

TECH LIBRARY

Lyngdorf MP60 & VMO16

Configuring the Lyngdorf MP60's AES67 interface



Introduction

The Lyngdorf MP60 is a highly capable cinema processor which offers users several choices for its upstream digital output. One of these is an (optional) AES67 network card, meaning we can connect digitally to a VMO16 for the highest quality balanced analogue output processing.



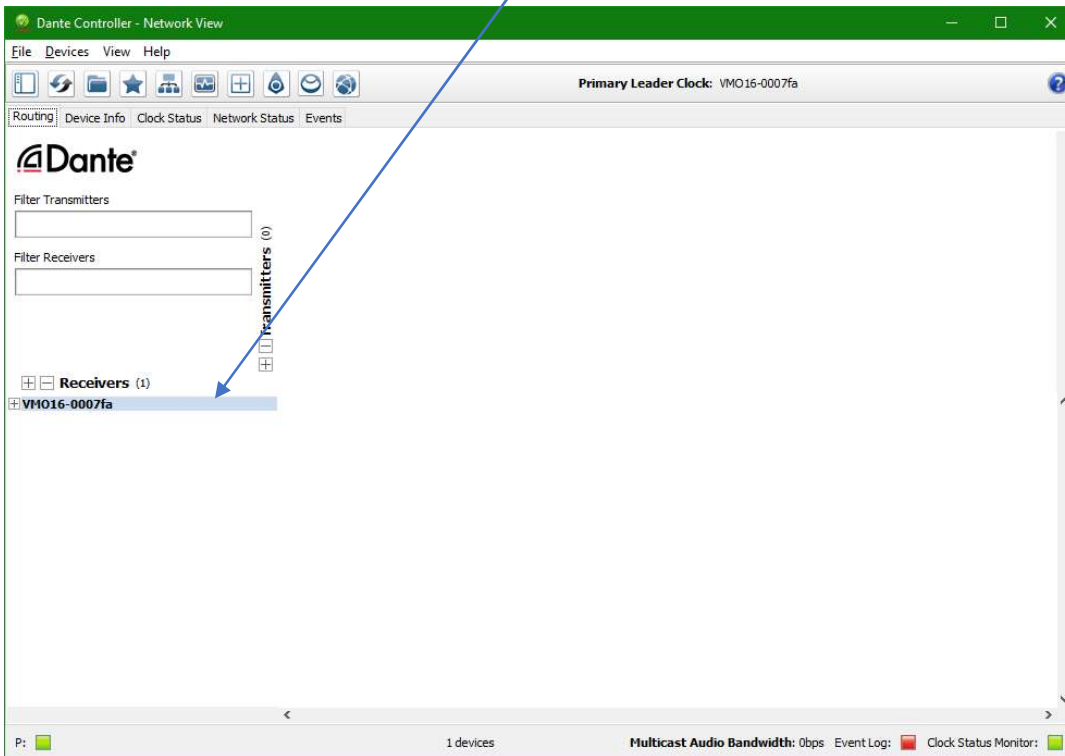
The VMO16 input is via network audio only and this is by default Dante, but the network audio interface can easily be set to work in AES67 mode.

This document assumes the user is familiar with the following software applications:

