

Dante Updater

User Guide



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About Audinate

Audinate® was founded with a vision to revolutionize professional and commercial audio for the 21st century. Audinate's award winning Dante® audio over IP networking solution is the worldwide leader and used extensively in the professional live sound, commercial installation, broadcast, public address, and recording industries.

About Dante

Dante is the de facto standard digital media networking solution, using standard IP infrastructure to network devices, and making interoperability easy and reliable. It distributes uncompressed, multi-channel digital media via standard Ethernet networks, with near-zero latency and perfect synchronization.

It's the most economical, versatile, and easy-to-use media networking solution, and is scalable from simple installations to large-capacity networks running thousands of channels. Dante can replace multiple analog or multicore cables with a single affordable Ethernet cable to transmit high-quality multi-channel media safely and reliably. With Dante software, the network can be easily expanded and reconfigured with just a few mouse clicks. Dante technology powers products available from hundreds of partners around the world.

For more information, please visit the Audinate website at www.audinate.com.



Overview

Dante Updater is a desktop application that allows you to update the firmware and software (collectively referred to as 'firmware') on Dante hardware devices.

The application is linked to an online database or 'Library', containing firmware update files for products from multiple manufacturers. When the application is connected to a Dante network, it scans the network and identifies the firmware versions for each discovered Dante device.

If newer firmware for any device is available in the Library, you can update the device using the online file, or download the firmware file to your local machine for <u>offline use</u>. If firmware is found for multiple devices in your network, you can choose to update all devices (up to 50 devices at a time) simultaneously.

You can always easily control which devices get updated.

Dante Updater can also import firmware files from your computer, which can be used to update devices for which firmware is not available in the online Dante Updater Library, roll back firmware to older versions, and reinstall firmware for cases where the installed firmware has become corrupted.



About the Online Firmware Database

The Dante Updater online firmware database is maintained by Audinate, and populated by licensed Dante manufacturers. When a manufacturer produces new Dante firmware for one of their products, they can securely upload it to the database. If there is already existing firmware in the database for that product, it is replaced by the new file.



Note: All files are validated when they are uploaded to ensure they are valid Dante firmware files, but it is the responsibility of the manufacturer to ensure the quality of the firmware and that it is fully compatible with the host device.

As soon as new firmware is added to the database, it becomes available to the Dante Updater application in the Library tab (assuming Dante Updater is connected to the Internet) and you can then update your compatible devices to that firmware version.

Updating Devices on Offline Networks

If you want to update devices on a Dante network that is not connected to the Internet, you can download the files ahead of time to your computer, move the computer to the offline network, and then update the devices using the downloaded files.

Dante Updater displays a list of all online firmware files in the Library tab, so you can choose which files to download, or even download the entire database if you are not sure which files you will need.



About Device Discovery

When you launch Dante Updater, it automatically collects information about each Dante device it can 'see' on the network, including its device name, model name, manufacturer and Dante firmware version, and displays the list of discovered devices in the Home tab.



Note: Devices must be powered up and functioning normally to be discovered.

If devices are added to or removed from the network when Dante Updater is running, the list is updated dynamically.

For non-DDM networks, Dante Updater must be connected to the same IP subnet as the Dante devices.

Dante Updater will also identify if you have Audinate software on your network for which there is a new version available.

Device Discovery on DDM Networks

When you are logged into a DDM (Dante Domain Manager) network, Dante Updater is able to discover all devices in the currently-selected domain, regardless of their IP subnets. Only one domain can be viewed at a time, and the domain permissions configured in DDM determine which domains can be viewed and updated.

For more information about DDM, please see the Audinate website.



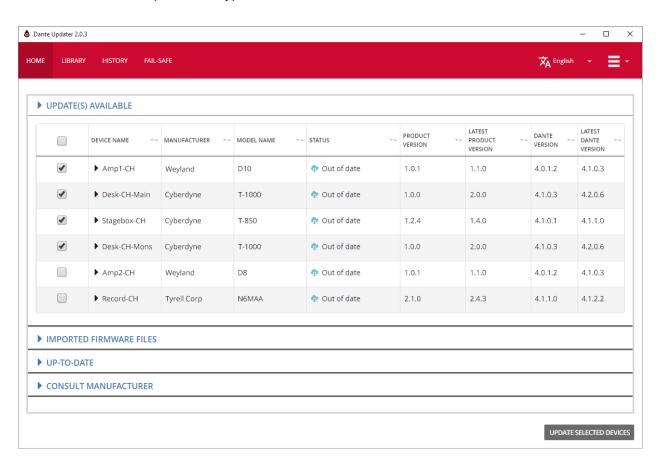
Updating Devices

Use the 'Home' tab to update your Dante devices.

