Important Notice: After update the firmware, you need to do the reset to the radio firstly, power off the radio firstly. 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.

After a re-start the radio will display the setting of the date and the time. Use the up-down key 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.

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

D868UV firmware update V1.18 and V2.18

Hardware V1.0 --- Please use the firmware V1.18 for updating the radio. **Hardware V1.1** --- Please use the firmware V2.18 for updating the radio.

CPS is V1.18, no difference for the 2 firmware.

We made below improvements.

- 1. In CPS Alarm Man Down, we add a Man Down Delay time. Some person don't like the radio alarm at once when the radio is upend, with set up the delay time, the radio will alarm when it reach the time after it is upend.
- 2. Improve the Digital Monitor.
- 3. Address the GPS positioning issue
- 4. Modify 'Slot' to 'Time Slot' in the menu.
- 5. Add a confirm for the MCU Reset
- 6. Add GPS on/off in the GPS info
- 7. Delete the GPS positioning message
- 8. Add Sub CH on/off in the option of key long press and short press in CPS
- 9. In CPU Public Optional Setting– Other, we add an Analog call hold time. When the radio is in analog mode, if the sub channel receives the call, you can transmit at the sub channel when you set up the Analog call hold time.
- 10. Set up the auto backlight duration in CPS, when receive a call, the back light will keep on for the duration time when the signal is disappear.
- 11. Add zone indication for the channels.
- 12. Address the issue can not change scan list group in the radio menu.

Note: When you use new CPS to open the old codeplug, you have to set up the 2 items base on your habit.

- (1) In CPS, Public- Optional Setting Alert Tone Maximum Volume, you can set up the volume for each volume level. 8 is maximum, 1 is the minimum, the default is 1 when you open an old codeplug.
- (2) In CPS, Public- Optional Setting Alert Tone Volume Change Prompt, choose on for the volume screen display.

D868UV firmware update V1.17 and V2.17

Hardware V1.0 --- Please use the firmware V1.17 for updating the radio. **Hardware V1.1** --- Please use the firmware V2.17 for updating the radio.

CPS is V1.17, no difference for the 2 firmware.

We made below improvements.

1. Add the digital contact (Promiscuous mode). In CPS, Public- Optional Setting – Digital Function – Digital Monitor, you need choose ON to turn on the function.

In digital monitor or **promiscuous** mode, the typical option is to pass all communication without regard for Talk Group (TG) codes. As an option, you could also allow the radio to pass communication in both Time Slots and any Color Code. The callsign, talkgroup, and TSx, CC, should be displayed on the radio's screen.

Notice: When switching the zone or channel, we find the audio may not come in, we will look into this next week.

- 2. Resolved the issue that there is a hum noise in transmit and receiving when the backlight is set low.
- 3. Add functions for long press keys.
- 4. Some people said the volume for each level is too loud, so we increase a volume set up for each level in CPS, people can reduce the volume for each level if they need.
- In CPS, Public- Optional Setting Alert Tone Maximum Volume, you can set up the volume for each volume level.
- After you update the firmware and do reset, the volume level will be 1, you will need to program it to higher for loud volume.
- 5. Some people said the volume screen is annoying, we add a check box that you can turn on/off the volume screen.
- In CPS, Public- Optional Setting Alert Tone Volume Change Prompt, choose on for the volume screen display.
- 6. Add several functions in the CPS, Public- Optional Setting –Other

Remote Monitor -- When this function is on, in radio, you can dial a private ID and choose Remote Monitor, then you can hear from the other radio without the radio press PTT key.

Get GPS Position -- When this function is on, in radio, you can dial a private ID and choose Get GPS Position, then you can get the other radio's GPS position.

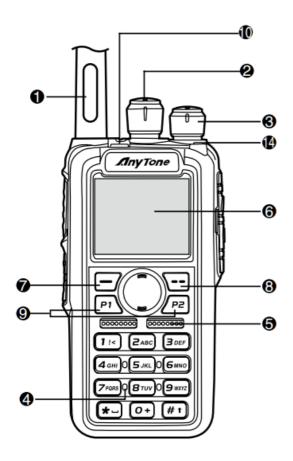
Select TX Contact -- When this function is on, it will allow you change the digital contact in radio directly.

Auto Repeater -- With this function is on, when you edit the channel manually, if you input TX frequency, the RX frequency will be auto offset frequency. as below chart shown.

TYPE A2 [MHz]

2m BAND		70cm BAND	
Range	Shift	Range	Shift
145.100≦ON <	-0.6MHz	440.025≦ON <	+5MHz
145.500	-0.01011 12	445.000	I JIVII IZ
146.000≦ON <	+0.6MHz	445.025≦ON <	-5MHz
146.400	+0.01VII 12	450.000	-SIVII IZ
146.600≦ON <	-0.6MHz		
147.000	-0.01011 12		
147.000≦ON <	+0.6MHz		
147.400	TU.OIVITIZ		
147.600≦ON <	-0.6MHz		
148.000	-0.01/1172		

^{7.} Allow to choose a RX group in radio menu.



Press 7 (Menu) key to enter the menu, press key to the Device Info and enter into the menu to check the hardware version.

Hardware V1.0 --- Please use the firmware V1.xx for updating the radio.

Hardware V1.1 --- Please use the firmware V2.xx for updating the radio.

If you use wrong firmware for updating, the radio will not work, but it is not broken. After load into correct firmware, it will work fine.

Actually the V1 and V2 firmware *are almost* same, just in/out is different, so every time when Engineer make updates, he will issue 2 firmwares at the same time. In future, we may have V3.0 hardware with more functions AND higher cost.

The V1.1 hardware has below difference compare with V1.0 hardware.

- 1) no jumper wire
- 2) CPU IC in/out pin is different.
- 3) V1.1 hardware allows adding a small PCB board for 300 hours recording use, this is an **optional** function.

The V1.0 hardware can't add the recording board, so engineer changed the in/out pin for the recording board.

It causes the CPU firmware is not compatible.