Important Notice: After update the firmware, you need to do the reset to the radio first, power off the radio first. Then power it on while holding the PTT and the PF1 button below the PTT at the same time. The radio will start up with a note on the display stating MCU Reset, Please Wait – and do not turn the radio off while it restarts.   ******   See the Separate FW Update Instructions for Details   ******
.
- Install the Customer Program Software (CPS) by running the <mark>D878UV_CPS_Setup_x.xx.exe</mark> setup program in the CPS Program Folder
- After installing a new D878UV 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.

*** <mark>USB Drivers</mark> - Many users have found the D878 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.

D878UV --- Please use the firmware D878UV_Vx.xx for updating the radio.
D878UVII --- Please use the firmware D878UVII_Vx.xx for updating the radio.

D878UV firmware update V3.04 (dated 2024-9-15)
Change List
1. Add the Satellite function.
   The radio will provide a predict list for the satellites which will transit recently. Select a satellite to check the frequency and transit time. Press PTT button to transmit to the satellite.
2. Modify the GPS icon to green satellite. (Designed by IK8JHL)
3. Allows ARC4 and AES256 export/import in CPS.
Export = Default template to let you edit. This is a blank file apart from its headers.
Import = The file you manually made base on the template.

Firmware version: V3.04
CPS version: V3.04
Icon version: V1.22
SCT 3258 version: V2.01.07 BA   （same, no need update）
BT Version: 10033 or 10036 or 10043 or 19043 (no need update)

D878UV firmware update V3.03 (dated 2023-12-18)
Change List
2. Improve the scan speed, ignore some burst signal.
3. Modify the SMS to support the Text Capture on BM.
4. 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.

   To avoid the mistake, we suggest you do the process as below.
   1. Save the codeplug in 3.02 CPS in .rdt file.

2. Do the firmware upgrade on the radio, and after firmware upgrade, the reset is a must.

3. Run the 3.03 CPS and open the saved .rdt file, the AES keys only display xxxx now, but it still works when write the code plug into radio. To be safe, engineer suggests you re-input the AES keys in the CPS before loading to radio, then it must work.

5. CPS->Optional setting->Key function, add the "dim shut" function which allow set a key to shut off the radio backlight and LED completely.
6. Modify the firmware to make the AES encryption have a variable Vector(IV) instead of fixed "12345678".

Firmware version: V3.03
CPS version: V3.03
SCT 3258 version: V2.01.07 BA （same, no need update）
BT Version: 10033 or 10036 or 10043 or 19043 (no need update)

D878UV firmware update V3.02 (dated 2023-4-21)
Change List
1. CPS->Digital->ARC4 encryption, add the ARC4 encryption which is compatible with Motorola radio. When use AES/ARC4 encryption with 878, it is better to turn off the sub band to increase the percentage of successful.
2. 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.
3. CPS->Optional Setting ->Digital -> TX preamble to define the preamble time of the data transfer function (not needed for audio calls), and improve synchronization
4. SMS confirmation mode improvements with better compatibility with other devices
5. Call Alert fully compliant with ETSI recommendation

Firmware version: V3.02
CPS version: V3.02
SCT 3258 version: V2.01.07 BA （same, no need update）
BT Version: 10033 or 10036 or 10043 or 19043 (no need update)

D878UV firmware update V3.01 (dated 2022-11-4)
Change List
6. Channel -> Analog -> 5Tone ID, make the decode standard in current channel to be same as the 5Tone ID encode standard.
7. AES256 encryption code only allows to write into radio, not allow to read from the radio.

Firmware version: V3.01
CPS version: V3.01
SCT 3258 version: V2.01.07 BA （same, no need update）
BT Version: 10033 or 10036 (no need update)

D878UV firmware update V3.00 (dated 2022-10-14)
Change List
1. RX Group List (Settings > Chan Set > Rx Group List), add "none" selection

2. Introduce the choice of selecting On line alert also to each Talk Group (one by one), so that every time any contact talks using that specific Talk Group, you will hear a beep at the beginning of speaking, regardless of the contact.
3. 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 transtion from green to off

    3-> Beep on led transition from blue or green to off.

