D578UVII Firmware Changelog

****** See the Separate FW Update Instructions for Details ******

- Install the Customer Program Software (CPS) by running the <u>D578UV_CPS_Setup_x.xx.exe</u> setup program in the CPS Program Folder
- After installing a new D578UV CPS version go to the top Menu -> Tool-> Options in the CPS to set GPS, BT, 500 Hour Record and APRS options as needed

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

*** USB Drivers - Many users have found the Anytone radio USB will connect in Windows 10 without loading the AnyTone virtual drivers. The PC found Windows the driver that worked just by plugging in and turning on the radio. If you get a new radio and your PC is Windows10 system, do not install the GD32 virtual driver. *** Just plug the radio USB cable in to the USB port on your PC and let windows find the driver. *** If Windows 10 fails to load a USB driver please see the separate Virtual USB Driver Installation Instructions.

D578UV --- Please use the firmware D578UV_V1.xx for updating the radio. **D578UVII** --- Please use the firmware D578UVII_V2.xx for updating the radio.

D578UV firmware update V2.06.2 (dated 2023-9-25)

Change List

- 1. Improve the scan speed, ignore some burst signal.
- 2. Modify the SMS to support the Text Capture on BM.
- Modify the CPS to prohibit the CPS read the AES / ARC4 encryption from the radio, and prohibit the CPS read the AES / ARC4 encryption from the codeplug. We suggest you export the AES / ARC4 encryption codes from the old CPS and save it on your PC, in case you need to create the codeplug, you can import the encryption codes.
- 4. Resolve the issue that sometimes D578UV stuck when use BT01 through bluetooth wireless connection.
- 5. Resolve the issue that D578UV has a frequency shift when power on the D578UV with repeater function default ON.
- 6. Modify the firmware to make the AES encryption have a variable Vector(IV) instead of fixed "12345678".

Firmware version: V2.06.2 CPS version: V1.19 SCT 3258 version: V2.01.07 BF BT Version: 10043 or 19043 APRS ver: V2.00 or V1.06 BT01 firmware: V1.01

D578UVII firmware update V2.05 (dated 2023-4-21)

Change List

7. CPS->Digital->ARC4 encryption, add the ARC4 encryption which is compatible with Motorola.

- 8. CPS->Optional Setting ->Digital -> Voice Header Repetitions, allows you set the voice header transmit times to sync the receive radio, it will improve the communication success rate with RX radio.
- 9. CPS->Optional Setting ->Digital -> TX preamble to define the preamble time of the data transfer function (not needed for audio calls), and improve synchronization
- 10. SMS confirmation mode improvements with better compatibility with other devices
- 11. Call Alert fully compliant with ETSI recommendation
- 12. Resolve the issue that when BT01 is connected, the radio freezes when sending APRS.
- 13. Resolve the issue that BT MIC GAIN setting in CPS doesn't load into BT01 when program into BT01 microphone.
- 14. Resolve the issue that BT01 custom BT name is incorrect after reboot BT01 microphone.
- 15. Resolve the issue that D578UV does a reset when the radio lose power during scan the air channels, which lead the D578UV has to reload the codeplug.
- 16. Resolve the issue that D578UV doesn't display the active air channel information during scanning, it still shows the initial air channel when start the scan.

Firmware version: V2.05 CPS version: V1.18 SCT 3258 version: V2.01.07 BF BT Version: 10043 or 19043 APRS ver: 1.06 BT01 firmware: V1.01

D578UVII firmware update V2.04 (dated 2022-12-8)

Change List

- 17. Channel -> Analog -> 5Tone ID, make the decode standard in current channel to be same as the 5Tone ID encode standard.
- 18. Upgrade the firmware to work with BT01 bluetooth microphone.

Firmware version: V2.04 CPS version: V1.17 SCT 3258 version: V2.01.07 BF BT Version: 10043 APRS ver: 1.06

D578UVII firmware update V2.03 (dated 2022-7-5)

Change List

- 1. Set the sub band default OFF when GPS roaming is turned On, to avoid the issue that sub band VFO channel jumps to random channel.
- Add new function in CPS->APRS-> Analog -> PASS ALL. Set On PASSALL will receive more APRS message, but some are with corrupted data.