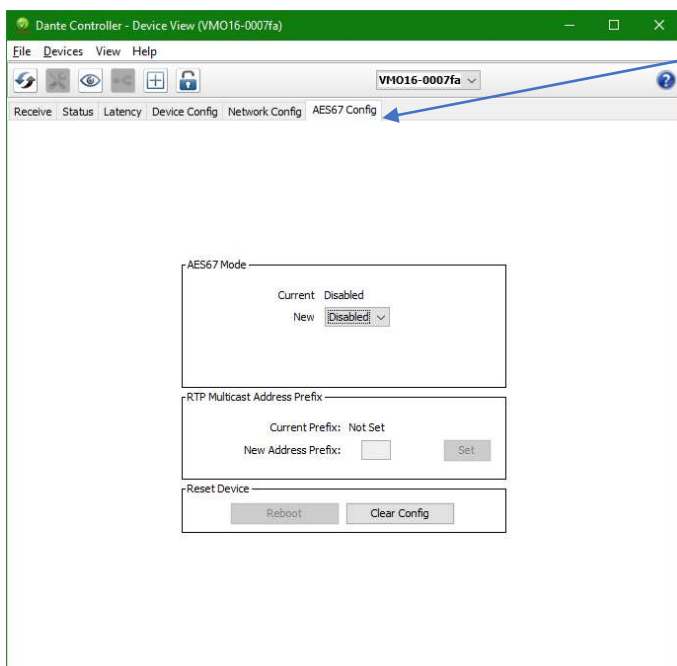
- Microsoft Edge or any modern internet browser
- Audinate Dante Controller

Step 1: Set the VMO16 to AES67 mode

Ensure that your VMO16 is connected via the Primary Dante socket on the rear panel of the unit, and that it is powered up. Open Dante controller. The VMO16 should be visible under the "Receivers" on the left hand side of the window:



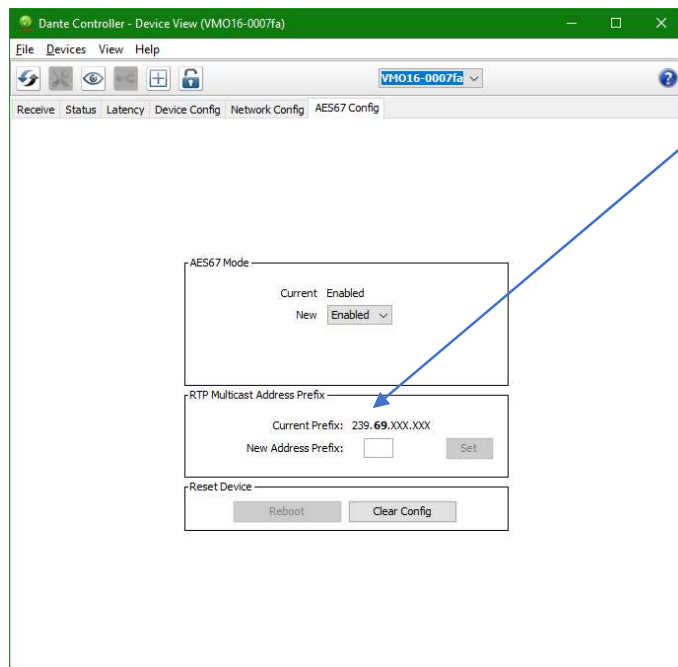
Double click on the device name to display the Device View and select the AES67 Config tab:



Swap the AES67 Mode to "Enabled" and following the confirmation dialogue pop-up, reboot the VMO16 and the process is complete.

Step 2: Check the address range of the VMO16 in AES67 mode

Now that the VMO16 is in AES67 mode, its network audio card must be in the same address range for the Lyngdorf's AES67 interface to be recognised. This is determined back in Dante Controller, on the same tab used for enabling AES67 mode in step 2 – the "RTP Multicast Address Prefix":



The "239" octet is *fixed* for the card in the VMO16, but the next octet, shown in bold, is variable. This should be set to the same as in the MP60 (configured in the next step...).

We chose 69 in our example. If it's not 69, type this into the "New Address Prefix" box and press "Set".

