

Guide how to set up APRS to Kydera CDR300UV

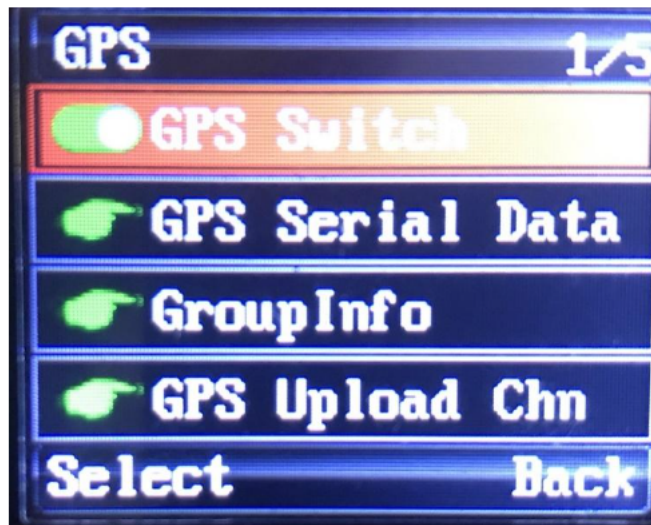
Basic guides

1. Update radio to the latest firmware and use proper software
2. Always read code plug from radio, make a change to code plug and then write back to the radio, because in this case your code plug will have all correct data that match to your radio
3. Never write data to the radio from different version of CPS, while this will lead to unpropred function/working of your radio.

Setting in Radio CDR-300UV

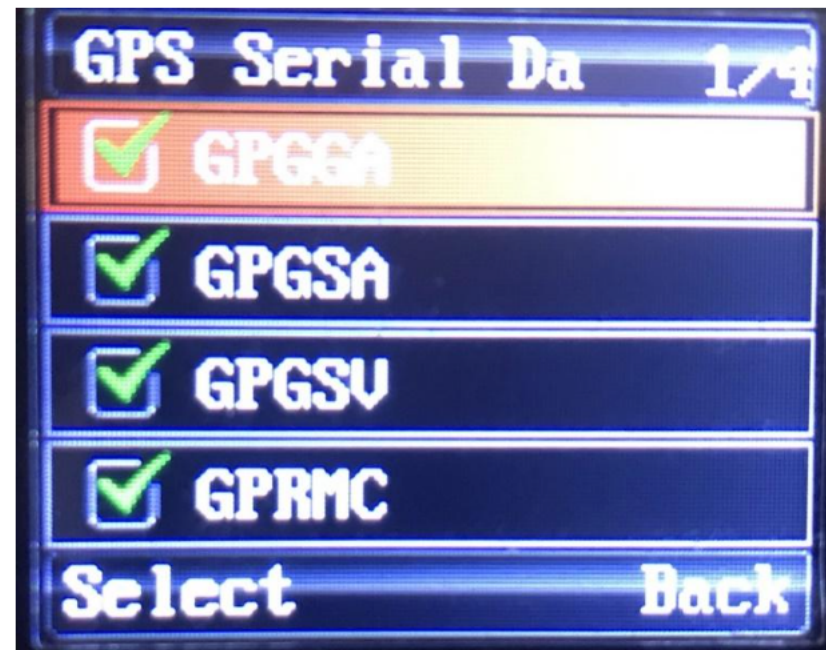
You need to prepare your radio for APRS.

