

Digital DMR APRS setup for Anytone D578 de KØTV

2023-01-23 rev. – 1st pass at this document. Later revs will fill in any blanks.

I currently use my radio in a fixed location.

After you get your radio working, then extending it to implement dynamic location data from a GPS will be another project. Configuring the radio to send analog APRS locations is also another project.

Part 1

Use a web browser and Login to your Brandmeister account.

<https://brandmeister.network>

Select '**SelfCare**' from the menu

- + For the Anytone, select the 'Chinese Radio' from the **Brand menu**
- + Insert an **APRS interval**. I use the max of 600. 30 min. is often enough for a fixed location.
- + Put in your APRS callsign including SSID.
- + **APRS text** field is optional. I use my email address.
- + Select an APRS icon
- + All the other options are Off.
- + Click the **SAVE** button when you are finished. (Important!)
- + Logout from Brandmeister

Part 2

These instructions are a back fill of the steps I used. Let me know if I overlooked a setting.

Open the CPS program for the radio. The CPS seems to change with every new revision so you may need to creatively interpret some of these settings.

- + Open **Common Settings** then **APRS**

You will configure both Digital and Analog APRS items here. I just messed with the Digital part and plan to go back to the Analog later. If the APRS options isn't visible in your CPS, you will need to reference the Anytone manual to locate the steps to enable it.

Manual TX interval – Manual transmission interval of APRS with PTT. Pick a number. I used 240 seconds. Every 4 minutes seems to be often enough.

APRS Auto TX interval – Automatic interval while the radio is idle. I used 1800 for every 30 min.

Roaming – off

Fixed Location Beacon – on

AprsDis Time – Time that 'APRS transmitted' message appears on your radio. I use 5 sec.

ddd.ddddd section

Put in your fixed location latitude and Longitude

Digital section

You can set this up to use multiple configurations depending on what channel you use.

I just filled out No. 1.

Report Channel = Current Channel

Report Slot = Slot 2

APRS TG = 310999

Call Type = Private Call

What all this means is that APRS will be reported via the DMR channel you are using. With the Cole Camp repeater, I found that my APRS data often got blocked because the KC Wide talk group on Slot 1 can get active. I know the Cole Camp repeater owner wants to keep all the dynamic talk groups on Slot 1 to keep Slot 2 open for local activity. Until repeater policy is updated, I decided to slip my DMR APRS data thru on Slot 2. I now get much more reliable position reports getting thru vs using Slot 1.

Analog section (You can skip this, it isn't part of the DMR APRS)

I have not yet implemented analog APRS. But, there are still some blanks that can be filled in this section while you have the CPS open.

TOCALL = APAT51 (check out the APRS protocol documentation to see what this means)

Your Call = (Just what it says)

Your SSID = -1 (this is what I use for fixed, but normally go with -5 for mobile)

APRS Symbol Table and Map Icon = (whatever is appropriate for your application)

/- for house

\k for SUV

(See APRS protocol documentation for a complete listing)

Digipeater Path = Your option (WIDE2-1 is what I use)

Sending Text = Optional (I put in my email address)

Ana AprsTx = Wide

Transmission Frequency = 144.39000 (I put this in all the blanks)

+ Open **Channel Information** for each of your existing DMR Channel entries

APRS RX = make sure this is checked (Not sure what this does)

APRS Report Type = set to Digital

Digital APRS PTT Mode = On

Digital APRS Report Channel = 1 (This selects the channel you set up in the Digital Section above)

+ Save this configuration to your radio. (Important!)

TESTING

Go to a DMR channel and hit PTT. You will see a message on the radio display saying APRS transmitted. You will also see this every 4 minutes during a QSO. It depends on what you set for the manual TX interval.

Watch the **aprs.fi** website to see if your location gets painted.

Let the radio sit for a while then check **aprs.fi** again to see if the automatic location interval is reporting.

This same basic process will apply to other DMR radios. But the CPS fields will be different.

Let me know if there are errors in these notes or something that needs to be clarified.

Harry, KØTV