



QL5/QL1 Firmware Update Guide

Thank you for choosing a Yamaha product.

This guide explains how to update the QL series (QL5 and QL1) firmware and its built-in Dante module firmware.

■ 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.
- Yamaha Corporation owns exclusive copyrights for the QL series firmware, its update program, and the update guide.
- Audinate owns exclusive copyrights for the Dante firmware and its update program.
- It is prohibited to duplicate or modify the firmware, software or guides, in part or in their entirety, without permission from the copyright owner.
- The screen shots in this guide are for use with this update procedure only and may be different from the actual screen shots.
- Dante is a registered trademark of Audinate.
- Windows is a registered trademark of Microsoft ® Corporation in the United States and other countries.
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■ Checking the version number

You may check the QL main firmware version number and the Dante firmware version number from the version field in the SETUP screen.



MAIN	Main firmware version on the QL series unit
DANTE	3 versions of the firmware in the Dante module

■ Preparing for the update

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

- A Windows computer equipped with the following conditions:

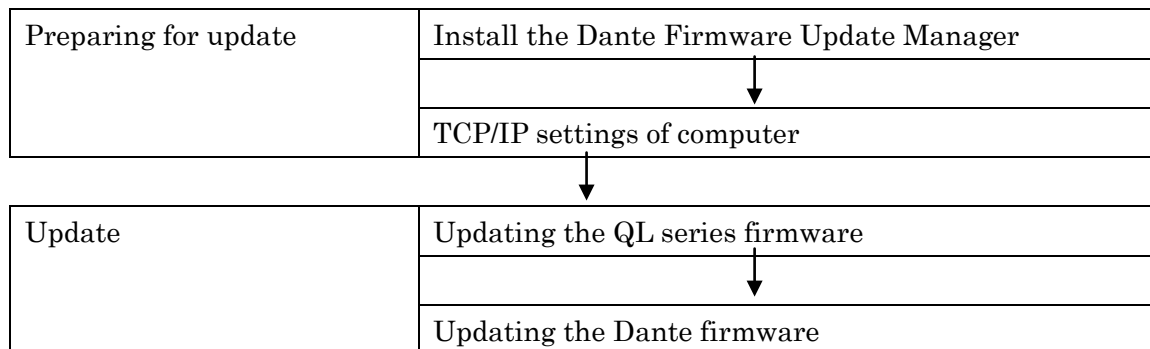
OS	Windows 8/8.1	/Pro
	Windows 7	Ultimate / Professional / Home Premium
CPU	Intel Pentium 1.2GHz or Intel Celeron 1.7GHz or higher	
HDD	250MB or more	
Connector	An Ethernet connector that supports a data transfer rate of 100Mbps or higher	
	A USB connector	

- An Ethernet cable (CAT5e or higher recommended. Straight or cross.)
- Formatted (FAT12/FAT16/FAT32) USB memory
In the QL series unit, memory of 4GB or larger will be formatted in FAT32, and memory of 2GB or smaller in FAT16. For the formatting procedure, refer to “QL5/ QL1 Reference Manual.”
For formatting in a computer, refer to documentations supplied with the computer or its OS.
- The QL series firmware
Download the latest firmware from the following URL.
<http://www.yamahaproaudio.com/downloads/>
- The Dante firmware update program
Download the latest program from the following URL.
<http://www.yamahaproaudio.com/downloads/>

■ Update procedure sequence

Update each firmware component in the following sequence.

If you plan to update multiple QL series units, repeat the procedure described in “Update” for each unit in sequence.



■ Install the Dante Firmware Update Manager

Before you update the Dante firmware, you must install the Dante Firmware Update Manager.

Double-click the Dante Firmware Update Manager installer downloaded in “Preparing for the update” (DanteFirmwareUpdateManager-x.x.x.exe) 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.

■ TCP/IP settings of computer

Before you update the Dante firmware, you must modify your computer's TCP/IP settings.

After the firmware update procedure is complete, return the TCP/IP settings to their original settings.

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

Windows 7

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

Windows 8 and Windows 8.1

[Windows]+[X] → [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.

