music selections. Note that some streaming services limit the number of simultaneous devices that can access their service. By using the SMZ16-PRE's advanced audio matrix functionality, multiple rooms or zones can easily listen to the same streaming audio service with fully synchronized sound.

USING BLUETOOTH

In order to pair a Bluetooth device with the SMZ16-PRE's internal streamer, you must enter Bluetooth Pairing Mode. To enter pairing mode, select "Bluetooth" as the selection in the built-in audio streamer of the SMZ16-PRE using the Russound app and then select "Scan for other Bluetooth devices" and complete the pairing using your phone/tablet. The SMZ16-PRE's Bluetooth name will be the "Device Name" you entered earlier, such as "Bob's Streamer".

ELECTRICAL POWER

The SMZ16-PRE operates at 100-120VAC ~60 Hz or 220-240VAC ~50 Hz. Voltage is selected by the voltage switch on the rear panel and incorporates the appropriate detachable power cord. It is recommended that the SMZ16-PRE and the source equipment be plugged into a dedicated outlet. Do not use it with an outlet strip, extender, or similar. A power line conditioner is normally not required but can help reduce interference problems caused by noise found in some electrical systems.

The primary power switch for the unit is on the rear panel. The front panel power switch will enable the unit to enter a reduced power mode but will not completely shut off the unit.

This product has a networked standby function ONLY (less than 7.00 W). It does NOT have a normal standby function. This product is considered a HiNA (High Network Availability) product.

VENTILATION REQUIREMENTS

Important: The SMZ16-PRE should be situated so that its location or position does not interfere with its proper ventilation. Do not block vents above or to the sides of the unit, as it requires ventilation for proper operation. Do not expose to excessive dust, and do not allow dust to build up on the unit and block vent holes. Do not place the SMZ16-PRE directly above or below a heat-generating component such as an audio amplifier.

Be sure to leave at least 2 inches of space to the sides of the unit with open air flow above. A single-space rack mount vent or about 1.75 inches must be kept clear above and below the unit.

IMPORTANT CONSIDERATIONS

Disconnect the power cord before making any connections to the controller.

- Verify that all connections and polarities are correct.
- Keep all power cords away from all signal cables to prevent humming from induced noise.
- Choose reliable signal cables and patch cords.
- Label all wires with the room location at both ends of the wire.
- Avoid running speaker wires or signal cables close to house electrical wiring for any distance. If you have to run them parallel to each other, make sure to space the wires at least two feet from the AC line. If you need to cross an AC line, it should be at a 90° angle.
- For multiple controller installations, the controller ID must be set with the rotary switch on the rear panel so that each controller has a unique controller ID before powering on the connected controllers.

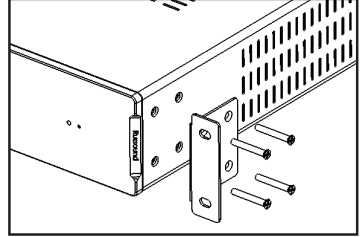


Do not connect the controller's main power feed until all other connections have been made and verified. Live connection or removal of wiring when the system is powered can result in erratic operation or system damage. Double-check terminations during each phase of the installation to prevent accidental damage. Incorrect wiring is the number one cause for non-warranty product damage.

The SMZ16-PRE may be placed on a shelf or installed into an equipment rack using the rack ears included within the box.

RACK MOUNTING

When installed in a rack, the four mounting feet on the bottom of the chassis may be removed if needed. Save the feet in case the amplifier is ever moved back to a shelf-mounted type of installation so that they may be re-attached. Do not use the amplifier on a shelf or other surface without the mounting feet being installed. They help provide ventilation space at the bottom of the amplifier.



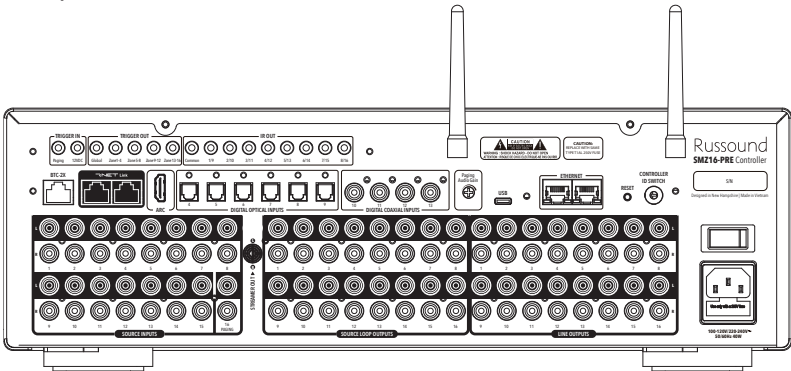
One empty rack space should be left above and below the SMZ16-PRE to allow adequate ventilation.

