



Masterclock Firmware Update Procedure

For: GMR1000/GMR5000/GMR6000, NTP100, NTDS, MDN and TCDS Series Displays, MC-ECC, MC-EID, MC-EOD20, MC-ECC+, RC600/RC1000

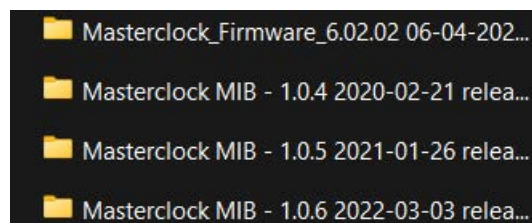
Precautions for the Firmware Update:

Please read the update instructions carefully before beginning. The firmware update may take up to 5 -10 minutes per unit. Once the update begins, do not turn off the power supply to the unit until the update has fully completed. The unit may reboot during the update to complete the process.

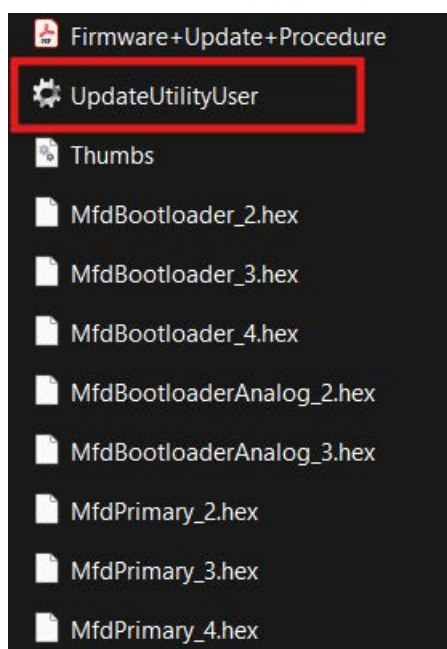
Please follow the procedures as instructed when you update. Note that the update may fail if you do any of the following:

- Interrupt the power supply to the unit
- Insert or remove the LAN cable from a device in your network when updating over a network.
- Insert or remove a USB cable when updating via USB.

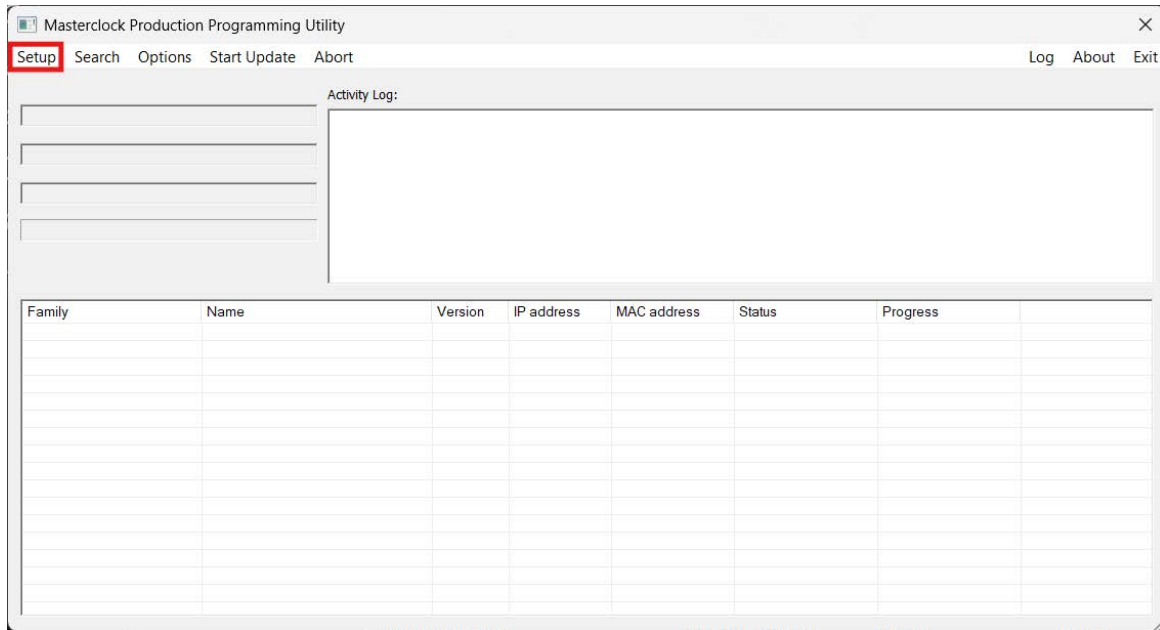
1. Download and extract the files contained in the .zip file. This will create multiple directories containing both the firmware update files, and the latest SNMP MIB files. Select and open the Masterclock_Firmware_.... folder



