



# RAVENNA

## Connecting a RAVENNA / AES67 device to Q-Sys

### Introduction

Now that QSC have released firmware which is AES67 compatible, connecting a RAVENNA and Q-Sys system has become not only possible but relatively straightforward.

Before you start you should ensure that you have defined your IP addressing scheme (static or DHCP) and have configured and documented all your devices.

### Switch Checklist

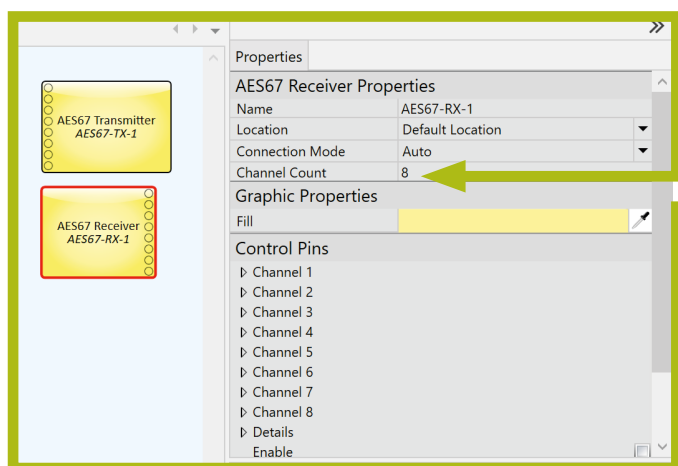
- IGMP on
- Ensure there is a single querier on the network
- Energy Efficient Ethernet off
- Jumbo Frames off

### Connect RAVENNA to Q-Sys

RAVENNA devices can connect in two different ways to a QSC Q-Sys system; either natively using the AES67 transmitters and receivers or via an optional Dante card with AES67 mode enabled fitted to a core or I/O-Frame.

### AES67 Transmitters & Receivers

AES67 Transmitters and Receivers can be added to the inventory of a Q-Sys design from the Streaming I/O tab.



Q-Sys designer

Network streaming blocks should be dragged into the design window and connected up as you would any other audio device. The number of channels **must** match the channel count of the stream that you are going to connect to.

**IMPORTANT:** The number of audio streams **MUST** match the block exactly. For example if you have a four channel stream you must use a four channel block otherwise no audio will pass.

### AES67 Components

The AES67 components provides the means for sending and receiving valid AES67 audio streams.

While the AES67 mandated "Compatibility Mode" is ***"1ms packet time with 1.8 channels per stream at L24, 48kHz"***, the Q-Sys AES67 components may accept 1-10 channels per stream, as set by the user during the design of a project.

Optional device discovery and connection management configuration:

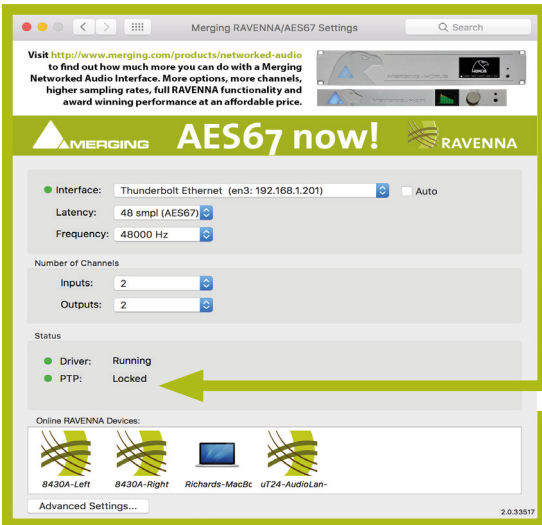
- Streaming block --> properties
- Auto Mode – using SAP to ease integration with any other AES67 device using SAP
- Manual Mode – to allow manual configuration of stream TX/RX parameters for integration with devices not using SAP.



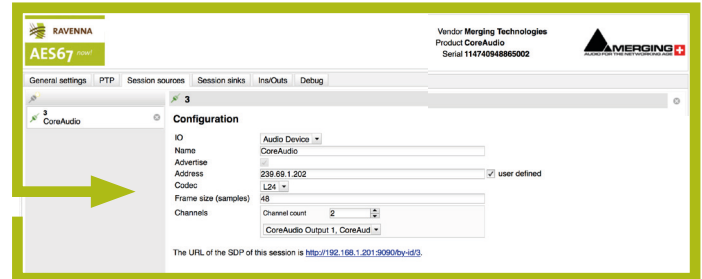
## Connecting a RAVENNA / AES67 device to Q-Sys

For this example we will connect a Merging virtual sound card to a Q-Sys Core 510i.