ANTENNAS

The SMZ16-PRE includes 2 external Wi-Fi/Bluetooth antennas which should be attached to the rear panel. For proper operation, Russound recommends installing both antennas even if Wi-Fi is not intended to be used at the time of installation.

MAKING THE CONNECTIONS

Note: All wiring connections must be made with the system powered off and the power cord disconnected from the electrical mains (unplugged from the wall outlet).

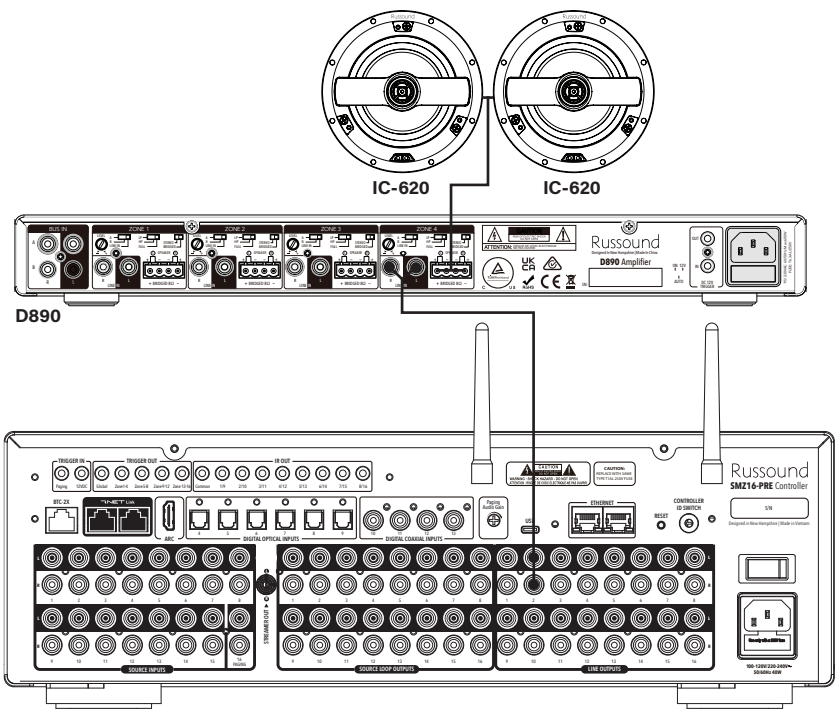


MAKING THE CONNECTIONS

CONNECTING AMPLIFIERS

Connect your choice of amplifier to the Line Outputs on the rear of the SMZ16-PRE. The pre-amp design allows full flexibility in choosing the best amplifier for each room/zone of the installation. Feel free to use a premium stereo amp for primary listening areas, a multi-channel amp to easily distribute sound to multiple areas, or even use 70V/100V amps for any of the zones.

70V/100V amplifiers are excellent for areas such as outdoor zones in a residential installation or for any areas of a commercial installation. Russound offers a variety of amplifiers that can be used for these situations, including the versatile P100 or a large multi-channel amp such as the eight channel D890 all the way up to the sixteen channel D1675 for extremely large outdoor areas.



SOURCE CONNECTIONS

The SMZ16-PRE can have up to 16 audio sources in any combination of its available analog or digital connections. The built-in audio streamer is defaulted to be Source 1, leaving Sources 2-16 available. If desired, the built-in streamer can be bypassed, and a different audio source used instead of it. A built-in connection for the Russound BTC-2X is defaulted to be Source 2. It can also be bypassed with a different audio source used instead of it. The built-in HDMI ARC connection is defaulted to be Source 3. As with the others, it can also be bypassed with a different audio source used instead of it.

Available External Source Connections

Connection Type	Maximum Number of Connections Available
Stereo RCA (Signal Sensing)	16
HDMI ARC	1
Digital Optical	6
Digital Coax	4
BTC-2X RJ45	1
RNET RJ45	1-4 (daisy-chained)

Any combination of these inputs above can be used, up to a total of 16.

SOURCE TYPES

In order to simplify configuration of the SMZ16-PRE, each connected source input will be configured in Web Config as one of the following device types:

Russound Media Streamer	Russound ST-1 AM/FM Tuner
BTC-2X Bluetooth Module	Miscellaneous Audio
CD	Video Accessory
Receiver	Satellite
Blu-ray / DVD	Television
Cable	Amplifier

Devices without a specific type listed are configured as "Miscellaneous Audio". The source device type determines the amount of device control as well as the particular control screens that are available within the Russound app and other control interfaces for that device.

