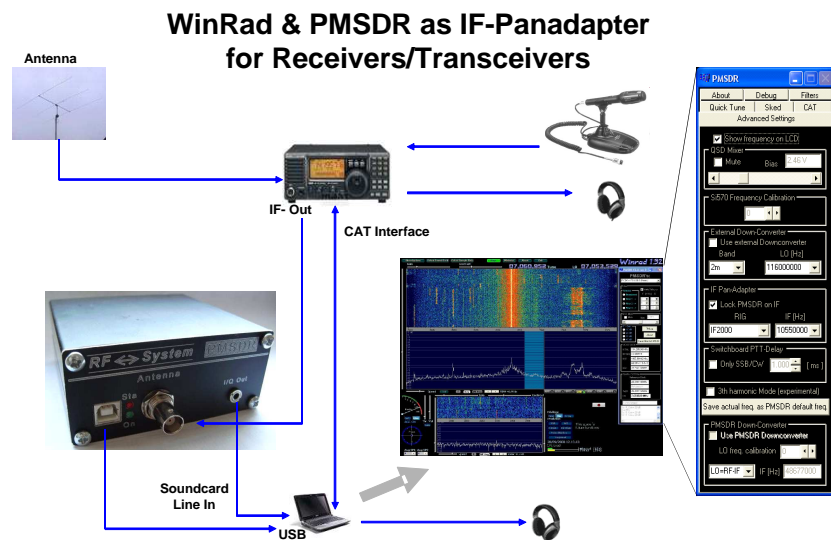# Your PMSDR is an excellent PAN-Adapter !
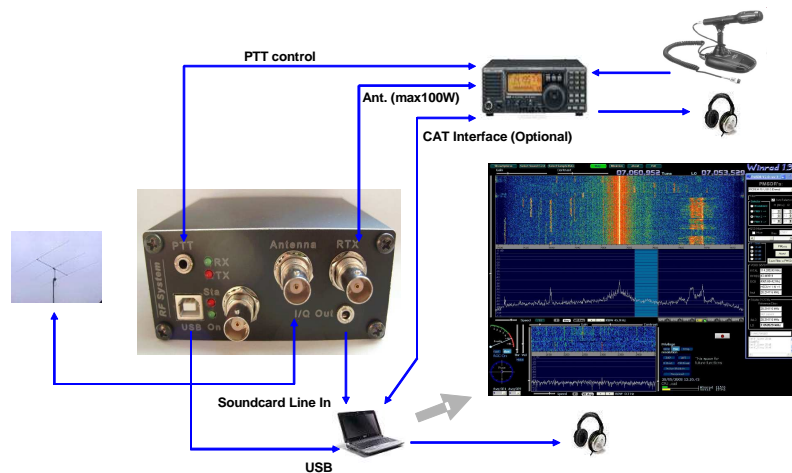
It has great capabilities to identify stations within the spectrum in a way, we call it **"See, Listen, Click and Tune"!** That potential of clicking around the waterfall, while the TRX is tuned to an other station is fairly unique, and will function in the specified manner with Winrad only!

A few easy steps will bring you in to it:

1. **Set up your equipment in one of both configurations; IF- or Tandem-Mode:**

WinRad & PMSDR as IF-Panadapter for Receivers/Transceivers

PMSDR with the Switchboard option for Transceivers in Tandem - Mode

2. Download the last DLL files available, and install them (3!) in to the WINRAD program folder. Start Winrad and set the checkmarks as indicated below.