Step 3: Configuration of the Lyngdorf AES67 interface

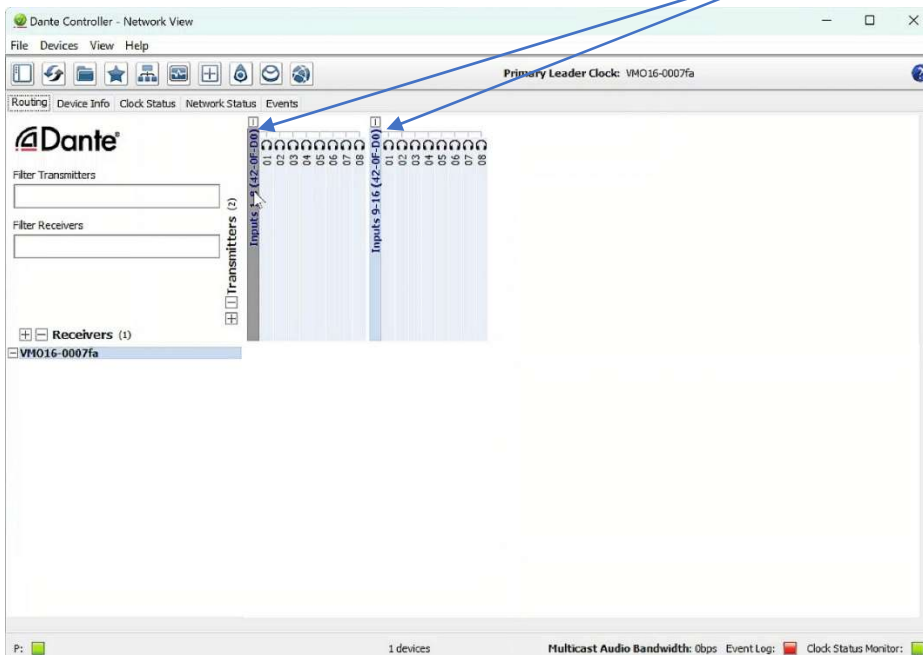
The Lyngdorf AES67 interface is a "native" AES interface and so does not have to be changed into a different operating mode to be recognised by Dante Controller. However, some changes to the default settings are required to enable all channels to be visible and routable within Dante Controller.

First, make sure the MP60 is powered up (and not in standby) and the AES67 audio interface is connected to the network with a cable.