Firmware version: V3.00

CPS version: V3.00

SCT 3258 version: V2.01.07 BA　（same, no need update）

BT Version: 10033 (same, no need update)

D878UV firmware update V1.27　(dated 2022-4-11)

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.
2. In CPS->Optional Setting-> Key function, remove the Monitor and SubPTT from the long key function.
3. Resolve the issue that export .dcf file doesn't work with Contact Manager V270.

Firmware version: V1.27

CPS version: V1.27

SCT 3258 version: V2.01.07 BA　（same, no need update）

BT Version: 10033 (same, no need update)

D878UV firmware update V1.26　(dated 2021-12-10)

Change List

1. Resolve the issue in V1.25 that radio can't make contact with Repeater.
2. Resolve the issue that Talker Alias setting is not saved in export CSV file.
3. CPS->Tool-> Channel Talker Alias Operation, allows you check or uncheck all Talker Alias in channel.

Firmware version: V1.26

CPS version: V1.26

SCT 3258 version: V2.01.07 BA　（same, no need update）

BT Version: 10033 (same, no need update)

D878UV firmware update V1.25　(dated 2021-11-30)

Change List

1. Allow to select TG and RX group list for the new channel created in radio menu.
4. Improve the Single Frequency Repeater unstable problem.
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.
6. 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 talks through a D578UV in repeater mode with fixed slot.

7. 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. CPS->Common Setting-> Optional Setting ->GPS/Ranging -> GPS Roaming should be set ON to enable this function(make sure the GPS should be ON first).

8. 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.

9. Add APRS SMS function in the radio menu, allows the radio to receive and transmit APRS message. (Valid only when install the optional BT+APRS board)
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.

10. CPS->Common Setting ->Optional Setting->Key Function, add "Ana APRS Info", for fast accessing the received APRS information. (Valid only when install the optional BT+APRS board)

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. (Valid only when install the optional BT+APRS board)

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 reverb/echo sound issue when transmit analog in the A+D channel.

Firmware version: V1.25
CPS version: V1.25
SCT 3258 version: V2.01.07 BA 　（same, no need update）
BT Version: 10033 (same, no need update)

D878UV firmware update V1.24N (dated 2021-05-31)

Change List

1. Correct the issue that FM radio is unable to off in menu.

2. Correct the issue that CPS->APRS -> APRS set APRS auto TX intervals(s) doesn't match to radio setting.

Firmware version: V1.24N

CPS version: V1.24N
SCT 3258 version: V2.01.07 BA （same, no need update）
BT Version: 10033

D878UV firmware update V1.24 (dated 2021-05-26)

<u>Change List</u>

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

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

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

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

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

8. CPS->Channel -> Auto scan, tick on the box will allow the radio start scan automatically.

9. CPS-> Optional setting ->Volume/Audio, separate mic gain setting for digital channel and analog channel

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

11. Add the alert tone setting in radio menu.

12. 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.

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

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

15. Digital APRS add Coarse and Speed information.

16. Optional Setting ->Other-> Priority Zone A, Priority Zone B change to display the zone name instead of zone number.

17. CPS-> APRS-> APRS alt data add "Meters" unit for optional.

Firmware version: V1.24
CPS version: V1.24
SCT 3258 version: V2.01.07 BA （same, no need update）
BT Version: 10033

D878UV firmware update V1.23 (dated 2021-04-13)

<u>Change List</u>

18. Resolve the issue that the talker alias transmit doesn't match to selected Radio ID

19. CPS->Tool -> Options, add Analog APRS RX option, allows user choose whether the Analog aprs RX setting is valid according to the radio version.