Press Menu, go to Appendix, Choose GPS (red icon) and you will see this menu



Enable GPS Switch

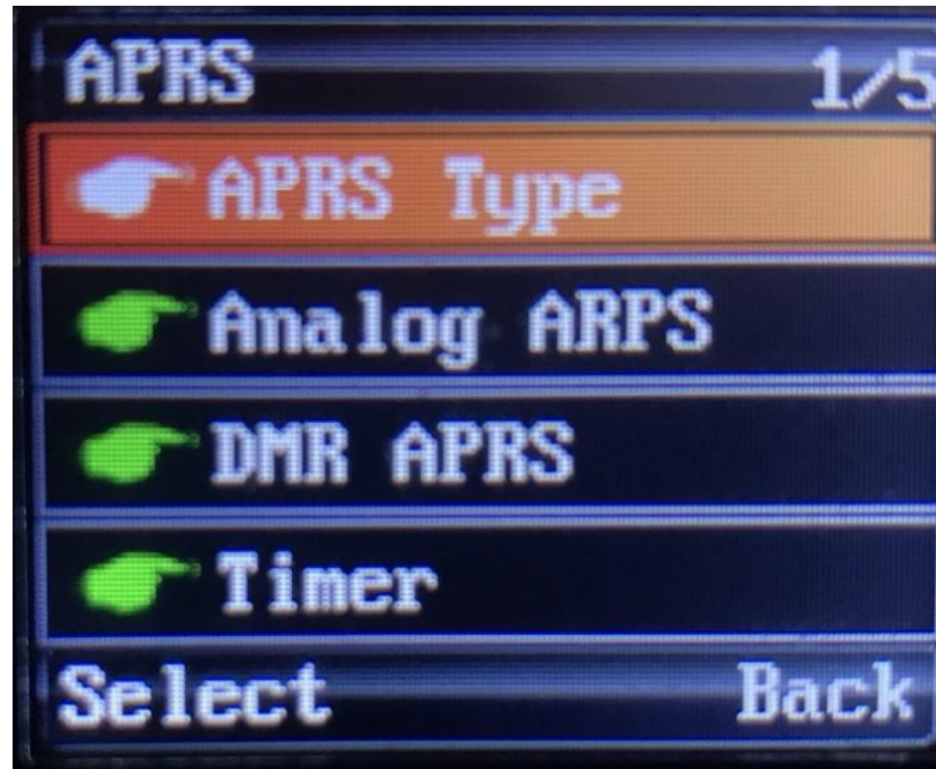
Under GPS Serial Data tick all options



Go to Calibrator and set to AUTO.

Now go back to appendix menu and choose APRS

In APRS Menu you have 5 options: APRS Type, Analog APRS, DMR APRS, Timer and Beacon



