

ARDOP and Winmor setup with Winlink Express

Using CMedia Digital Interfaces

(NS7C 11-13-2020)

Applies to: Masters Communications RA and DRA series adapters, RIM Lite series, URI, and many other “Allstar” type sound card adapters

Note: Vara HF v4.0.6+ now supports C-Media based interfaces natively. This workaround is no longer needed.

Download the latest com0com:

<https://sourceforge.net/projects/com0com/>

Download CAT7200 beta v2.1:

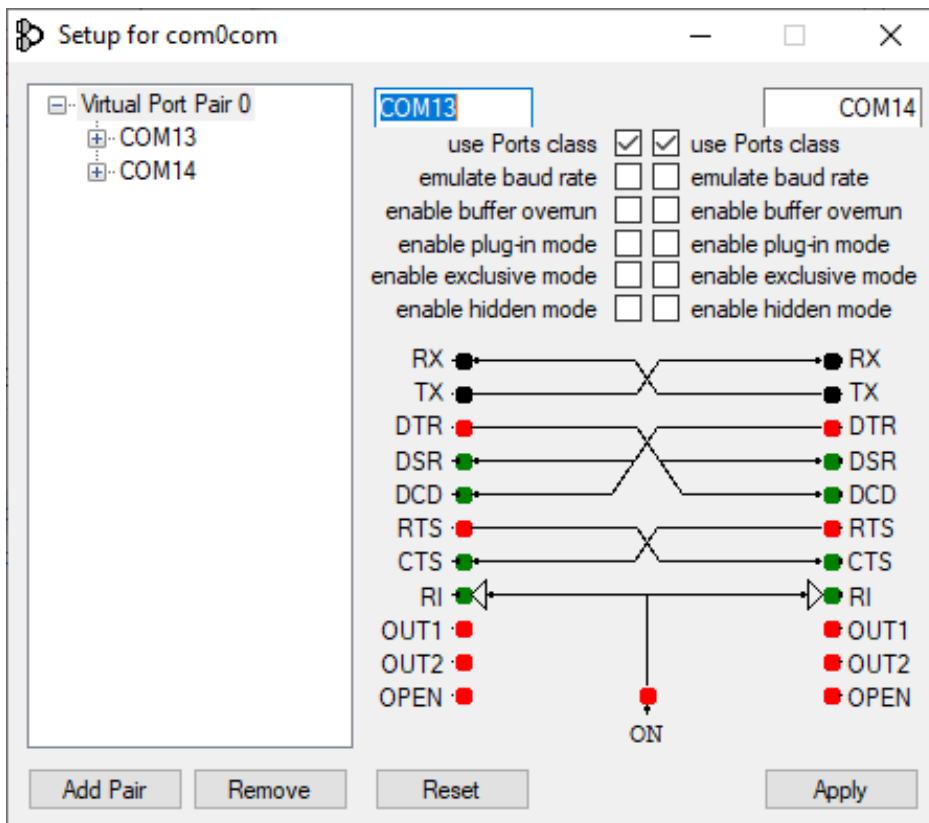
<http://www.cantab.net/users/john.wiseman/Downloads/Beta/CAT7200.exe>

Also, download the HID library support dll:

<http://www.cantab.net/users/john.wiseman/Downloads/Beta/HidLibrary.dll>

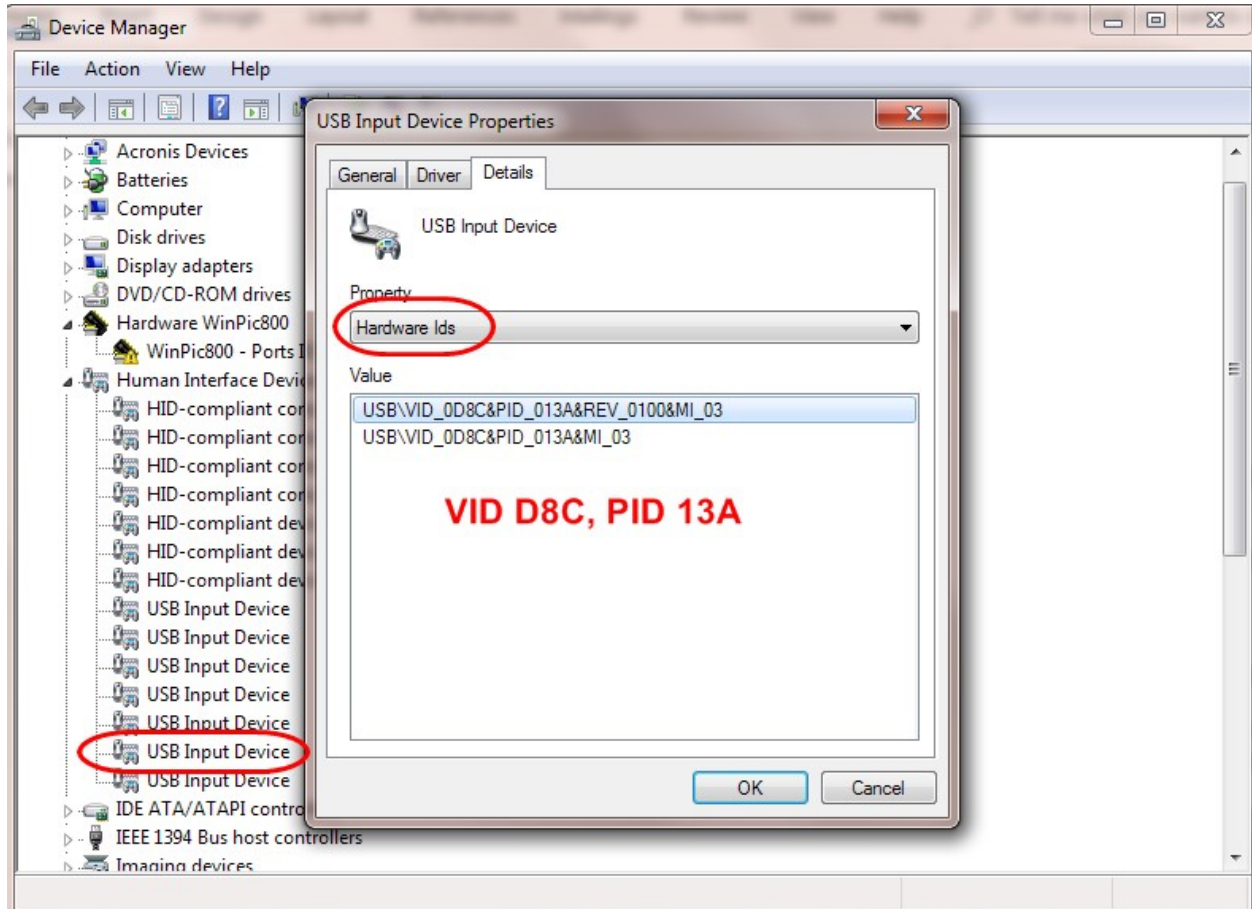
STEP 1:

Install com0com, run the setup application, and create a port pair. Use the “use Ports class” option, and all other default settings, then click Apply. You can then close com0com:



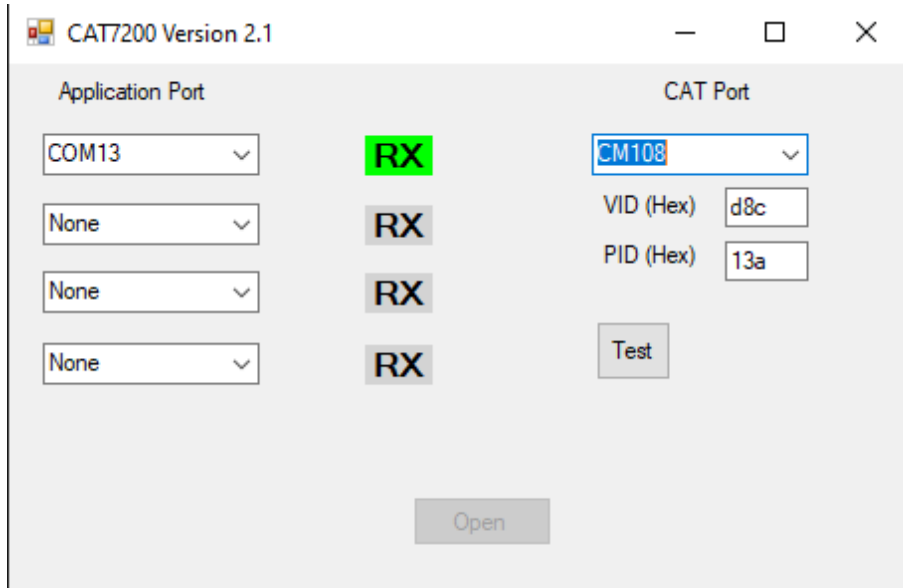
STEP 2:

Start Device Manager and locate the HID device and the VID and PID of your interface. This is a bit complicated. You must locate the correct USB Input device (there may be several), then display the properties and hardware IDs. Experience shows that the VID is xD8C and the PID is usually either x008 (CM-108 devices) or x13A (CM-119 devices):



STEP 3:

Start CAT7200 and configure it to use one of the COM ports in the com0com pair (doesn't matter which port). Then select "cm108" as the CAT port and input the VID and PID values from the previous step (leading zeros are not needed). Press Open to start the port. The Test button may or may not work. Some sound card interfaces will only PTT if an application is running that is using the device.



STEP 4:

Start Winlink Express and open an ARDOP HF Winlink session. Select settings → Radio Setup. Under Radio Selection and Radio Control Port, select the appropriate settings for your rig. Under PTT Port, Select the COM port number that is the pair of the CAT7200 Application port (the other com0com port). Check Enable RTS, the baud rate is not important, leave it at the default. Select Update. The ARDOP HF session will close and re-open with the new settings active.

Ardop Winlink Settings

Radio Selection

Select Radio Model: Icom 7100 Antenna Selection: Default

Icom Address: 88 USB USB Digital FM Use Internal Tuner

Codan login and optional password:

Radio Control Port

Serial Port to Use: COM7 Baud: 19200 Enable RTS Enable DTR TTL

PTT Port (Optional)

Serial Port to Use: COM14 Baud: 19200 Enable RTS Enable DTR

Update Close

STEP 5:

On the ARDOP HF Winlink session, select settings → ARDOP TNC Setup. Set the Ardop Capture and Playback devices to your C-Media interface. Other settings should be left at their defaults. Press Update to save the settings.

Ardop Setup

Identify with Morse Code

Ardop Capture Device: DRA-30 (2- USB PnP Sound Device)-18

Ardop Playback Device: DRA-30 (2- USB PnP Sound Device)-da

Virtual TNC host address/name: 127.0.0.1

Virtual TNC Command Port: 8200 Data Port: 8201

Session Bandwidth: 2000 Drive Level: 90

Update Cancel

You are now set up for ARDOP HF operation using a C-Media based sound card interface.

This same process can be used to configure the Winlink Express WINMOR modem to use the C-Media based radio interfaces. The ARDOP and WINMOR modems are included with Winlink Express.

Optional step:

Use a Windows Batch file to start CAT7200, open the ports, start Winlink Express, and then close CAT7200 when Winlink Express closes.

With Notepad or similar editor, create a batch file called Winlink Start.bat (or whatever name you like). The file should look like this, adjust the file name locations to reflect where you saved CAT7200:

```
@echo off
REM Start CAT7200 and Winlink Express.
REM Edit the folder locations if you stored the programs in a folder other than C:\Ham
REM Save this file to the desktop, and just double click it to run, or better yet
REM save the file to a folder (like C:\Ham), then create a desktop shortcut that points to this file.
REM You can then change the shortcut properties to run minimized, and
REM also change the icon, browse to the C:\RMS Express folder and select the RMS Express Icon.

start "CAT7200" "C:\Ham\CAT7200\cat7200.exe" START start
/wait "Winlink Express" "C:\RMS Express\RMS Express.exe"
taskkill /im cat7200.exe
exit
```

Create a new shortcut to this file on your desktop. Edit the shortcut properties and set it to start minimized, then change the icon to point to the Winlink Express icon in "C:\RMS Express\Program Icon.ico". This batch file will start CAT7200, open the port, then start Winlink Express. When Winlink Express is closed, CAT7200 will close as well.