1. Ensure your machine is connected correctly and you have **PTP lock**.
2. On the web page for the virtual sound card configure an output stream.

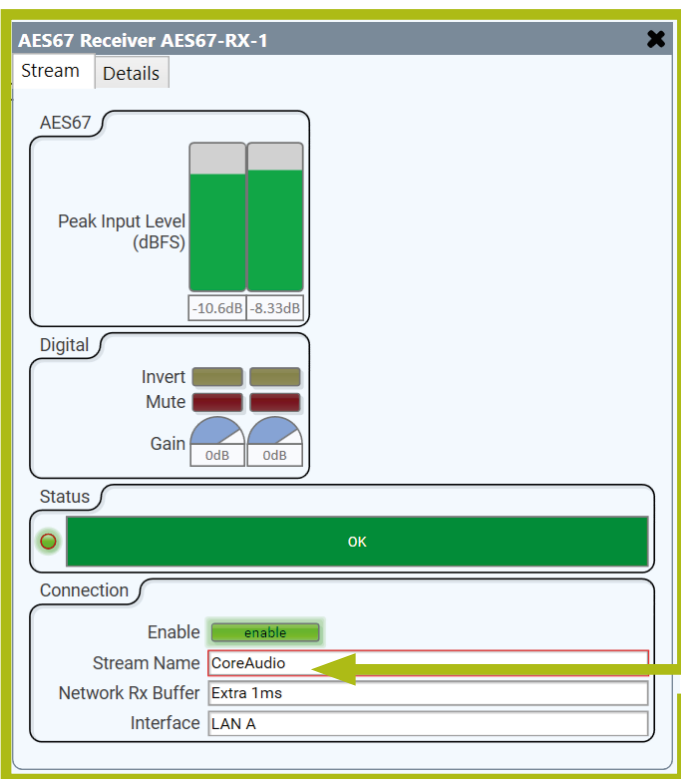


System preferences Merging soundcard

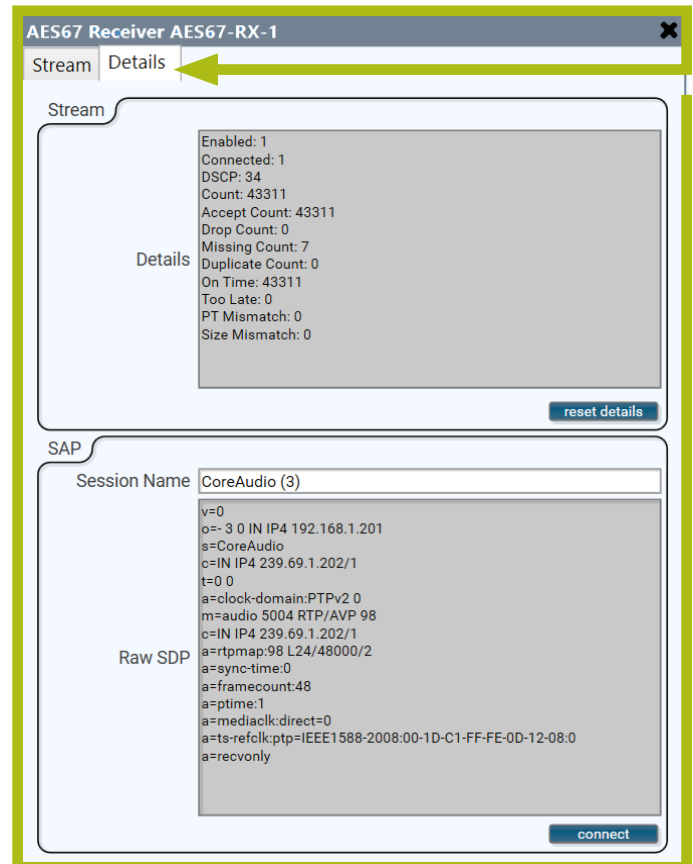


Merging virtual soundcard webpage

3. In the Q-Sys Receiver block select the required stream in the **Stream Name** drop down. Remember the channel count of the receiver should match the channel count of the transmitter
4. If you are not using a device that performs SAP announcements or don't have a copy of RAV2SAP running on the network you can manually enter the stream details on the **details tab**.



Q-Sys designer



Q-Sys designer

**IMPORTANT:** The number of audio streams **MUST** match the block exactly. For example if you have a four channel stream you must use a four channel block otherwise no audio will pass.