20. Resolve the issue that "when sending APRS Beacon it transmits three times instead of once, when transmitting APRS Beacon with PTT it transmits it twice instead of once"

Firmware version: V1.23
CPS version: V1.23
SCT 3258 version: V2.01.07 BA （same, no need update）
BT Version: 10033

D878UV firmware update V1.22 (dated 2021-02-06)

Change List

21. CPS->Public -> APRS -> Analog-> Digipeater Path, allows to input more digipeater paths..

22. CPS->Optional Setting -> Alert Tone -> Key Tone, change to turn off the key tone only. Other beep tones are keeping on.

23. CPS->Optional Setting ->GPS Ranging ->Time Zone change from GMT to UTC

24. CPS->Analog->5Tone ->5Tone decode units, allows to filter the income 5Tone ID. For example, if the setting is 109, the radio will receive all the calls 5Tone ID start with 109.

25. Resolve the issue that the channel setting changed in radio doesn't save in codeplug.

26. Resolve the issue that Lat set to S and write into radio, it will return to N when read the radio again.

27. CPS->APRS-> AprsDisTime, allows to set the APRS display time on the screen.

28. CPS->APRS -> Aprs Alt Data, allows to set the APRS altitude to fixed beacon use.

Firmware version: V1.22

CPS version: V1.22

SCT 3258 version: V2.01.07 BA　（same, no need update）

BT Version: 10033

D878UV firmware update V1.21 (dated 2020-09-18)

Change List

29. Improve the firmware issue that manual dial TG TX in simplex channel doesn't show busy when the radio is receiving.

Simplex Channel for a Hotspot   TX Permit = Channel free or Different CC

Manual dial a TG

When you PTT when the radio is RXing someone the Radio does not show Bussy

It just lets you TX into the Hotspot

It should see that it is in use and show Bussy

30. Improve the CPS issue that channel setting TX permit set to Same Color Code, reopen the channel setting will show Always.

31. Improve the CPS issue that "the channel edit menu cannot be moved to show the OK button."

Firmware version: V1.21

CPS version: V1.21

SCT 3258 version: V2.01.07 BA　（same, no need update）

BT Version: 10033

D878UV firmware update V1.20P (dated 2020-09-08)

Change List

1. Improve the issue that radio will grab a TG when the repeater is in Call Hold Off time.

2. Improve the issue that "GPS information doesn't display with using a programmed "GPS info" key when only analog channels are in use".

3. Resolve the issue that "The channels program as "Simplex" and "Dual Slot", save the codeplug or program into radio, the setting will become "Repeater" after re-open the saved codeplug or read from radio."

4. Improve the issue that "By receiving Dmr in Simplex and Double Slot mode, several times the demodulated audio of first word is missing".

5. CPS->Channel -> Analog, R5toneBot, R5tone Eot, allows to set different 5Tone PTT ID for each channel.
6. Resolve the issue that "By composing a 5 tone using Manual Dial (Book, Manual Dial, typing Input ID and pressing PTT, the "stop code" defined in 5 tone setting is not considered as silence (stop code and stop time) but as a tone".
7. When 5Tone -> Beep Tone & Respond are enabled, the radio will respond with itself ID.
8. CPS->Key function, add APRS send to the key function. The radio will transmit the APRS information (longitude, latitude,etc..) to the receiver when user press the "APRS send" key.
9. Improve the issue that digital monitor displays wrong time slot.
10. Improve the issue that "Keeping the sub band enabled, reception on the Main band is often lost or is very delayed".
11. Improve the issue that "After decoding a 5-tone call in repeater mode, the 5-tone response is sent only after the repeater has dropped out".
12. Improve the issue that "By configuring the 5 tones selective call for different call types, starting from when the RF carrier is on pushing PTT, the timing of the beginning of 5 tones sequence   does not correspond to the summation of pauses configured in 5 tone setting windows in the CPS. Unexpected delay is also present using DTMF and 2 tone"
13. CPS->Channel ->TDMA adaptive rename to Slot suit.
14. CPS-> Hot key, add the "Channel Set" hot-key choice that is on the 578, to the 878
15. CPS->Digital -> Talk Groups, allows the entry of talk group numbers maximum 16777215.

