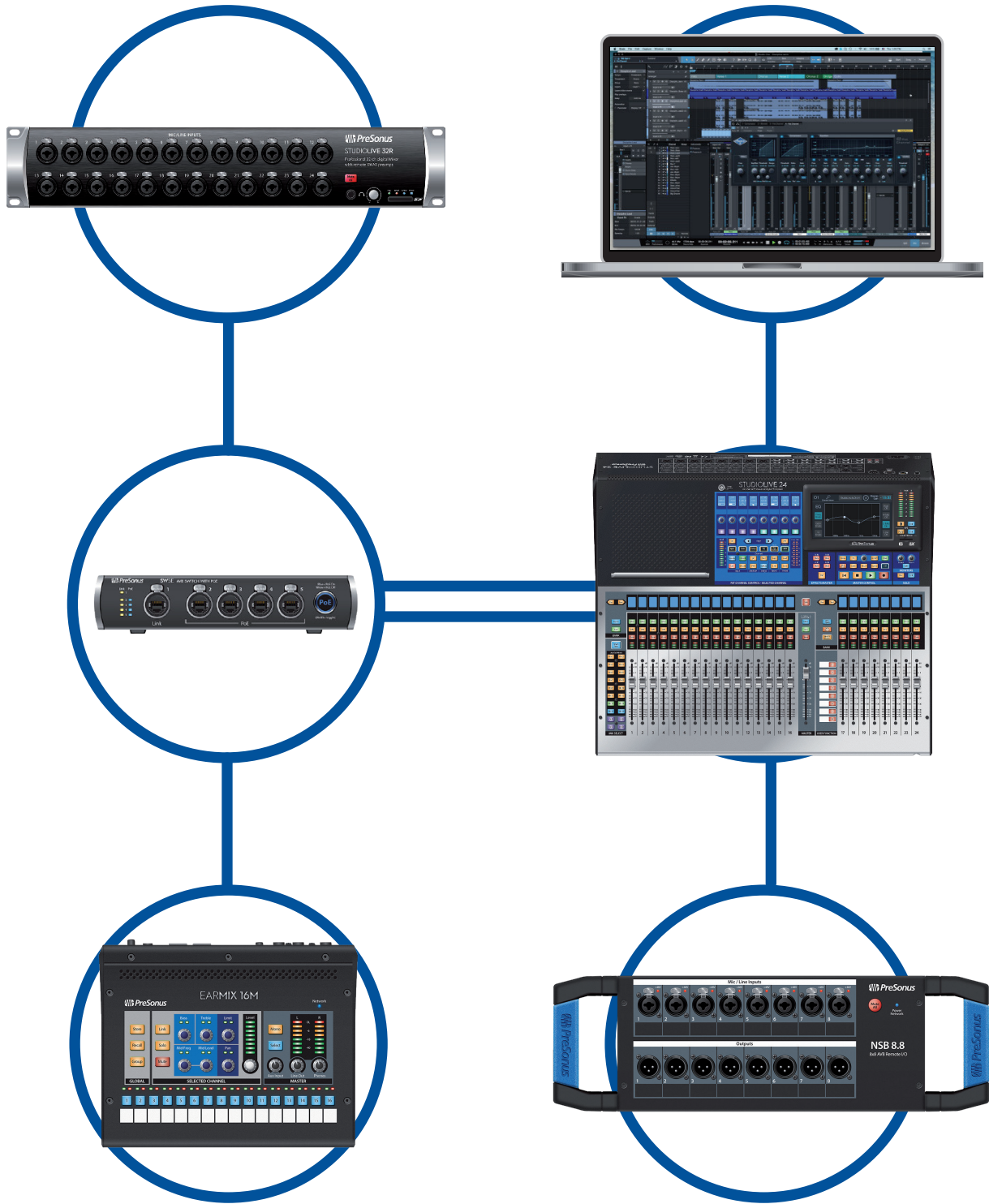


# PreSonus AVB 3.0 Preview



# Table of Contents

## **1 Systems Under Test — 1**

- 1.1 Basic Daisy-Chain Topology — 1
- 1.2 Daisy-chain and Star Topology — 2
- 1.3 Basic Star Topology — 3
- 1.4 Complex Star Topology — 4
- 1.5 Complex Daisy-Chain Topology — 5
- 1.6 Maxed Out Ecosystem — 6