3. Enable: Cat

4. Enable: Send CAT command to RIG

5. Choose your RIG and IF-Frequency.

6. Enable: Lock PMSDR on IF
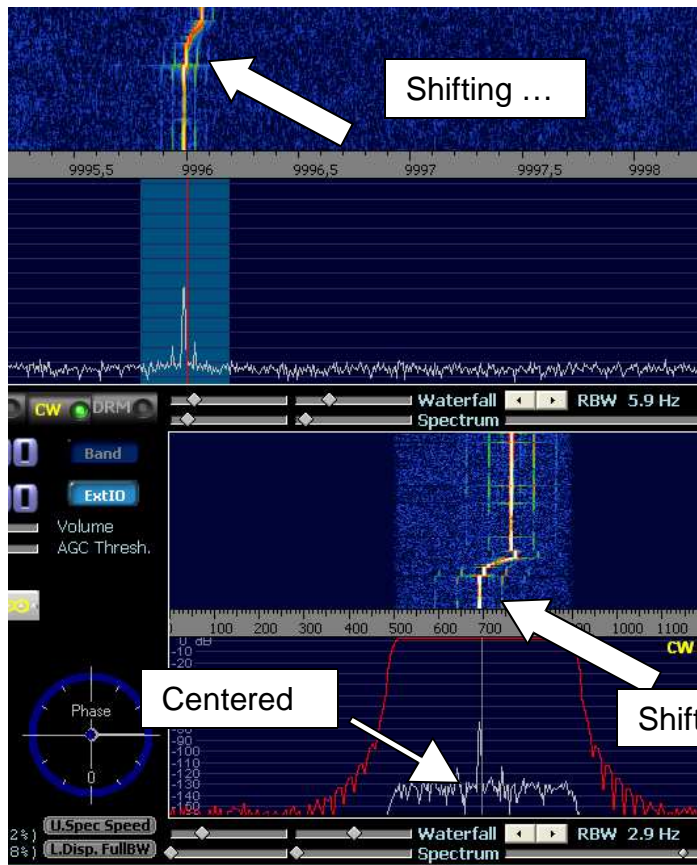
7. Set the Mode offset values as indicated.

8. Some RIG's have an inverted IF output. To obtain correct spectrum readout, you have to set "Mixer inv." and toggle in Winrad "Swap I and Q channels". For example, FT950+IF2000 don't need to set "Mixer inv.". In contrast Elecraft K2 and K3 , TS870, and many other RIG's need to set "Mixer inv" and therefore toggle in Winrad "Swap I and Q channels"!

You are ready for "See, Listen, Click and Tune"!

The flag in **Send CAT command to RIG** together with **Write TUNE -> RIG** are the most used switches to play with, while looking around for stations, and writing them back in to the VFO as needed for transmitting.

You might have to line-up your Winrad frequency read- out with your VFO.

Play with the Mode offset up/down arrows, unless the tone pitch is identical on both, VFO and Winrad as well. A little bit of try and error is necessary here.

The easiest way to perform it:

Use well known broadcast stations in AM, as well as WWV stations for CW.

Shift the frequency by the use of the up/down arrows (Mode offset box), unless it is well aligned.

A little bit more "trial and error" is necessary for the SSB modes.

Identify the signal in USB/LSB and instead of using the center-frequency, set the tone-pitch of both, VFO and Winrad, to the same level!

Tuning a CW Signal in to Center.

Below you will find a condensed list of how to perform
"See, Listen, Click and Tune" while in Pan-Adapter-Mode.

While looking for Stations:

> Folder → **CAT**; Enable CAT → **ON**; Remote-Rig → **OFF**

Set the cursor to a station of your choice:

> **USB** → Left mouse button: Position red line on to left signal-slope.
> **LSB** → Left mouse button: Position red line on to right signal-slope.
> **CW** → Left mouse button: Position red line on to the middle of the signal.
> **AM** → Left mouse button: Position red line on to the middle of the signal.
> → **Pitch control** could be done by the mouse-wheel.

Write a desired station in to VFO for transmitting:

> Hit → **Write Tune to RIG** (No need to activate Remote-RIG before!)
> **VFO** → Perform pitch adjustment as necessary

Choose an other frequency area:

Wind VFO knob up/down:

→ Wind VFO to the frequency of your choice.
Spectrum, Waterfall as Frequency-Bar as well will follow.
(Note: Some RIG's have an inverted IF output: To obtain correct spectrum readout, set "Mixer inv." and toggle in Winrad "Swap I and Q channels" as indicated in **8**.)

Shift the Frequency-Bar left/right:

Folder → **CAT**; Remote-Rig → **ON**
Frequency-Bar → **Grab it** with the left mouse button.
→ Hold it tight, while shifting the mouse left/right.
→ VFO does follow, Frequency-Bar does follow.

Jump through the frequencies by steps determined previously (48 / 96 KHz):

→ Folder **Quick-Tune** to be seen in blue?
Yes → Folder → **CAT**: Remote-Rig → **ON**; Folder → **Quick-Tune**
No → Folder → **Quick-Tune**
Quick-Tune:
→ Set **Tuning Step**'s for your needs;
→ Hit **+/- Fast Tune Key**'s
→ VFO does follow, Frequency-Bar does follow.

Want to go back? Looking for other stations?:

Folder → **CAT**; Remote-Rig → **OFF**;
→ Place the Cursor as you wants;
And all the rest of it …

Swapping Bands (Quik-Tune):

→ Folder **Quick-Tune** to be seen in blue?
Yes → Folder → **CAT**: Remote-Rig → **ON**; Folder → **Quick-Tune**
No → Folder → **Quick-Tune**
Quick-Tune
→ Hit the radio button of your choice ….. And all the rest of it …