Click the arrow icons to expand and collapse the sections.

Updates Available

The **Updates Available** section of the Home tab lists devices that have been discovered on your Dante network which are eligible for a firmware update (devices for which there is new or imported firmware available in the Dante Updater Library).



To update all eligible devices:

- 1. Click the top checkbox to select all the eligible devices.
- 2. Click Update Selected Devices.
- 3. When the update is complete, reboot the updated devices.

To update a subset of the eligible devices:

- 1. Click the individual checkboxes for the devices that you want to update.
- 2. Click Update Selected Devices.
- 3. When the update is complete, reboot the updated devices.



Imported Firmware Files

This section is only visible when Allow Imported Firmware is selected in the Advanced Settings.

More information

Up-to-Date

The **Up-to-Date** section of the Home tab lists devices which are on the latest firmware versions currently available in the Dante Updater Library.



Note: The device manufacturer may have newer firmware available which has not yet been uploaded to Dante Updater.

Consult Manufacturer

The **Contact Manufacturer** section of the Home tab displays devices for which there is no firmware available in the Dante Updater Library.

About Product and Dante Versions

Product Version

The Product Version is set by the manufacturer, and is typically used to identify the overall firmware version for the host device (which may incorporate non-Dante firmware or software).

- The 'Product Version' column displays the product version of the firmware currently on the device.
- The 'Latest Product Version' column displays the product version of the latest firmware file in the Library.

Dante Version

The Dante Version is set by Audinate, and is used to identify the version of the firmware on *the Dante module* in the host device.

- The 'Dante Version' column displays the Dante version of the firmware currently on the device.
- The 'Latest Dante Version' column displays the Dante version of the latest firmware file in the Library.

Updating Devices in DDM (Dante Domain Manager) Networks

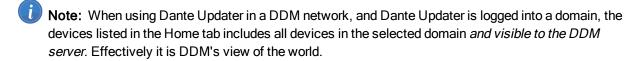
To update devices on a DDM network:



- 1. In Dante Controller, ensure you are currently logged into the DDM server.
- 2. Open Dante Updater.
- 3. Enter your DDM password. The DDM IP address and the currently-selected domain is displayed for reference.
- 4. Click Login.
- 5. To change domains, use the drop-down menu in the menu bar.



- 6. Select the devices that you want to update, or click Select All.
- 7. Click Update Selected Devices.



If any of the devices are unable to resolve the IP address of the computer running Dante Updater, or the computer is unable to resolve the IP addresses of any of those devices (for example, if the computer is on an IP subnet which is not configured to allow routing to the devices) the firmware update process for those devices will fail.

To ensure that Dante Updater can update all devices in the Updates list when logged into a domain, run Dante Updater on the same computer that is running DDM, or on a computer in the same IP subnet as the DDM server.

Alternatively, configure the network to ensure that the Dante Updater computer is able to resolve the IP addresses of all the devices that you want to update, and vice versa.

Home Tab Columns

Click the sort icons — to sort a section by that column.

Checkboxes

Use the checkboxes to select the devices that you wish to update.

Device Name

The current device name (which can be the default name, or a new name set in Dante Controller).

Click the arrow icon ▶ to expand or collapse further information about the device.

Manufacturer

The name of the manufacturer of the device.

Model Name

The manufacturer's model name for the device.

Status

The current firmware status of the device.



Product Version

The overall version number applied by the Manufacturer to the firmware package installed on the device.

Latest Product Version

The product version of the latest update file in the Dante Updater Library.

Dante Version

The version number applied by Audinate to the firmware on the device's Dante module or chip.

Latest Dante Version

The Audinate version of the latest update file in the Dante Updater Library.



Note: Some sections display a subset of these columns.

Imported Firmware Files

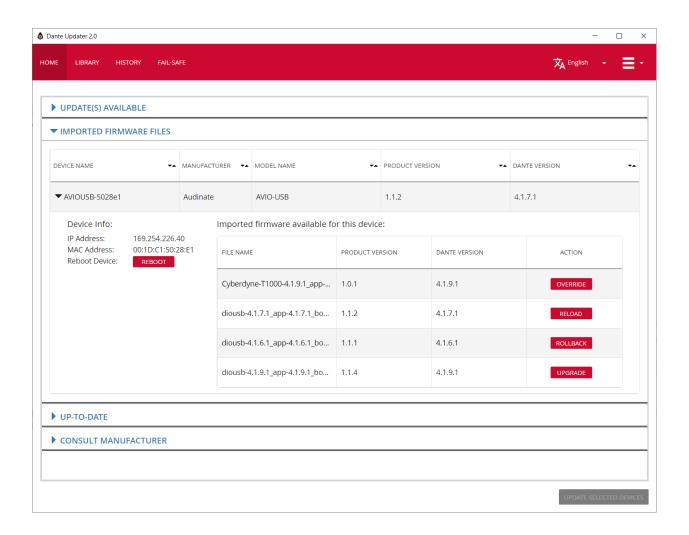
The **Imported Firmware Files** section of the Home tab is visible when 'Allow Imported Firmware' is selected in the Advanced Settings.