Firmware version: V1.20P
CPS version: V1.20P
SCT 3258 version: V2.01.07 BA （same, no need update）
BT Version: 10033

D878UV firmware update V1.19 (dated 2020-6-16)

Change List
1. CPS->Optional Setting ->Display -> Zone Name Colour, allows to set the display color of zone name.
2. CPS->Optional Setting ->Power Save -> Auto shut down type, allows to set the auto power off count time be affect by call or not.
3. Improve the issue that radio has Click sound during scan.
4. CPS->Channel ->DataACK Disable, allows to disable the radio response to repeater data service request. It helps to improve the radio freeze issue.
5. Press Menu key on radio to stay at the channel with signal permanently when it finds a signal during scanning. The radio is unable switch to that channel If the channel doesn't belong to a zone.
6. Change the default date time to year 2020.
7. Separate the TOT prompt tone and the beep tone.

Firmware version: V1.19
CPS version: V1.19
SCT 3258 version: V2.01.07 BA （same, no need update）
BT Version: 10033

D878UV V1.18(dated 2020-4-11)

change list
1. Improve the send message issue when both roaming and GPS are on.

2. Add the notification in the help section for Group Call hold time setting and Private Call hold time setting in CPS.

3. Add "CTCSS/DCS Scan" in key function. Assign a key with "CTCSS/DCS Scan" function, press the key to turn on the function. This function is only valid for the analog channel with CTCSS/DCS setting.

With this function ON, when an analog channel with CTCSS setting receive a signal with unmatched CTCSS, the radio will start the CTCSS scan from the data base, once the CTCSS data matches to the received CTCSS, the audio will come out, press PTT to reply the call and save the data, or just press MENU key to save the data, press the EXIT key to exit.

Note: When the channel set with CTCSS, it will scan the CTCSS data base. When the channel set with DCS, it will scan the DCS data base. When the channel doesn't set CTCSS/DCS, the radio will not start CTCSS/DCS scan.

4. Change the Digi APRS RX display to callsign instead of channel name display.

5. Resolve the issue that radio stuck or reboot when both roaming and GPS are on.

6. Allows max TG number 16777215

7. Add the "channel name/frequency display switch" to the key function.

8. Add STE operations to the radio menu.

9. Improve the issue that sometimes radio transmit to wrong TG.

Firmware version: V1.18
CPS version: V1.18
SCT 3258 version: 2.01.07BA
BT version: 10033

D878UV firmware update V1.17 (dated 2020-1-16)

Change List

1. Add GPS On/Off in the key function

2. Add BT On/Off in the key function

3. During scanning, the removed channels from channel list will revert back after switching zone.

4. CPS->Channel ->Digital ->multi-key , add encryption (MKE) function. (Note: When use the MKE function, make sure turn off the sub channel, otherwise the RX will be affected)

5. CPS->Channel ->Digital ->radom key, allows the radio transmit the radom key encyrption.

6. Resolve the issue that when roaming is ON, the POP-up screen shows OFF.

7. Resolve the issue that in APRS section, Slot2 selection is radio broadcast for Slot1 and vice versa.

8. Resolve the issue that the car audio stops when start the roaming function.

9. Resolve the issue that the car audio stops when APRS is transmitting.

10. Improve the Scan speed to double.

11. Resolve the issue that Beep sound doesn't work when repeater is out of range.

12. Resolve the issue that up/down key function on microphone is reverse in VFO mode.

13. Revise the beep tone time setting.

14. Resolve the issue that APRS-Auto TX interval setting in CPS doesn't match the radio menu.

15. CPS->Optional Setting->Other->TOT Predict-> ON, the radio will beep to predict TOT time will reach soon and TX will cut off.

16. CPS->Optional Setting->Other->TxPow Agc -> ON, when the radio detects the RX signal is very strong, it will adjust the TX power one level lower, also the display will show the correct TX power level match to the actual TX power. This function helps to reduce the battery consumption.

