TOA

M-8080D Digital Signal Processor Dante Enabled System

Thank you for purchasing TOA's Digital Matrix Mixer System.
Please carefully follow the instructions in this manual to ensure proper firmware update procedure.

TOA Corporation

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PREREQUISITES

DHCP Server and Installation

The M-8080D auto-provisions its own Network IP address via DHCP only. To configure and/or update the device via the M-8080 software utilities, **you will need a DHCP server active on your network**. Without a DHCP server, the device will not receive an IP address and it will not be accessible to both the Controller and Update Software utilities.

Given the necessity of a DHCP server for on-site configuration, TOA advises integrators to properly coordinate with their client's IT department to avoid potential issues that may arise with regards to IT security (i.e., port blocking, MAC filtering, firewalls, etc.) if they wish to utilize their client's network. Furthermore, TOA advises installers to pre-commission their devices prior to installation on-site to bypass using the client location's network or bring a basic router for commissioning and configuration.

Shielded cabling for M-8080 Controller and Accessories

The M-8080D's accessories connect to the device via the RD ports.

The RD ports do not carry regular IP packets. Instead, the pins of the RD ports carry DC power, and both AES, and RS-485 signals (see M-8080D device manual for details). The AES and RS-485 standard specifies that the wires be shielded. This means that the cables used should be **STP (Shielded Twisted Pair)** with the correct shielded connectors. Not using shielded connectors has been shown to cause issues because the controllers will not be properly grounded to the chassis of the M-8080 if a regular unshielded RJ-45 connector is used. The unshielded cable may work for a shorter distance, but the use of unshielded cabling will quickly be untenable as the length increases. This will lead to accessories showing unexpected behavior such as being unable to be detected, unstable connections and even controller malfunction. Only use shielded cabling with properly shielded connectors for M-8080D controllers.
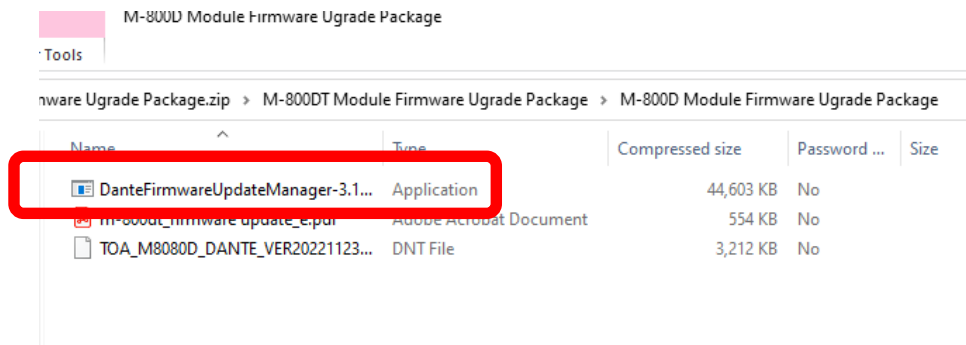
FIRMWARE UPDATES

