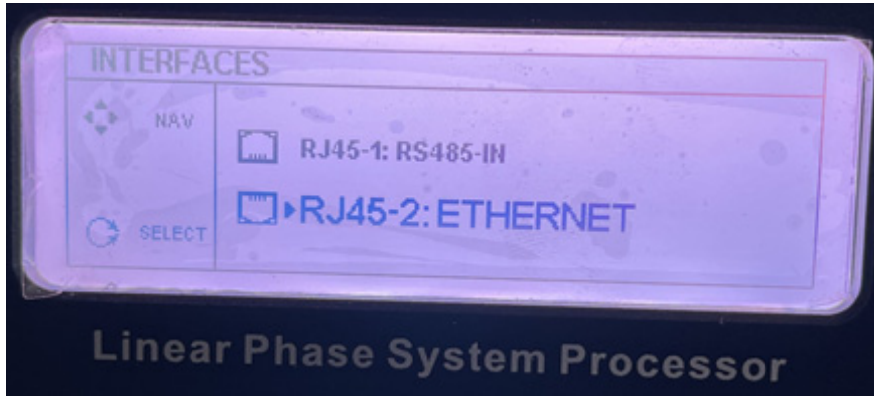
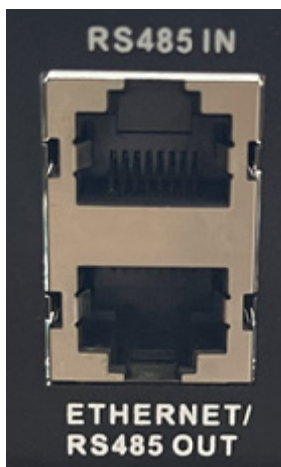


1. For the Control networking, first need to be confirm the interface right setup and on the rear panel found the plug-in the right down RJ-45 to connect.



- In front panel, the button "UTIL" --> "INTERFACES" --> SET RJ45-2 as "ETHERNET".



- use the down RJ-45 for the ETHERNET.
2. And the "UTIL" --> "NETWORK SETTINGS" --> "IP Addressing": Set as "DHCP/AUTOIP"  
If the "IP Addressing": set as "STATIC", need to be confirm all the network IP address is set correctly and unique.
  3. For the DANTE networking, Install the Dante Controller Correctly, and here from next page is Troubleshooting from DANTE.



- On rear panel use PRIMARY and SECONDARY RJ-45 for the DANTE Audio.  
SYNC LED :
  - (1) Red LED lit --> networking and DANTE not connected.
  - (2) Green LED lit --> DANTE connected.
  - (3) Red LED dim and Green LED blinking --> networking connected waiting for DANTE signal.

# Troubleshooting

## Fanout

### About Transmit Flows

Transmit flows are 'streams' of media packets which supply data between devices. Dante devices can support a finite number of transmit flows, depending on their specific hardware configuration and firmware version.

Dante supports two types of flows - unicast and multicast.

**Unicast** flows are used to supply media to specific devices, and support up to 4 channels of audio simultaneously, or 1 channel of video. So if you subscribe 4 audio channels on a receiver to 4 audio channels on a single transmitter, that audio data will be supplied using one flow. If you were to then subscribe a fifth audio channel, a second flow would have to be created.

If you were to subscribe 4 different receivers to the same audio channel on a single transmitter, Dante Controller would have to create 4 unicast flows, because the audio data is going to 4 different places. In this case, it would be better to create a multicast flow.

A **multicast** flow 'broadcasts' media across the network, so multiple receivers can subscribe to the media, but the transmitter is only using one of its available flows. Multicast flows can be configured with up to 64 channels (depending on the Dante device type). However, multicast media traffic can propagate throughout an entire network, using up bandwidth on every link in the network. 100Mbps links in particular are easily saturated when large numbers of multicast flows exist (and would be overwhelmed by 1 channel of video). Therefore, multicast flows should only be used when there is a good reason to do so.



**Note:** IGMP snooping must be enabled on network switches that will be carrying Dante video on 1Gbps network infrastructure. Refer to your switch manufacturer's documentation for information about enabling IGMP snooping.

If you subscribe a number of devices to one channel via unicast, Dante Controller will alert you with the following message: "Fanout Configuration detected."

If you then exceed the supported number of transmit flows, any further subscriptions will fail, and the tooltip for the failed subscription will read 'No more flows (TX): transmitter cannot support any more flows, reduce fan out by unsubscribing receivers or switching to multicast.'