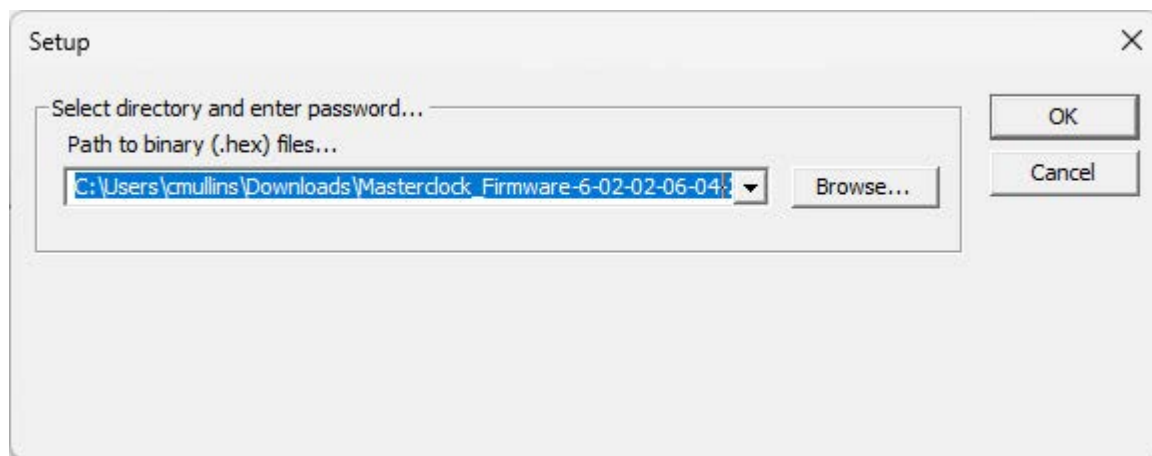
2. Locate and run the UpdateUtilityUser.exe inside the Firmware folder. Windows may present a warning for the first run of the program. If prompted, select 'Run Anyway'



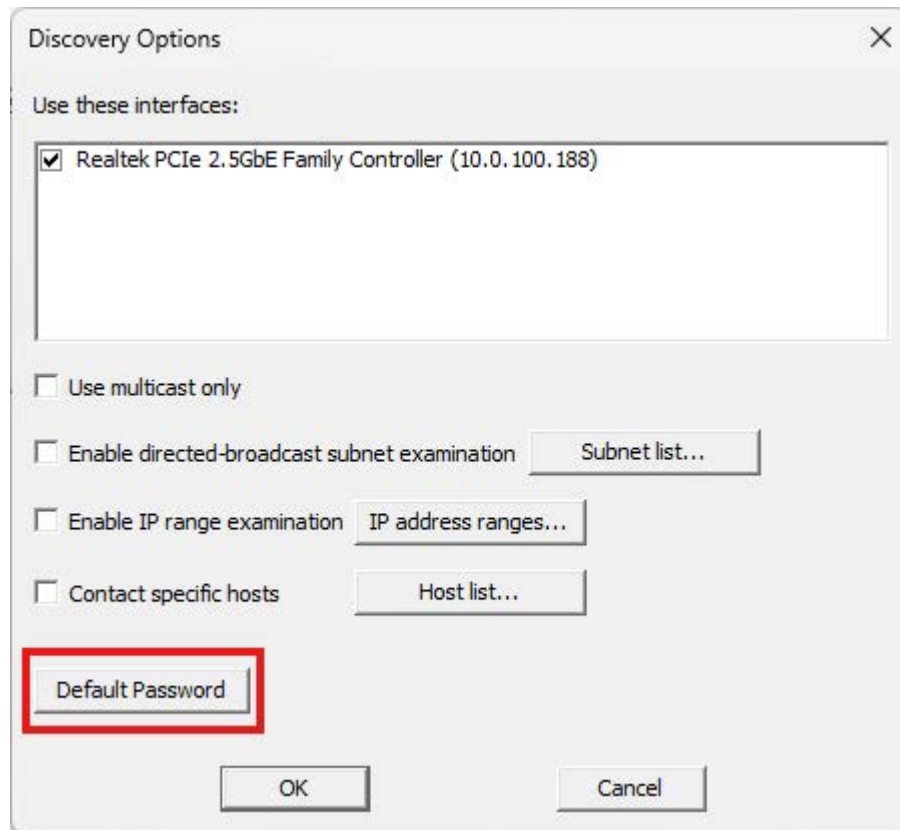
3. Click on 'Setup' at the top left corner of the program