CONNECTING AUDIO SOURCES

Primary Zones

Certain sources such as the MBX-PRE or BTC-2X can be configured to have a Primary zone. A Primary zone means that the zone will turn on and will tune automatically to that source whenever the source is active. For example, if using the optional BTC-2X Bluetooth receiver located in the Master Bedroom, the user would typically like the Master Bedroom audio zone to turn on and listen to the BTC- 2X whenever the BTC-2X is receiving Bluetooth audio. This is done by making the Master Bedroom, the Primary zone for the BTC-2X in Web Config.

When the Master Bedroom is configured as the Primary Zone for the BTC-2X source, whenever the BTC-2X starts receiving Bluetooth audio, it will automatically turn on the Master Bedroom and use the BTC-2X as the selected audio source there. Primary zones make a large, complex matrix like the SMZ16-PRE convenient and easy-to-use for everyone in the home. Because of the nature of their operation, not every source type can be a source for a Primary zone. They are typically used for streaming/casting audio sources.

Here is a chart of the connections, their default type, Primary Zone information and their default connection type:

Source Number	Default Source	Default Device Type	Default Primary Zone	Default Connection Type
1	Built-in Streamer	Russound Media Streamer	1	Internal
2	BTC-2X Bluetooth Connection (Optional)	BTC-2X Bluetooth Module	None	BTC-2X RJ45
3	HDMI-ARC	HDMI-ARC	None	HDMI
4	Source 4 (Unused)	Miscellaneous Audio	N/A	Analog
5	Source 5 (Unused)	Miscellaneous Audio	N/A	Analog
6	Source 6 (Unused)	Miscellaneous Audio	N/A	Analog
7	Source 7 (Unused)	Miscellaneous Audio	N/A	Analog
8	Source 8 (Unused)	Miscellaneous Audio	N/A	Analog
9	Source 9 (Unused)	Miscellaneous Audio	N/A	Analog
10	Source 10 (Unused)	Miscellaneous Audio	N/A	Analog
11	Source 11 (Unused)	Miscellaneous Audio	N/A	Analog
12	Source 12 (Unused)	Miscellaneous Audio	N/A	Analog
13	Source 13 (Unused)	Miscellaneous Audio	N/A	Analog
14	Source 14 (Unused)	Miscellaneous Audio	N/A	Analog
15	Source 15 (Unused)	Miscellaneous Audio	N/A	Analog
16	Source 16 (Unused)	Miscellaneous Audio	N/A	Analog

All of these are configured in the Source setup menu in Web Config.

CONNECTING AUDIO SOURCES

Global/Local Sources

Sources in the SMZ16-PRE are normally configured as “Global” sources that are available to all rooms/zones within the home but they can also be restricted to only be available to specific zones/rooms. For example, if you’d like to have an MBX-PRE audio streamer that is always available to the homeowner in the Master Bedroom, the MBX-PRE source can be configured to limit its access to only the Master Bedroom.

Built-in Audio Streamer

The built-in audio streamer of the SMZ16-PRE is configured by default as Source 1 as it is expected to be used in every installation. Because it is expected to be used in every installation, it is also pre-configured for Zone 1 to be its Primary Zone. This way, if a user sends Bluetooth, Google Cast, Apple AirPlay, Spotify Connect, or similar content to the built-in streamer, it will automatically turn on Zone 1 and begin playing the audio content as desired.

BTC-2X Bluetooth Connection (Optional)

The SMZ16-PRE supports a connection for the optional Russound BTC-2X Bluetooth module. The BTC-2X Bluetooth module can be located up to 500 feet (152m) away from the SMZ16-PRE using CAT-5 wire terminated via T568A, allowing the user to conveniently connect their smartphone or tablet via Bluetooth within range of the BTC-2X in their Kitchen while the SMZ16-PRE is remotely located in an equipment room in the basement.

The external BTC-2X Bluetooth source connection is hard-wired for Source 2 when it is used and cannot be re-assigned to another source number. Using Web Config, a Primary Zone can be set for the BTC-2X, allowing a specific zone to serve as the default listening zone for Bluetooth audio from the BTC-2X.

The internal Bluetooth source connection is hard-wired for Source 2 when it is used and cannot be re-assigned to another source number. Using Web Config, a Primary Zone can be set for the BTC-2X, allowing a specific zone to serve as the default listening zone for Bluetooth audio from the BTC-2X.

