

# SpeakerCraft Integration Guide

|                         |                    |
|-------------------------|--------------------|
| Manufacturer:           | Yamaha             |
| Model Number(s):        | RX-V3900, RX-V2065 |
| App Version:            | 1.0 and above      |
| 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.

**Surround Mode Control:** Change the surround mode from the **SpeakerCraft App** interface.

**Onboard Tuner:** 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 **SpeakerCraft App** tuner interface.

**Satellite Radio Inputs:** Yamaha receivers have inputs for XM or Sirius Satellite Radio. These inputs are supported and use the standard **SpeakerCraft App** Satellite Tuner interfaces.

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

### YAMAHA RECEIVERS DO NOT SUPPORT THE FOLLOWING FEATURES:

**NET/USB Sources:** Digital audio source control is limited to source selection and volume control in the **SpeakerCraft App**.

**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.

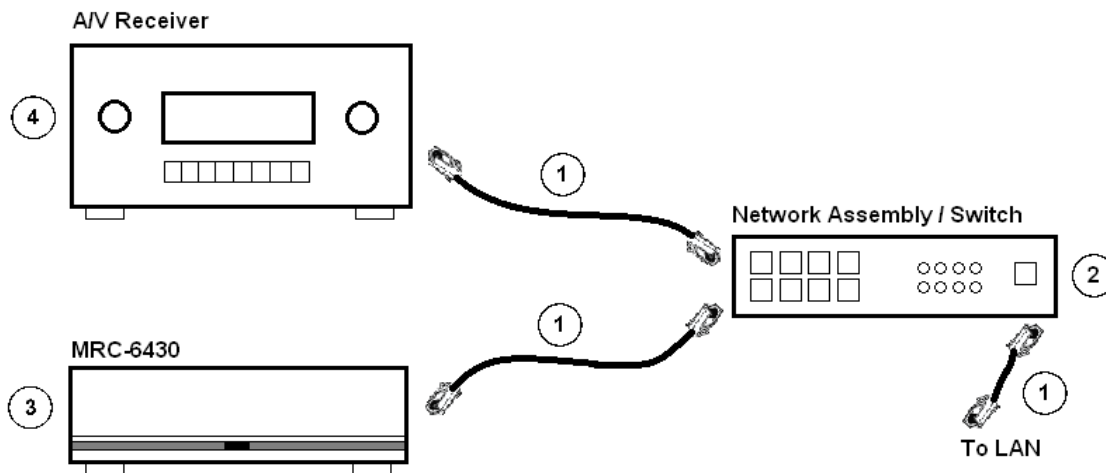
**Additional Features:** Many units include additional features such as Trigger Outputs, IR Inputs/Outputs, etc. Unless specifically listed above, the **SpeakerCraft App** does not integrate with these features.

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.
1. 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.
2. Install the speakers, display and other theater components.
3. Program the receiver according to the manufacturer's documentation.
4. Test the receiver to ensure that the sources play correctly and that the audio and video operate as expected.
5. Configure the **SpeakerCraft App** system for the receiver and confirm communication between the receiver and the **MRA-664** system controller.
6. Test the **SpeakerCraft App** system by changing sources and volume to confirm the correct source plays.

## CONNECTION DIAGRAMS



## 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 | Niles        | MRC-6430  | TCP/IP   | RJ-45 Female             |                                 |
| 4 | Yamaha A/V Receiver                | Yamaha       | See Notes | TCP/IP   | RJ-45 Female             | See Model Number(s) above       |

### YAMAHA CONFIGURATION:

It is recommended to set the Yamaha up 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.

- Access the Yamaha on-screen menu and enter **Setup**
- Use the on-screen menu to access **Setup> Network** and configure the unit with a Static IP.
- Set the unit to **IP Address** to disable DHCP
- Enter the desired IP address. It is recommended to configure the first unit with an address of **192.168.0.50**, the second to **192.168.0.51**, and so on.
- The subnet mask is typically **255.255.255.0**.
- Entry of the **DNS Server** and **Gateway** is optional, but typically should be set to the router IP address (default: **192.168.0.1**).

### **COMMON MISTAKES**

1. 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 Configuration** above for instructions.
2. 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.