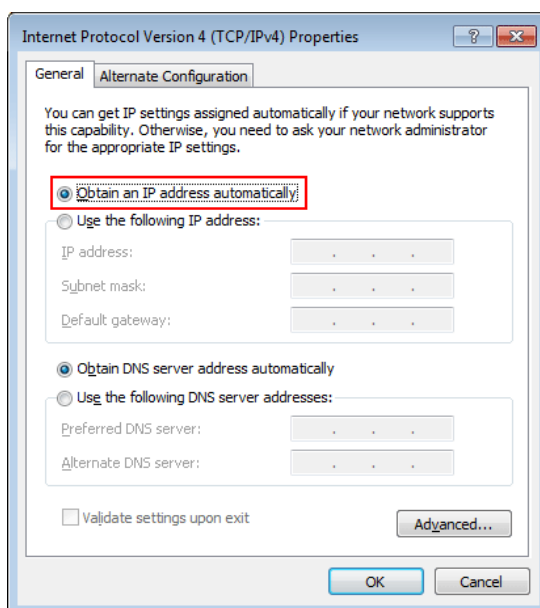
NOTE

- 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].

■ Updating the QL series firmware

Described below are the procedures to update the QL series unit firmware.

Uncompress the compressed file you downloaded in advance.

1. **Save the QL internal data to the USB memory or QL Editor (compatible with the current firmware version) as backup.**

If you are saving the data to the USB memory, open the SAVE/LOAD popup window from the SETUP screen.

2. **Turn off the power to the QL series.**

3. **Remove the cable connected to the Dante connector.**

After initialization, the Dante setup may change from REDUNDANT to DAISY CHAIN. Please check this setting in the DANTE SETUP popup screen, and change it if necessary, after the update is complete and before reconnecting the cables. Otherwise the Dante network may not function correctly.

4. **Connect the USB memory (formatted in FAT12/FAT16/FAT32) to the USB connector of your computer.**

Delete all files when the files extensions.PGM and.BIN exists in the root directory of the USB memory.

5. **Copy the all files (extensions .PGM and .BIN) in the "QL_firm***_USB" (*** indicates the version number) folder extracted from the downloaded file to the root directory of the USB memory.**

The folder may not contain the BIN file.

6. **Remove the USB memory when the files have been copied.**

For more information on removing the USB memory, refer to the owner's manual for your computer and USB memory.

7. **Connect the USB memory to the QL USB connector, then turn on the power to the QL series.**

A "Start Loading ?" message will be displayed.

8. **Click the OK button to start loading the firmware.**

CAUTION : A "Loading..." message will appear during loading the firmware. Progress from 0 to 100% is repeated 1 or 2 times. Do not disconnect the USB memory or power-off the QL series while accessing the USB memory.

9. **When the firmware has been loaded, the QL series automatically restarts and a "Starting System..." message flashes for approximately one minute.**

While this message is flashing, do not turn off the power. If you have accidentally turned off the power, turn on the power again to resume the initialization.

10. **When a "Console initialized due to memory mismatch." popup window (or similar message) appears, press the CLOSE button to close it.**

NOTE

- Since it is a message about initialization even if displayed as an error, please continue update.

11. **When an "Initialize All Memories ?" message appears, press the INITIALIZE button.**

12. When an "Are you sure ?" message appears, press the OK button.

Initializing the internal memory will be started.

13. When the initialization is complete, press the EXIT button.

14. Remove the USB memory after confirming the ACCESS indicator has disappeared in the function access area.

15. If necessary, confirm the firmware was correctly updated in the version field in the SETUP screen.

■ Updating the Dante firmware

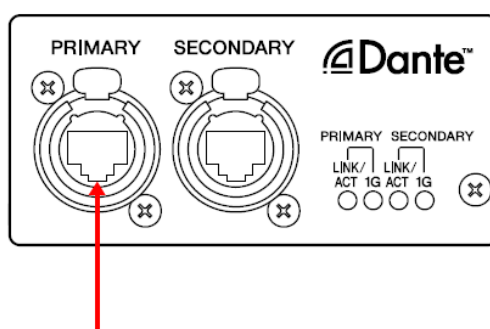
Described below are the procedures to update the Dante module firmware integrated in the QL series unit.

NOTE

- For details of the Dante Firmware Update Manager, refer to "AUD-MAN-Firmware Update Manager" stored in the compressed file folder.

1. Connect the Dante [PRIMARY] connector on the rear panel of the QL series unit to the Ethernet connector on the computer using an Ethernet cable.

Be sure to directly connect the computer and the QL series unit, and do not connect any other Dante device to the computer.



2. Select [Start]→[All programs]→[Audinate]→[Dante Firmware Update Manager]→[Dante Firmware Update Manager] , then right-click and select "Run as Administrator."