OPTIONAL RNET SOURCE DATA CONNECTIONS (EG. BTC-2 FOR ADDITIONAL BLUETOOTH INPUTS)

The RNET Link ports can be used to connect the SMZ16-PRE to other Russound RNET-enabled source equipment. The SMZ16-PRE is one of the few devices on the market that can enable and manage the audio routing for multiple simultaneous Bluetooth inputs. For example, if the homeowner frequently has guests in their kitchen and in their pool area, they can use the SMZ16-PRE's built-in BTC-2X Bluetooth connection for one of those areas and use an optional Russound BTC-2 kit for the second area. Both of these Bluetooth sources could be accessed from anywhere in the home or listened to by different groups of rooms at any time. All with full song metadata and playback controls available through the Russound app, the IPK-1 keypad, or the XTS7 touchscreen control.

To make the metadata and playback controls available, Russound's proprietary RNET system is used. The RNET connection is made using a CAT-5e patch cable from either of the two RNET Link ports on the controller to either of the two RNET Link ports of the RNET-enabled source. RNET ports are parallel, bidirectional connections, meaning that the ports are identical and either one can be used for any RNET connection. Another CAT-5e patch cable can be used to link out of that source to another RNET-enabled source in the system, such as the BTC-2 in the above example. Use a standard CAT-5e patch cable with an RJ-45 connector on each end to make the RNET connection between the BTC-2 and the SMZ16-PRE RNET port.

Note: Depending on the connected RNET device, along with RNET data signals, the RNET ports can pass source IR signals. To avoid potential cross-talk between the source-specific IR repeating signal lines, the cable for these types of devices cannot exceed 18 inches in length.

KEYPAD CONTROLLER INSTALLATION

KEYPAD/TOUCHSCREEN CONTROL (OPTIONAL)

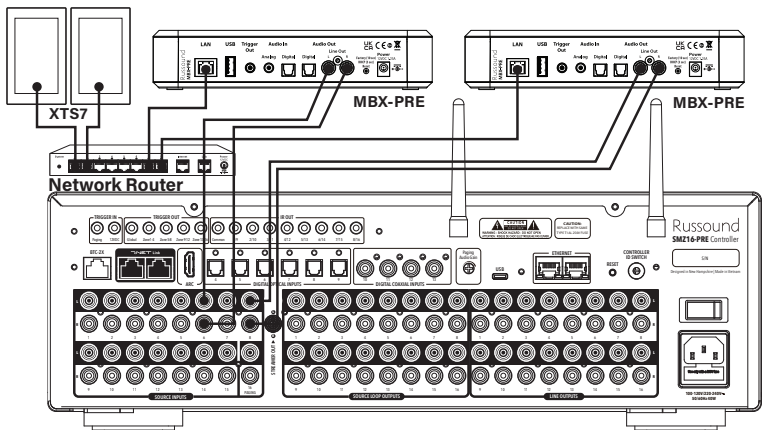
Russound offers optional wall-mounted keypad and touchscreen control accessories for the SMZ16-PRE.

IPK-1 Convenience Control

The IPK-1 is a PoE IP-Keypad that connects via a wired connection to your home network that offers convenient, basic control of a system from an elegant wall-mounted keypad. The IPK-1 is perfect for home entryways where it offers an easy way to turn on your favorite music when you arrive home, turn off the room or the entire system when you are leaving home, or simply to adjust the volume or mute the audio quickly when needed, without having to pull out a phone or tablet, start the Russound app, etc. With 4 easily re-configurable favorite buttons, it allows anyone to access their favorite music without any hassles or delays. No programming of the IPK-1 is needed, all that is required is a one-time pairing of the IPK-1 to the appropriate room or zone of the SMZ16-PRE.

XTS7 Wall-Mounted Android Touchscreen

For full control, Russound recommends adding the XTS7 7" wall-mounted Android touchscreen. The XTS7 runs apps from the Google Play Store, including the Russound app and can be mounted anywhere in the home in either portrait or landscape orientation as desired. Perfect for the kitchen, living room, or bedrooms where audio control is desired. While the XTS7 can run any smart home control app from the Google Play Store, using it for controlling your Russound system is simple and easy to do.

