



HY144-D Firmware Update Guide

Thank you for choosing a Yamaha product.

This guide explains how to update the built-in Dante module firmware (Dante firmware) integrated in the HY144-D.

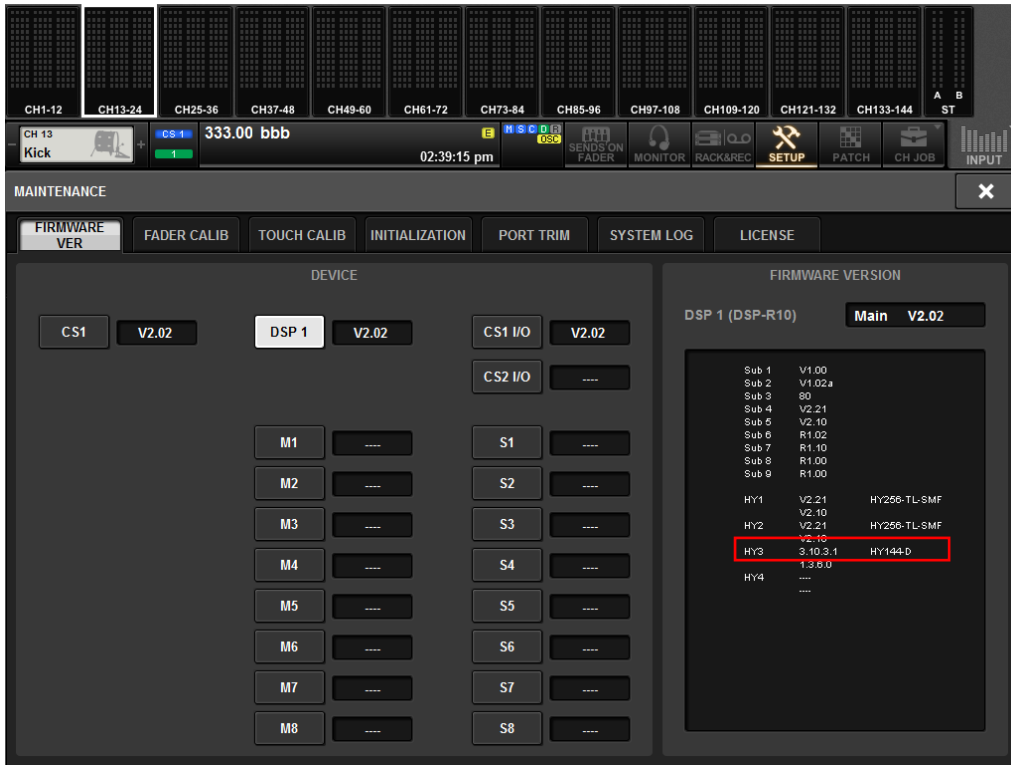
■ Precautions (Please be sure to read this section first!)

- The user assumes full responsibility for the update.
- Update the firmware components one unit at a time.
- Please note that the device may be damaged if you fail to follow these instructions properly, or turn off the device or disconnect the cable while the update is in progress.
- If the update fails, and the device still does not operate correctly even after you execute the update once again, please contact your Yamaha dealer.
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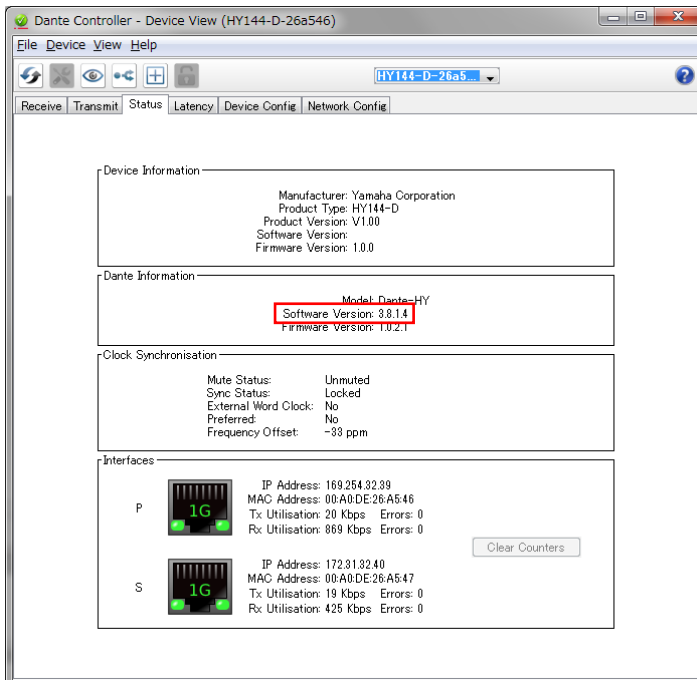
■ Checking the version number