4. Click the Browse button next to the file path field if not already pre-filled and select the firmware folder (the one that contains the UpdateUtility software) then click OK

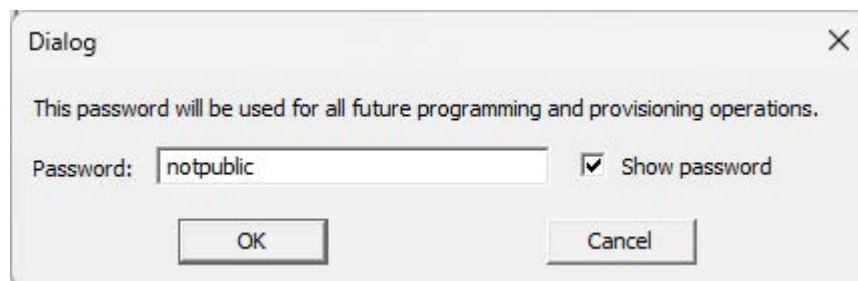


5. Click on 'Options' at the top to open the Discovery Options window, then select 'Default Password'

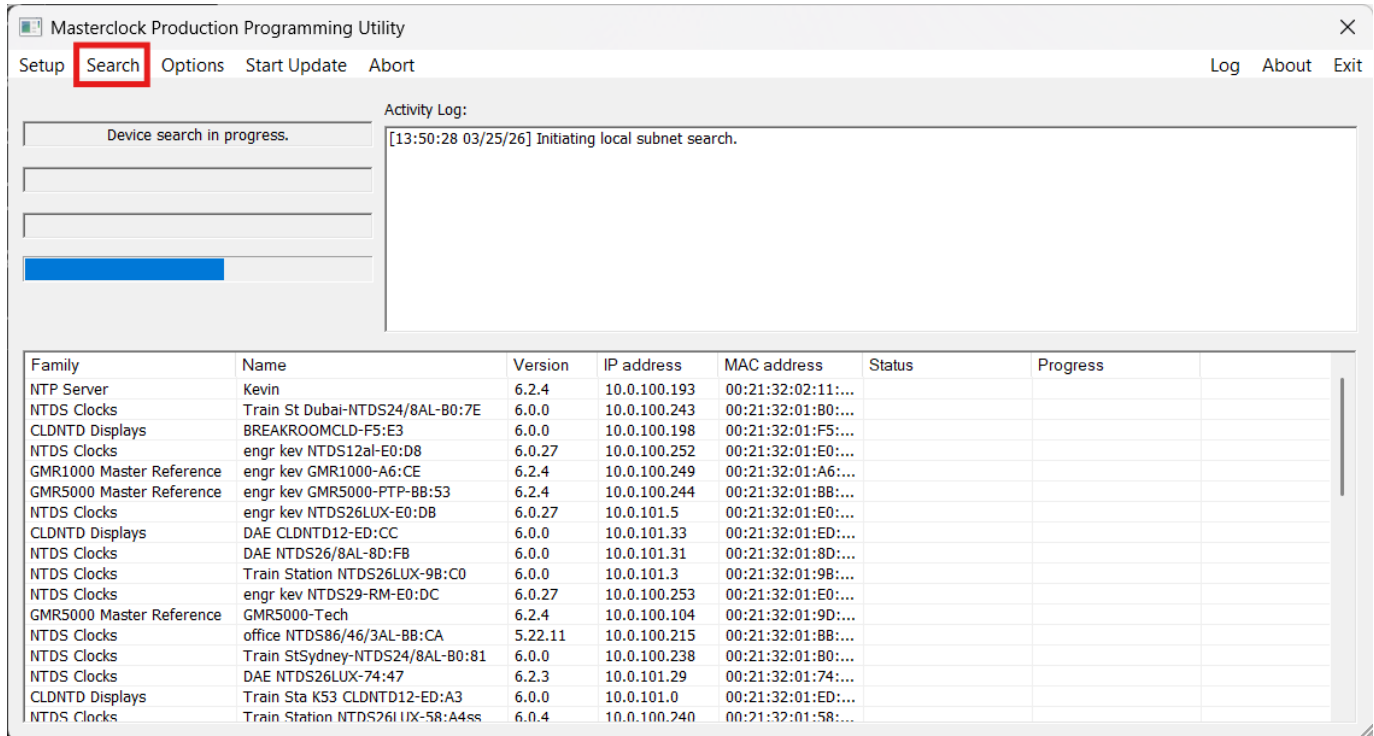


6. The factory default password '**public**' is pre-filled. If your device password is different, please set it here. Check the 'Show password' option to verify. Click OK

6a. For **GMR6000** only, the default password can be found on the product label under the unit. The default password is not '**public**'. If your password has changed and is no longer known, your device must be factory reset.