## Messages on Startup

Error Message	Meaning & Actions
'Dante Controller was unable to connect to the Dante Control and Monitoring manager. Dante Controller cannot function without this connection. This problem is most likely caused by the Dante Control and Monitoring ('conmon') service or daemon stopping unexpectedly. Click OK to restart Dante Controller. You may also need to manually restart the Dante Control and Monitoring service, or the computer, if the problem reoccurs.'	<p><b>Affects:</b> Windows only.</p> <p><b>Meaning:</b> The 'Dante Control and Monitoring' service is not responding. This can occur after a computer has been in sleep mode.</p> <p><b>Action:</b> Restart Dante Controller. In the event that does not work, reboot your PC, or restart the Dante Control and Monitoring service via Control Panel &gt; Administrative Tools &gt; Services.</p>
'The installed version [x] of the Dante Control and Monitoring service ('ConMon') is out of date. This version of Dante Controller requires ConMon version [x] or later. Please reinstall Dante Controller to resolve this issue. Dante Controller will now exit.'	<p><b>Affects:</b> Windows and macOS.</p> <p><b>Meaning:</b> Usually this is because the required service (ConMon) that is installed with Dante Controller has been overwritten with an older version by another Dante software product installation.</p> <p><b>Action:</b> Reinstall Dante Controller. This will update the ConMon service to the latest version.</p>
'The installed version [x] of the Dante Discovery service is out of date. This version of Dante Controller requires Dante Discovery version [x] or later. Please reinstall Dante Controller to resolve this issue. Dante Controller will now exit.'	<p><b>Affects:</b> Windows only.</p> <p><b>Meaning:</b> Usually this is because the required service (Dante Discovery) that is installed with Dante Controller has been overwritten with an older version by another Dante software product installation.</p> <p><b>Action:</b> Reinstall Dante Controller. This will update the Dante Discovery service to the latest version.</p>

## Computer Configuration Checklist

Before installing Dante Controller, you must be logged in to your computer as a user with administrator privileges.

To be correctly configured for use with a Dante network, the computer should have:

- Dante Controller installed
- The correct network interface/s selected
- The correct IP addresses in use


### Third-party firewall configuration

- Standard Windows and Mac firewalls are typically configured on installation.
- Third party firewalls will need to be manually configured.

If your computer has a third-party firewall installed, please read the Dante Controller and Dante Virtual Soundcard User Guides for detailed information about firewall requirements and configuration.

## Troubleshooting Dante IP Address Configuration

All devices in a Dante network, including Dante Virtual Soundcard, must be using IP addresses from the same network. When using Dante Virtual Soundcard or Dante Controller, your PC or Mac must be connected to the Primary and/or Secondary Dante network, and must have a correct IP address.

 **Note:** If a device name is shown in red, it means Dante Controller has automatically detected an error condition, such as an IP address configuration issue, or the device has entered failsafe. Double-click the red device name to see more information.

### Correct IP configuration

Dante hardware devices are set to obtain their IP address automatically from the network. They will either:

- Automatically assign themselves an address in the range 169.254.\*.\* (172.31.\*.\* for the secondary network if present), or
- Obtain an IP address from a DHCP server if it is present on the network

Your PC or Mac TCP/IP network configuration set should be set to 'Obtain an IP address automatically'. This way it will automatically acquire a Link Local automatic IP address in the same network as other Dante devices. If a DHCP server is present, the computer and Dante devices will all acquire their IP addresses via DHCP.

### Possible IP network configuration mistakes

Possible network configuration errors are listed below. Dante Controller will try to automatically detect these. If detected the offending device will be displayed in red.

#### Incorrect PC/Mac IP configuration

- Accidentally having multiple network interfaces with addresses in the same subnet
- If your secondary network is using Link Local (no DHCP server), all devices on that network will be in the 172.31.\*.\* range. The secondary network interface for the computer must be manually configured (using static IP addressing) to the same range.

#### Incorrect general IP configuration

- Accidentally having multiple DHCP servers on the same network  
Unusual - for example, someone may have a PC connected to the network with a DHCP server running that they're not aware of.
- Incorrectly configured static IP addresses  
You shouldn't typically need to configure static IP addresses at all. If for some reason you do, it must be in the same subnet as the rest of the network.

#### Incorrect redundant network configuration

Setting up a redundant network is described in '[Routing Audio](#)'. There are a few ways to incorrectly configure a redundant network. More than one of these can be present at the same time.

- Connecting the secondary interface of a Dante device to the primary network

Most commonly by either misunderstanding how redundancy works, and using only one switch with all cables connected to it; or correctly using two switches or networks, but accidentally connecting one secondary cable to a primary network switch

- Joining the primary and secondary Dante networks

By connecting primary and secondary switches, or perhaps just using one switch.