- You can check the Dante firmware version number from the FIRMWARE VERSION screen of CS-R10/CS-R10-S/CSD-R7/CS-R5/CS-R3, RIVAGE PM Editor or Dante Controller of Audinate.

PM10 (FIRMWARE VERSION screen of the MAINTENANCE)



Dante Controller (Device View)



■ Preparing for the update

You will need the following items ready to execute the update procedure.

- A Windows or a Mac computer equipped with the following conditions:

OS	Windows 8.1 or Windows 10 When using Dante Firmware Update Manager: OS X 10.11.5, macOS 10.12, macOS 10.13, macOS 10.14 When using Dante Updater: macOS 10.14, macOS 10.15, macOS 11
CPU	Intel Core i3 or higher
HDD	250MB or more
Connector	An Ethernet connector that supports a data transfer rate of 100Mbps or higher

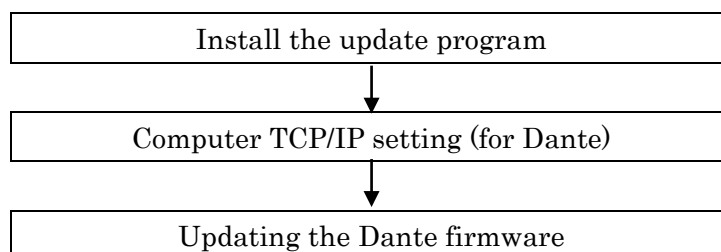
- An Ethernet cable (CAT5e or higher recommended. Straight or cross.)
- The Dante firmware
Download the latest program from the Yamaha Pro Audio global website (the following URL).
<http://www.yamahaproaudio.com/>
- Dante Controller
You can download Dante Controller from the following Download page at the Audinate website.
Version 4.4.0.8 or later is required for macOS 10.15 or later.
<https://www.audinate.com/products/software/dante-controller>

■ Update procedure sequence

Update each firmware component in the following sequence.

To update more than one HY144-D, configure “Computer TCP/IP setting (for Dante)” and perform the steps for “Dante firmware update” one by one.

There are also two ways to update Dante firmware: "When Using the Dante Firmware Update Manager" and "When Using the Dante Updater."



NOTE

- Make sure to not use the Dante Firmware Updater Manager for the failsafe recovery (11 page). It cannot be restored properly in the HY144-D Dante firmware V4 or later.
- For details of the Dante Firmware Update Manager, refer to “AUD-MAN-Firmware Update Manager” stored in the compressed file folder.
- Dante Updater is installed automatically when you install Dante Controller. For details on Dante Updater, refer to the Dante Updater User Guide of Audinate.

■ Install the Dante Firmware Update Manager

When using Dante Updater, this step may be skipped.

Double-click the Dante Firmware Update Manager installer downloaded in “Preparing for the update” (Windows: DanteFirmwareUpdateManager-x.x.x.exe, Mac: DanteFirmwareUpdateManager-x.x.x.dmg) and follow the on-screen instructions to install the firmware.

x.x.x represents the version number of the Dante Firmware Update Manager.

In addition, extract the Dante firmware (extension: .dnt) from the compressed file.