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].

3. If you see the interface selection screen, select the interface card to connect the Dante device.
4. Click [Update Dante Firmware].
5. Click [Browse] and select "FWUpdate_QL5_vxxx_swyyy.dnt" if it is QL5, or "FWUpdate_QL1_vxxx_swyyy.dnt" if QL1. 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)

CAUTION

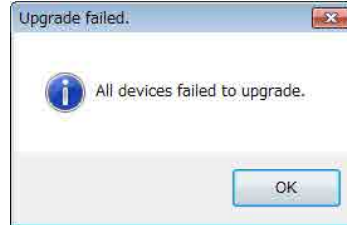
Be sure to ensure compatibility of the update files with QL. If update files other than QL are applied, the device will become inoperable. In general, do not check the [Override Device Matching] option. If this option is left unchecked, only devices that support the file can be selected, ensuring that updating the device with invalid or wrong files is prevented.

6. Click [Next].

NOTE

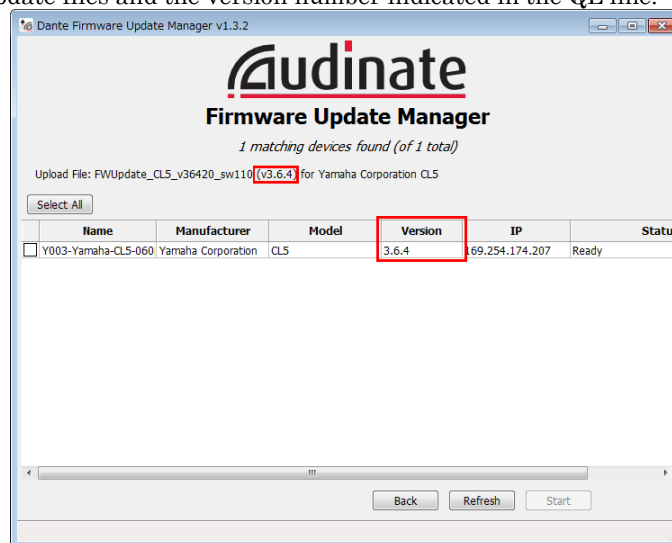
In some cases the Windows firewall may be blocking the Dante Firmware Update Manager. Select the [Private network] check box, and click [Allow access]. Alternatively, in the Windows firewall, click "Allow programs or functions through the Windows firewall," and if the "fum" checkbox is unselected, select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

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



7. Check the QL to update.

Check the version of the update files and the version number indicated in the QL line.



NOTE

- If the QL 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, and whether the QL is running.

8. Click [Start].

The update operation will begin.

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



CAUTION

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 update is not completed after 5 minutes, or update failure indication appears, click X at the upper right corner of Dante Firmware Update Manager to exit the program **without turning the QL power off**, and restart the procedure from the step 4. If update still fails, follow the instructions stated in "About Failsafe Mode" to perform the recovery processing.

9. Restart the QL series.

The firmware update is now complete.

■About Failsafe Mode

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

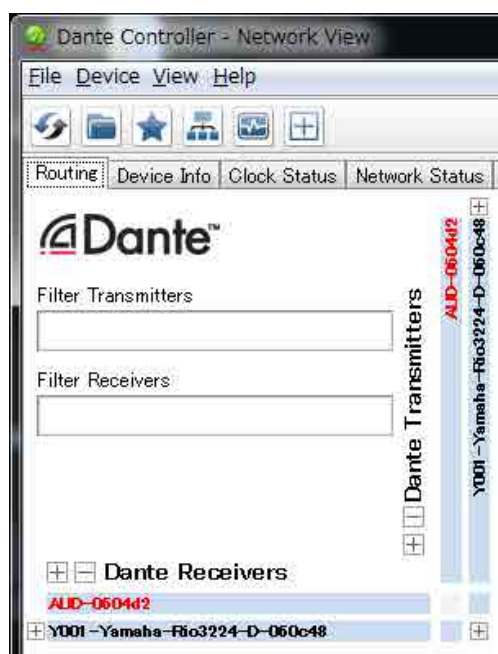
To recover from such a state, the Dante module will enter "failsafe mode."

To restore the Dante module from failsafe mode, a recovery image must be sent from the Firmware Update Manager.

