

**Important:** After updating the firmware, you need to do a full radio reset. First, power off the radio. Then power it back on while holding the PTT and the PF1 button (key below the PTT) at the same time. The radio will start up with a note on the display stating “MCU Reset, Please Wait”. **NOTE:** Do not turn the radio off while it restarts.

After a re-start the radio will need to reset the date and the time. Use the up-down keys to set the current year. Move to the month by pushing the P1 key. Set the month and use the P1 key to move forward each step. Once done, click the Menu key to save the date and time. Be sure to also set the time zone to avoid a “date/time” error.

Please make sure the codeplug is saved to PC before you do the update and reset the MCU.

#### **Fifth Public Firmware Release in DMR-6X2 PRO V1.20 (Release Date 2025-01-23)**

1. **Add Satellite Function:** A predictive list of upcoming satellite transits has been added, allowing users to view transit frequency and time details and transmit directly by pressing the PTT button. The GPS icon has also been updated to a green satellite design (Designed by IK8JHL) for improved visual representation.
2. **Modify Simplex Repeater Setting Behavior:** The Simplex Repeater settings now allow users to set the default state (active/inactive) after codeplug upload. This feature can be configured through the Key Function selection menu.
3. **Include Help Texts for Various Settings in CPS:** Help texts have been added to improve user guidance for settings under Optional Setting > Display (Current Contact Display, Rx Backlight Delay (s)), Optional Setting > Other (Select TX-Contact, Show Last Call On Launch, Mute Timing, TOT Predict, TxPow AGC, WX Alarm), and Optional Setting > Auto Repeater (Simplex Repeater, Speaker During RX of Simplex Repeater, Simplex Relay Slot, Timed Roaming Start Condition, Roaming Return Channel).
4. **Implement Single Frequency Repeater Functionality (DCDM TS Split):** The radio now supports Single Frequency Repeater Mode (DCDM TS Split), enabling different TX and RX time slots on the same frequency to meet single frequency repeater operation needs.
5. **Allow ARC4 and AES256 Export/Import in CPS:** Users can now export default templates for ARC4 and AES256 encryption codes. Edited files based on these templates can be imported back into the CPS.

#### **Fourth Public Firmware Release in DMR-6X2 PRO V1.11 (Release Date 2024-08-30)**

1. **GPS Information Display Enhancement:** The GPS information display has been refined. This ensures a more consistent user experience across devices, providing familiar GPS readouts and displays.
2. **Long Press Key Functionality Update:** The ‘Long Press’ function for the Up/Down keys now mirrors the behavior of the D878UV model, offering improved usability and operational consistency for users familiar with both models

#### **Third Public Firmware Release in DMR-6X2 PRO V1.10 (Release Date 2024-04-10)**

1. **Enhanced Scan Speed:** We have optimized the scan function to swiftly skip noise bursts signals, ensuring faster and more efficient channel scanning.
2. **Text Capture Support in SMS:** SMS functionality has been expanded to support Text Capture on the BrandMeister network, making message handling more versatile.
3. **'Dim Shut' Key Function:** A new key function, 'Dim Shut,' has been added under CPS->Optional setting->Key function. This allows users to completely turn off the radio's backlight and LED with a single key press, conserving battery life and reducing light emission in dark environments.
4. **Voice Header Repetitions Adjustment:** Users can now set the voice header transmit times under CPS->Optional Setting->Digital->Voice Header Repetitions. This adjustment helps in syncing with the receiving radio and enhances the communication success rate.
5. **TX Preamble Customization:** The TX preamble duration can now be customized under CPS->Optional Setting->Digital, improving data transfer synchronization. This feature is particularly useful for non-audio call functionalities.
6. **SMS Confirmation Mode Enhancements:** The SMS confirmation mode has been refined for better

compatibility with various devices, ensuring reliable message delivery acknowledgments.

7. **Call Alert Standard Compliance:** The Call Alert feature has been updated to fully comply with the ETSI recommendation, ensuring interoperability and standardization.
8. **Unified 5Tone ID Standards:** The 5Tone ID decoding standard in the current channel has been aligned with the encoding standard, simplifying tone operations under Channel->Analog.
9. **'None' Selection for RX Group Lists:** A 'None' option has been added to the RX Group List settings, allowing users to opt out of group lists for individual channels.
10. **Selective Online Alert for Talk Groups:** Users can now set online alerts for individual Talk Groups, receiving a beep notification at the start of each transmission from the selected Talk Group.
11. **Introduce a Global parameters for setting when the Idle state of digital channel will be played:** 0 -> Beep off 1-> Beep on led transition from blue to off (end of slot digital communication) 2-> Beep on led transition from green to off 3-> Beep on led transition from blue or green to off.
12. **Sub Band Default OFF with GPS Roaming:** When GPS roaming is activated, the sub-band default will now be set to OFF to prevent unintended VFO channel jumps.
13. **APRS PASS ALL Functionality:** The APRS->Analog->PASS ALL setting has been added, enabling the reception of more APRS messages, including those with corrupted data. This feature is off by default to ensure only CRC-verified packets are displayed.
14. **DMR and Analog Channel Combinations:** Users can now configure channels to support both DMR and Analog modes, enhancing the versatility of the radio.
15. **Encryption Vulnerability Patch:** A potential backdoor vulnerability associated with AES256 and ARC4 encryption has been addressed and patched, reinforcing the security of your communications.
16. **Front Panel TG and Digital Contact Removal:** The ability to remove Talk Groups or Digital Contacts directly from the front panel has been added, providing more convenience and flexibility in managing your contacts.
17. **Message Format Enhancement:** A new format specifier, "{1", has been introduced at the end of messages to align to DMR texting standards.

## **Second Public Firmware Release in DMR-6X2 PRO V1.01j (Release Date 2023-06-07)**

1. ARC4 Encryption support: We've introduced ARC4 encryption to bolster the security of your communications.
2. NOAA weather menus in software: Now you'll have access to NOAA weather updates directly via the device's software menus.
3. Improved APRS reception and transmitting: We've made tweaks to enhance the quality and reliability of APRS reception and transmitting, an APRS+BT Firmware Update is Required.
4. Small typos and corrections: We've cleaned up various minor text issues across the software to improve readability.
5. APRS data download improvements: We've enhanced the speed and reliability of APRS data downloads, making the process smoother than ever.
6. Multiple minor bug fixes and improvements, and firmware solidification
7. Additional user guides included with the 1.01J Software Package
8. Revised CPS explanations and procedures included in the application

## **First Public Firmware Release in DMR-6X2 PRO V1.01i (Release Date 2022-09-01)**

No update required, first public firmware release