M-800DT Dante Module Firmware Update

To utilize the M-8080D's Dante capabilities, an M-800DT Module must be installed and be updated from the current version 5.3 or lower to version 6.0. The procedure to update the M-800DT Module is as follows:
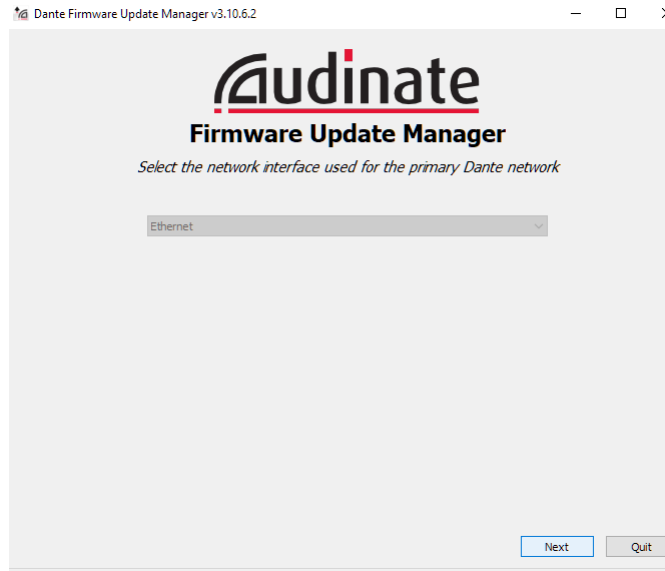
1. Power off the M-8080.
2. Unscrew the cover plate of the M-8080D's module slot and insert the M-800DT module.
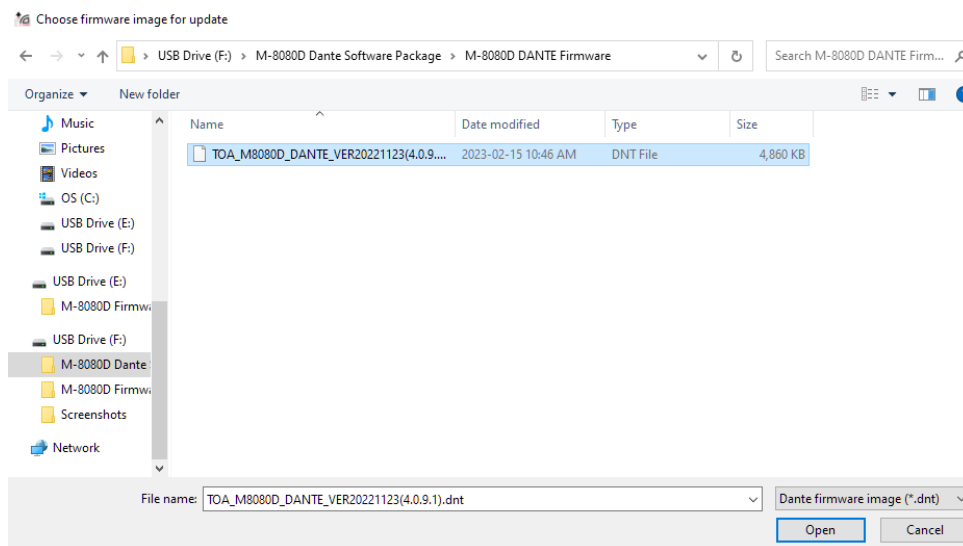

3. Power on the device and connect the "Primary" LAN port of the Dante Module to your network.
4. Download the M-800DT modules firmware update ZIP package. This is available on the M-800DT product page.
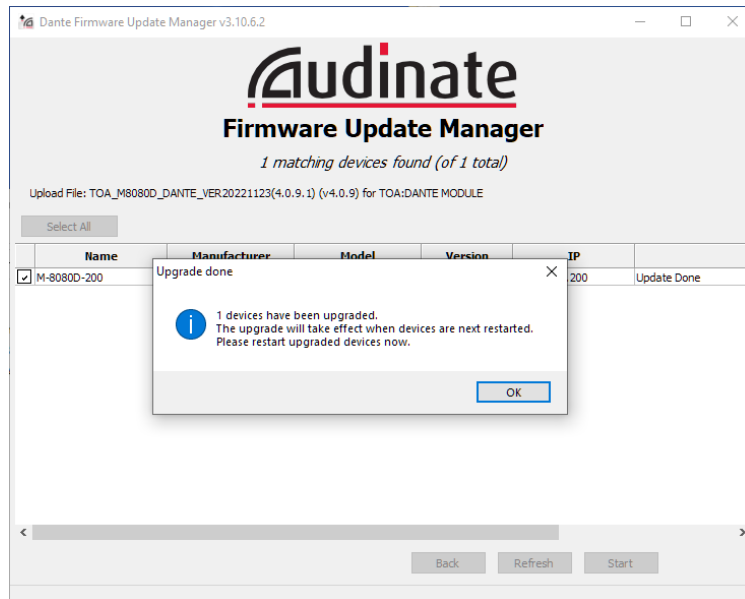5. Extract and install Audinate's Dante Firmware Updater Manager.

6. Run the Updater Manager and select the network on which the Dante Module is connected.

7. Click Update Dante Firmware. Load the M-800DT Module firmware file and click next. This is also included in the ZIP package. This will begin the update of the M-800DT module.