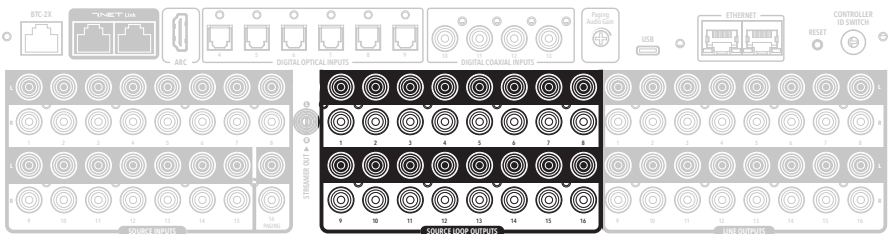


MULTIPLE CONTROLLER INSTALLATION

Up to 3 SMZ16-PRE controllers can be linked together in the same installation to create up to an 16-source, 48-zone audio system. Adding these additional SMZ16-PRE units will expand the number of available zones of audio but will NOT expand the maximum number of sources available. That number will remain a maximum of sixteen.

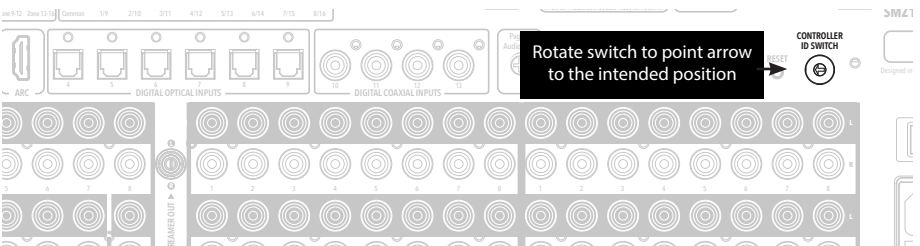
LINKING MULTIPLE CONTROLLERS

In order to link more than one SMZ16-PRE controller, the audio sources from Controller #1 must be shared to Controller #2 (and #3) This can be done with the built-in buffered source loop output connections of the SMZ16-PRE. These connections use analog stereo RCA connections to connect to the analog stereo input connections of the subsequent controller.



When using more than one controller, it is also necessary for the additional controllers to have unique controller ID numbers. This is done by using a mini-flathead screwdriver to turn the Controller ID switch on the rear panel to the next sequential number. The first (Primary) controller must always be set to Controller ID 1. The second controller must be set to Controller ID 2, the third to Controller ID 3. Each controller must have a unique Controller ID or system reliability issues will result.

The SMZ16-PRE must be powered down and restarted after making any change to the rear panel Controller ID switch.



MULTIPLE CONTROLLER INSTALLATION

Note: Unlike previous Russound controllers, each SMZ16-PRE in a multiple controller installation requires its own internet connection via either a Wired or Wi-Fi connection. The SMZ16-PRE does not require any RNET connections between SMZ16-PRE devices in this configuration.

SHARING THE BUILT-IN STREAMER

The SMZ16-PRE built-in streamer can be shared with additional controllers and when you have more than one SMZ16-PRE, each one's built-in streamer can be shared with the other SMZ16-PRE controllers in the system. To accomplish this, there is a dedicated Streamer Out Analog RCA connection on the rear of the SMZ16-PRE located between the Source Inputs and the Source Loop Outputs.

NETWORKING BEST PRACTICES

Some of the most common problems can be caused by network configuration and out-of-date firmware. Improper network configuration can prevent advanced network devices such as the SMZ16-PRE from connecting and communicating on the network.

The first step for troubleshooting is to check networking connections and power cycle all equipment to check for proper communication. A dedicated wireless 802.11n or 802.11ac compatible router is recommended. Please note that some ISP supplied modem/router combination devices may have incompatible settings that can cause issues with the SMZ16-PRE or similar devices connecting or communicating across the network. It is recommended not to use these modem/router combination devices, because they may not provide access to all services and settings of the device. The ISP may retain control over the device settings and send updates to reset, reinitialize, or replace the device at their discretion, all of which can cause unforeseen issues with your home network and attached devices such as the SMZ16-PRE.

Check for firmware updates available for your Russound equipment to make sure all Russound products are up-to-date in order to take advantage of any additional features and supported services.

Use a network discovery and IP scanning application that can assist to better understand the network, such as FING (www.fing.com). FING is free and available for iOS and Android and can assist in identifying devices on the network and if there are any IP addressing conflicts.

BANDWIDTH

Audio streaming uses substantially less network bandwidth than video streaming, gaming, or large file transfers. Typical audio streams range from 64 kbps to 160 kbps for most streaming services and hi-res audio streams typically max out at 320 kbps. This compares to video streaming which will typically range from 1.5 to 3 Mbps for SD, 5 Mbps or more for HD and even 25 Mbps or higher for detailed content. Video consumes much more bandwidth overall than audio.

