INSTALLING LP-PAN2
WITH
LP-BRIDGE2 AND THE FTDX3000

STEP 1. ACQUIRE THE SOFTWARE

    A.   **Download LP-BRIDGE2** com port manager program here:
            http://www.telepostinc.com/LPB.html

            DESCRIPTION: LPB2 serves to link the SDR rig control and display application with the radio, and creates additional com ports to allow additional programs to share information with the radio, such as logging programs, automatic antenna tuners, antenna rotators, etc.   When acting to link SDR command and display applications, it supports VFO A, VFO B, Mode and TX/RX. Connections are "bidirectional"- meaning the rig affects the SDR application, and vice versa, eitehr way – adjusting one also adjusts the other.   One additional application can control the rig, while up to four other apps can read data from the rig.

    B.   **Download NaP3 SDR** rig control and display software here:
            http://www.telepostinc.com/TRXP.html

            DESCRIPTION: NaP3 is an open source panadapter display application written by Pete, F5VNB, and is based on PowerSDR/IF by WU2X, and PowerSDR v2.x by Flex Radio company.

STEP 2. INSTALL THE SOFTWARE

    A.   Log onto your computer with Administratory Privileges

    B.   **Install the LP-BRIDGE 2** application.

            1. Accept all offers to install ancilliary software that pop up.
            2. Reboot when finished.

    B.   **Install the NaP3 SDR** rig control and display application

            1. Accept all offers to install ancilliary software that pop up.
            2. Reboot when finished..

STEP 3. CONFIGURE LPB2   (LP Bridge 2 Application)

    A.   Log onto your computer with Administratory Privileges
    B.   Turn the FTDX3000 ON
    C.   Launch   LPBR2
        Note: Launch LPBR2 FIRST-before launching NaP3 or another SDR control app. All connected apps should be set for the same rig type and baud rate as the rig.

You will see the following Setup Screen:
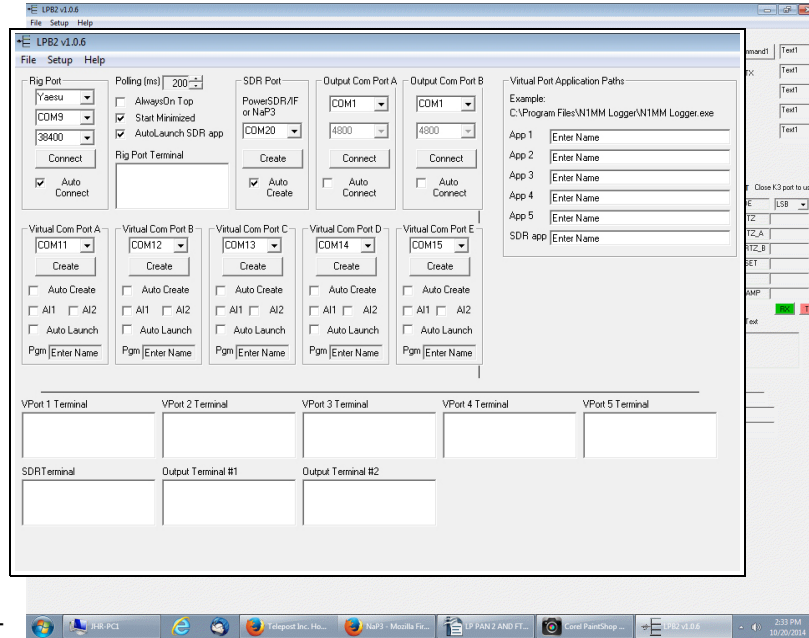
D. Set Rig COM PORT

__ Select rig type   (from the drop down list)
__ Select comm port   (as per the rig from the drop down list)
__ Select baud rate   (same as MENU 038 CAT RATE on the rig)

__ The the "Connect" button connects the rig

Notes:

- Polling Rate defaults to 200ms but can be set faster ot slower.

- The Always On Top checkbox allows LPB2 to supercede other windows on the screen.

- Start Minimized allows LPB2 to start in the Taskbar.