Select APRS Type, you will see 4 options, select DMR+Analog APRS

Under Analog APRS choose PTT Upload and choose TX End

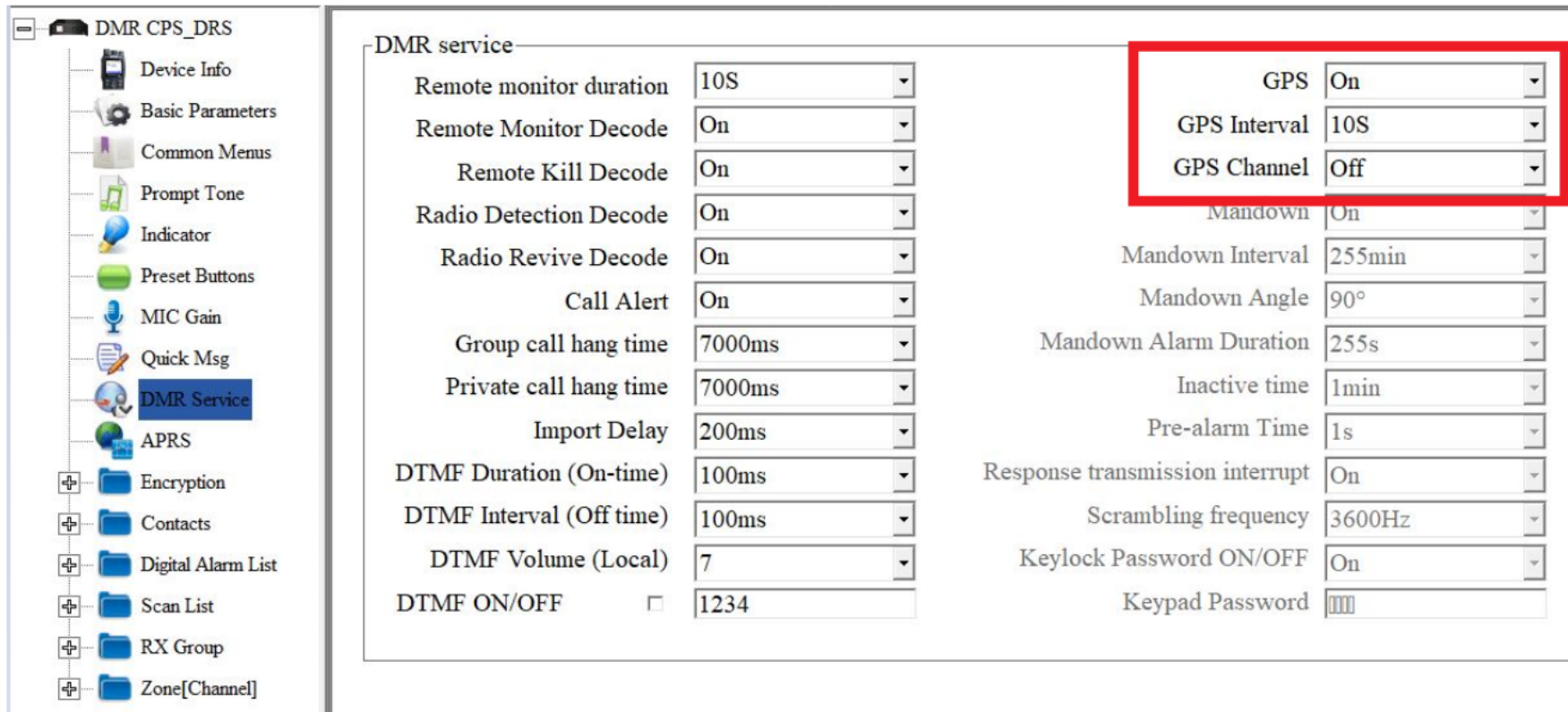
All other settings we will made in CPS

Connect your Radio via USB and open CPS

Read from the radio, do not open saved code plug.

Go to the DMR Service and set:

GPS to ON, GPS Interval 10s, GPS Channel OFF



DMR CPS_DRS

- Device Info
- Basic Parameters
- Common Menus
- Prompt Tone
- Indicator
- Preset Buttons
- MIC Gain
- Quick Msg
- DMR Service**
- APRS
- Encryption
- Contacts
- Digital Alarm List
- Scan List
- RX Group
- Zone[Channel]

DMR service

Remote monitor duration	10S	GPS	On
Remote Monitor Decode	On	GPS Interval	10S
Remote Kill Decode	On	GPS Channel	Off
Radio Detection Decode	On	Mandown	On
Radio Revive Decode	On	Mandown Interval	255min
Call Alert	On	Mandown Angle	90°
Group call hang time	7000ms	Mandown Alarm Duration	255s
Private call hang time	7000ms	Inactive time	1min
Import Delay	200ms	Pre-alarm Time	1s
DTMF Duration (On-time)	100ms	Response transmission interrupt	On
DTMF Interval (Off time)	100ms	Scrambling frequency	3600Hz
DTMF Volume (Local)	7	Keylock Password ON/OFF	On
DTMF ON/OFF	<input type="checkbox"/>	Keypad Password	1234

Under the MENU APRS you have following:

DMR CPS_DRS

- Device Info
- Basic Parameters
- Common Menus
- Prompt Tone
- Indicator
- Preset Buttons
- MIC Gain
- Quick Msg
- DMR Service
- APRS
- Encryption

Manual TX Intervals[s] 15

APRS Auto TX Intervals[s] 30

Beacon GPS Location

Latitude (degrees) 46.1011 N

Longitude (degrees) 14.2018 E

TX Freq[MHz] 144.8 Transmit Power Low

TX QT/DQT Off APRS Tone Off

Transmit Delay 500ms Destn SSID 0

Prewave Time 300ms Destn Call Sign KYDERA

Your SSID -4 APRS Signal Path WIDE1-1

Your Call Sign S52SX Your Sending Text KYDERA CDR300UV

APRS Symbol Table /

APRS Map Icon j

No	Report Channel	APRS TG	Report Slot	Call Type	PTT
1	Current channel	293999	Slot 2	Private call	On

Black frame settings:

Manual TX, set 15

APRS Auto TX Interval set to 30s,

Under Beacon – set Beacon. Here you have two options – GPS Location or Fixed Location.

If you choose Fixed Location your radio will transmit GPS Coordinate marked in green frame!

Green frame settings:

You can find own coordinates by web browser or visit www.aprsdirect.com.

Be Aware that those Coordinate are in Slovenia right now.