SATELLITE INTERNET SERVICE

Due to the inherent high-latency nature of Satellite Internet Service, it is generally incompatible with reliable and enjoyable audio streaming. ***Russound therefore does not recommend utilizing any of its streaming audio solutions in systems that rely solely on a satellite internet connection.***

For installations where satellite internet service is the only available option, Russound recommends using UPnP-based NAS drives, flash drives, or local AirPlay/casting-type solutions from a dedicated audio source rather than internet audio streaming.

ROUTER CONFIGURATION

A few routers may need additional configuration to prevent incompatibility or intermittent connection issues. Access the router and check user accessible settings that enable support for Multicast or IGMP and enable them or check for options that may be actively filtering these protocols and disable those filters. Check for other options that could have an effect on communication: Options such as UPnP should be enabled Options such as IGMP Proxy, IGMP Snooping, Multicast Filtering or WMM Proxy should be disabled.

GLOSSARY

Multicast - The delivery of a message or information to a group of destination computers simultaneously in a single transmission from the source.

Unicast - The delivery of a message or information which is sent from one point to another point. An example would be connecting to an IP address of a URL such as www.google.com.

IGMP - Internet Group Management Protocol is an integral part of IP

NETWORKING BEST PRACTICES

Multicast and is used for one-to-many networking applications such as online streaming audio and video, gaming, and allows more efficient use of resources when supporting these types of applications.

WMM - Wireless Media Management is designed to support consumer and corporate applications and works with 802.11a, 802.11b and 802.11g. The specification provides basic prioritization of data packets based on four categories - voice, video, best effort and background.

UPnP - Universal Plug and Play uses Multicast and allows media servers and streaming devices to communicate.

TROUBLESHOOTING

DHCP RESET

If you are having difficulty finding the SMZ16-PRE on the network due to something like changing your router or Wi-Fi information, a DHCP Reset can be performed using the Factory Reset button on the rear panel of the SMZ16-PRE. If your SMZ16-PRE cannot communicate on the network, you can reset its DHCP connection by pressing and holding the button for 3 seconds and then releasing it. This will restore the SMZ16-PRE to a DHCP connection from a static IP connection. This will also reset the network connection type to "Automatic" so that a wired Ethernet connection can easily be made. Performing the DHCP reset will also delete Wi-Fi configuration information so that the device can be configured for a new wireless connection. Refer to "Wi-Fi Connections" on page XX for more information on connecting to a Wi-Fi network.

FACTORY RESET

Warning: Do not perform a factory reset without being instructed to do so by Russound Technical Support personnel or if you intend to fully erase all settings of the SMZ16-PRE and restore it to its original out-of-the-box settings.

FOR A FULL FACTORY RESET, ERASING ALL CONFIGURATION SETTINGS, AND RE-LOCKING THE SMZ16-PRE:

Press and hold the Factory Reset button on the rear of the SMZ16-PRE for 10 seconds. The front panel status LED will flash and the SMZ16-PRE will reboot on its own.

Note: Performing a factory reset will restore the unit to its factory default settings. The unit will require valid Russound Certified Installer credentials in order to be unlocked and configured again. The factory reset will also delete all configuration information and all personal information including service account settings, device-stored Favorites, and passwords.

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.
2. This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter. The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC & CE STATEMENTS

CE DECLARATION OF CONFORMITY

Russound/FMP, Inc. declares that the radio equipment contained in the SMZ16-PRE is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: www.russound.com/conformity

COMPLIANCE WITH 2014/53/EU RADIO EQUIPMENT DIRECTIVE (RED)

In accordance with Article 10.8(a) and 10.8(b) of the RED, the following table provides information on the frequency bands used and the maximum RF transmit power of the product for sale in the EU:

Bluetooth and BLE	
Frequency Range (MHz)	Max. Transmit Power (dBm)
2402-2480MHz	10 dBm
Wi-Fi (2.4GHz)	
Frequency Range (MHz)	Max. Transmit Power (dBm)
2412-2472 MHz	18.8 dBm
Wi-Fi (5 GHz)	
Frequency Range (MHz)	Max. Transmit Power (dBm)
5180-5700 MHz	18.2 dBm

UK/EU RESTRICTION IN THE 5 GHz BAND:

According to Article 10 (10) of Directive 2014/53/EU, the packaging shows that this radio equipment will be subject to some restrictions when placed on the market in Belgium (BE), Bulgaria (BG), the Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Croatia (HR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE), Turkey (TR), Norway (NO), Switzerland (CH), Iceland (IS), and Liechtenstein (LI), the United Kingdom in respect of Northern Ireland (UK(NI)).