- AutoLaunch SDR automatically launches the SDR app (PowerSDR/IF or NaP3) when starting LPB2
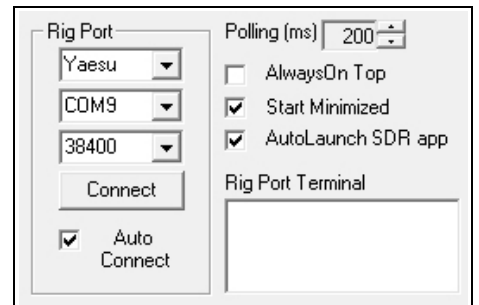
E. Set NaP3 (or other) SDR Program COM PORT

__ Select Com Port Number
__ Press the "Connect" button to establishe an active link between LPBR2 and the SDR app.

Notes: Eenter the same port number and baud rate here and in the SDR control applicaiton to establish a link between the rig and SDR application. Supposedly, COM99 is the only choice, but I type "com20" into the box, and it creates a COMPort 20.   The author selected Com 99 to surely avoid avoid conflicts.

Set Additional COM PORTS For Other Apps (Optional and as appropriate for your station.)

G.   Set Virtual Port (Optional and as appropriate for your station.)

__   Select comm port   (as per the thrd party application from drop down list)
__   Select baud rate   (same as per third party application)
__   Set COM Port number (Pick one that is not already assigned) 0
__   Pgm: Enter   (type the name of your third party application to identify which program will use this port number.
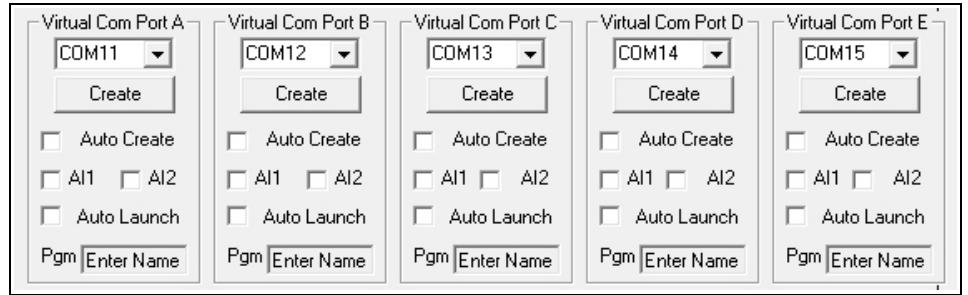

Notes:

- Select any unused port number to enable communication between the rig, NaP3 and a third party logging, rig control, or external accessory (e.g. antenna rotator) application. The Connect/Disconnect button and Auto Connect check boxes work the same as for above.

- AI1 or AI2… used to emulate the Kenwood Auto Information modes which are required for apps which do not poll.

- Virtual Port #1 provides full bidirectional comms with the rig.

- VPorts #2-5 have limited support and would normally be used for a simple logger or something like CW Skimmer ot MixW

H.   Set Output Port Com Port (Optional and as appropriate for your station.)

__   Select comm port
(as per the thrd party application or hardware device,
e.g, antenna rotator, antenna tuner, etc. , from the
drop down list)

__   Select baud rate
(Currently fixed at 4800 baud, not adjustable.
Set the thrd party device to this value.)

___   Connect/Disconnect   Us this to activate the
hardware connection

___   Auto Connect   Use this AFTER you know it works as it should.
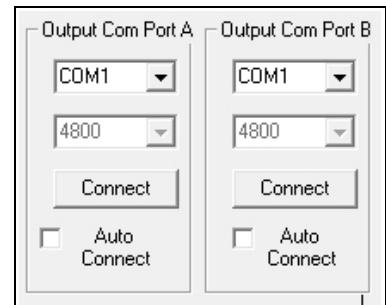
I.   Optional Final Step - Set "Auto Connect" for all ports

Do this AFTER LP Bridge 2 is fully configured and working properly, so the process is automated during future startups. The program will open each application in the proper order.   When shutting down, reverse the order, and close the various rig control applications before closing LPBR2.

J.   Modify Program Start Icon   (located on the Win OS START MENU)

Right Click on the LPBR2 program start icon, and select Properties, and check the box to have it open with Administrator Privileges - and this should prevent a problem opening the application on newer Windows operating systems.   This should not be necessary on Windows 7 64 bit, but on my system, LBPR2 would not open unless I did this. Rather than figure it out or fight City Hall... I simply marked the box and moved on without further incident. Life is not always logical... I just do what works.