17. CPS->Channel->SMS Forbid, allow to turn off the SMS receive.

18. CPS->Optional Setting -> Display, allows to change the color of channel name.

19. Resolve the issue that the Encryption key is always changing when even click on the "enter" key.
20. During scanning, the backlight will be turned off according to the back light settings in CPS,
Firmware version: V1.17
CPS version: V1.17
SCT 3258 version: 2.01.07BA
BT version: 10033

D878UV firmware update V1.17a (dated 2019-12-17)

change list
Firmware version: V1.17a
CPS version: V1.17a
SCT 3258 version: 2.01.07BA
BT version: 10033

D878UV firmware update V1.16 (dated 2019-11-20)

change list
1. Optional Setting ->Display ->Standby Char Color, allows to set different colors.
2. Resolve the issue that the radio continue to receive when switch from TS1 to TS2.
Issue only in VFO mode : During a reception on TS1 if i change on TS2 i continue to receive , or some time its dropped only audio but ID are received
3. CPS-Optional Setting - Display, allows to set different colors for A channel name and B channel name.
4. CPS-Optional Setting - Other - Encryption type, allows to choose AES or Common encryption type. The common encryption type allows the radio communicate with earlier D868UV or D878UV radios.
Note: The radio must be reboot after select the encryption type.
5. Resolved the issue that when digital monitor is on, press # key will not save the channel and color code.
6. Improved the issue that sometimes the LED light keeping on in digital channel.
7. Improved the issue that sometimes after the signal drop, the display will keep receiving and radio emits nosie.
8. Resolved the issue that when DTMF->D code pause is set, press PTT and Down Key will not transmit the D code.
Resolve the issue that the digital contact manually change in radio will not be saved.
9. Resolve the issue that the radio doesn't RX after TX when both transmit and receive radios are with digital Monitor ON.
10. Resolve the issue that the Talker alias doesn't change when the radio ID changes.
11. Resolve the issue that the digital scan is easily interfered.
12. Resolve the issue in CPS that 5Tone will add E to the code automatically.
13. Resolve the issue in CPS that AES code is incorrect when open the codeplug.
14. Resolve the issue that the callsign change to orange color when load the codeplug into radio directly.
FW: 1.16
CPS: 1.16
SCT:2.01.07BA
BT:10033

D878UV firmware update V1.15 (dated 2019-9-27)

Change List

1. Improved the DMR RX audio drop out issue

2. Improved BT TX no audio issue

3. Make the default Analog APRS callsign APAT81 in radio and in CPS.

D878UV firmware update V1.14 (dated 2019-8-10)

Change List

1. Increased the auto repeater offset setting in CPS, allows set 2 different offsets in one band.

2. Increase AES encyption setting in CPS

4. Add multi colors settings for the callsign and channel name in CPS.

5. Allows select different GPS mode in CPS, default is only GPS.

Both GPS & BDS   ($PCAS04,3)

Single only BDS   ($PCAS04,2)

Single Only GPS   ($PCAS04,1)

6. Increase the decode time setting for the CTCSS,recommend setting is 250ms for normal use.

D878UV firmware update V1.13 (dated 2019-6-8)

Change List

1.Increased to 200,000 digital contacts.

2. Add "BT RX Delay" in radio BT menu and CPS->Option Setting->VOX/BT

BT Rx Delay Setting - For Digital Mode Only - this allows for a time delay to be set before the RF radio BT Rx will capture the automobile audio.   Recommended setting should be off.   If there are short RF radio Rx issues that cause BT RF radio Rx to interrupt background music too soon, a delay from 30ms, 1s, 1.5s, or 2s can be set to avoid false RF radio BT Rx.

An example could be user PTT bursts to activate a repeater -> ("kerchunking") that may cause the RF radio BT Rx to lock onto the automobile audio and stop music when there is no actual RF Radio BT conversation)

3.Add "CTCSS/DCS set" in CPS->Optional Setting->Key function, it allows the radio access CTCSS/DCS set promptly.

