

Introduction

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

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

AES67 is an audio over IP standard compatible with Dante. NST products with Dante devices support AES67 mode which allows the device to work with different audio IP standards on the same network. A Dante device can support any mix of Dante and AES67 flows up to the maximum supported on the device.

AES67 flows can only be *transmitted* with the following rules:

- Multicast Only
- Non redundant
- Destination address in range 239.nnn.0.0 to 239.nnn.255.255 (239.nnn/16), port 5004
- 48kHz sampling rate
- 24 bit linear (L24) encoding
- 1 ms packet time
- Up to 8 channels per stream (dependant on Dante device)

AES67 flows can only be *received* with the following rules:

- Multicast Only
- Non redundant
- Destination address in range 239.nnn.0.0 to 239.nnn.255.255 (239.nnn/16), port 5004.
Must match destination address range – this will be apparent in Dante Controller – if address range is wrong the flows will appear and can be connected, but no audio will appear.
- 48kHz sampling rate
- L16 or L24 encoding
- 125usec, 250usec, 333usec, 1 ms packet time
- Up to 8 channels per stream (dependant on Dante device)

AES67 Transmit flows created on a Dante device will be advertised via the Session Announcement Protocol (SAP). The announcement interval is 30 seconds.

AES67 Transmit flows are represented as virtual devices in Dante Controller, allowing configuration of AES67 Rx flows by clicking channel intersections in grid view, or drag and drop in Device View.

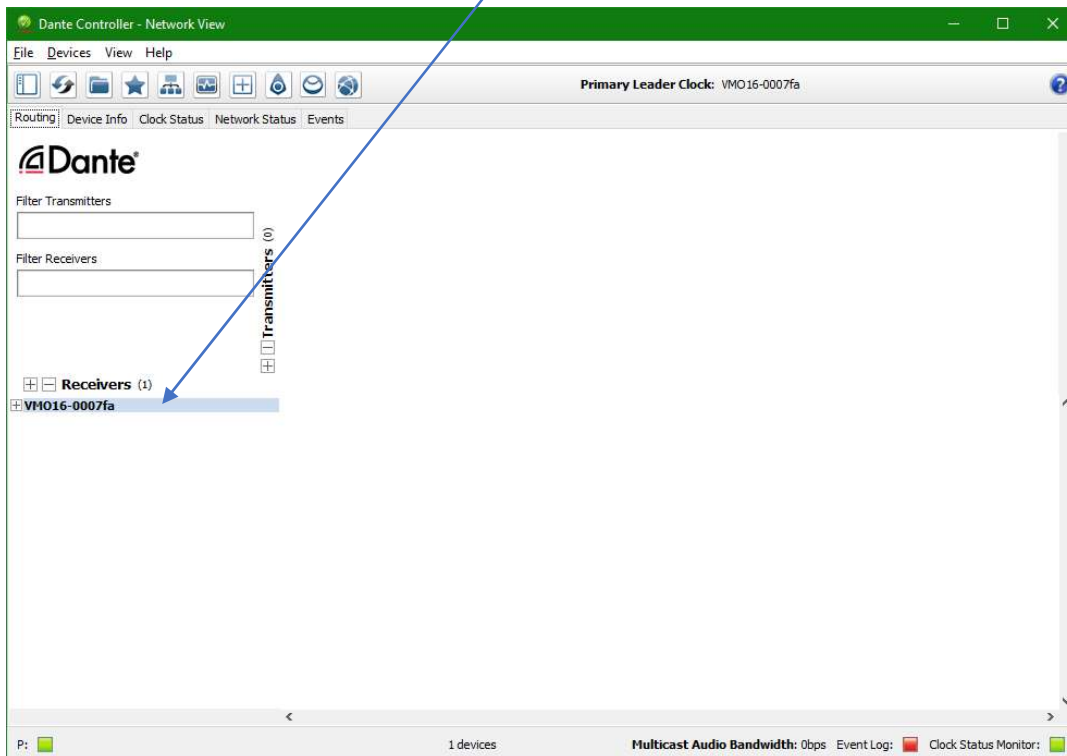
The receive latency for AES67 Rx flows is set to 2ms; this setting is not affected by changing the latency setting in Dante Controller, and may not even be available to adjust in earlier versions on Dante Controller.

