



Masterclock Firmware Update Procedure

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

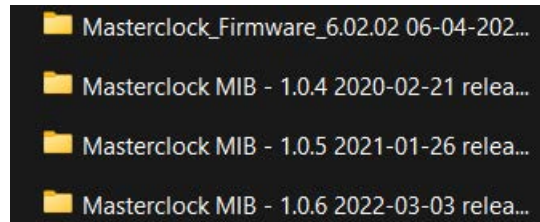
Precautions for the Firmware Update:

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.

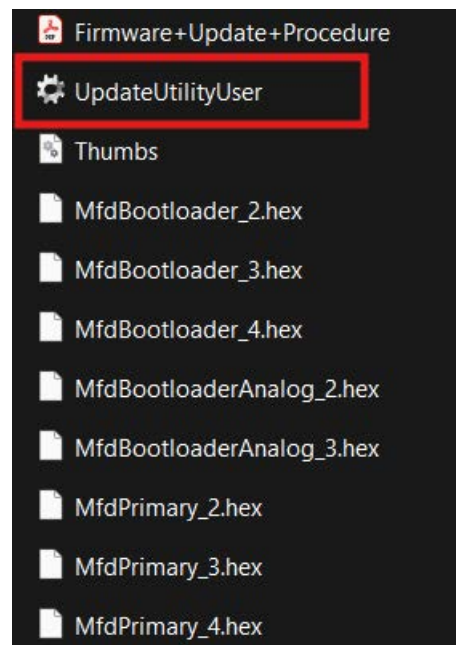
Please follow the procedures as instructed when you update. Note that the update may fail if you do any of the following:

- 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.

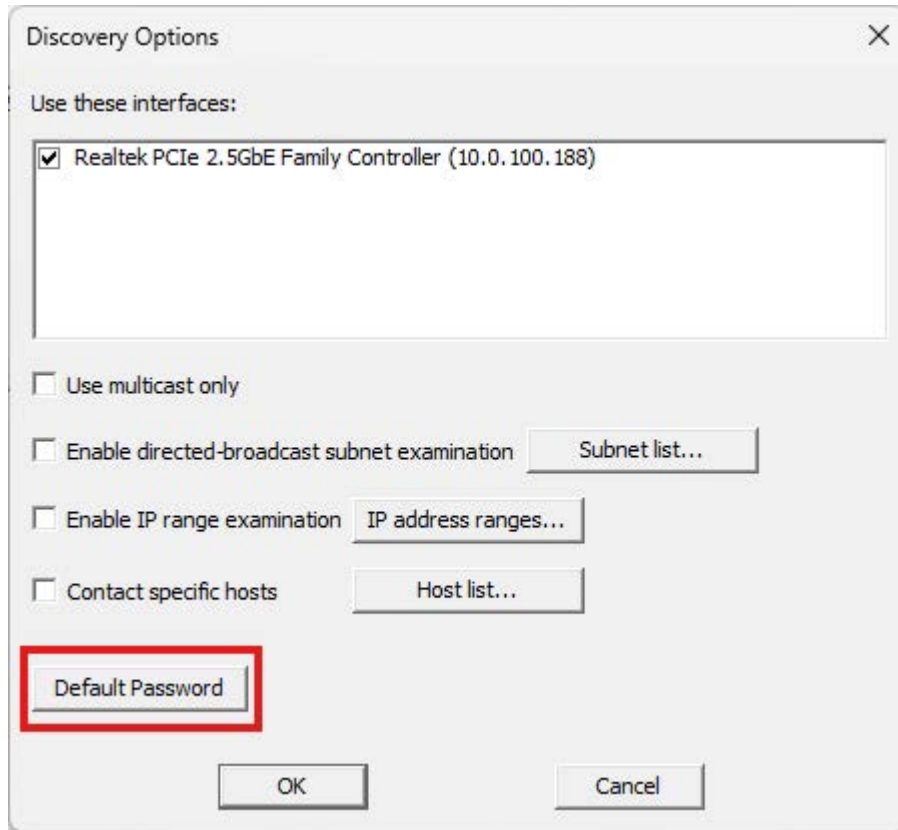
1. Download and extract the files contained in the .zip file. This will create multiple directories containing both the firmware update files, and the latest SNMP MIB files. Select and open the Masterclock_Firmware_.... folder