4.Modify the "BT Mic Gain" default set to 1.

5.Make the TOT beep independently from public setting, the beep is there when TOT function is on.

6.Change the "Working Mode" in CPS->Optional Setting->Other to match the radio bands, i.e when the radio is at amateur band, the working mode is default at amateur mode.

7.Resolved the issue that SSID in APRS doesn't update when open a new codeplug.

8.Fixed an error, that "auto repeater offset frequency" settings are not being imported

9.corrected band limits for Amateur Europe 0003

Important Notice for bluetooth:

● Although Bluetooth version 4.2 is compatible to many newer car entertainment systems, it cannot be guaranteed that it will work with all of these devices.

● Anyone will continue improving Bluetooth to allow more car models connect to our radios, but time is not guaranteed.

D878UV firmware update V1.12 (dated 2019-4-30)

Change List

1.Resolved the issue that Wide band set up was missing in the radio menu.

2.Resolved the issue that RX display is incorrect when set up the talker alias.

3.Resolved the issue that BT PTT battery voltage show on D878UV PLUS screen is incorrect.

4.Resolved the issue that BT PTT disconnect once D878UV PLUS is reboot.

In case the BT PTT doesn't reconnect when D878UV PLUS is reboot, please refer to "D878UV BT PTT firmware Upgrade" for updating the BT PTT.

After the firmware update, the BT soft Version should be ET12_AQQX_V10024.

D878UV firmware update V1.11N (dated 2019-4-9)

Change the "Startup Reset" to be default ON.

But it still requires to set "Startup Reset" to "On" in CPS after the first time V1.11N firmware update.

1.) Update FW to V1.11N

2.) Use V1.11 CPS to read the radio data

3.) Go to Optional Setting - > Power On menu and set Startup Reset to "ON"

4.) Write the Code Plug to the radio.

5.) Hold pressing PTT & PF1, at the same time power on radio, it will do a Reset.

It doesn't require to set "Startup Reset" in all the future firmware update operations.

D878UV firmware update V1.11 (dated 2019-3-22)

➔ **This firmware update requires an Icon Update.**

Change List

1. Resolved the issue that "go to Bluetooth and in Paired List - when I want to delete say No 2 = Chevrolet MyLink = it deletes the one above the one I want to delete"

1. Make the band changes, separate the amateur band and commercial band

2. Resolved the issue that the 5Tone encode is incorrect.

3. Add black background for menu.

4. Resolved the issue that some car BT require 6digit code for connection.

5. Resolved the issue that the BT name is incorrect after the re-connection.

6. Resolved the issue that the car player doesn't show the BT name.

7. Resolved the issue that no audio when re-connect the BT.

8. When in roaming, allow the user press PTT, the talk is effective when roaming is successful.

9. CPS->Tool->Firmware update, rename to Firmware and Icon Update.

10. Resolved the issue that Exclude Channel from Roaming was not exported.

11. Resolved the issue that amateur band is not compatible with Contact Manager.

12. Hot keys Import/Export feature added in CPS.

13. This CPS update includes a new Startup Reset option to turn off/on MCU Reboot - Reset.
   In the CPS-> Optional Settings menu -> Power On menu -> Startup Reset field, the Default is set to "OFF" preventing MCU Reboot. To restore the MCU Reboot feature after installing the new CPS, go to Options menu -> Power On menu and turn Startup Reset to "On", save the code plug and then write the code plug to the radio. This will allow future MCU Reboot to be enabled using the **PTT & PF1** hold down during radio turn on.

