

SpeakerCraft Integration Guide

Manufacturer:	Yamaha
Model Number(s):	RX-A800/1000/2000/3000 RX-A710/810/1010/2010/3010 RX-A3020/2020/1020/820/720 RX-A3030/2030/1030/830/730
App Version:	1.0 and above
Comments	7/17/2014 Tested: RX-A1000 FW 1.11 Tested: RX-A810, 3010 Tested: RX-A820 FW 1.64, 3020 FW 1.4 Tested: RX-A2030
Document Revision Date:	7/31/15

OVERVIEW AND SUPPORTED FEATURES

Yamaha A/V Receivers include an Ethernet port which is connected to a Local Area Network (LAN), allowing the **SpeakerCraft App** system to provide full two-way communication; enabling reliable control and providing feedback to the **SpeakerCraft App** system when changes occur at the receiver.

YAMAHA RECEIVERS SUPPORT THE FOLLOWING FEATURES:

Basic Source and Volume Control: Select any available source and control volume with two-way feedback. Changes made at the receiver (turning the volume control, changing source) are reflected in the **SpeakerCraft App** interface.

Onboard HD Tuner: Some Yamaha receivers offer a built-in HD AM/FM tuner, which can play music in the main zone or in the secondary zones. The tuner can be controlled from the standard HD AM/FM tuner interface in the **SpeakerCraft App** system.

(RX-AXX10 Models) Onboard AM/FM Tuner: Some Yamaha receivers offer a built-in AM/FM tuner, which can play music in the main zone or in the secondary zones. The tuner can be controlled from the standard AM/FM tuner interface in the **SpeakerCraft App** system.

(RX-AXX30 Models) Yamaha Streaming Media Player (NET/USB Sources): Some Yamaha receivers support Network and USB Sources via the Yamaha Media Player. This is currently available on the **RX-AXX30** series of Yamaha Receivers. When a compatible receiver is added to the **SpeakerCraft App** system, the Yamaha Media Player is automatically added as a 2-way source, and the NET/USB sources' devices are populated with Yamaha Media Player.

Satellite Radio Inputs: Yamaha receivers have inputs for Sirius Satellite Radio. These inputs are supported and use the standard **SpeakerCraft App** Satellite Tuner interfaces. **Note:** An external Sirius tuner box is required by Yamaha.

RDS: The RDS, or Radio Data System, is supported in the **SpeakerCraft App** interface where available.

YAMAHA RECEIVERS DO NOT SUPPORT THE FOLLOWING FEATURES:

(RX-AXX00/AXX10 Models) Integration NET/USB Sources: Digital audio source control is limited to source selection in SpeakerCraft App for **RX-AXX00/AXX0010** models.

Listening/Surround Mode Control: Change of the tone controls or listening mode from the **SpeakerCraft App** Settings interface is not supported.

Multiple AVR Zones: The **SpeakerCraft App** supports the functionality of **ONE AVR Zone**. When using supported A/V Receivers with Zone 2 (or Zone 3) outputs, these additional zones will not function correctly through the **SpeakerCraft App** system and are NOT supported.

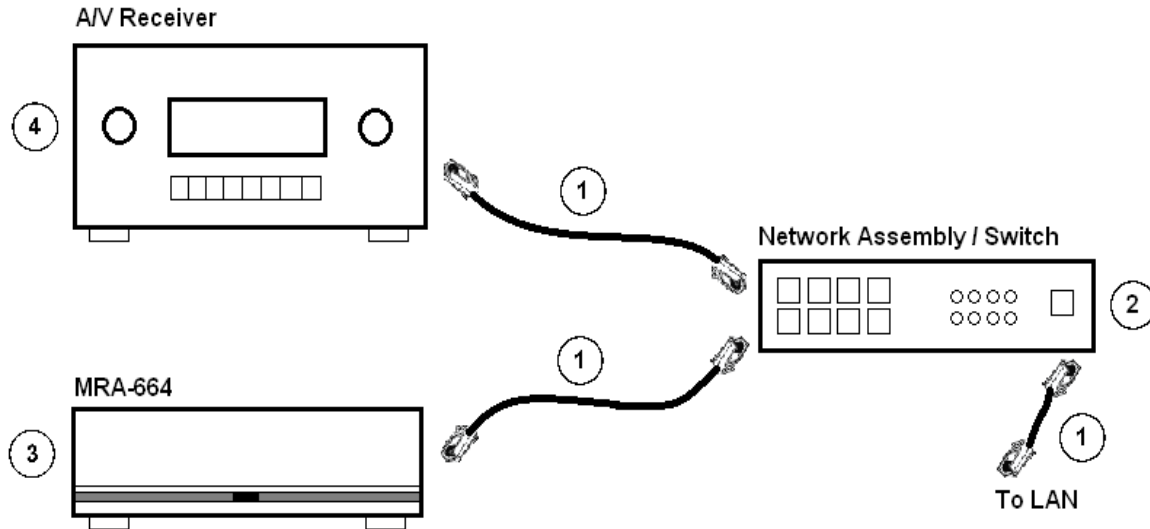
Additional Features: Many units include additional features such as Trigger Outputs, IR Inputs/Outputs, etc. Unless specifically listed above, the **SpeakerCraft App** does not integrate with these features.