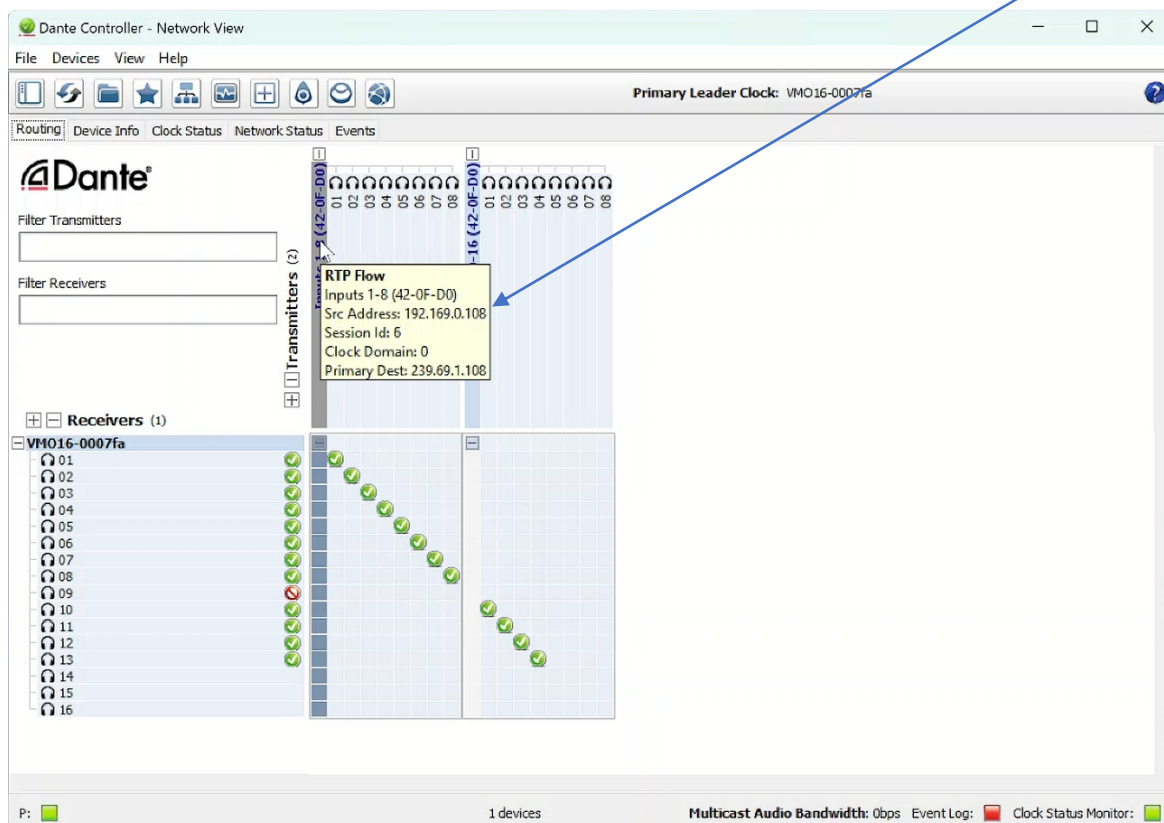


You may be using the MP60 with streaming services and have connected this already for WiFi access but the AES67 interface is completely separate from this and requires a different approach.

The Lyngdorf MP60 should now appear in Dante Controller in the "Transmitters" section, as two sets of 8 outputs (so 16 in total).