Default OFF.

This command enables the attempt to display corrupted packets when PASSALL is ON.

When PASSALL is OFF, packets will be displayed only if the CRC (error checking) is correct.

- 3. Improve the analog APRS receive, with upgrading the APRS firmware to V1.04 for the APRS+BT board.
- 4. Resolve the issue that export .dcf file doesn't work with Contact Manager V270.

- 5. Improve the issue that radio cracks when SFR repeater is running, requires an upgrade on the SCT to resolve this issue.
- 6. In CPS->Scan list-> Digi Group Hold Time, Digi Pri hold time, add the hold time setting when receive signal at digital channel during scanning.

Firmware version: V2.03 CPS version: V1.16 SCT 3258 version: V2.01.07 BF (shall be updated from BA to BF) BT Version: 10036 APRS ver: 1.04 (shall be updated to V1.04)

D578UVII firmware update V2.02 (dated 2021-11-30)

Change List

- 1. Allow to select TG and RX group list for the new channel created in radio menu.
- 2. Improve the Single Frequency Repeater unstable problem.
- 3. Add APRS SMS function in the radio menu, allows the radio to receive and transmit APRS message. Sending APRS Text from one AnyTone radio to another that has the APRS Rx feature.

Go to the radio Menu -> APRS -> APRS SMS where you can add a text message using the microphone keys, use the # key to switch from alpha to numbers, etc.

After entering your text, confirm it with the Menu button to get to the next Call Sign / SSID entry screen. Enter the Call Sign and SSID dash number for the user you want to send the message to; use the # key to switch from alpha to numbers, etc. When you confirm the Call Sign the APRS test message will send.

NOTE: APRS SMS TX setting is using the CPS->APRS-> Analog setting, so the received channel should have the matched frequency setting/CTCSS setting/band width to the TX radio's APRS setting, and have the APRS RX turned on.

- 4. Radio Menu ->Settings ->Device Info, add the APRS board version display
- 5. CPS->APRS->Analog, add 8 groups analog TX frequency. In CPS->Channel->Analog APRS Report Freq, allows select a TX frequency to transmit the analog APRS.
- CPS->Common Setting->Channel ->DMR Mode, add "DCDM TS Split" mode. In this mode, the radio receives on the selected slot in channel, but in transmission it will use the other slot. This configuration is only in use when the radio talk through a D578UV in repeater mode with fixed slot.
- 7. CPS->Optional Setting -> Auto repeater, add 3 new functions. These 3 functions are only working when Repeater function set ON.

Rep CC Limit: Repeater is not working when the color code doesn't match.

Rep Slot Path A: Repeater will receive at fixed slot on channel A and transmit in the other slot on channel B.

Rep Slot Path B: Repeater will receive at fixed slot on channel B and transmit in the other slot on channel A.

CPS->Common Setting ->GPS Roaming, allow user set a list of GPS locations, when GPS positioning is within the preset radiation radius of coordinates, the radio will switch to the corresponding zone.
1)Common Setting->Optional Setting ->GPS/Ranging -> GPS set ON.

2)Common Setting->Optional Setting ->GPS/Ranging -> GPS Roaming set ON.

3)Common Setting->Optional Setting ->GPS/Ranging -> Distance unit,select Meter or Feet for the radius.4)Common Setting->GPS Roaming, complete the setting, maximum 16 coordinates can be set with

matched zone.