Any feature not specifically noted as “supported” is not supported.

INSTALLATION OVERVIEW

1. During the rough-in phase install the necessary speaker and video cabling for the theater installation.
2. Also during the rough-in phase, run a Cat-5 wire from the location of the receiver back to the network switch location to provide the Ethernet connection needed to control the receiver. The **SpeakerCraft MRA-664** should already be connected to the same LAN.
3. Install the speakers, display and other theater components.
4. Program the receiver according to the manufacturer’s documentation.
5. Test the receiver to ensure that the sources play correctly and that the audio and video operate as expected.
6. Configure the **SpeakerCraft App** system for the receiver and confirm communication between the receiver and the **MRA-664** Controller.
7. Test the **SpeakerCraft App** system by changing sources and volume to confirm that the correct source plays.

CONNECTION DIAGRAMS – ETHERNET



BILL OF MATERIALS

#	Device	Manufacturer	Part #	Protocol	Connector Type	Notes
1	Cat-5 Cable	Installer	N/A	TCP/IP	RJ-45 Male to RJ-45 Male	Must terminate all 8 conductors
2	Network Assembly/Switch	Installer	N/A	TCP/IP	RJ-45 Female	
3	SpeakerCraft App System Controller	SpeakerCraft	MRA-664	TCP/IP	RJ-45 Female	
4	Yamaha A/V Receiver	Yamaha	See Notes	TCP/IP	RJ-45 Female	See Model Number(s) above

YAMAHA ETHERNET CONFIGURATION:

It is recommended to set up the Yamaha A/V Receiver with a Static IP address for reliable control. If left at **DHCP**, the unit may get a new IP address in the future and control will be lost. In addition, if using Ethernet, you Network Standby must be enabled to allow the SpeakerCraft **App** to control the unit when it is in a power standby state.

Press On Screen button on face of unit. For Yamaha AVRs without an On Screen button, use the unit's remote control to access this function.	<i>Enters On Screen Menu</i>
Use Arrows and the Enter button to navigate to and select Setup	<i>Enters the Setup sub menu</i>
Use Arrows and the Enter button to navigate to and select Network	<i>Enters the Network Setup sub menu</i>
Use Arrows and the Enter button to navigate to and select IP Address	<i>Enters the IP Setup sub menu</i>

Use Arrows and the Enter button to set DHCP to No , and then press Return to go back a level.	<i>Disables Dynamic address and allows entry of Static IP</i>
Use Arrows and the Enter button to enter Manual Setup , and edit IP Information as follows: <ul style="list-style-type: none"> • IP Address: It is recommended to configure the first unit with an address of 192.168.xxx.50, the second to 192.168.xxx.51, etc. • Subnet Mask: Typically set to 255.255.255.0 • DNS1 and Gateway: Typically set to Router's LAN IP (ex. 192.168.xxx.1) 	<i>Configures Static IP address for reliable network control</i>
Use Return button to get back to the Network Setup Screen.	<i>Returns to base Network options screen depicting IP Address, Network Standby, and MAC Filter sub menus</i>
Use Arrows and the Enter button to set Network Standby to ON .	<i>Enables Network Standby. Note: If this setting is disabled, the unit will not wake out of standby mode based on Ethernet commands</i>
Press On Screen button on face of unit or remote	<i>Exits the On Screen Menu</i>

COMMON MISTAKES

1. Using the incorrect tuner type. Yamaha **YNCA** tuners must be used, as the **Aventage (YNCA)** models use a different protocol than earlier Yamaha units. In addition, use the HD or non-HD tuner as appropriate.
2. Failure to Enable Network Standby. Network Standby must be properly configured or the unit will not wake up out of standby mode from Ethernet messages as the Ethernet adapter in the AVR is turned off to save power.
3. Configuring the unit to use DHCP will lead to eventual connectivity and control problems. It is recommended to set up the Pioneer AV Receiver with a Static IP address for reliable control. Please see **Yamaha Ethernet Configuration** above for instructions.
4. Attempting to configure multiple AVR zones. Even when using supported models that have second and/or third zones, only ONE AVR zone will work correctly with the **SpeakerCraft App** system.