8. Wait till the process finishes. Do not unplug the LAN connection of the Module while this is running. Upon completion, you will receive a notification of upgrade completion and will be prompted to restart the module.

M-8080D Main Unit and Accessory Firmware Upgrade

To enable the M-8080D's Dante capability, the firmware must be upgraded to version 6.0. Both the main unit and the accessories must be updated. The M-8080D firmware upgrade tool is available for download on the M-8080 product page at www.toacanada.com. **The devices must be upgraded in the following order:**

1. M-800RCT Touch Panel and M-800RM Paging Mic
2. M-800RC, M-802RC, M-800IO, and other accessories
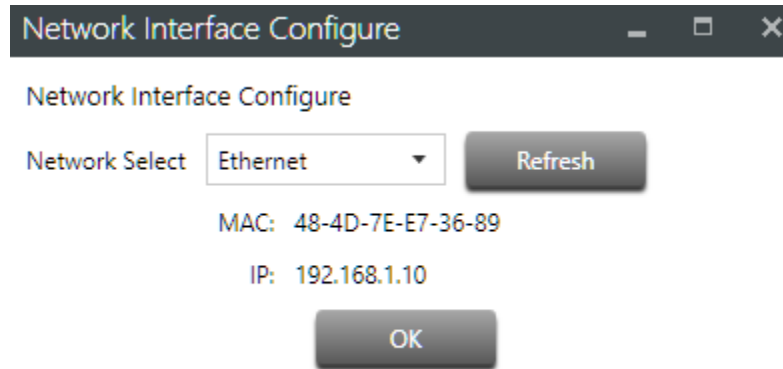3. M-8080D Main Unit

If the main unit is upgraded first before upgrading the accessories, the upgrade software will be unable to detect the accessories and thus will be unable to upgrade them. If this is accidentally done, please contact TOA technical support so we can assist in reversing the upgrade.

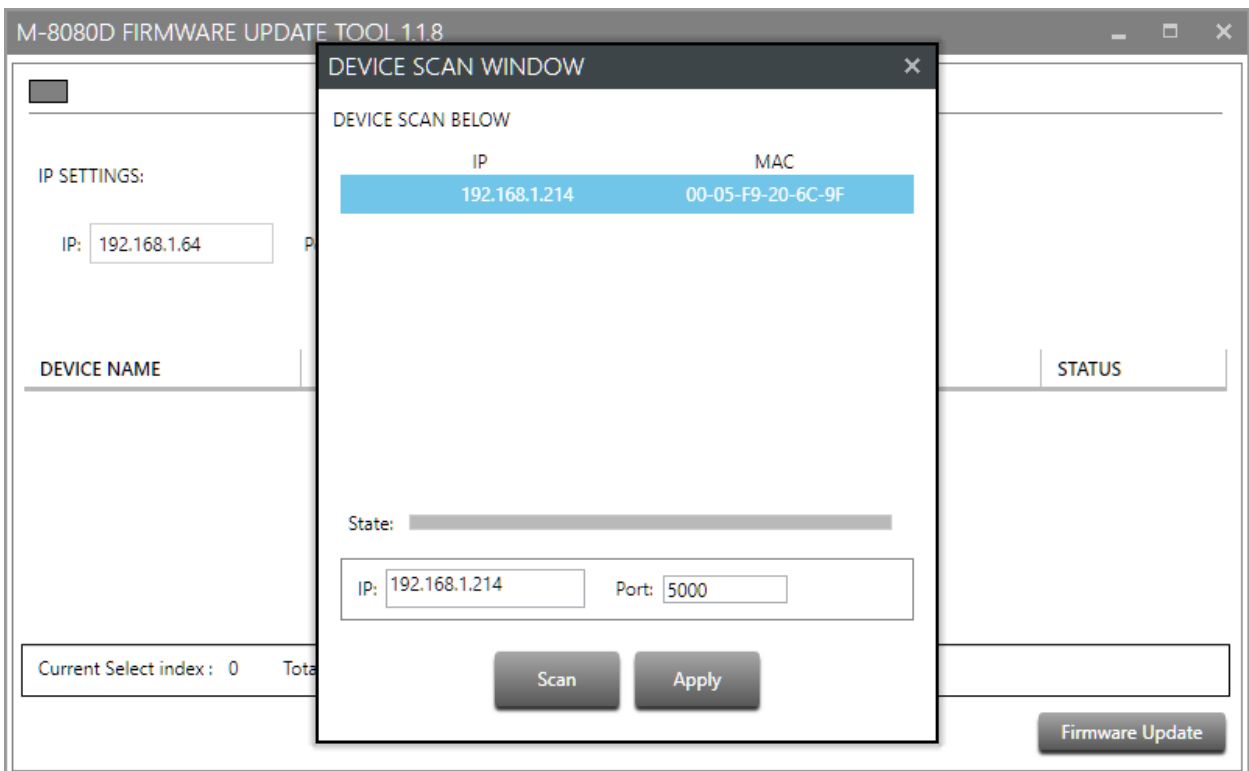## M-800RCT and M-800RM Paging Mic Firmware Upgrade

