

Robust Packet Radio APRS is nice but way too expensive and by far too complicated to practise.	True <input type="checkbox"/> False <input type="checkbox"/>
You would need at least 50 watts to participate or even better 100 watts.	True <input type="checkbox"/> False <input type="checkbox"/>
You would need a huge antenna which ruins the visual acceptance of your car and a tuner is necessary as well.	True <input type="checkbox"/> False <input type="checkbox"/>
HF-APRS just makes sense if you are on a world wide sailing trip or crossing the desert in a 4-wheel monster.	True <input type="checkbox"/> False <input type="checkbox"/>

Just check those four statements and compare if it is what you have heard about Robust Packet Radio-APRS so far...

**This documents cleans up with stereotypes, tells some true facts and offers an easy way to step into RPR-APRS.**

True is, there is no software/soundcard system helping to operate RPR modulation. And yes, there is only one company providing the necessary hardware. But if someone is able to get over the fact that for once there is no smart-ham-bypass-solution he will enjoy a really robust system.

Applications are not only if you live, drive or sail in some remote part of the world. If the infrastructure on the VHF-APRS side is poor it is fun to cover that by transmitting parallel (with same SSID !) via HF. The augmentation will give your trip smooth contours on the APRS maps provided in the internet.

HF-APRS goes international and monitoring of propagation conditions makes things more interesting. It gives you independence from local features and gets you in contact with real APRS enthusiasts.

If you wish to operate a stationary equipment you are as well highly welcome to set up a gate or digipeater. With a notebook connected to the TNC it's only a few clicks away! Especially during the travel season you would be noticed with thanks to help hams not to get lost.

Following discription of a setup will demonstrate that expenditure is smaller than expected. 5 watts output on an 1,30 m antenna are enough to play the game!

Here we'll concenrate on the hardware. Configuration of TNC and UI-View are to be found in the following document (click on it):

<http://robust-packet.net/Robust-Packet-Network-Manual.pdf>

# RPR Station Sample

[www.robust-packet.net](http://www.robust-packet.net)

How to get started

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## Example of a RPR rig

### YAESU FT-817



The Yaesu FT-817 is an allmode portable transceiver. It provides 5 watts output which i.e. on 30 m is absolutely enough to be heard. (fits cigarette lighter socket) Unlike FSK frequency setting is less sensible; so go straight to 10.147,30 kHz.



Beside DIG as modulation you have to enter menu 26 and select USER-U for USB operation on 30, 40 and 80 m.



If you wish to operate 20m (14.103,30 kHz) which is on LSB ! menu 26 must be selected to USER-L.

### SCS Tracker / DSP TNC



The tracker is simply connected by a **6-pin mini-DIN** (both sides !) male plug to the YAESU. For configuration USB connection is provided for a notebook. If using UI-View KISS red LED eluminates.

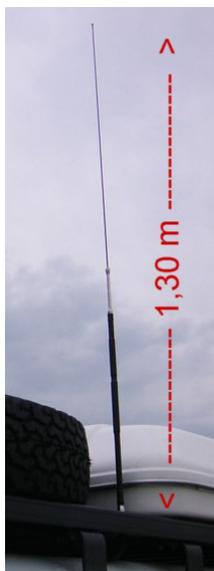


DCD eluminates red when a RPR signal is received. Now TX would not start sending.



PTT eluminates red when transmitting, either by time or because digipeating.

### Diamond HF-20FX HF-30FX HF-40FXW HF-80FX



Diamond monoband antennas optic it little different than that of an ordinary CB whip. Positioned on top of the cars it is easy to get SWR down to 1:1. So like with the FT-817 a missing tuner is no factor. On top the bandwidth is good enough to do i.e. PACTOR without changing anything. The antenna has a PL connector and does **not** required any heavy duty socket at all.