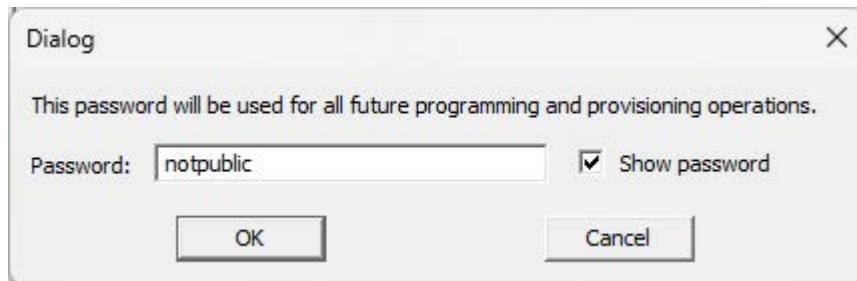
2. Locate and run the UpdateUtilityUser.exe inside the Firmware folder. Windows may present a warning for the first run of the program. If prompted, select 'Run Anyway'



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



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

Masterclock Production Programming Utility

Setup **Search** Options Start Update Abort Log About Exit

Activity Log:

Device search in progress.

[13:50:28 03/25/26] Initiating local subnet search.

Family	Name	Version	IP address	MAC address	Status	Progress
NTP Server	Kevin	6.2.4	10.0.100.193	00:21:32:02:11:...		
NTDS Clocks	Train St Dubai-NTDS24/8AL-B0:7E	6.0.0	10.0.100.243	00:21:32:01:80:...		
CLDNTD Displays	BREAKROOMCLD-F5:E3	6.0.0	10.0.100.198	00:21:32:01:F5:...		
NTDS Clocks	engr kev NTDS12al-E0:D8	6.0.27	10.0.100.252	00:21:32:01:E0:...		
GMR1000 Master Reference	engr kev GMR1000-A6:CE	6.2.4	10.0.100.249	00:21:32:01:A6:...		
GMR5000 Master Reference	engr kev GMR5000-PTP-BB:53	6.2.4	10.0.100.244	00:21:32:01:BB:...		
NTDS Clocks	engr kev NTDS26LUX-E0:DB	6.0.27	10.0.101.5	00:21:32:01:E0:...		
CLDNTD Displays	DAE CLDNTD12-ED:CC	6.0.0	10.0.101.33	00:21:32:01:ED:...		
NTDS Clocks	DAE NTDS26/8AL-8D:FB	6.0.0	10.0.101.31	00:21:32:01:8D:...		
NTDS Clocks	Train Station NTDS26LUX-9B:C0	6.0.0	10.0.101.3	00:21:32:01:9B:...		
NTDS Clocks	engr kev NTDS29-RM-E0:DC	6.0.27	10.0.100.253	00:21:32:01:E0:...		
GMR5000 Master Reference	GMR5000-Tech	6.2.4	10.0.100.104	00:21:32:01:9D:...		
NTDS Clocks	office NTDS86/46/3AL-BB:CA	5.22.11	10.0.100.215	00:21:32:01:BB:...		
NTDS Clocks	Train StSydney-NTDS24/8AL-B0:81	6.0.0	10.0.100.238	00:21:32:01:80:...		
NTDS Clocks	DAE NTDS26LUX-74:47	6.2.3	10.0.101.29	00:21:32:01:74:...		
CLDNTD Displays	Train Sta K53 CLDNTD12-ED:A3	6.0.0	10.0.101.0	00:21:32:01:ED:...		
NTDS Clocks	Train Station NTDS26LUX-58:A4ss	6.0.4	10.0.100.240	00:21:32:01:58:...		