This section lists devices that have been discovered on your Dante network which are compatible with firmware files that have been imported into Dante Updater.

The actions available for each device will vary depending on the versions and IDs in the imported file, the versions and IDs of the existing firmware on the device, and the options selected in the Advanced Settings.

Multiple actions may be available for a device, if multiple imported firmware files in the Library are compatible with it.





Upgrade

Use Upgrade to install newer firmware on your Dante devices.

This action is available if any imported files:

- 1. Are fully compatible with the device (identical device, manufacturer and model IDs), and:
- 2. Have higher Dante and/or Product versions than those on the target device

Rollback

Use Rollback to downgrade your Dante devices to older firmware.

Important: Rolling back to old firmware versions may cause compatibility or configuration issues.

This action is available if any imported files:

- 1. Are fully compatible with the device (identical device, manufacturer and model IDs), and:
- 2. Have lower Dante and/or Product versions than those on the target device

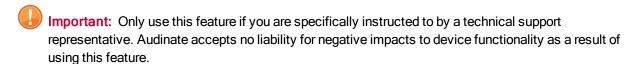




Note: This action requires that 'Allow rollback to previous versions' is selected in <u>Advanced</u> Settings.

Override

Use Override to force 'non-matching' firmware to a Dante device.



This action is available if any imported files have the same device ID (for example, Brooklyn II, Broadway or Ultimo) as the target device.

Override ignores manufacturer and model IDs, and firmware versions.



Note: This action requires that 'Allow override of device matching' is selected in Advanced Settings.

Reload

Use Reload to reinstall the firmware that is already on the device - for example, if the installed firmware has somehow become corrupted.

This action is available if any imported files:

- 1. Are fully compatible with the device (identical device, manufacturer and model IDs), and:
- 2. Have identical Dante and Product versions as those on the target device



Downloading Firmware for Offline Use

If the devices that you want to update are on a Dante network which is not connected to the Internet, you can download the required firmware files from the database ahead of time, and then move the computer to the offline network to update the devices.

To download firmware from the database:

- 1. Select the 'Library' tab.
- 2. Select the files that you want to download.

In the 'Audinate Library Files' section:

- Files marked with a check icon have already been downloaded to your computer.
- Files marked with a blue cloud icon are available for download.
- A gray cloud icon indicates that files cannot be downloaded because the firmware database cannot be contacted.

3. Click **Download Firmware**.

The firmware files are then stored locally on your computer and can be used to update devices on an offline network.

When you next connect to the Dante network, in the Home tab, Dante Updater will identify the discovered devices that can be updated using the downloaded files.

To search the 'Audinate Library Files' section, enter text in the Search field.

Tip: The 'Device Last Discovered' column indicates the date and time a physical device compatible with the listed firmware file was last discovered on a Dante network. This enables you to scan an offline network to determine which firmware files you will need in order to update the network.

First connect to the offline Dante network, to collect information about the devices in the network. Then connect to an online network to download firmware files for the recently-discovered devices.

To clear discovered devices, select the relevant entry and click **Clear Discovered Device**.

To delete all downloaded firmware files from your computer, click **Delete All Downloads**.

Library Tab Columns

Click the sort icons ** to sort the list by that column.

Audinate Library Files

Checkboxes

Use the checkboxes to select files for downloading.

Manufacturer

The name of the manufacturer of the file.



Model Name

The manufacturer's model name applied to the file.

Status

The download status of the file:



The file is available for download



The file has already been downloaded



The file cannot be downloaded, because the server is unreachable

Product Version

The version number applied by the Manufacturer to the file.

Dante Version

The version number applied by Audinate to the file.

Release Date

The date the file was added to the Dante Updater Library.

Device Last Discovered

The last time a compatible device was discovered on a Dante network.

Imported Files

The Imported Files list is visible in the Library tab when 'Allow Imported Firmware' is selected in the Advanced Settings.

File Name

The name of the imported file.

Model Name

The manufacturer's model name applied to the file.

Dante Version

The version number applied by Audinate to the file.

Date

The date the file was imported.