The Dante firmware will not work correctly if the path contains any characters other than single-byte alphanumeric characters, "-" (hyphen), or "_" (underscore). You must save the firmware update file in a directory whose name contains only single-byte alphanumeric characters, "-" (hyphen), or "_" (underscore). (E.g., C:\temp)

NOTE

- The “Windows Security” dialog box may appear. In such case, click [Install this driver software anyway].
- You may be prompted to restart the computer after the installation is complete. Before proceeding to update, restart the computer.
- When installing the Dante Firmware Update Manager, temporarily disable any running anti-virus software.
- Use Dante Updater, which is automatically installed with Dante Controller 4.4.0.8 or later for macOS 10.15 or later.

■ Computer TCP/IP setting (for Dante)

To update Dante firmware, configure computer TCP/IP settings.

Windows

1. Open the Network and Sharing Center as described below.

Right-click [Start] → [Control Panel], then click or double-click [Network and Sharing Center] or [View network status and tasks].

The “Network and Sharing Center” is displayed.

2. Click [Manage network connection] or [Change Adapter settings] from the “Tasks” list located in the left side of “Network and Sharing Center” window, then double-click [Local Area Connection].

The "Local Area Connection Status" dialog box will be displayed.

NOTE

- The "User Account Control" dialog box may appear. Click [Continue] or [Yes].
- If the "Local Area Connection properties" dialog box appears, skip ahead to step 4.

3. Click [Properties].

The “Local Area Connection properties” dialog box will be displayed.

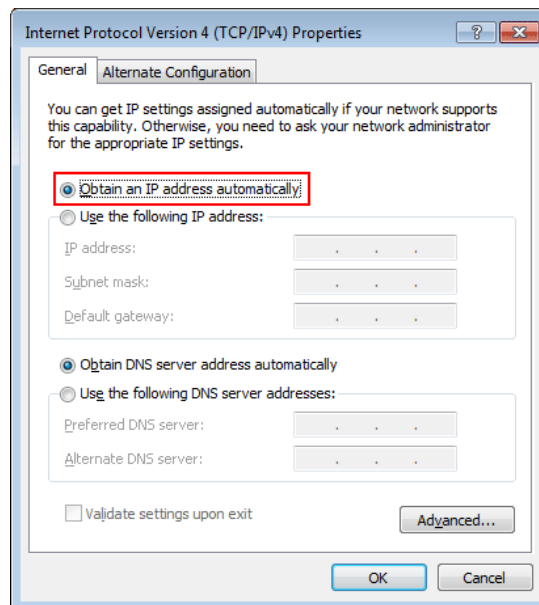
NOTE

- The "User Account Control" dialog box may appear. Click [Continue] or [Yes].

4. Select [Internet Protocol Version 4 (TCP/IPv4)], then click [Properties].

The "Internet Protocol Version 4(TCP/IPv4) Protocol" dialog box will be displayed.

5. Click [Obtain an IP address automatically].



6. Click [OK].

Mac

1. Click [System Preferences] → [Network].

The “Network” dialog box will be displayed.

- 2. Click the service that you want to connect to the device.**
If you're using the Ethernet port that's built into the Mac, click [Ethernet].
- 3. In “Configure IPv4,” choose [Using DHCP].**
- 4. Click [Apply] button, then close “Network” dialog box.**

■ Updating the Dante firmware

For instructions on updating the Dante module firmware integrated in the HY144-D, see the steps described below in the sections "When Using the Dante Firmware Update Manager" and "When Using the Dante Updater." Dante Updater is installed automatically when you install Dante Controller.

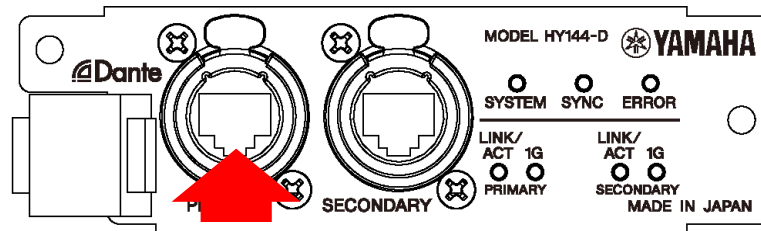
NOTE

- Perform the update with the HY144-D installed to the DSP-R10/DSP-RX/DSP-RX-EX HY card slot 3/4, to the CSD-R7 HY card slot 2/3 or to the RPIO622/RPIO222.