Those are in format Latitude 46°10' 11" N and Longitude 14°20'18" E

RED frame you have following settings:

TX frequency: for Europe Africa and Russia is 144.80, for all other counties check picture bellow

TX QT/DTQ – this is analogue or digital tone. Leave this to OFF. If in your country is in use tone, that ask your local igate owner what kind of tone is used to open igate

Transmit Delay and Preamble Time: Optimal setting are 500ms and 300 ms, if you think this can be decreased, go ahead and test it.

BLUE frame settings:

YOUR SSID: you have options from 0 to -15, it up to you what kind of extension you would like to have. Usually 0, -1,-2 are used for fixed location, -7 for weather station, all other extension can be normally used.

APRS Signal Path: WIDE1-1, is working fine, you can also use WIDE2-1 and WIDE2-2. Always use this without any space.

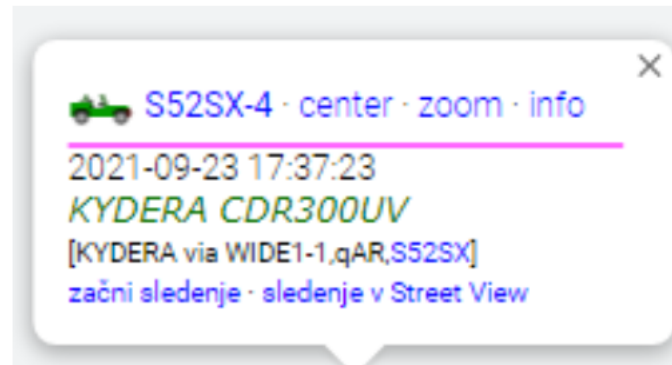
You Call Sign: put in your call sign

APRS Symbol table: there are two option according to APRS map chart – primary symbols ^/ ^ and alternate symbols ^ \ ^

Map Symbols can be found at this link: https://www.yachttrack.org/info_camper/downloads/APRS_Symbol_Chart.pdf

APRS Map Icon: According to the map symbols you can use whatever icon you like.

Your Sending Text: Here you can write a text, that everyone can be seen, if click on your call sing in web page www.aprs.fi or www.aprsdirect.com