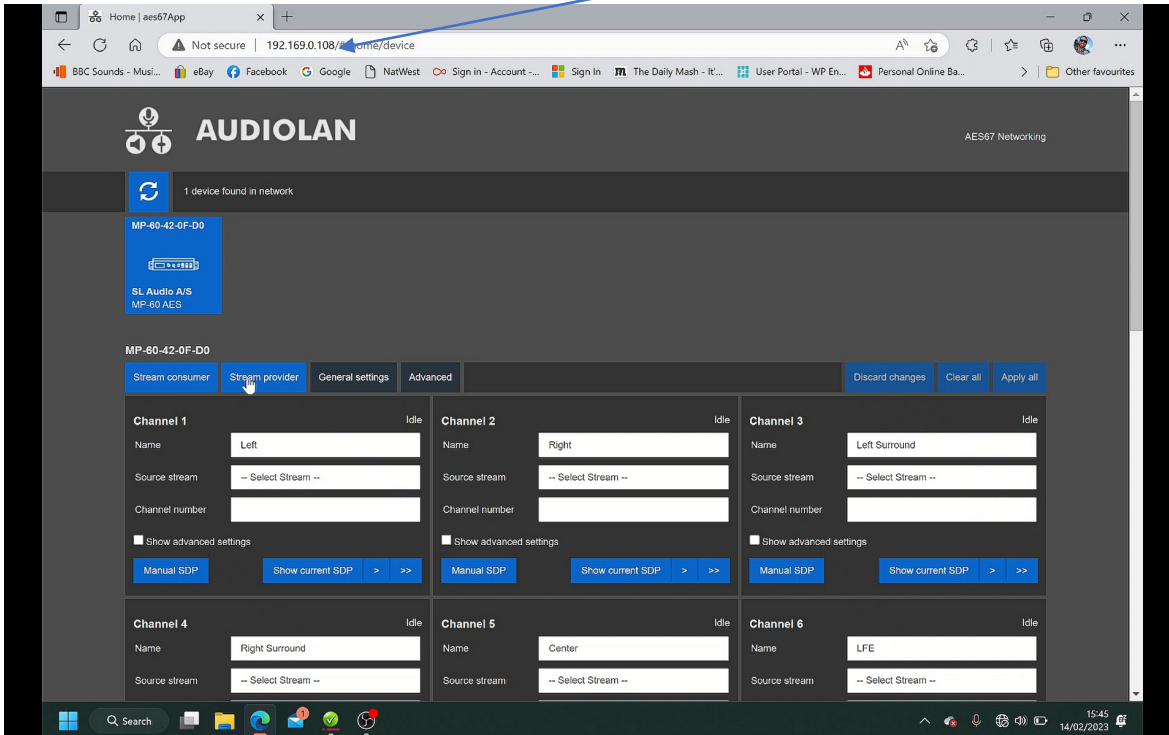


A change needs to be made to the Lyngdorf interface set-up and to access this, we need to get the IP address of the AES67 interface. The quickest way to see this is to hover over the Lyngdorf entry in Dante controller. A tool tip will appear with the IP address we need displayed under "Src Address":

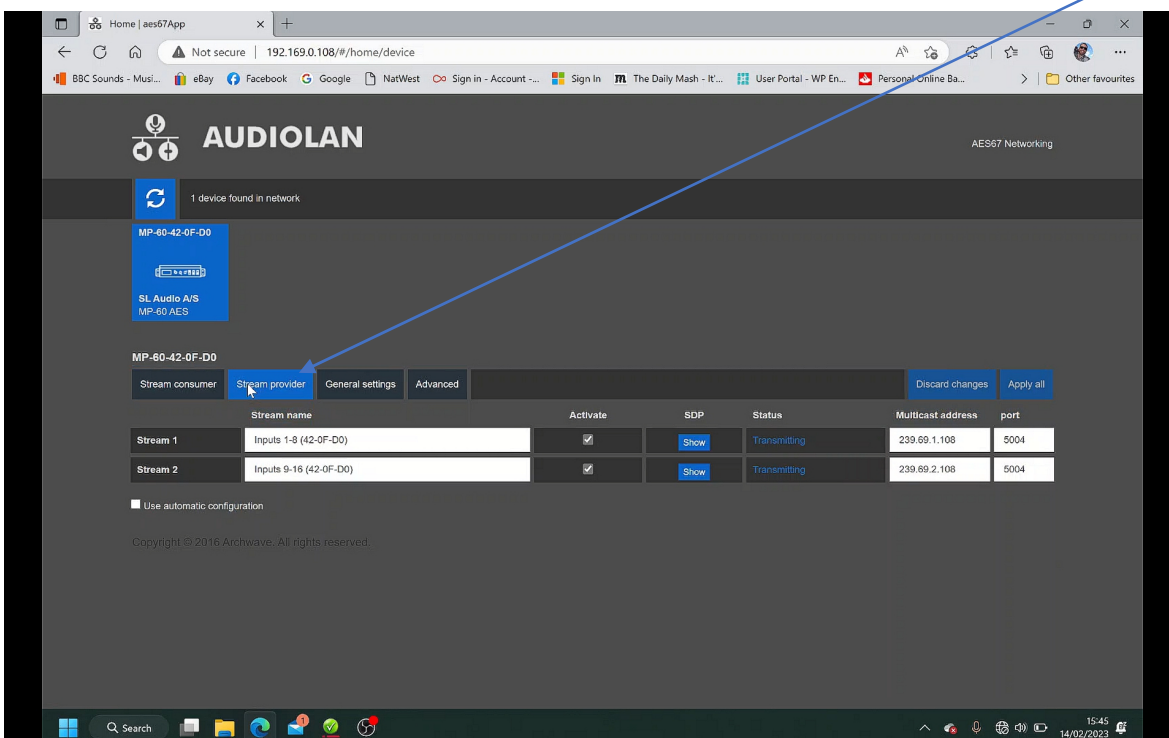


In this example – the IP address to note is 192.169.0.108.

Next, open an internet browser on the same computer as is running Dante Controller and, in the address bar, type in the IP address as discovered – in our example this is 192.169.0.108 – and press ENTER on the keyboard.