Delete File

Click the delete icon to delete the file from the Library.



Importing Firmware

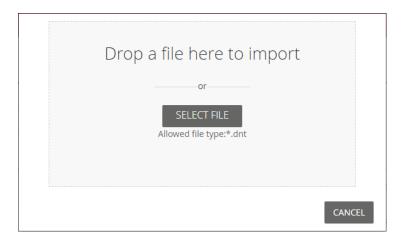
In addition to installing firmware that is available in the Dante Updater Library, you can use Dante Updater to import and install firmware that you have downloaded from a manufacturer's website, or acquired elsewhere.

The 'Allow Imported Firmware' option in the Advanced Settings must be enabled before you can import

Firmware import requires an active Internet connection, to enable file integrity validation.

To import firmware:

- 1. Select the 'Library' tab.
- 2. Click the arrow icon to expand the Imported Files panel.
- 3. Click Import Firmware.
- 4. Drag and drop the firmware file onto the file selector (shown below), or click Select File to browse to the relevant file.



When the file has finished importing, it will appear in the 'Imported Files' list in the Library.

If the selected file is structurally or otherwise invalid, or if you are not connected to the Internet, you will see an error message and the file import will fail.

To delete an imported file from the Library, click the trashcan icon:

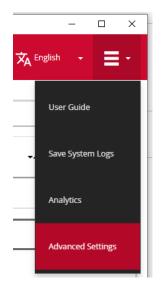


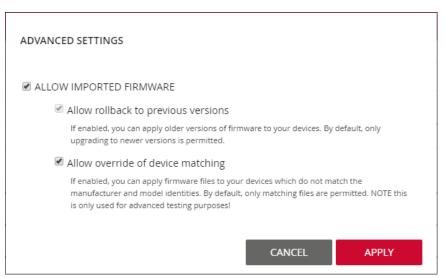
Note: You cannot use Dante Updater to install non-Dante firmware to a host device.



Advanced Settings

To open the Advanced Settings, click the burger menu at the top right of the interface.





The Advanced Settings includes the following options.

Allow Imported Firmware

Select this option to enable the importing of firmware files from outside Dante Updater (for example, files you have downloaded from a manufacturer's website).

Imported files are added to the Dante Updater Library and can be used to update Dante devices on your network. They remain in the Library until they are deleted.

Selecting this option adds an 'Imported Firmware Files' section to the <u>Home tab</u>, and also enables the following secondary options.

Allow Rollback to Previous Versions

With this option selected, Dante Updater can install firmware with lower Dante and/or Product versions than those on the target device(s).

Allow Override of Device Matching

With this option selected, Dante Updater can install firmware with different Manufacturer and Model IDs than those on the target device(s).





Important: Only use this feature if you are specifically instructed to by a technical support representative. Audinate accepts no liability for negative impacts to device functionality as a result of using this feature.



History

The History tab displays a log of all firmware updates performed using your computer.

The list includes each update event (successful or otherwise), along with associated information about the event.

- To search the history, enter text in the Search field.
- To export the log as a CSV file, click **Export History**.
- To clear all events, click Clear History.

History Tab Columns

Click the sort icons The list by that column.

Date

The date of the event. Hover over the date to see the time of the event.

Device Name

The current device name (set in Dante Controller).

Manufacturer

The name of the manufacturer of the device.

Model Name

The manufacturer's model name for the device.

Update Status

The update status of the event (Successful / Failed).

Updated Product Version

The manufacturer product version that the device was updated to.

Previous Product Version

The manufacturer product version that the device was updated from.

Updated Dante Version

The Dante firmware version that the device was updated to.

Previous Dante Version

The Dante firmware version that the device was updated from.



Domain

The DDM domain in which the device is currently enrolled. 'Unmanaged' indicates that the device is not enrolled in any domain.

IP Address

The IP address of the device.



Restoring Fail-safe Devices

Fail-safe devices are devices for which the firmware image stored on the board has become corrupted. This can occur if a firmware update process is interrupted due to a power failure or a network connection issue.



Note: Devices in fail-safe advertize their state only to their local IP subnet. In order for Dante Updater to identify when a device is in fail-safe, the device and the computer running Dante Updater must be in the same subnet.

Devices that are in fail-safe are displayed in red text in the 'Updates Available' section of the Home tab.



To restore a fail-safe device, click the **Restore** button for the device.



Note: If the Restore button is inactive, it may be because:

- The device has very recently gone into fail-safe, and it does not yet have a network interface available (you can hover over the button to check this). The button should become active after about 20 seconds. Or:
- The fail-safe images have not been downloaded.