EU:

	AT	BE	BG	CH	CY
	CZ	DE	DK	EE	EL
	ES	FI	FR	HR	HU
IE	IS	IT	LT	LI	LU
LV	MT	NL	NO	PL	PT
RO	SE	SK	TR	SI	UK(NI)

UK:

	UK
--	----

SAFETY INSTRUCTIONS



	WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
	CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.
	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.
	The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

1. Read Instructions - All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions - The safety and operating instructions should be retained for future reference.
3. Heed Warnings - All warnings on the appliance in the operating instructions should be adhered to.
4. Follow Instructions - All operating and user instructions should be followed.
5. Water and Moisture - The appliance should not be used near water; for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool. The apparatus shall not be exposed to dripping or splashing liquids and no objects filled with liquids, such as vases, shall be placed on the apparatus. Do not touch the appliance with wet hands. Do not handle the appliance or power cord with wet or damp hands. If water or any other liquid enters the appliance cabinet, take it to qualified service personnel for inspection.
6. Cleaning - The appliance should be cleaned only as recommended by the manufacturer. From time to time, you should wipe off the front and side panels and the cabinet with a soft cloth. Do not use rough material, thinners, alcohol or other chemical solvents or cloths since this may damage the finish or remove the panel lettering.
7. Ventilation - The appliance should be situated so that its location or

position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings, or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings. Place the unit in a well-ventilated location, leaving at least 2 inches (5 cm) of clearance on all sides, top and rear of unit for air flow. If ventilation is blocked, the unit may overheat and malfunction.

8. Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
9. Grounding or Polarization - Precaution should be taken so that the grounding or polarization means of an appliance is not defeated.
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, receptacles, and the point where they exit from the appliance.
11. Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
12. Main Power Disconnect - The main power plug is used as the disconnect device and shall remain readily operable. When installing the product, ensure that the plug is easily accessible.
13. Non-Use Periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
14. Attachments - Only use attachments/accessories specified by the manufacturer.
15. Location of the Amplifier - Do not mount this unit under a kitchen cabinet. Do not expose the amplifier to direct sunlight or heating units as the amplifier internal components' temperature may rise and shorten the life of the components.
16. Avoid damp and dusty places.
17. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through the openings.
18. Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.
19. Damage Requiring Service - The appliance should be serviced by qualified service personnel when: A. The power supply cord or the plug has been damaged; B. Objects have fallen, liquid has been spilled into the appliance; C. The appliance has been exposed to rain; or D. The appliance

SAFETY INSTRUCTIONS

does not appear to operate normally; or E. The appliance has been dropped or the enclosure is damaged.

Note: 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 of 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, or consult the dealer or an experienced radio/TV technician for help.

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan (for Finland).
Apparatet må tilkoples jordet stikkontakt (for Norway).
Apparaten skall anslutas till jordat uttag (for Sweden).
Apparatets stikprop skal tilsluttes en stikkontakt med jord, som giver forbindelse til stikproppens jord (for Denmark).

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Russound/FMP, Inc. warrants to the original retail purchaser that this product will be free of manufacturing defects in material and workmanship for the following periods ("Warranty Period") and subject to the limitations and exclusions set forth below:

Lifetime

Volume controls, Architectural Series speakers

Ten years from the date of purchase

Speaker selectors and impedance matching devices

Five years from the date of purchase

Landscape speakers, Outback™ speakers, Soundbars

Two years from the date of purchase

Multiroom controllers, keypads, source equipment, MBX-Series, SMZ-Series, A-BUS, ComPoint devices, D-Series, P-Series, AVA-Series and all Infrared products

One year from the date of purchase

Touchscreens

Ninety days from the date of purchase

All B-Stock or factory-refurbished items

LIMITED WARRANTY

This Warranty is not transferable to subsequent purchasers/owners of the product.

This Warranty does not include service or parts to repair damage caused by improper use or handling, including but not limited to damage caused by accident, mishandling, improper installation, shipping damage, power surges, lightning strikes, abuse, negligence, or normal wear and tear, or any defect caused by repair to the product by anyone other than Russound or Russound's authorized repair facility.

Certain Russound products may permit access to third-party content providers and/or may support third-party technologies such as specific codecs or file formats. Russound reserves the right to discontinue support and/or access to such third-party content or technologies at any time and for any reason. Russound makes no representations or warranties whatsoever regarding ongoing support for any such third-party content or technologies.

This Warranty does not cover reimbursement for the costs of removing and transporting the product for warranty service evaluation, re-installation, or installation of any replacement product provided under this Warranty.