After the power is turned on, if the screen of the QL indicates "NETWORK AUDIO MODULE FAILED AND WAS RESTARTED." and the Dante version is not displayed, it may be that the Dante module is in failsafe mode.

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

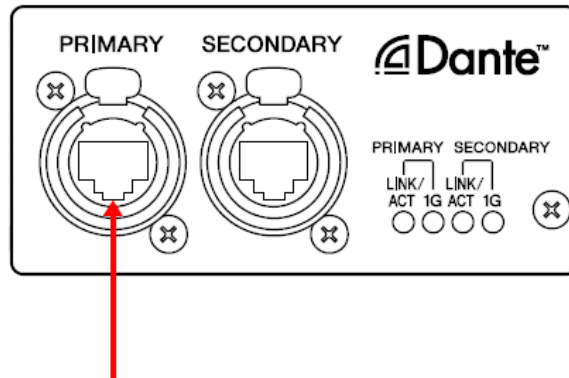
A Dante module that is in failsafe mode is shown as a red device name in the network grid view of Dante Controller (version 3.1.x or later).



Described below are the procedures to recover the Dante module integrated in the QL series unit.

1. Turn off the power to the QL series.
2. Separate the QL from the Dante network.
3. Connect the Dante [PRIMARY] connector on the rear panel of the QL series unit 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 QL in a one-to-one connection.



4. Turn on the power to the QL series.
5. Disable all but one of the network interfaces on your computer.
You should also disable the wireless LAN.
6. Select [Start]→[All programs]→[Audinate]→[Dante Firmware Update Manager]→[Dante Firmware Update Manager] , then right-click and select "Run as Administrator."

The Dante Firmware Update Manager will start up.

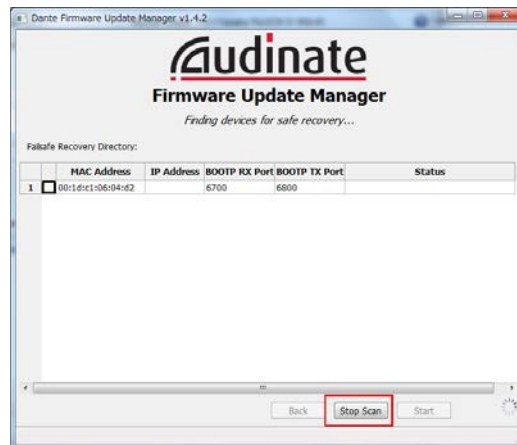
NOTE

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

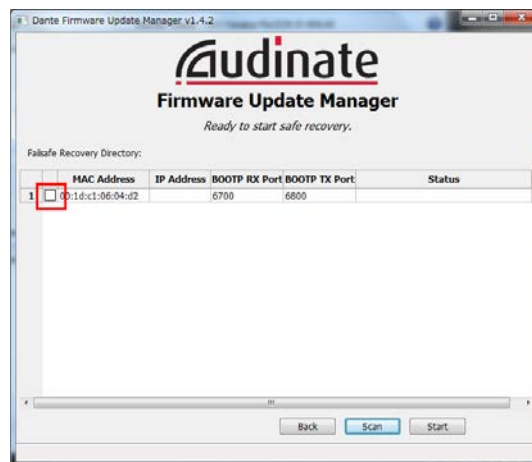
7. If you see the interface selection screen, select the interface card to connect the Dante device.
8. Click [Failsafe Recovery].

9. When the QL is detected, click the [Stop Scan] button.

If several minutes have passed without detection, use Dante Controller to check whether the cable might be disconnected or broken, whether the TCP/IP settings are correct, and whether the QL is running.



10. Select the check box of the detected QL.



11. Click [Start].

A pop-up is displayed confirming that you wish to proceed.

12. Click [OK] to start the recovery.

Firmware Update Manager will display "Processing Safe Recovery", and then "Safe recovery Done" when the device(s) are recovered.



13. **Exit the Dante Firmware Update Manager, and wait for two minutes before turning off the power to the QL main unit.**

After recovery, restart the Dante module. If you power-off the QL before restart is completed, the data of the Dante module will be corrupted, and you will have to perform the recovery once again. Start Dante Controller, and if the device name is shown in black, it is safe to turn off the power.

14. **The correct Dante firmware now needs to be loaded.**

After recovery, the Dante firmware will not be the latest version. To update to the latest firmware, perform steps 2 through 9 of "[Updating the Dante firmware.](#)"

Now recovery and firmware update are completed.