When Using the Dante Firmware Update Manager

1. Connect the Dante [PRIMARY] connector of the HY144-D to the Ethernet connector on the computer using an Ethernet cable.

Be sure to directly connect the computer and the HY144-D, and do not connect any other Dante device to the computer.



2. Turn on the power to the device to which the HY144-D is installed.
3. Windows: Select [Start]→[Audinate]→[Dante Firmware Update Manager]→[Dante Firmware Update Manager] , then right-click and select "Run as Administrator."

Mac: [Application]→[Dante Firmware Update Manager], then double-click "Dante Firmware Update Manager."

The Dante Firmware Update Manager will start up.

Check that the version number is 1.3.2 or higher from the title bar.

NOTE

- The "User Account Control" dialog box may appear. Click [Continue] or [Yes].
- Dante Firmware Update Manager does not work with macOS 10.15 or later. Use Dante Updater installed with Dante Controller.

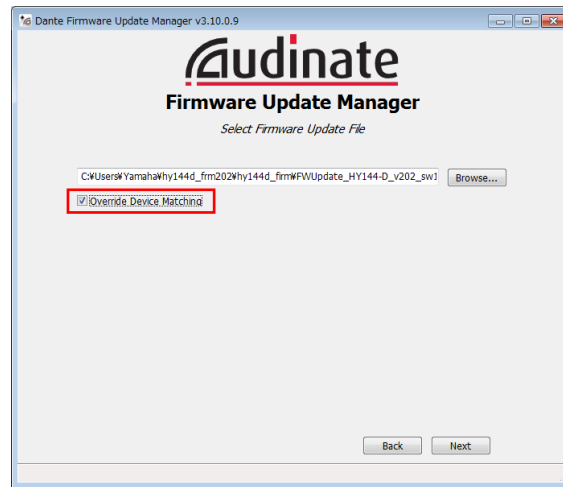
4. If you see the interface selection screen, select the interface card to connect the Dante device.
5. Click [Update Dante Firmware].
6. Click [Browse] and select "FWUpdate_HY144-D_vxxx_swyyy.dnt," then click [Open].
xxx and yyy represent the firmware version number.

NOTE

- The Dante firmware will not work correctly if the path contains any characters other than single-byte alphanumeric characters, "-" (hyphen), or "_" (underscore). You must save the firmware update file in a directory whose name contains only single-byte alphanumeric characters, "-" (hyphen), or "_" (underscore). (E.g.,

C:\temp)

7. (Only when updating from Dante firmware before version 3.8.1.4,) check the [Override Device Matching].



Notice

When [Override Device Matching] is not checked, only devices supported in the update file are displayed. For this reason, updating with wrong files is prevented.

However, it is necessary to check the [Override Device Matching] only when you update the HY144-D Dante firmware from V3.8.1.4 or earlier to V3.10.4.1 or later.

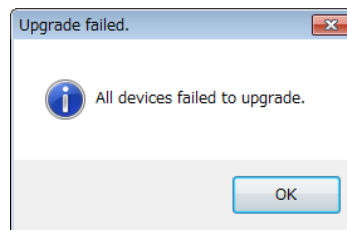
Be sure to confirm the name of the update file to prevent updating with wrong files.

8. Click [Next].

NOTE

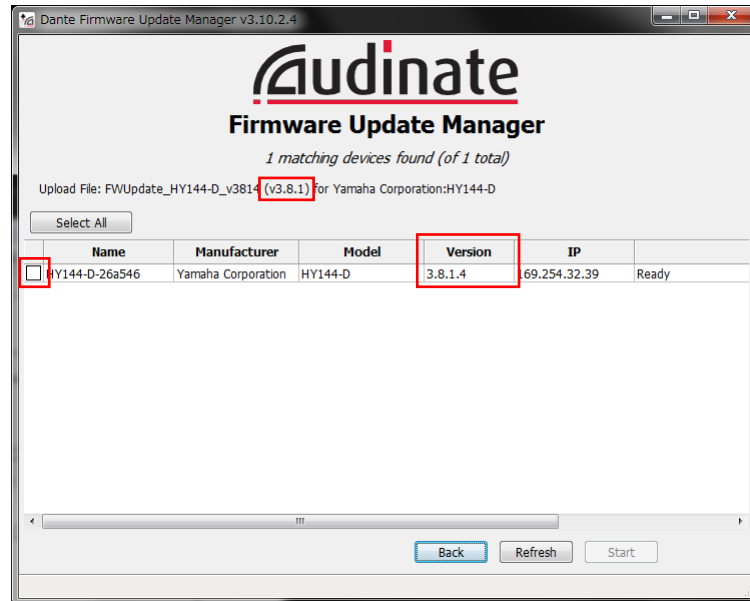
• In some cases the Windows firewall may be blocking the Dante Firmware Update Manager. Select the [Private network] check box, and click [Allow access]. Alternatively, in the Windows firewall, click "Allow programs or functions through the Windows firewall," and if the "fum" checkbox is unselected, select this check box to allow access.