In the new M-8080D Dante system, the M-800RCT and M-800RM will be able to utilize the enhanced capabilities of Dante. To enable these features, the devices must be updated to the newer firmware. The upgrade process is as follows:

1. Unplug all other accessories if there are others connected. **Only a single M-800RCT or M-800RM should be connected to the Main unit and updated at a time. Failure to do so may result in an unstable update and might render the device unusable.** For example, if you have two or more M-800RCT, unplug all the other units, leaving only one connected at a time. These should not go through an M-800EX. Connect directly to the M-8080 RD port.
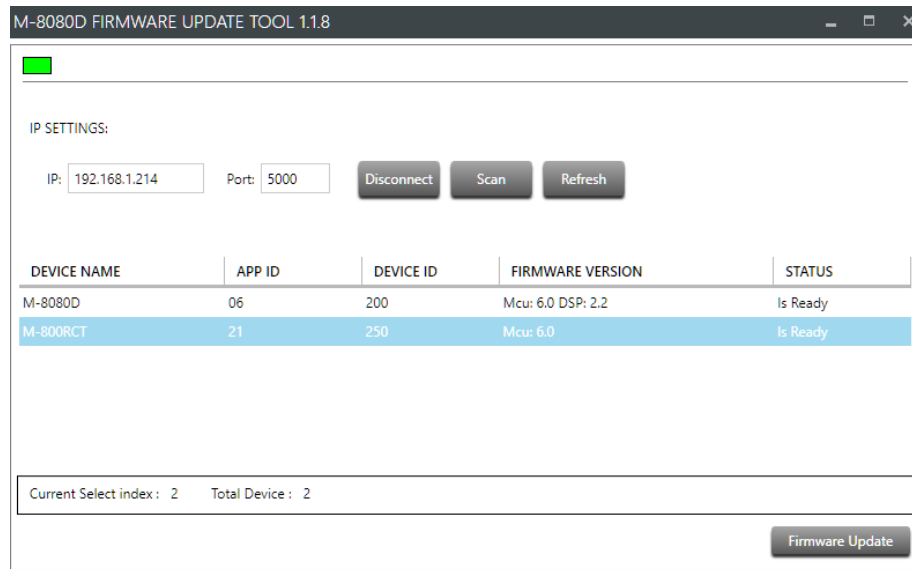
2. Launch the M-8080 Firmware Upgrade Tool. On the dropdown menu, select the PC network adaptor which is connected to the same network where the M-8080 system is connected.

