Using an Alternate Microphone Mode for Audio and PTT - Duane N6DMR

The D578UV Mobile radios have a UART controlled data line for Microphone controls including PTT, this uses the Mic computer chip to control all the Mic Function Keys as well as PTT by data line.

Anytone has added an Alternate Microphone (MIC) Setup called HandOpMode to allow the RJ45 to be switched to a basic MIC connection at the RJ45 MIC jack. You lose all Mic Function Key access but can wire a standard Electret type MIC audio in / out and PTT control to the RJ45 MIC jack.

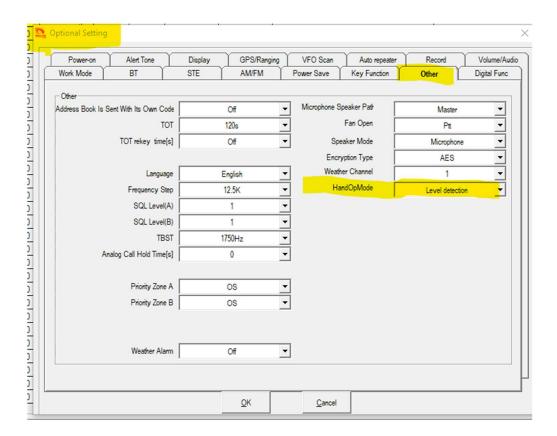
The CPS Menu in Optional Setting -> Other Tab, there is a new setting for HandOpMode which can be set as:

- 1.) Serial Port Detection (UART) -> (the default setting for the supplied Anytone Hand Mic)
- 2.) Level Detection mode which detects the Electret Mic Voltage, allowing that RJ45 pin to be used as PTT

In the Radio the Menu -> Settings -> Radio Set -> Other Func. The Hand Type the settings are:

- 1) UART-Det (UART Detect is default) or
- 2) Volt-Det (Mic PTT Line Level Detect)

CPS Menu Settings – Alternate Level Detection



D578UV Microphone Alternate Settings with Tigertronics Signalink Setup Information only - Not Supported by Tech Support / Warranty

12/14/21

Microphone Pinout Wiring - Original Default / Alternate Option

Default

Level Detection

- 1. Red -- UART
- 2. Brown -- 5V
- 3. Yellow -- UTX
- 4. Green SP +
- 5. Black -- MIC GND
- 6. White -- MIC
- 7. Blue SP -
- 8. Grey -- GND

MIC connector (Front view)



Optional Volt Dotact

- 1. Red PTT
- 2. Brown -- 5V
- 3. Yellow -- UTX
- 4. Green SP +
- 5. Black -- MIC GND
- 6. White -- MIC
- 7. Blue SP -
- 8. Grey -- GND

<u>Tigertronics Signalink with D578UV Mobile – Brian W1BKW</u>

SignaLink USB for AnyTone AT-578UVII / AT-D578UVIII Pro/Plus

In order to use a SignaLink USB with the AnyTone 578 without any modifications, follow the instructions and diagram below.

SignaLink USB Order Part No.= SLUSBRJ4 w/RJ 45

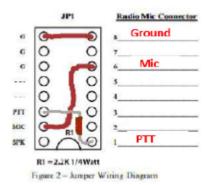
(If you have an existing SignaLink the Radio Cable Needed = SLCABRJ4)

In order to use the front panel microphone jack on the 578 you must set the HandOpMode to Level Detect in the CPS. Optional Setting, Other Tab, HandOpMode, Level Detect.

Or you can do it via the Radio front panel as follows: Menu, Settings, Radio Set, Other Func, Hand Type, Volt-Det.

You can also use an RJ-45 A/B Switch with a standard straight through RJ45 cable.

The jumper configuration for the SignaLink USB is as noted in the diagram below:



You must use a ¼ watt 2.2K resistor across PTT to Pin 1. Other wattage sizes will either be too small and fall out of the JP1 socket, or larger wattages will be too large and damage the socket.

SPK - Do NOT install this jumper wire. **See SPK note below**

**SPK - The mic jack on this radio uses differential audio which CANNOT be used with the SignaLink, or you'll damage the radio's audio amplifier. Instead, attach the supplied audio cable between the Signalink's rear SPKR jack and one of the radio's External Speaker jacks (the top jack disconnects the radio's built-in speaker, the bottom jack does not).