To obtain warranty service, contact the authorized Russound dealer/installer where you purchased your product or take the unit to the nearest authorized Russound dealer. Proof of purchase must be provided – claims made without proof of purchase will not be covered under this Warranty. The authorized Russound dealer/installer will test the product and, if necessary, make arrangements with Russound for service. If there are no authorized Russound dealers in your area, you must contact Russound to receive a factory Return Authorization Number and shipping instructions. Purchaser is responsible for any shipping and handling charges for shipping the product to Russound. **DO NOT RETURN ANY UNIT WITHOUT FIRST RECEIVING WRITTEN AUTHORIZATION AND SHIPPING INSTRUCTIONS FROM RUSSOUND. ANY PRODUCTS RECEIVED WITHOUT FOLLOWING THIS PROCEDURE WILL BE REFUSED AND RETURNED UNOPENED.**

Upon examination, Russound will, at its sole option and expense, repair or replace any product found to be defective. Russound will return the repaired or replaced unit to you via its usual shipping method from the Russound repair center to your address in the United States of America or Canada only. Any shipping costs for addresses outside of the United States or Canada or any expedited shipping charges requested by the purchaser shall

be the responsibility of the purchaser. In the event that a particular product is no longer available and cannot be repaired effectively, Russound, at its sole option, may replace it with a different model of equal or greater value, or refund the original purchase price paid. **THE FOREGOING ARE YOUR EXCLUSIVE REMEDIES FOR BREACH OF WARRANTY.**

This Warranty will be void if:

- the serial number on the product has been removed, tampered with, or defaced.
- the product was not purchased from an authorized dealer or reseller.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESSED AND IMPLIED WARRANTIES. RUSSOUND EXPRESSLY DISCLAIMS ALL SUCH OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT, WITH RESPECT TO THE PRODUCT. TO THE MAXIMUM EXTENT PERMITTED BY LAW, RUSSOUND SHALL NOT BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES EXCEPT TO THE EXTENT PROVIDED (OR PROHIBITED) BY APPLICABLE LAW, EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Notwithstanding the above, if you qualify as a “consumer” under the Magnuson-Moss Warranty Act, or applicable state laws, then you may be entitled to any implied warranties allowed by law for the Warranty Period. Further, some states do not allow limitations on how long an implied warranty lasts or allow the exclusion or limitation of consequential damages, so such limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For the name of your nearest authorized Russound dealer, contact: Russound, 200 International Drive, Suite 155, Portsmouth, NH 03801, or call 1 (603) 659-5170. Please be advised that Russound products are only sold via the Internet through a select group of authorized Internet dealers. These are listed at www.russound.com. Products offered on the Internet through unauthorized Internet dealers are not covered by this warranty and may be either:

1. goods acquired on a secondary or grey market
2. counterfeit or stolen goods
3. damaged, or defective goods

LIMITED WARRANTY

Please fill in your product information and retain this for your records. You may also submit your warranty registration information online on www.russound.com/warranty-registration, but you must still retain all proof of purchase information should warranty service ever be required.

Model_____ Serial No._____
Purchase Date_____

ATTENTION: TO OUR VALUED CUSTOMERS:

To ensure that consumers obtain quality pre-sale and after-sale support and service, Russound products are sold exclusively through authorized dealers. This Warranty is **VOID** if the products have been purchased from an unauthorized dealer.

NOTES

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

[illegible]



a sound relationship

Russound

**Russound/FMP, Inc.
200 International Drive, Suite 155
Portsmouth, NH 03801 USA**

This product includes some software components that are licensed under the General Public License (GPL). Source code for GPL components is available upon request.

The **Spotify** software is subject to third party licenses found here: <https://www.spotify.com/connect/third-party-licenses>

AirPlay and iPhone are trademarks of Apple Inc. Registered in the U.S. and other countries. Use of the Works with Apple badge means that an accessory has been designed to work specifically with the technology identified in the badge and has been certified by the developer to meet Apple performance standards.

Google Cast is a trademark of Google LLC.

TIDAL and TIDAL logo are registered trademark of Aspiro AB in European Union and other countries.

Deezer and Deezer logo are international trademarks of Deezer S.A., registered in France and other countries.

SiriusXM Internet Radio Service is available in the USA, PR or Canada. SiriusXM internet Radio subscriptions are sold separately and are governed by the Sirius Terms and Conditions (see www.sirius.com). Be sure to read this agreement before you purchase your subscription. Sirius, XM and all related marks and logos are trademarks of SiriusXM Radio Inc. and its subsidiaries. All rights reserved.