## **2 Installation Checklist — 7**

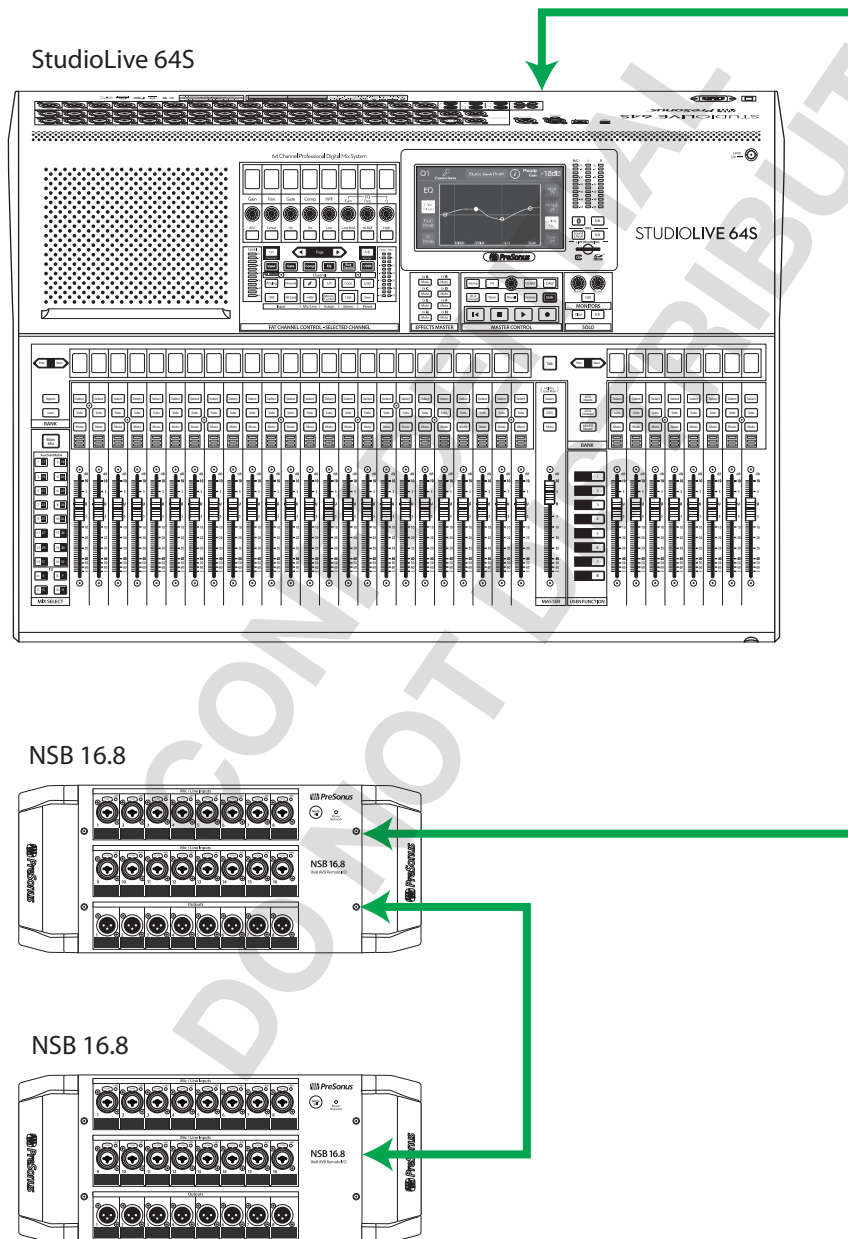
- 2.1 Pre-Installation — 7
- 2.2 Networking Setup — 7
- 2.3 Basic StudioLive Mixer Setup — 8
- 2.4 Basic NSB Setup — 8
- 2.5 Basic EarMix 16 Setup — 8