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

Masterclock Production Programming Utility

Setup Search Options Start Update Abort Log About Exit

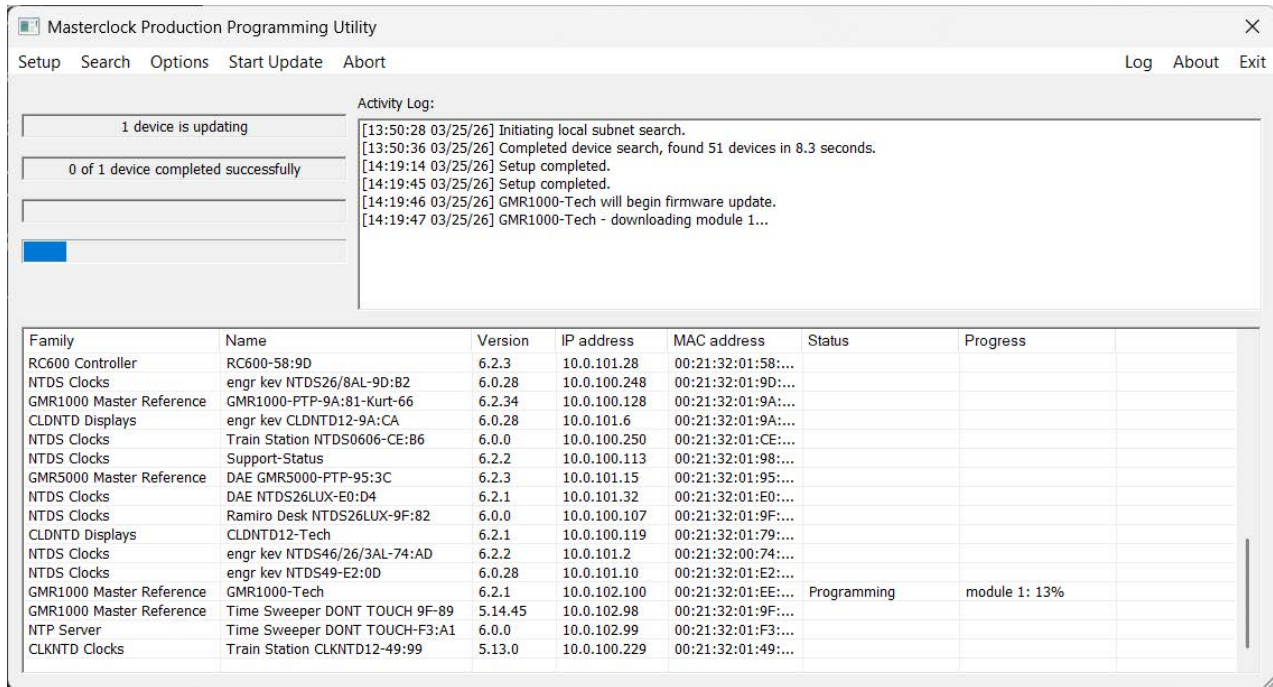
Activity Log:

[13:50:28 03/25/26] Initiating local subnet search.

[13:50:36 03/25/26] Completed device search, found 51 devices in 8.3 seconds.

Family	Name	Version	IP address	MAC address	Status	Progress
NTDS Clocks	engr kev NTDS12al-E0:D8	6.0.27	10.0.100.252	00:21:32:01:E0:...		
GMR1000 Master Reference	engr kev GMR1000-A6:CE	6.2.4	10.0.100.249	00:21:32:01:A6:...		
GMR5000 Master Reference	engr kev GMR5000-PTP-BB:53	6.2.4	10.0.100.244	00:21:32:01:BB:...		
NTDS Clocks	engr kev NTDS26LUX-E0:DB	6.0.27	10.0.101.5	00:21:32:01:E0:...		
CLDNTD Displays	DAE CLDNTD12-ED:CC	6.0.0	10.0.101.33	00:21:32:01:ED:...		
NTDS Clocks	DAE NTDS26/8AL-8D:FB	6.0.0	10.0.101.31	00:21:32:01:8D:...		
NTDS Clocks	Train Station NTDS26LUX-9B:C0	6.0.0	10.0.101.3	00:21:32:01:9B:...		
NTDS Clocks	engr kev NTDS29-RM-E0:DC	6.0.27	10.0.100.253	00:21:32:01:E0:...		
GMR5000 Master Reference	GMR5000-Tech	6.2.4	10.0.100.104	00:21:32:01:9D:...		
NTDS Clocks	office NTDS86/46/3AL-BB:CA	5.22.11	10.0.100.215	00:21:32:01:BB:...		
NTDS Clocks	Train StSydney-NTDS24/8AL-B0:81	6.0.0	10.0.100.238	00:21:32:01:80:...		
NTDS Clocks	DAE NTDS26LUX-74:47	6.2.3	10.0.101.29	00:21:32:01:74:...		
CLDNTD Displays	Train Sta K53 CLDNTD12-ED:A3	6.0.0	10.0.101.0	00:21:32:01:ED:...		
NTDS Clocks	Train Station NTDS26LUX-58:A4ss	6.0.4	10.0.100.240	00:21:32:01:58:...		
NTP Server	NTP100-Tech	6.2.4	10.0.101.19	00:21:32:01:DB:...		
NTDS Clocks	Train StLondon-NTDS24/8AL-B0:7B	6.0.5	10.0.100.245	00:21:32:01:80:...		
GMR5000 Master Reference	GMR5000-PTP-00:RC NOT YOURS	6.2.1	10.0.100.230	00:21:32:01:00:...		

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**