About Fail-safe Images

The firmware files that are used to restore fail-safe devices are called 'fail-safe images'. Typically, the fail-safe image will be an older version of the firmware that was last installed on the device. Once a device has been restored, it can be updated to the latest available firmware version using Dante Updater.



Note: Dante Updater does not support roll-back to older firmware versions. If your device was on legacy firmware and you restore it from fail-safe, it may be restored to a newer version of firmware than was on the device previously. If you need to roll back to the legacy firmware version, use Firmware Update Manager.

Downloading Fail-safe Images



Important: If your network is not connected to the Internet when a device goes into fail-safe and the fail-safe images have not already been downloaded to your computer, you will not be able to use Dante Updater to restore the device.



For this reason, Dante Updater will prompt you at installation to download the full set of fail-safe images, so that they will be available for use in offline networks. It will also prompt you to update the fail-safe images when new versions are published to the Dante Updater online database.

To check if you have the latest fail-safe images downloaded, go to the Fail-safe tab.

If your Dante network is connected to the Internet and a device goes into fail-safe, when you initiate the fail-safe restore process, Dante Updater will automatically download the fail-safe images from the database and then proceed with the fail-safe restore process.



System Logs

You may be asked by Audinate Technical Support to provide system logs for Dante Updater.

To save the system logs, click the burger menu at the top right of the UI, and select **Save System Logs**. Click **Show Folder** to open your file browser at the log location.

Bug Reports & Feedback

To report a bug, or provide any other feedback, please email du-feedback@audinate.com.

To anonymously report a bug, open the log files panel and click **Report to Audinate**.



Troubleshooting

Device Fails to Update

Error message: Failed - reboot device and try again

If you initiate a device update operation but the device fails to update and you see the error message above, this may be because port 6969 on your computer has been blocked by your firewall or an anti-virus program, which prevents the device from requesting the new firmware file from Dante Updater.

To resolve this issue, ensure port 6969 is open in your firewall and/or anti-virus program.

Device Fails to Restore from Fail-safe

Error message: Failed - Unfortunately we have failed to recover the device

If you initiate a restore operation for a device in fail-safe, but the device fails to restore and you see the error message above, it may be port 69 on your computer has been blocked by your firewall or an anti-virus program, which prevents the device from requesting the fail-safe file from Dante Updater.

To resolve this issue, ensure port 69 and 6969 are open in your firewall and/or anti-virus program.

Can't Restore Device from Fail-safe

If you are unable to initiate a restore operation for a device in fail-safe, it may be because you have not downloaded the latest fail-safe images from the Dante Updater server.

See Restoring Fail-safe Devices for more information.

No Firmware Available for my Device

If your device appears in the 'Consult Manufacturer' list, this means that Dante Updater does not have any matching firmware for the device in its database. Typically this is because the device manufacturer has not uploaded any firmware for the device (or provided a notification about available firmware).

Please contact the device manufacturer to find out why this is the case.

Update is Available, But No File is Provided (Only a URL)

If your device appears in 'Updates Available', but a website URL is provided instead of a firmware file, this is because the manufacturer has chosen not to use Dante Updater for firmware management. Typically this is because the device firmware must be managed using a proprietary utility.



Devices Not Appearing in Dante Updater

If some of the devices in your Dante network are not appearing in Dante Updater, this may be because Dante Controller and/or the Dante network is not correctly configured.

See the following topics in the Dante Controller user guide for more information:

- Configuring Dante Controller
- Troubleshooting Dante IP Address Configuration
- Troubleshooting Switch Configuration and Cabling

You can also refer to the Network Basics section of the FAQs at audinate.com.

Devices Not Appearing in Dante Updater (Dante Domain Manager Network)

If you are using Dante Updater in a DDM network with multiple IP subnets and some devices on the network are not appearing in Dante Updater, this may be because the computer is on an IP subnet which is not configured to allow routing to the devices.

See Updating Devices in DDM (Dante Domain Manager) Networks for more information.

Devices Not Appearing in 'Updates Available'

If a device is not appearing in the 'Updates Available' list, this may be because:

- The device is already up-to-date in which case it will appear in the 'Up-to-date' list instead
- The device manufacturer has not provided any firmware files for the device in which case it will appear in the 'Consult Manufacturer' list instead

Also see 'Devices Not Appearing in Dante Updater' above.

Device Not Supported

If a device is not supported by Dante Updater, it will appear in the Consult Manufacturer list, with a status of 'End-Of-Life'.

This is typically because the device uses a discontinued legacy Dante platform, or because the device firmware is too low to be updated by Dante Updater.

You can use Dante Firmware Update Manager to update these devices.



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