3. On the update tool menu, click scan. The software will scan the network for M-8080D devices. Select the device you wish to update and click apply.
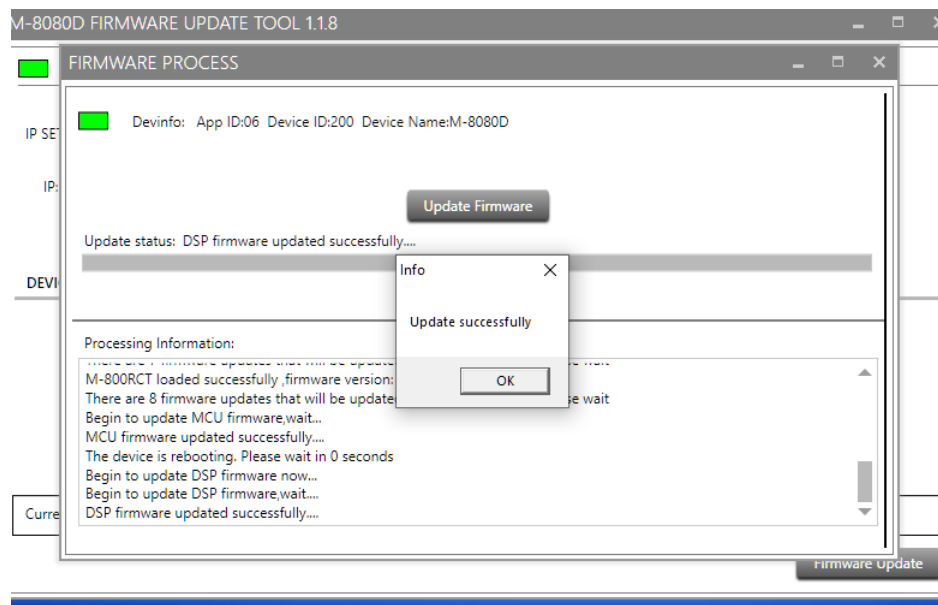
4. Click connect. This will load all the available devices connected to this M-8080D. Since all other devices should be unplugged, only one device, the M-800RCT (or M-800RM), should be visible. Select the M-800RCT and click "Firmware Update".

This will load the Firmware Update window for that device.

5. Click "Update Firmware" to begin the update. You will be asked if you wish to revert to factory settings or keep the current one. Select yes or no accordingly. Make sure not to unplug the device while the upgrade is ongoing since this will render the device unusable. Upon successful upgrade, you will be notified.
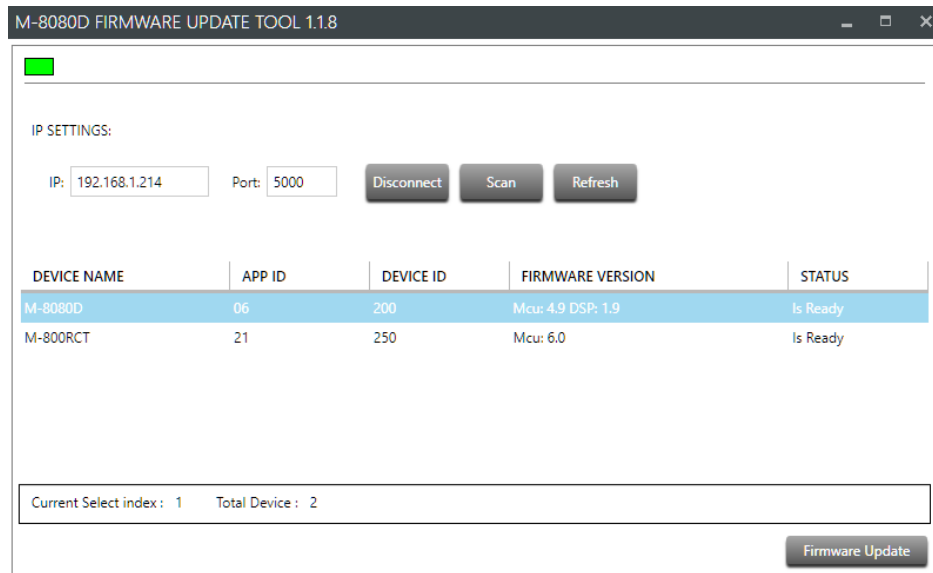

6. Repeat the process for other M-800RCT or M-800RM devices.

M-800RC, M-802RC, M-800IO, and Other Accessories Firmware Upgrade

The update process for the rest of the accessories is very similar to the M-800RCT. However, now you can connect multiple accessories and upgrade them individually.

M-8080D Main Unit

Finally, after upgrading all the other accessories you can now update the M-8080D main unit to the new firmware following the same procedure.

Upon completion, the M-8080D main unit will power cycle and will indicate the new firmware version (6.0) on the front panel. Congratulations! You are now ready to use the M-8080D Dante System. Make sure to use Version 2 of the M-8080D System Controller Software. Version 1 is no longer compatible with this Dante upgraded firmware.