14. Roaming > Out Range Note > Note Kind > Beep is now working.

15. Resolve the issue that TX TG doesn't match to the display TG.

16. Resolve the issue that voice come out from BT earpiece when transmit analog APRS.

17. Add 60S and 120S BT hold time options in BT menu.

18. Make the BT disconnect to car player after the call is done.

19. Make the radio return to main screen once finish the zone setup.

20. Add display "Booting... Please Wait!" when power on the radio.

D878UV firmware update V1.10 (dated 2018-12-30)

21. Add new menu item in radio Menu->GPS-> Start Test or CPS ->Optional Setting->Power On->Startup GPS Test. With both the Start Test and GPS function are ON, when power on radio, it will enter into GPS test mode first and stay 1minute at GPS test mode before it goes into normal mode. This function may improve the GPS lock speed. Either Start Test or GPS is OFF, the radio will start up at the normal mode.

22. Change the color of roaming icon, red means the roaming is failed, green means the roaming is successful.

23. Add the Analog APRS Signal Path in the Radio Menu - APRS.

24. In CPS ->Channel, add a function "Exclude channel from roaming", when this function is on, the roaming function is invalid in this channel.

25. Add the ON/OFF for date time display.

26. Revise the auto power off, when there is a signal come in or user press PTT key, the auto power off count time will be cleared and re-count.

27. Resolve the issue that the backlight is not off in set time when RX analog signal.

28. Add the "repeater check interval" and "times of repeat reconnections" in the radio menu - Roaming.

29. In CPS->Optional Setting ->Auto repeater-> Repeater out of range reminder (times), it will allow the user set up the reminder times for the "Repeater out of range" to show on screen.

D878UV firmware update V1.09(dated 2018-11-28)

30. Change the TG to red color when the roaming is successful.

31. Resolved the issue that the Radio will re-start when in radio check

32. Resolved the issue that when install the CPS at C:/Program Files(X86), the Firmware Upgrade can not run well.

33. Resolved the issue that Export Data Conversion File doesn't work if there are 2 Radio ID.

34. Allow the CPS to open DCF file.

D878UV firmware update V1.08(dated 2018-11-10)

35. Resolved the problem the PF3 not allow for Turbo power switch.

36. In VFO mode, change the up key to increase the frequency by 1MHz, down key to reduce the frequency by 1MHz.

37. Add "Roaming Effect Wait" on roaming menu of radio.

38. Move the A or B indication behind the last call.

39. Increase the TG display when the roaming is successful.

40. CPS->Tool->Export Data Conversion File, allow convert the codeplug for Contact Manager use.

41. CPS->Channel->Analog-> Customs CTCSS, allow customize the CTCSS code.

42. CPS->Public->Optional Setting->Auto Repeater->Roaming Display, it allows set up the roaming return channel to be current channel or the roaming channel.

43. CPS->Public->Optional Setting->Key function, add the Mute Timing function, it allows mute the radio at the set time. After it reach the set time, it will return to normal volume. The mute timing can be set in CPS->Public->Optional Setting->Other->Mute timing

44. Allow load the codeplug into radio when the roaming zone is null.

45. Resolved the problem that R icon and A icon is mixed in display when radio switch from digital channel into analog channel.

46. Resolved the problem that Repeater Out of Range is always on display.

47. Resolved the problem when assign the PF3 key to Power Switch function, it cannot switch to Turbo power.

48. Resolved the issue that DMR APRS cannot work on Motorola Repeater.

49. Delete the roaming setup in each channel in CPS. All the roaming setup please refer to CPS->Public->Optional Setting-> Auto repeater.

50. Allow start the roaming function in a simplex channel.

51. CPS->Public->Optional Setting-> Auto repeater->Alert Out of Repeater range, it has Off, bell and voice for optional.

52. Change the date time display to be standard.

53. CPS->Public->Optional Setting->Display->Channel name color, allow set up the channel name to yellow or white color.

54. CPS->Public->Optional Setting->Display->Receive Backlight Delay, it will allow you turn off the backlight when RX.

55. Allow set the APRS TG in radio menu.

56. In VFO mode, press up and down key will allow to adjust the frequency at 1MHz step.

57. Resolved the issue that time slot can be switched in analog channel.

58. Hide the roaming icon in analog channel.

59. Resolved the issue that talker alias set up cannot be saved in CPS.