## **3 Troubleshooting — 9**

- 3.1 System Verification Checklist — 9

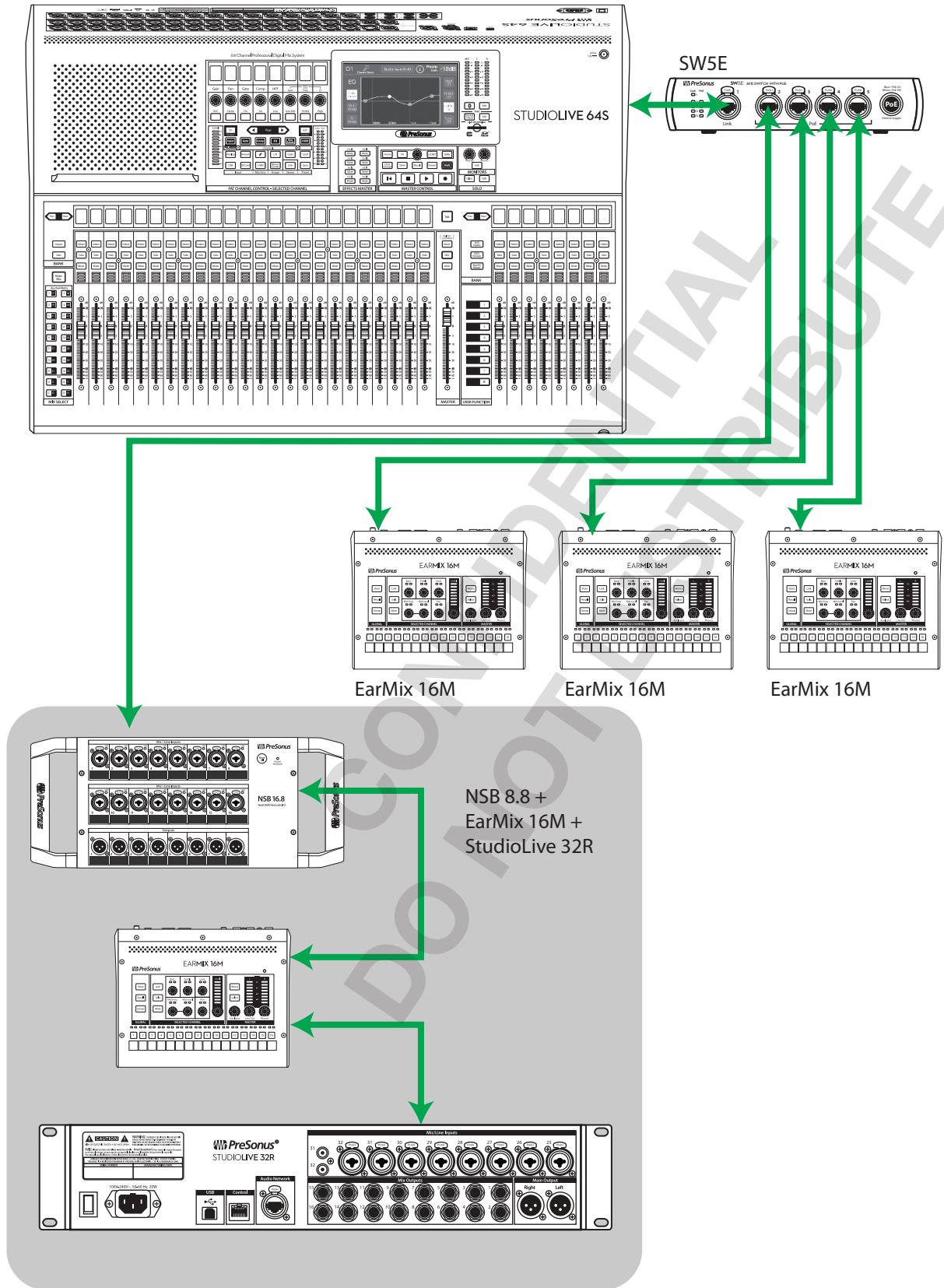
# 1 Systems Under Test

## 1.1 Basic Daisy-Chain Topology

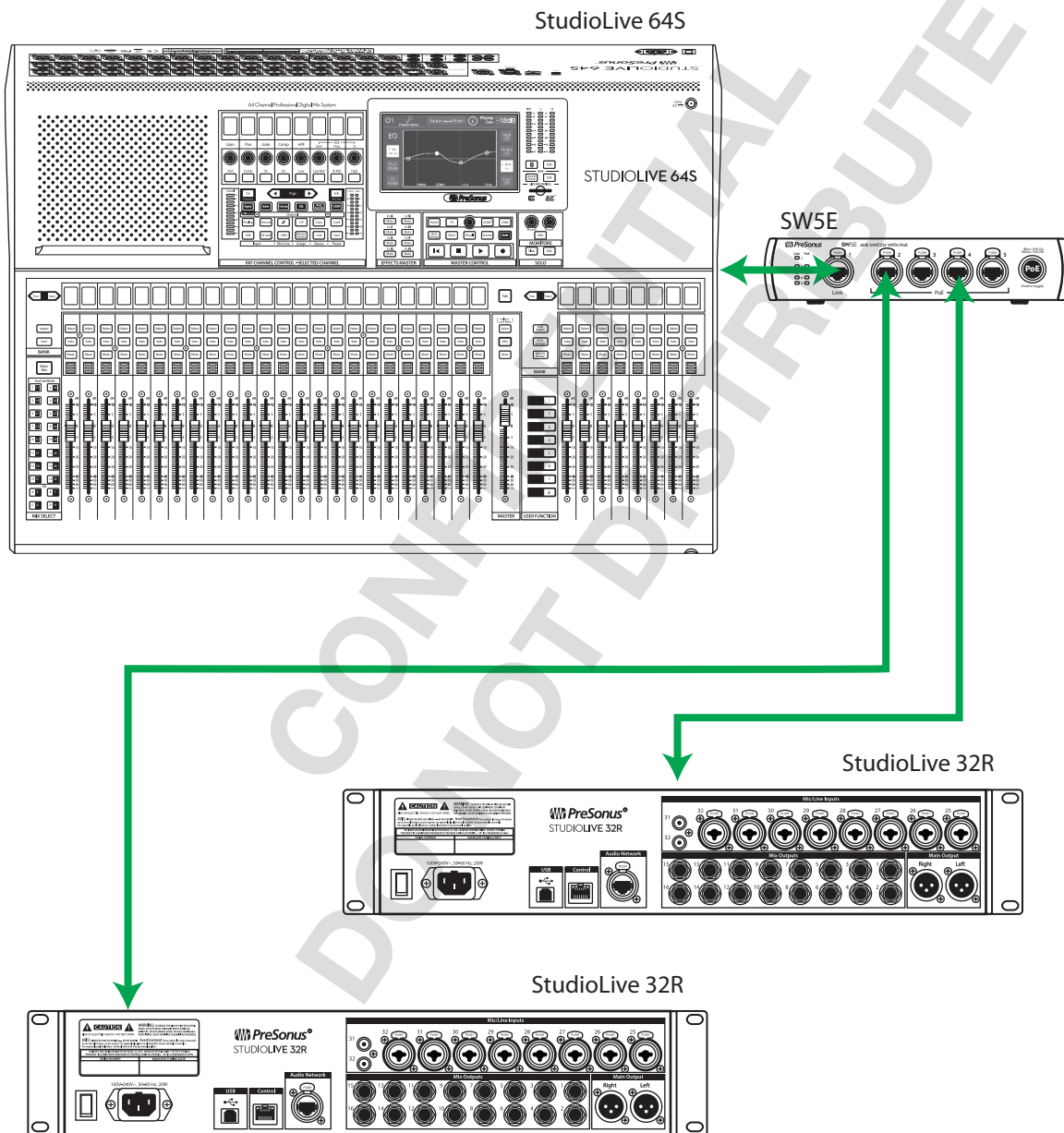


1.2 Daisy-chain and Star Topology

StudioLive 64S

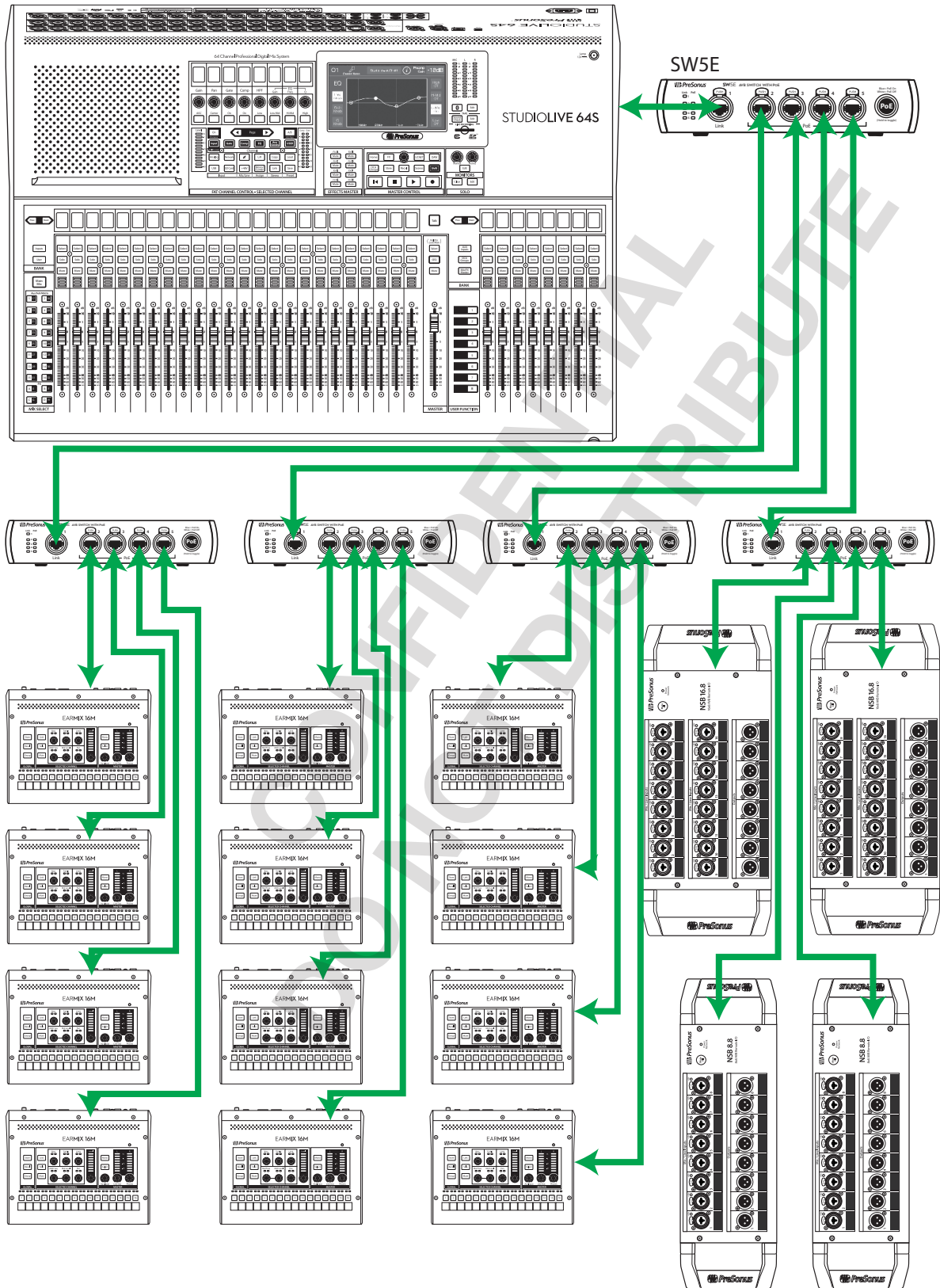


1.3 Basic Star Topology



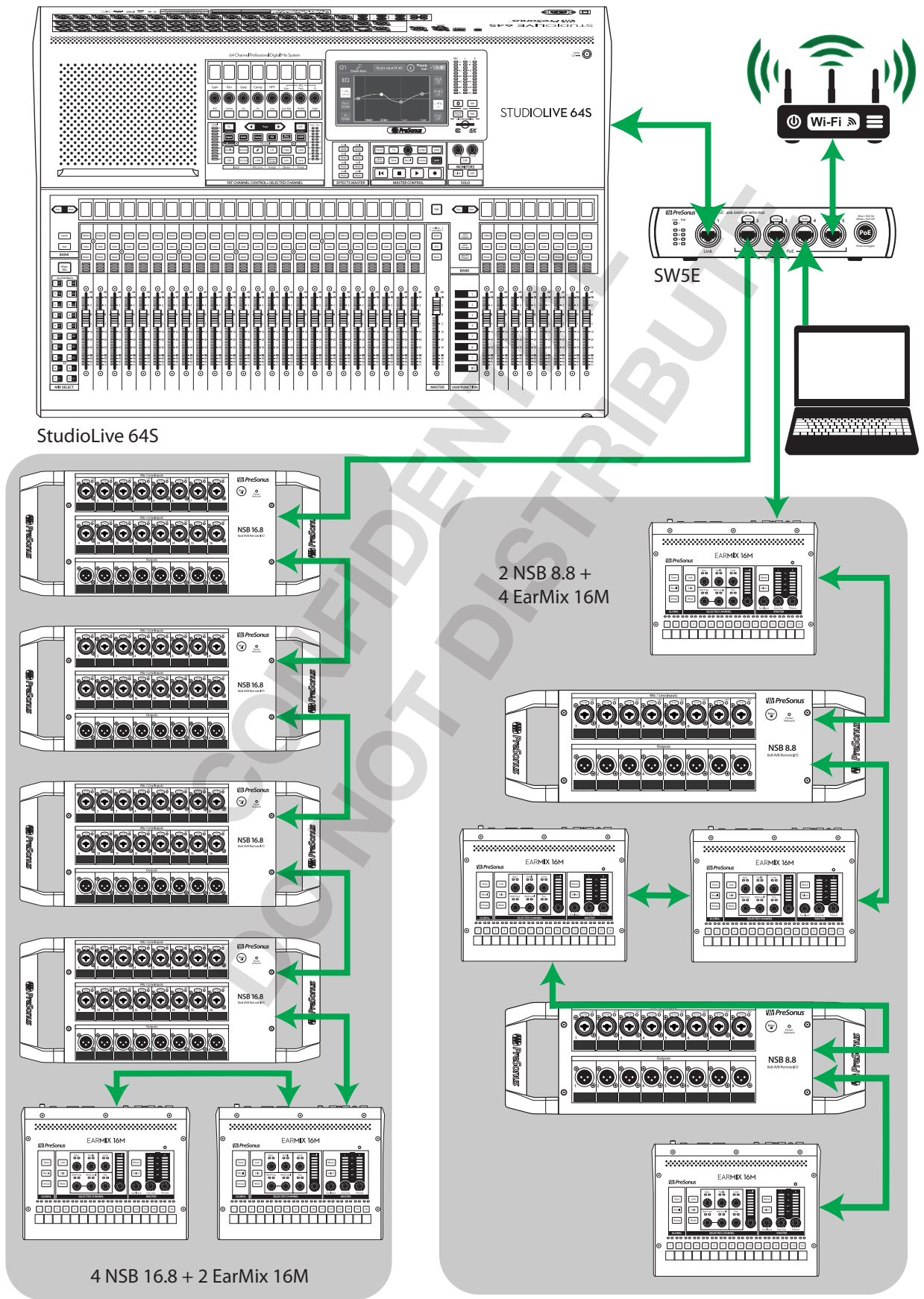
1.4 Complex Star Topology

StudioLive 64S

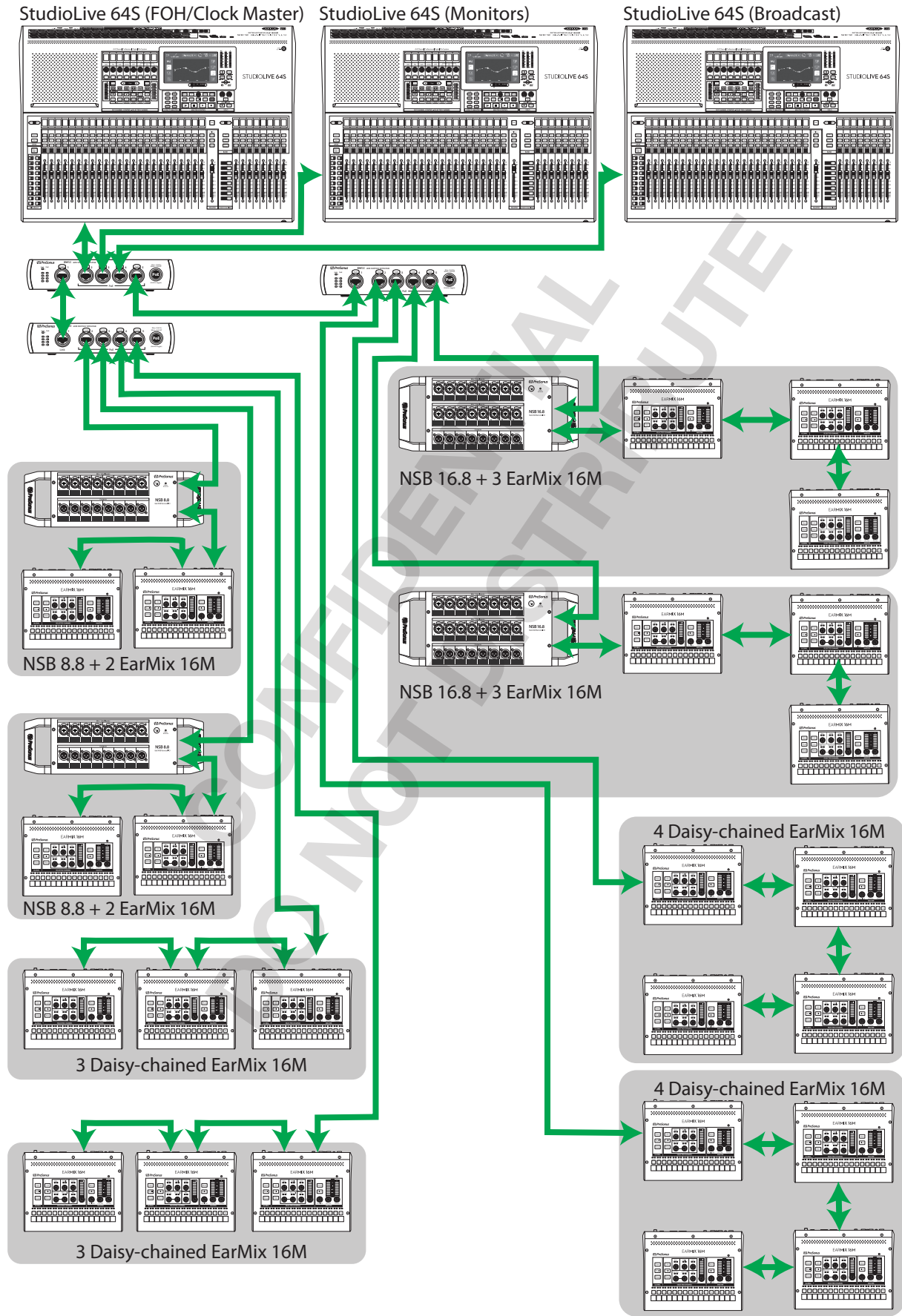




1.5 Complex Daisy-Chain Topology