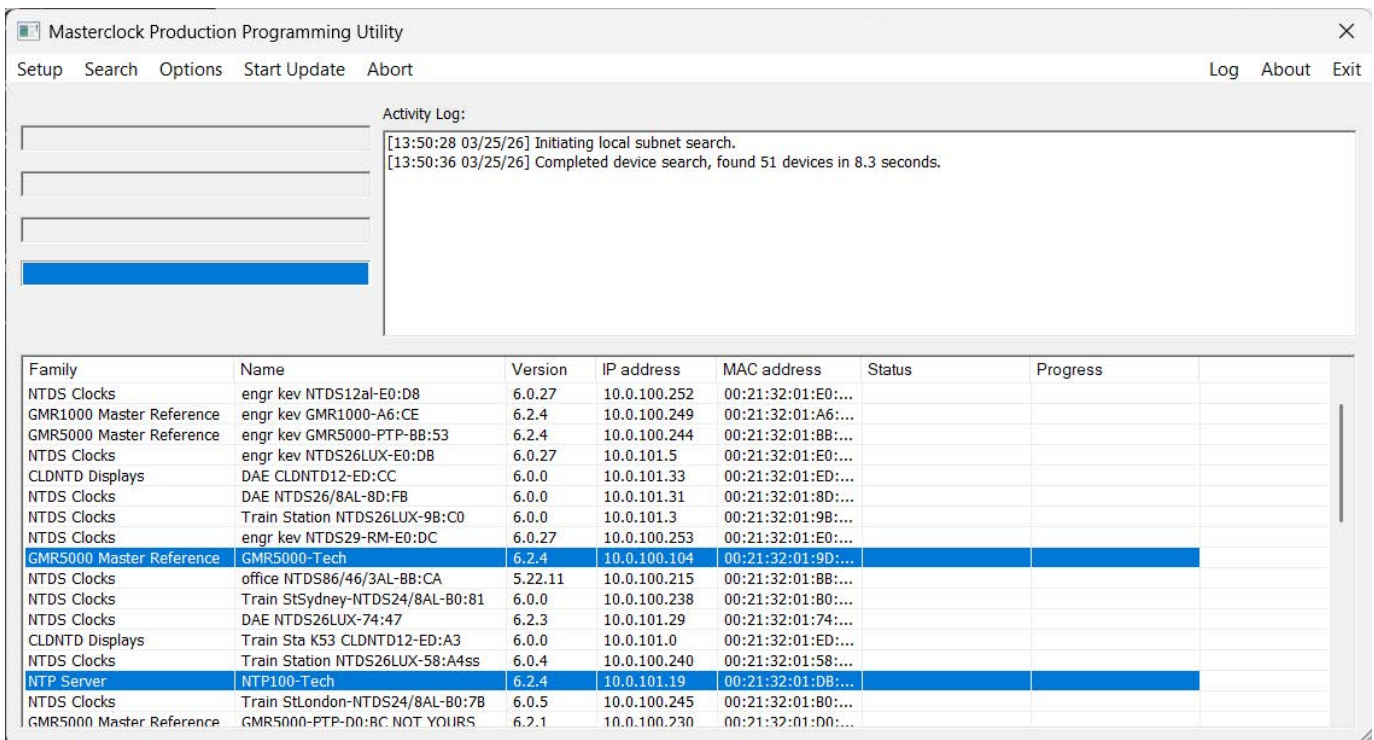


7. Click 'Search' in the top left corner to begin locating devices

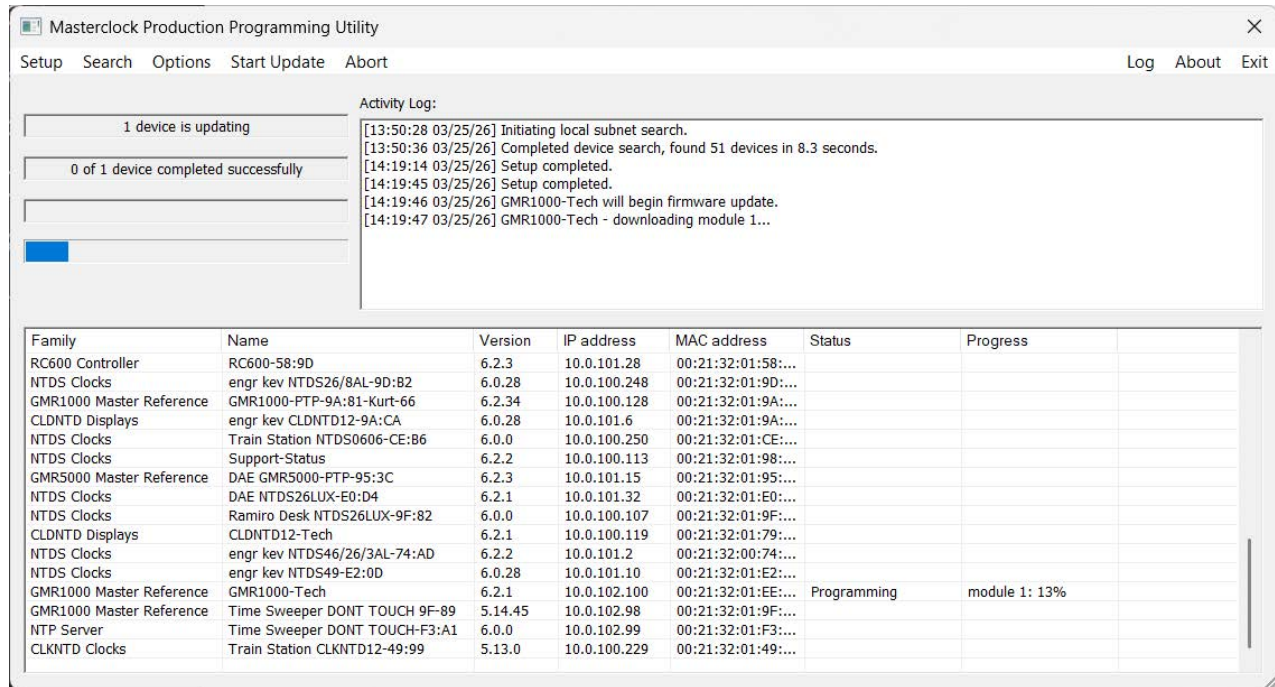


8. Once search has completed, click on the device you wish to update. You can select multiple devices by holding the CTRL key and clicking more devices.

Note: It is highly recommended to update a single device first to ensure there are no problems during updating



9. Click 'Start Update' to begin updating. The device will reboot automatically to complete the update process. Please wait for the device to complete 'Post download verification' before disconnecting your device.



Important Notes:

- **Do not interrupt the update process.** Once the firmware download has begun, do not power cycle, disconnect, or otherwise interrupt the device. Doing so may cause the unit to become non responsive and unrecoverable. In this situation, the device must be returned to Masterclock through the standard **RMA procedure**.
- **Allow the update to fully complete.** The update process may take **5 to 10 minutes per device**. During this time, the device may receive multiple update cycles to refresh all internal hardware components. Please be patient.
- **If the update does not start automatically:**
If the firmware download does not begin within **60 seconds** (or **2-3 minutes** on networks without DHCP), power cycle the device one time while the firmware update application remains open. This will re-initiate the download request.
Do not power cycle the device again once the update has started.
- **Need assistance?**
If you encounter any issues during the update or require support, please contact Masterclock Technical Support at: **support@masterclock.com**
- **Need to downgrade your GMR6000 firmware?**
If you need to downgrade from Firmware 1.0.9 or later to 1.0.8 or earlier, please contact technical support at **support@masterclock.com** for instructions.
For all downgrades, your device will require a factory reset after downgrading.