If the update manager is blocked by the Windows firewall, the "Upgrade failed." dialog box appears.



9. Check the HY144-D to update.

Check the version of the update files and the version number indicated in the HY144-D line.



NOTE

• If the HY144-D is not indicated, click [Refresh]. If it is still not indicated, use Dante Controller to check whether the cable might be disconnected or broken, whether the TCP/IP settings are correct or not, and whether the device which is installed the HY144-D is running or not.

10. Click [Start].

The update operation will begin.

“Updating(n/m)” appears in the Status field during updating. “Done” is displayed once update is completed.

Notice

Update takes 2 to 4 minutes. During the update operation, do not turn off the power to the unit or disconnect the cable. If update fails due to disconnection of the power cable during the update, or due to other reasons, the device may become inoperative.

NOTE

• If the update is not completed after 5 minutes, or an update failure indication appears, click X at the upper right corner of Dante Firmware Update Manager to exit the program **without turning off the power of the device to which the HY144-D is installed**, and restart the procedure from the step 3. If update still fails, follow the instructions stated in “About Failsafe Mode” to perform the recovery process.

11. After the update is completed, restart the device which the HY144-D is installed.

Check whether HY144-D is detected on Dante Controller and the device to which the HY144-D is installed.

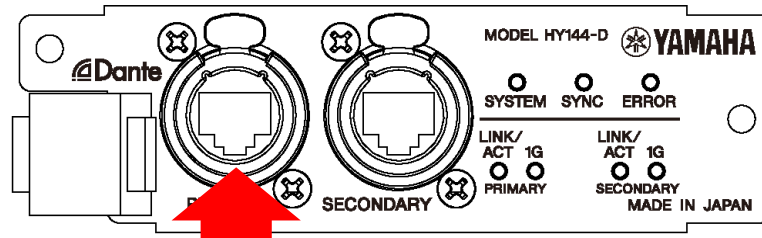
When Using the Dante Updater

This instruction provides only an overview. Refer to the Dante Updater User Guide for details.

<https://www.audinate.com/learning/technical-documentation>

1. Connect the Dante [PRIMARY] connector of the HY144-D to the Ethernet connector on the computer using an Ethernet cable.

Be sure to directly connect the computer and the HY144-D, and do not connect any other Dante device to the computer.



2. Turn on the power to the device to which the HY144-D is installed.
3. Activate Dante Updater, and check [ALLOW IMPORTED FIRMWARE] in [ADVANCED SETTINGS] (first time only).
4. Import HY144-D Dante firmware from [LIBRARY]→[IMPORTED FILES] of Dante Updater (first time only; internet connection required).
5. Update the Dante firmware from [HOME]→[IMPORTED FIRMWARE FILES] of Dante Updater. Click [UPGRADE] of “FWUpdate_HY144-D_****.dnt” which you want to update. Check [I understand that audio will be interrupted], and click [UPDATE NOW].
6. After the update is completed, restart the device which the HY144-D is installed.
Check whether HY144-D is detected on Dante Controller and the device to which the HY144-D is installed.

■About Failsafe Mode

The Dante module integrated in the HY144-D may become unusable due to data corruption if the Dante device is powered-off during a firmware update.