1.6 Maxed Out Ecosystem





## 2 Installation Checklist

### 2.1 Pre-Installation

- Register all StudioLive Series III Ecosystem products at My.PreSonus.com or using the My PreSonus app.
- My.PreSonus account username: \_\_\_\_\_
- Update all StudioLive Series III Ecosystem product firmware.
- See Section 3.1 for StudioLive Series III console mixer firmware update instructions.*
- See Section 3.2 for StudioLive Series III rack mixer firmware update instructions.*
- See Section 3.3 for NSB-series stage box firmware update instructions.*
- See Section 3.4 for EarMix 16M personal monitor mixer firmware update instructions.*
- See Section 3.5 for SW5E AVB switch firmware update instructions.*

### 2.2 Networking Setup

- Ethernet cabling.
- Cable length cannot exceed 100M (300') per segment.
- CAT 5, CAT 7, and CAT 8 cables are not recommended.
- Crimp all connectors to the T568B wiring standard. PreSonus recommends CAT 6 connectors.
- AVB Network (Select cable type):

<b>Cable Brand Name:</b> _____			
Cable Type	UTP	Shielded	Ethercon
<input type="checkbox"/> CAT 5e	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> CAT 6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> CAT 6A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Control Network (Select cable type):

<b>Cable Brand Name:</b> _____			
Cable Type	UTP	Shielded	Ethercon
<input type="checkbox"/> CAT 5e	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> CAT 6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> CAT 6A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Wireless Router for Control Network
- Wireless Network Name: \_\_\_\_\_
- Wireless Network Password: \_\_\_\_\_
- Wireless Router SSID: \_\_\_\_\_
- Connect router to the primary StudioLive mixer's Control Port. *See Section 4.2 for connection diagram.*
- Use router's LAN ports for connections to any StudioLive Series III Ecosystem Product. Do not use the Main Internet or WAN port.
- Configure router for DHCP for UC Surface and QMix-UC connectivity.