- Multiple interfaces on the same device using the same IP address subnet


Possibly by having the same DHCP server on both primary and secondary networks, or both DHCP servers configured to serve the same IP addresses. Also, mixing DHCP and Link Local on the same network can cause issues. It is often necessary to have all devices and the computer on either DHCP or Link Local.

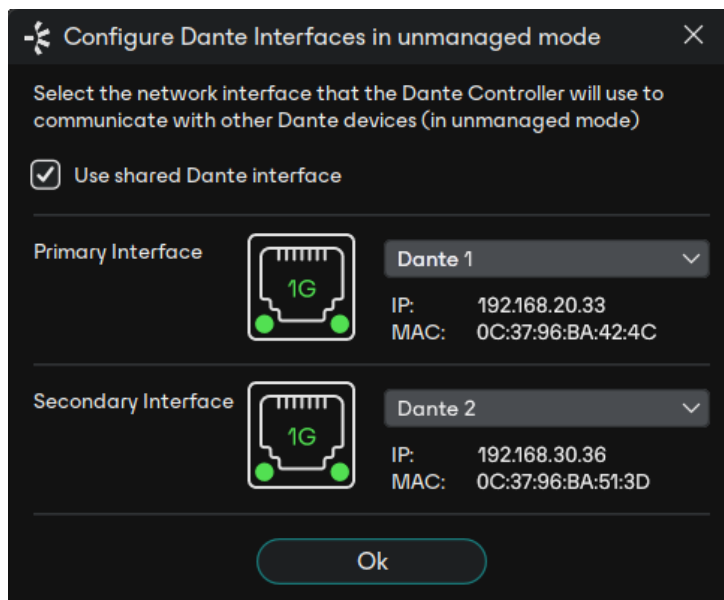
## What are the symptoms of using the wrong network interface on my computer?

If you have more than one wired network interface, and Dante Controller is not using the interface the rest of the Dante devices are connected to:

- Dante Controller cannot see any Dante devices
- Dante Virtual Soundcard is not sending or receiving any audio when it is expected to

## How do I check which network interfaces Dante Controller is using?

- The selected network interfaces can be viewed or changed via the 'interface selection' button  in the Network View toolbar of Dante Controller.



- If the Dante network is standalone and does not have a DHCP server installed, the addresses should be in the range 169.254.\*.\*
- If the Dante network is using a DHCP server, the IP addresses should conform to the addressing scheme it is using (as shown in the image above)

## How do I check IP addresses for all devices on my network?

- Use the Device Info tab to view the IP addresses of all the devices on your network.

Routing		Device Info		Clock Status		Network Status		Events
Device Name ^	Model Name	Product Version	Dante Version	Device Lock	Primary Address	Primary Link Speed	Secondary Address	Secondary Link Speed
Amp-Lobby	D10	3.10.0	4.1.3.5	<input type="checkbox"/>	192.168.20.29	100Mbps	N/A	N/A
Amp-Main	D8	3.0.0	4.0.9.1	<input type="checkbox"/>	192.168.20.33	100Mbps	N/A	N/A
Desk-Main	Nexus 6	1.0.0	4.2.3.13	<input checked="" type="checkbox"/>	192.168.20.22	1Gbps	N/A	N/A

- The Primary Address of all devices should follow the same IP address scheme. Same for secondary addresses...
- Note that some older Dante devices or devices running older firmware may not show this information.

## Troubleshooting Switch Configuration and Cabling

Cables are the most vulnerable part of a network system. If you suspect cabling issues, check for:

- Faulty or manually terminated cables
- Unplugged /badly connected Ethernet cables
- Incorrectly configured switches
- Dante devices removed or turned off

### Symptoms of switch or cabling issues

- You cannot see (some) devices in the Dante Controller network view
- Dante Controller shows orange “unsuccessful subscription” icons, which usually means a device that was present earlier is now missing
- Faulty cables can lead to intermittent faults, which may be heard as dropped samples or “cracks” in the audio
- Dante devices may appear and disappear in Dante Controller

### Switch and Cabling Checklist

- Are all the connected link/status lights on the switch lit, or flashing as expected?
  - Is the switch powered on?
  - Is the cable correctly plugged in at the switch and the PC or equipment?
- Is the switch correctly configured?
  - Perhaps QoS or VLANs have been incorrectly set up
- Are you using a switch from another application with an unchecked or tested configuration?
  - Consult the switch manual and check the switch configuration



**Note:** Video (Dante AV) devices require at least 1Gbps ports and cables.