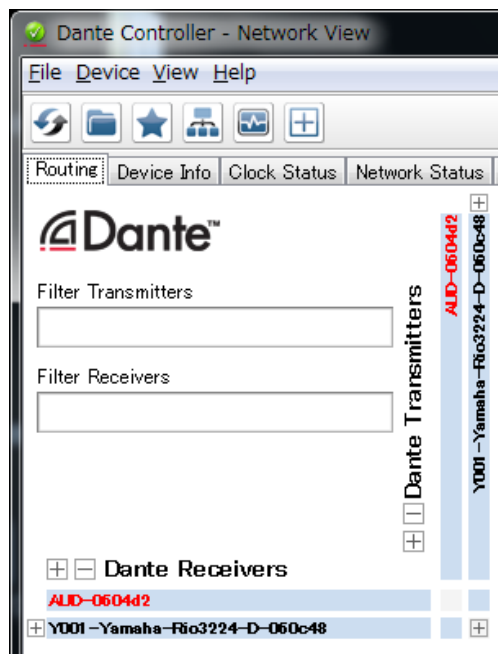
To recover from such a state, the Dante module will enter "failsafe mode."

To restore the Dante module from failsafe mode, a recovery image must be sent from Dante Updater automatically installed with Dante Controller. Make sure to not use the Dante Firmware Updater Manager. It cannot be restored properly in the HY144-D Dante firmware V4 or later.

If the red ERROR indicator of the HY144-D is lit, it may be that the Dante module is in failsafe mode.

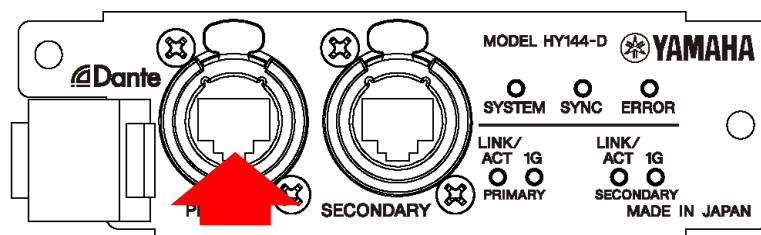
Use Dante Controller to check whether the Dante module is in failsafe mode.

A Dante module that is in failsafe mode is shown as a red device name in the network grid view of Dante Controller (version 3.1.x or later).



The procedure below explains how to recover the Dante module integrated in the HY144-D. Refer to the Dante Updater User Guide for details.

1. Turn off the power to the device to which the HY144-D is installed.
2. Separate the HY144-D from the Dante network.
3. Connect the Dante [PRIMARY] connector of the HY144-D to the Ethernet connector on the computer using an Ethernet cable.
In some cases, an error may occur during recovery if you are going through a network switch. Connect the computer with the HY144-D in a one-to-one connection.



4. Turn on the power to the device to which the HY144-D is installed.
5. Disable all but one of the network interfaces on your computer.
You should also disable the wireless LAN.
6. Activate Dante Updater installed with Dante Controller.
7. Download the latest failsafe recovery image from the Audinate website.
8. Check [ALLOW IMPORTED FIRMWARE] and [Allow override of device matching] in [ADVANCED SETTINGS] of Dante Updater (first time only).
[Allow rollback to previous versions] will be checked automatically.
9. Import HY144-D Dante firmware from [LIBRARY]→[IMPORTED FILES] of Dante Updater. (first time only; internet connection required).
10. Execute the failsafe recovery using the Restore function from [HOME]→[UPDATE(S) AVAILABLE] of Dante Updater.
NOTE
The firmware after the recovery operation is not the latest. "VIRTUAL" is indicated on the RIVAGE PM series consoles and RIVAGE PM Editor. Update the firmware in the next step.
11. Update the Dante firmware from [HOME]→[IMPORTED FIRMWARE FILES] of Dante Updater.
Click [UPGRADE] of "FWUpdate_HY144-D_****.dnt" which you want to update. Check [I understand that audio will be interrupted], and click [UPDATE NOW].
12. After the update is completed, restart the device which the HY144-D is installed.
Check whether HY144-D is detected on Dante Controller and the device to which the HY144-D is installed.