K.   Reboot (optional step)   I do this after installing any new application.
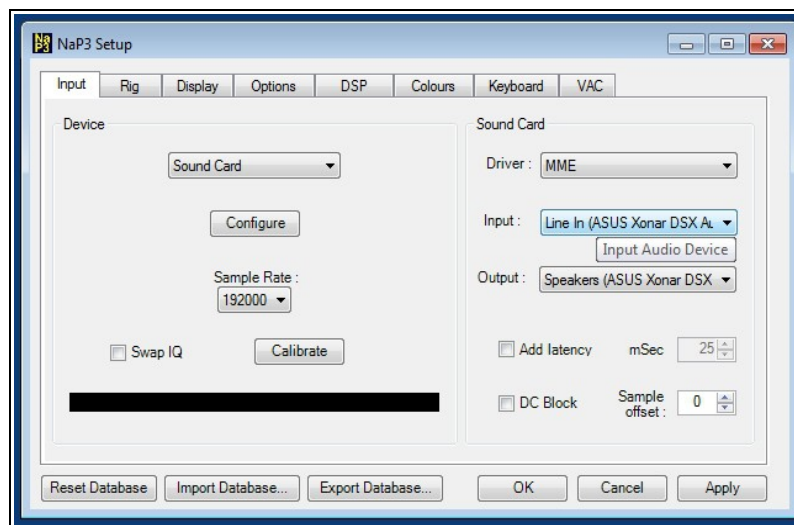
STEP 3. CONFIGURE NaP3 SDR Control Application (or other control app)

A.   Log onto your computer with Administratory Privileges

B.   Turn the FTDX3000 ON

C.   Open LPBR2 - before launching NaP3 or another SDR control app. All connected apps should be set for the same rig type and baud rate as the rig.

You will see this Setup Screen:

D.   INPUT Selection

Select the type of sound card or donngle thing on the left, and select appropriate input and output device selections for your sound card on the right.   This will vary according to your sound card, but this is what works for my ASUS Xonar DXS card with 192 MHz recording and playback sampling rate capability.

E.   Rig Selection
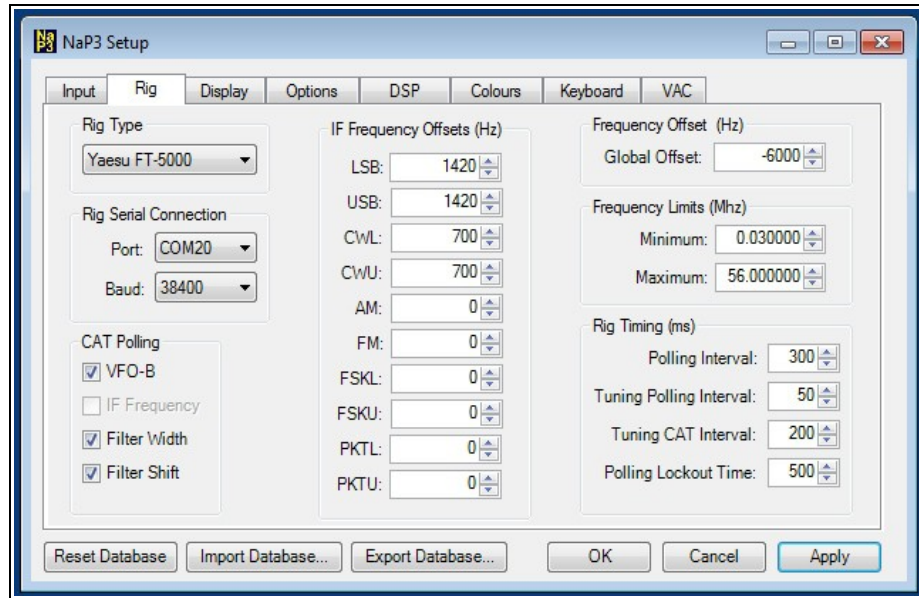
___   Set Rig COM PORT in NaP3 to the same port number as selected in the
            SDR Port section of LPBR2

___   Set the Baud Rate the same as you did in LPBR2

___   Set the Global Offset to -6000 (as per instrucitons on the LP-Pan2 web pages)

___   Set the LSB and USB offsets to 1420 and -1420, respectively. These values work for
            my rig in my shack, but you may need to adjust each value higher or lower to match your
            rig. Listen to a live QSO and tune for best results, as if you were tuning the rig, itself.
            You can fine tune this later, and it may require minor when operating on different bands.

___   Set the other parameters as you wish, at your own risk, as I don't understand
            them and they do not seem to requie tweaking. Your mileage may, of course, vary.

E.   ___   Set the options in the Dislpay, Options, DSP, Colours, Keyboard, and VAC
            sub menu screens as you think best. I may expand these instructions later,
            as I gain greater knowledge and experience with these other settings, and as
            others provide suggestions based on their experience with the same over time.

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                        Rev. A / Oct. 2014