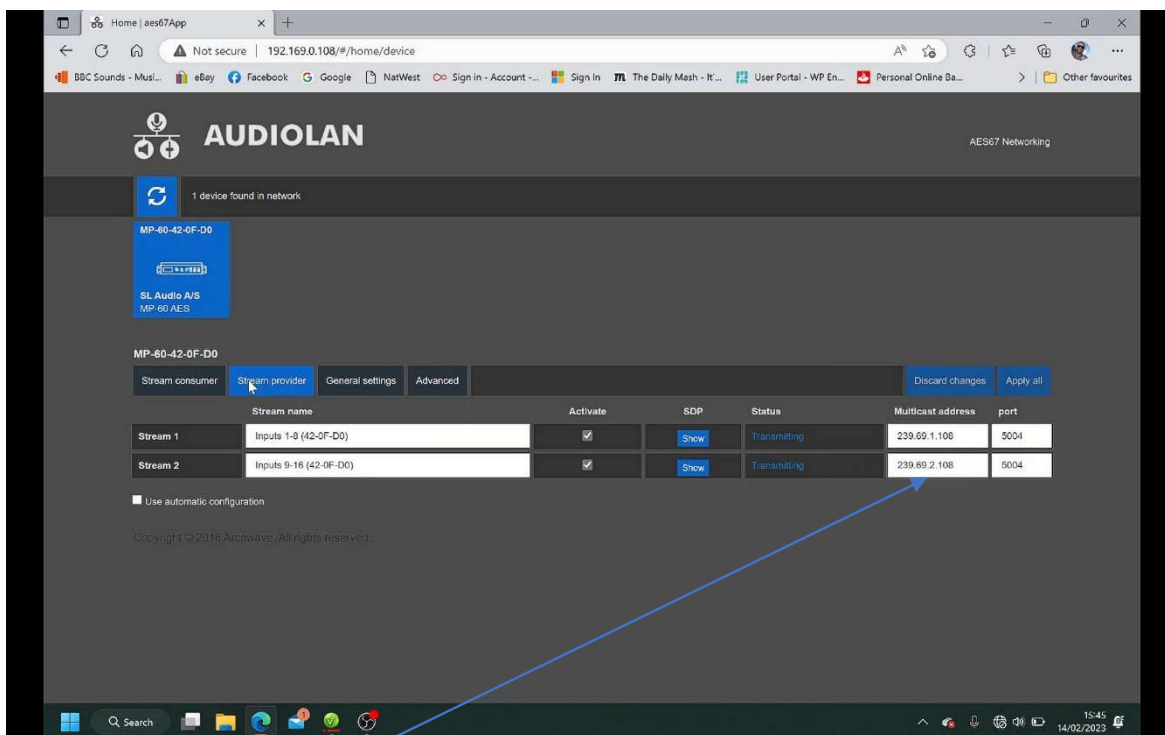


This will access the Lyngdorf's AES67 interface web application (this is nothing to do with the normal Lyngdorf interface you may be used to for setting volumes and speakers etc.). Press the "Stream provider" tab, and the two pairs of 8 channel's information should be shown:



Devices in AES67 mode are able to transmit and receive AES67 multicast flows to / from non-Dante AES67-enabled devices. Between Dante devices, Dante's native audio transport protocol is used instead (even when AES67 is enabled for both devices). However, an AES67 stream can only support a maximum of 8 audio channels, which is why there are two streams shown for the MP60's output.

Connection to the VMO16 when using AES67 is fixed at 48kHz sample rate for all channels and 1mS latency. This is a feature of the Dante interface operating in AES67 mode and cannot be adjusted, and the MP60's output on AES67 is also fixed at 48kHz ensuring compatibility.