- Ensure all wireless devices (smartphones, tablets, etc.) are running the latest operating system.
- Ensure all wireless devices (smartphones, tablets, etc.) have the latest version of UC Surface or QMix-UC installed.
- AVB Network Switches
  - Use only AVB switches, like the PreSonus SW5E, for all AVB traffic. Do not use Netgear AVB switches.
  - Update AVB switch firmware. *See Section 3.5 for SW5E update instructions.*

### 2.3 Basic StudioLive Mixer Setup

- Set IP Mode to Dynamic (default) either from the console mixer's UCNET screen or Networking tab in the Settings menu in UC Surface.
- Set the permissions for all your remote devices (FOH, All Auxes, etc.).
- For mixers with FOH permissions, enter the default access code in UC Surface (12345).

### 2.4 Basic NSB Setup

- Update Firmware. *See Section 3.3 for instructions.*
- Connect NSB stage box to AVB Network.
- Power the NSB stage box on.
- Set primary mixer's network clock to "Internal" (default).
- Route AVB Network streams from mixer to NSB stage box.  
*Note: An AVB Output source is required for Network clock, even if the NSB stage box outputs are not in use.*
- Route AVB Network streams from NSB stage box to mixer.
- Change channel source to "Network" for any mixer channel sourced from the NSB stage box.  
*See Section 4.1 for complete set-up instructions.*

### 2.5 Basic EarMix 16 Setup

- Update Firmware. *See Section 3.4 for instructions.*
- Connect EarMix 16M to AVB Network. *Note: AVB Switches with PoE, like the PreSonus SW5E, will provide power in addition to audio. If PoE is not available, use the included power supply.*
- Power the EarMix 16M on.
- Route AVB Network streams from the mixer to the EarMix 16M.  
*See Section 4.3 for instructions.*  
*Note: You must assign an input stream to EarMix 1-8 for proper clocking.*

## 3 Troubleshooting

### 3.1 System Verification Checklist

Before beginning any advanced troubleshooting, it is recommended that the following checklist be followed:

1. Are all devices updated to the latest version?
  - Universal Control
  - StudioLive Series III console mixers
  - StudioLive Series III rack mixers
  - SW5E (or other) AVB Switch
  - NSB Stage Boxes
  - EarMix 16M (all)
  - QMix-UC on all mobile devices
  - UC Surface on all mobile devices
2. Power cycle the system or the device on which the issue is occurring.
3. Verify cable functionality.
  - Audio cabling (XLR, TRS, TS, RCA, etc.)
  - Ethernet cabling (CAT5e or CAT6). **Note:** *only CAT5e and CAT6 cable has been qualified for use with StudioLive Series III ecosystem products.*
4. Verify AVB Stream assignments.
  - Reestablish AVB Input Streams by setting them to “None” and then reassigning the streams to the desired inputs.
5. Verify mixer channel source assignments. Are channels that should be receiving an input source from the Network set to “Network”?
6. Is your Main Bus set to “Analog” input type? **Note:** *With few exceptions, the input source for the Main Bus should always be set to “Analog.”*
7. When you press Select for the Main Mix, is “Post Fader” enabled in the Digital Send section?
8. Is your StudioLive rack mixer in the correct mode (Standalone, Stagebox, or Monitor Mixer)?
9. If you have a router connected to your system, is the Control port on your StudioLive Mixer connected to the LAN port on the router and not the “Internet” or “WAN” port?
10. Is the power in the facility stable and clean? If the problem persists, it is recommended that you contact a professional electrician to verify the power.

## Added bonus: PreSonus' previously Top Secret recipe for...

### Rice Dressing

#### Ingredients:

- 1 lb ground beef
- 1 lb chopped chicken liver
- 1 onion (diced)
- 2 green peppers (diced)
- 4-6 celery stalks (diced)
- 2 garlic cloves (minced)
- ¼ C. chopped fresh parsley
- 3 C. chicken stock
- 6 C. cooked rice
- 1 Tbs. oil
- Salt and pepper to taste
- Cayenne pepper to taste

#### Cooking Instructions:

1. In a large pot, heat oil on medium high and add meat, salt, and pepper to taste. Stir until meat begins to brown.
2. Lower heat and add all vegetables. Cook until onions are transparent and celery is very tender. Add stock as necessary to prevent burning.
3. Stir in cooked rice. Add remaining stock and simmer on low until ready to serve.

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