- CPS->Common Setting ->Zone -> Zone hide, add Zone Hide function in the Zone menu, it allows user hide some zone when they don't need it on display. Since the Zone Hide is new inserted item, it may be checked automatically when open an existing codeplug. CPS->Tool-> Zone Hide Operation, allows you check or uncheck all Zone Hide.
- 10. CPS->Common Setting ->Optional Setting->Key Function, add "Ana APRS Info", for fast accessing the received APRS information.
- 11. CPS->Common Setting ->Channel -> Send Talker Alias, make the Talker Alias to be private setting for each channel, instead of public setting for all channels.
- 12. CPS->Tool -> APRS information Manager, allows the CPS to read the received APRS message from radio and export.
- 13. Add "Draft" in the Messages menu, unsuccessful SMS is saved in draft and can be resent.
- 14. Add timezone GMT+5:30(India), GMT+5:45 (Nepal), GMT+4:30(Afganistan), GMT+3:30(Iran) GMT-3:30 (Newfoundland, Canada), GMT+8:30 (Eucla)
- 15. Change the APRS message to be a lower priority than menu, the radio will not be kicked out of radio menu when receive the APRS message.
- 16. Correct the analog APRS sending inaccurate altitude (height) issue.
- 17. Correct the corrupted alert tone issue.
- 18. Make the TOT valid for the cross band repeater function.
- 19. Change the AM frequency to maximum 145MHz (138-145MHz AM is useable, but the spec may not best).
- 20. Radio menu -> APRS -> Ana APRS Info ->APRS Verify, allows you set the function on or off. The Anytone firmware has error code verification when receive analog APRS information, it helps to display the data correctly. Turn off the error code verification may improve the analog APRS receive.

Firmware version: V2.02 CPS version: V1.15 SCT 3258 version: V2.01.07 BA (same, no need update) BT Version: 10036

D578UVII firmware update V2.01 (dated 2021-06-13)

Change List

1. CPS->Optional setting ->Display->Date Display Format, allows the user set the date format on display.

2. CPS->Optional setting ->Display->Display Channel type, allows the user turn off the channel type on display

3. CPS->Optional setting ->Display->Display time slot, allows the user turn off the time slot on display

4. CPS->Optional setting ->Display->Display color code, allows the user turn off the color code on display

5. CPS-> Optional setting ->Alert Tone, add Ana idle channel tone, the digital channel and analog channel have separated idle channel tone setting.

- 6. CPS->Channel -> Auto scan, tick on the box will allow the radio start scan automatically.
- 7. CPS-> Optional setting ->Volume/Audio, separate mic gain setting for digital channel and analog channel

8. CPS-> APRS ->Ana AprsTX, allows to set wide band or narrow band for analog APRS transmit.

9. Add the alert tone setting in radio menu.

10. CPS->Analog -> 2Tone Setting-> Auto Reset Time changes to maximum 250S. If you set Auto Reset Time to 25s, it keeps the squelch on carrier until there is 25 secs of silence, then it switches back to waiting for tones. If there is a transmission before the end of that 25 secs, the timer restarts. It is useful for the 2Tone Paging System.

11. CPS->Analog -> 5Tone Setting-> Auto Reset Time changes to maximum 250S

12. CPS->Analog -> DTMF-> Auto Reset Time changes to maximum 250S

13. CPS->Optional Setting ->AM/FM -> AM squelch, allows to set the AM squelch separately.

14. Rename to AM menu to AM air.

Firmware version: V2.01 CPS version: V1.14N 0612 SCT 3258 version: V2.01.07 BA (same, no need update) BT Version: 10036

This release is for Anytone AT-D578UV PLUS/AT-D578UVIII PLUS use.

How to know your firmware version



Press (Menu) key to enter the menu, turn channel knob to the Device Info and enter into the menu to check the model.

D578UV --- Please use the firmware D578UV_V1.xx for updating the radio.

D578UVII --- Please use the firmware D578UVII_V2.xx for updating the radio.

If you use wrong firmware for updating, the radio will remind "version error". After load into correct firmware, it will work fine.

Model Name	D578UV/	D578UVG/	D578UV PRO/	D578UV PLUS /
	D578UVIII	D578UVIIIG	D578UVIII PRO	D578UVIII PLUS
Included	No	GPS	GPS & BT	GPS, BT, Air band
	GPS/BT			
Glass print	black	black	black	black+silver
Analog APRS TX	No	Yes	Yes	Yes
Analog APRS RX	No	No	No	Yes
Digital APRS TX	No	Yes	Yes	Yes
Digital APRS RX	No	Yes	Yes	Yes
Air band RX	No	No	No	Yes
Memory IC capacity	2G	2G	2G	2G
Digital Contact	500,000	500,000	500,000	500,000
Firmware	D578UV	D578UV	D578UV	D578UVII
CPS	D578UV	D578UV	D578UV	D578UV

Notice: D578UV PLUS use a different firmware D578UVII V2.xx, CPS is same as D578UV.