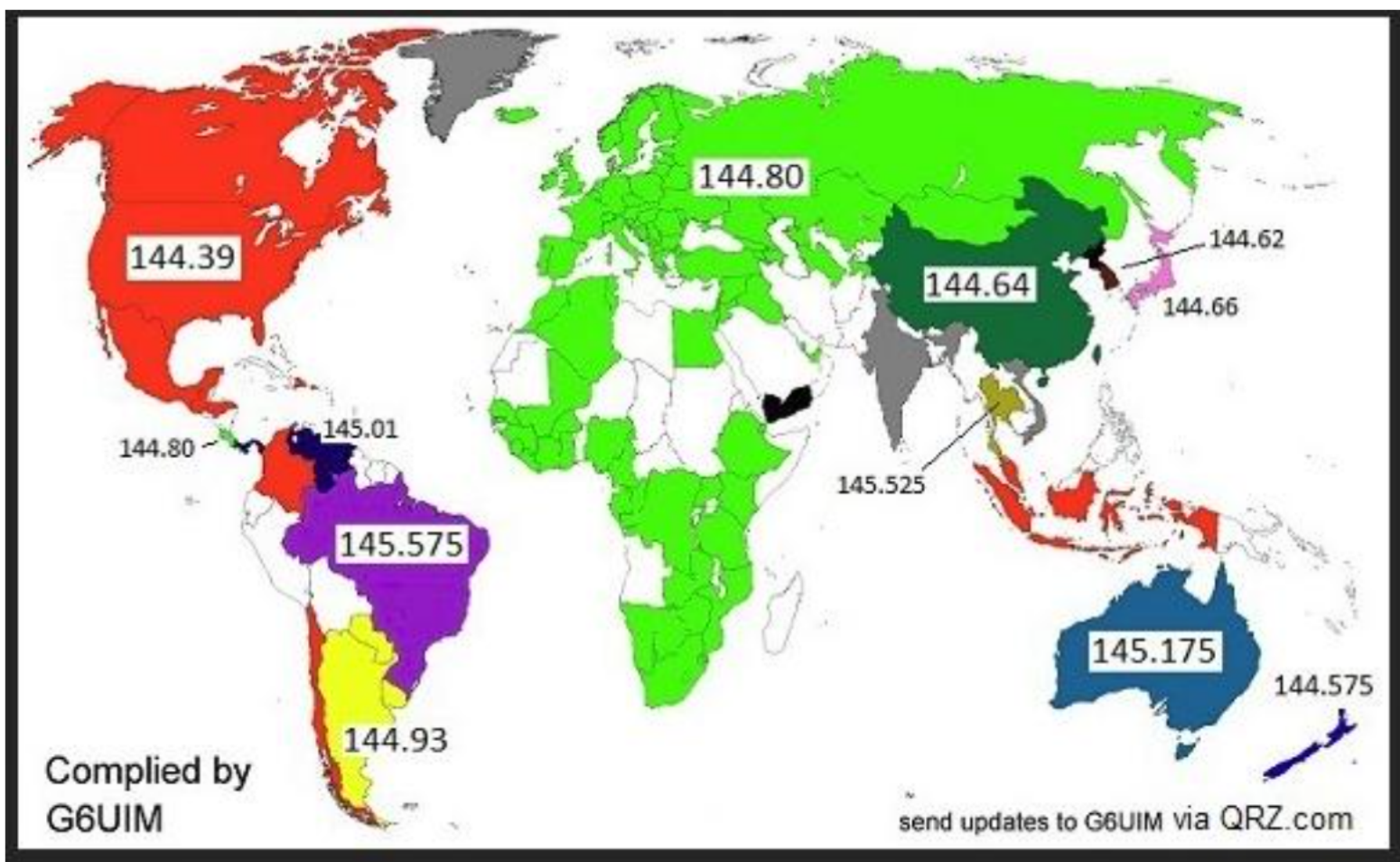


Yellow Frame Settings:

This setting are for digital APRS via DMR repeater's.

Report Channel You can choose Current channel, or any other channel in your channel list. I recommend to use Current channel

APRS TG: this is assembly from country code (293 for Slovenia) and 999 for TG for Brendmeister. 293999 is for Slovenia.



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Digital PARS registering at Brandmeister.

For Digital APRS you must be registered to Brandmeister. Please check what type of DMR repeaters are in use in your country.

Go to the following web page: <https://brandmeister.network/>

Click register and filled up all necessary data. Sometimes you need to wait a while that your account be confirmed.

After confirmation click to Login and put in your credentials

Click on your call sign on the right upper corner and choose Selfcare

SelfCare Settings

User: S52SX EN Settings

User Dashboard > SelfCare

Brand: Chinese Radio Language: English

APRS Interval: 60 sec APRS Callsign: S52SX-9

APRS Icon: In Call GPS: Off

Compact / CSBK data: Off Text Capture: Off

APRS Text: SAVO

AirSecurity / TOTP: Off

Hotspot Security

Password: [Redacted]

Save Restore defaults

Brand: Choose Chinese radio

Language: Choose your language on drop down menu

APRS interval: choose 60s

APRS Callsign: put your callsign and extension from -1 to -15

APRS Text: put your text in, but MAX 12 letters!

APRS Icon: choose your Icon which will be displayed on web pages like aprs.fi and aprsdirect

In Call GPS, Compact/CSBK data and Text Capture: leave to OFF

AirSecurity/TOTP: OFF

Hotspot Security: if you have a hotspot, than put in your personal password

Do not forget to press **SAVE** button at the end.

Channel setting in your code plug for analog APRS

For test make one analog channel And name it APRS ANA.

Put correct RX and TX frequency

Move slider to the right and under APRS choose APRS(A)

NOTE: analog APRS will work only on analog channels!

Channels settings in code plug for Digital APRS

NOTE: in Europe digital APRS is allowed to transmit only on TS2!

On your digital channel, at the end on the right side under the APRS column just choose 1, that mean current channel.

WARNING: Firmware is not finish yet so Digital APRS will transmit and proper work only on TS2,

DO NOT CHOOSE Digital APRS to work on TS1, because IT WILL NOT WORK and you will make a unnecessary traffic on TS1!

NOTE2: Digital APRS will work only on digital channels!

We are working very hard to fix that in the future.