Setting Up Digital DMR APRS – D868 Radio 8/4/18

Step One:

Setup a Channel for APRS

You must designate one of your channels as the default APRS Channel. This will be used for the Frequencies, Color Code and Time Slot to use that matches the Repeater or Hotspot you are using. Open this Channel's settings screen and select:

- APRS Report to "ON"
- APRS Report Channel to "1"

	DUP 3100		
Receive Frequency	Digit	al	
Transmit Frequency	421.33300	Contact 3100	Nat
Transitist Proqueriesy	427.55500	Radio ID N6DMR 028	
Channel Type	D-Digital	Color Godo 5	
Transmit Power	Lov:	50 540	
Bani Wich	12.5K	Receive Group List Ry 3100	
TX Permit	Always	Digital Endryption	
CH Scan List	Nore	Entryption Type Nama Engine	
APRS Report	On 🗾		
APRS Report Channel	1	Simplex TDMA	
	-	Call Confermation	
TX Peokibit	Talk Around	i Gai Gomeniaeon	
Work Alone	Through Mode	☐ Ranging	
Work Alone Γ	Through Mode	☐ Ranging	
Work Alone Γ alog CTCSS/DCS Decode	Through Mode	☐ Ranging	
Work Alone Γ alog CTCSS/DCS Decode CTCSS/DCS Encode	Through Mode	☐ Ranging	
Work Alone alog CTCSS/DCS Decode CTCSS/DCS Encode Squelch Mode	Through Mode	← Ranging	
Work Alone Γ alog CTCSS/DCS Decode CTCSS/DCS Encode Squelch Mode Optional Signal	Through Mode Off Off Off Off Off Off Off Off Off	☐ Ranging	
Work Alone alog CTCSS/DCS Decode CTCSS/DCS Encode Squelch Mode Optional Signal DTMF ID	Through Mode Off Off Off Off Off Off Off Off V	Ranging	
Work Alone	Through Mode Off Off Off Off Off Off Image: Carrier Off Image: Carrier I	Ranging	
Work Alone I alog CTCSS/DCS Decode CTCSS/DCS Encode Squelch Mode Optional Signal DTMF ID 2Tone ID 5Tone ID	Through Mode	Ranging	
Work Alone I alog CTCSS/DCS Decode CTCSS/DCS Encode Squelch Mode Optional Signal DTMF ID 2Tone ID STone ID PTT ID	Through Mode	☐ Ranging ✓	
Work Alone	Through Mode Off Off Off Off Off I Off I Off	Ranging	

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Step Two:

Setup Digital APRS Information Screen

At this screen you set your required settings:

- 1. Manual Tx Intervals
- 2. APRS Auto TX Intervals
- 3. Transmit Power set as High for Repeaters or Low for Hotspots
- 4. Fixed GPS Beacon (semantics on this is wrong it really means Fixed Beacon on or off
 - a. This gets set as "Not Used" if you want to use the actual GPS data as the location, GPS must be on and have a satellite signal lock for APRS to send
 - b. This is set to "Used" to transmit as a fixed Beacon and it will use the "dd.mm.nn" settings you enter below instead of the GPS (good for testing with no GPS lock)
- 5. Current Location which will be used as an APRS Beacon
- 6. The Report Channels you want to use, in this case select Report Channel 1 as the Channel you set in Step One Above
- 7. Enter Brandmeister APRS Talk Group (In the USA this is 310999)
- 8. Call Type set to Private Call
- 9. Set Slot that you want to use typically this would match the Step One Channel setting

	Manual TX Intervals[s]	30	Report Channel 1	DUP 3100	•
	APRS Auto TX Intervals[s]	60	Report Channel 2	Channel VFO B	-
	Transmit Power	Low	Report Channel 3	Channel VFO B	-
	Fixed GPS Beacon	Not Used	Report Channel 4	Channel VFO B	-
			Report Channel 5	Channel VFO B	-
	ddd.mm.mm		Report Channel 6	Channel VFO B	-
	Latitude (degrees)	40 -	Report Channel 7	Channel VFO B	-
ixed	Latitude (minutes)	07.45	Report Channel 8	Channel VFO B	•
eacon 🗖	North or South Latitude	N 💌			
ettings	Longitude (degrees)	70 🔹	APRS Talk Group	310999	
	Longitude (minutes)	07.99	Call Type	Private Call	-
	East or West Longitude	w _	Slot	Slot1	-
			Slot	ISIOU	-

Step Three:

Select APRS Send Channel

To turn on the DMR APRS, you just have to select the Channel you set up in Step One above and do a PTT to start the process, you will see the "Sending Digi APRS Data" Icon. The radio should now send APRS data at your selected intervals until you change the active channel.