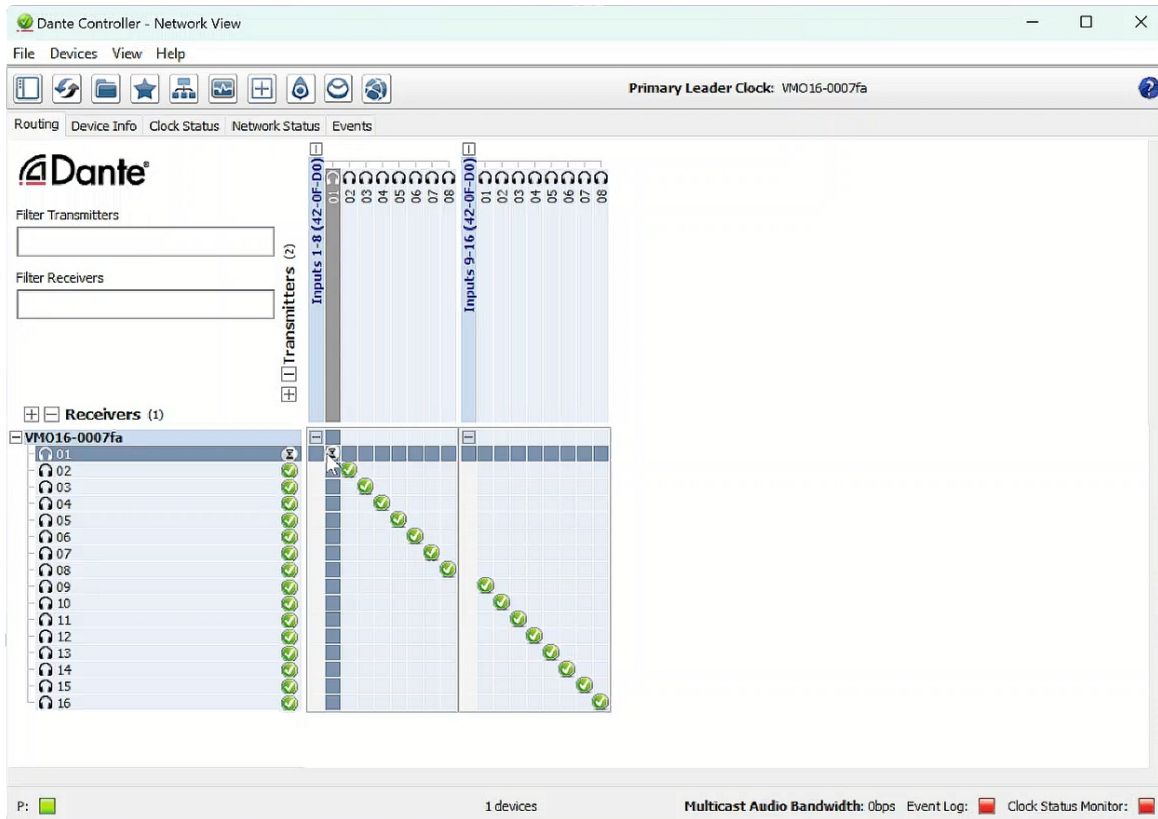
Make sure that the first 2 octets match those the RTP Multicast Address Prefix given in the Dante Controller (239.69.xxx.xxx in the example above). Set the last 2 octets for each stream to unique values. Always avoid duplicated IP addresses, so set each stream to a different IP address as shown.

Make sure that the "Activate" checkbox for the stream is checked.
Select the "Advanced" tab and ensure that the SAP browsing is enabled.

Finally press "Apply All" to save the changes!

Step 4: Assign MP60 outputs to VMO16 inputs

We are finally in a position to virtually connect the MP60 and the VMO16. Expand both the VMO16's receiver and the two sections of the MP60's receiver sections. Hover over and click once on each cross point to establish a connection between a transmitter and a receiver channel. We have mapped channel 01 from the first MP60 output to channel 01 on the VMO16 and so on.



Test with either the built-in generator on the MP60's web interface or play a test disc or content with known audio to check all is connected as required, and we are done!