Can someone confirm: if I want to switch between an electret and dynamic
mic and need to turn bias on/off (a common need), I have to open up the
radio and change a jumper on the Hermes board itself?

> Hi Mike,

> yes, **PTT is readily available on both the MIC Jack and the AUX I/O connector**.

>

> **Jumpers J4/J5/J6** are documented in both the ANAN-10 Users Guide and in

> the excellent pdf prepared by Phil VK6APH for the OpenHPSDR Hermes group:

> http://svn.tapr.org/repos_sdr_hpsdr/trunk/Hermes/Documentation/

>

> I believe versions 1.6 is the latest.

>

> GL de Ken N9VV

=========== **From the above manual** Revision 1.16 Pg 9 of 30 =============

JP4: (Mic audio) This jumper selects the **microphone connection**, either **tip (default)** or ring - see the
diagram below. Some microphones come with their element wired between a 3.5 mm jack plug 'tip' and sleeve
(ground), whilst on others the element is wired between a 3.5 mm jack plug 'ring' and sleeve (ground).
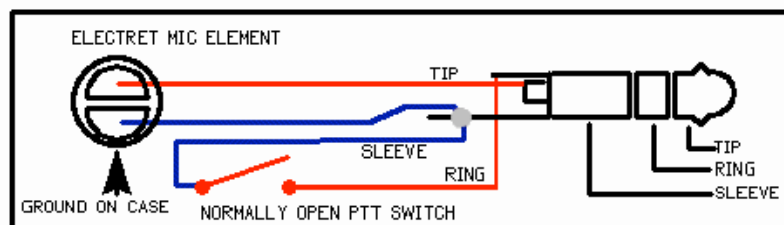
To select the **tip** for the mic audio, place the jumper on **JP4 pins 2 and 3 (default)**; to select the ring, use pins 1
and 2.

JP5: (Mic bias)   This **provides bias** if you wish to use an electret microphone.
If the microphone is connected between to the 3.5 mm jack plug **'tip' and sleeve** (ground), then place a jumper
between pins 2 and 3.
If the microphone is connected between the 3.5 mm jack plug **'ring' and sleeve** (ground), then use pins 1 and 2.
If bias is not required then do not fit this jumper (this is the default setting).

JP6: (PTT)   If your microphone is fitted with a **PTT button**, then this jumper enables it.
If the PTT button is connected between the 3.5 mm jack plug 'tip' and sleeve (ground) then place a jumper
between pins 2 and 3.
If the PTT is connected between the jack plug **'ring' and sleeve** (ground) then place the jumper between
between pins 1 and 2.
If your microphone is not fitted with a PTT, or you do not wish to use it, then do not fit a jumper to JP6 (this is the
default setting).

WARNING: If your microphone plug uses tip and sleeve connections only and you set the PTT jumper to the ring

setting, then the PTT will be permanently enabled (i.e. the transmitter will be permanently switched on).

NOTES: Ensure that the jumper on **JP6** is NOT connected to the same terminal (tip or ring) that your microphone is connected to. The PTT button should present a voltage-free contact that connects its associated pin to the outer sleeve (ground) of the coaxial microphone cable when pressed. This is the most common way of wiring a PTT button, but users are advised to check the connections with a multimeter set to the lowest ohms range if unsure of the exact configuration.

An alternative PTT input connection is available via pin 1 of connector J16
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Technically, yes, but I can think of a couple of easy ways around that.

1.) Build yourself a simple DC block for your dynamics.
2.) Assuming you're not going to use PTT on the mic jack, set up the Hermes
for phantom power on either the tip or the ring. Then wire your mics to use
connections based on whether they need phantom or not.

**Why are you not using a USB headset on your computer ? Works fine with
me on ANAN-10**   73's Paul

Yes, USB headsets can work well, except for a small amount of increased latency.
Some are using bluetooth headsets as well.
No PTT button, but keyboard commands and VOX can be used to key the radio.

> Your post raises an interesting question about remote operation (next room in the house or next town).
>
> With Ethernet connected SDR's the mike and earphones can be plugged direct into SDR radio <u>or routed through a sound
card in the PC where this is not co-located with the SDR radio.</u>.
>
> My question is what about the CW key? And for that matter the mike PTT?

>
> I guess these questions apply to networked SDR's in general and are certainly no reflection on the Apache SDR's. And in fact, I am not particularly interested in remote operation. But the questions are of technical interest. I am a long-time digimodes fan and my current favorite FlDigi certainly can provide remote PTT and CW (via tone keying in SSB mode) operation of both analog and SDR radio's. <u>But is there any way of achieving PTT for SSB and "genuine" CW key functionality directly with a PC remote from the SDR radio box?</u>

You can activate PTT in PowerSDR with keyboard commands or VOX.
The Setup, Keyboard tab has the SpaceBar Control radio buttons for
specifying what your space bar does. The default if for the space bar
to activate PTT/MOX. I have used VOX to operate digi modes with 3rd
party applications, no problems encountered.

The CW key is a different story. The only way to activate it
remotely is via an external device of some kind. The Begali CW machine
has this capability and their may be other devices. Latency can be a
big issue when keying over the Internet, local sidetone required. Of
course, the CW keyboard in PowerSDR can alwyas be used in a pinch .
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Dynamic mikes such as the Yaesu MH-31 from the FT-817 work just fine.
My Heil Proset Plus with the HC-4 or HC-5 element also work great on the ANAN-10.
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