All that said, it's a quick process to enable AES67 mode on the Dante interface, as explained overleaf...

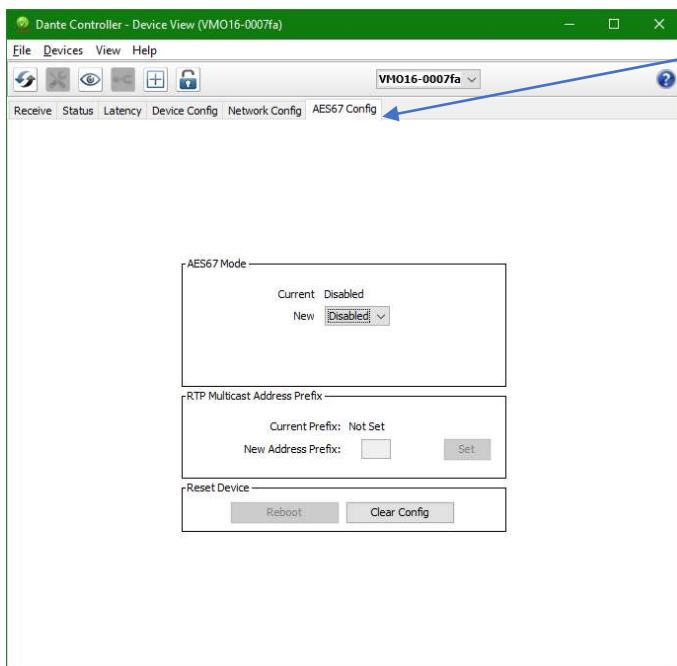
Enabling AES67 Mode

Ensure that the VMxxx is connected to the network using the Primary RJ45 socket on the rear panel of the unit's Dante interface, and not the "Comms" socket!

Open Dante Controller. Assuming the the VMxxx is powered up and on the network, it should be visible under the "Receivers" on the left hand side of the window (our example is a VMO16):



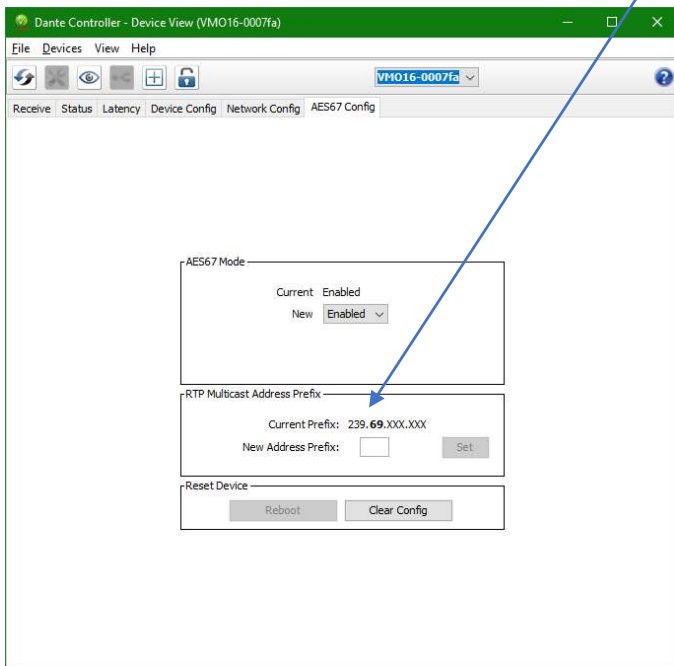
Double click on the device name to display the Device View window and select the AES67 Config tab:



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

Check the address range of the VMxxx in AES67 mode

Now that the unit is in AES67 mode, its network audio card must be in the correct address range for the other interfaces to connect successfully. 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. We chose 69 in our example. If it’s not 69, type this into the “New Address Prefix” box and press “Set”.

This should be set to the same in the other devices via either their own configuration method.

If they are native AES67 devices, they will have some method of adjusting this – normally through a web interface accessed via a browser. This is beyond the scope of this document. However, as a guide, the IP address of this interface can be found by hovering over the device name where it is shown in Dante controller.