

CONTROL SOFTWARE FOR AR5001D RECEIVER

1. System requirements

Hardware:

- PC with 2GHz Dual Core CPU, 1GB RAM
- USB Port (USB 2.0)
- 16 bit AC-97 compatible audio board
- 1024 x 768 (minimum) resolution video board and monitor
- 2 button mouse with wheel

Operating System:

Windows® 2000 SP4, XP SP2 (32 bit version), Vista or Windows 7.

2. Unzip the downloaded zip file to your PC at the location of your choice, such as the desktop.

3. USB driver installation

To control AR5001D with a PC, the supplied USB driver needs to be installed.

To avoid any driver conflict, please UNINSTALL ANY OLDER VERSION OF THE VCP DRIVER.

To check if you have such a driver already in your system, go to START > CONTROL PANEL > ADD OR REMOVE PROGRAMS > search for “Windows driver package – FTDI CDM Driver Package”

If you wish to obtain the latest version of the driver (supplied version 2.08.14 is 32 bit only), you can download from the manufacturer’s website.

<http://www.ftdichip.com/ftdrivers.htm>

Click “VCP Drivers”, then select the device name “FT232B”.

3-1. Plug the supplied AC adapter into the DC power input connector of the AR5001D. Connect the AC adapter to an electrical outlet, and turn on the power switch on the back of the receiver.

3-2. Plug the square end of the (non-supplied) USB cable into the USB socket (located below the DC power socket) on the rear panel of the AR5001D.

3-3. Plug the other end of the USB cable into an available USB port on the PC.

3-4. Windows will detect the hardware and start the installation procedure.

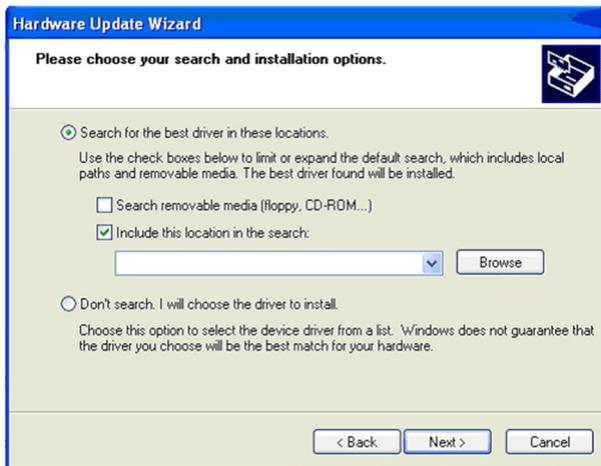
Note: Sample screen instructions or messages shown may differ depending the version of Windows® operating system of your PC.



3-5. Check the “No, not this time” and click “Next”.



3-6. Check the “Install from a list or specific location [Advanced]” and click “Next”.



3-7. Check the “Search for the best driver in these locations.”, “Include this location in the search:”.

Select the path of the USB driver folder which you have copied on your PC.

3-8. Click “Next”.

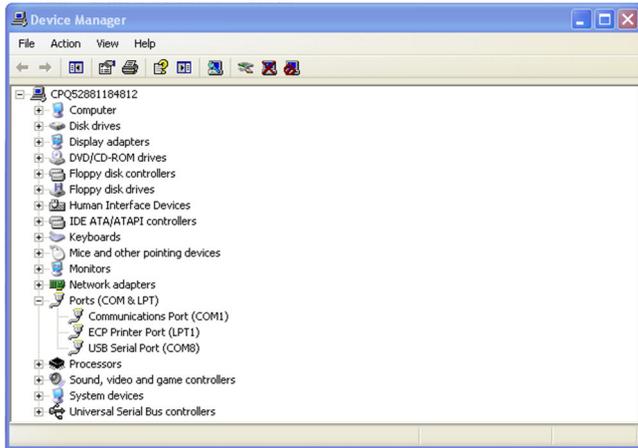


3-9. When the installation is completed, click “Finish”.

In order to find the assigned serial port for the USB port, click the “**Start**”, “**Control Panel**”, “**System**”, “**Hardware**”, “**Device Manager**”, “**Ports (COM&LPT)**”.

USB Serial port (COM x) will be indicated. (Note: “x” varies from your PC configuration.)

Below screen shows the COM8 has been assigned for the USB port.



4. Starting the program

Double click the “AR5001DControlSoft.exe” in the program folder which you have copied to your PC.

The following screen (or similar) will appear on the monitor screen of the PC.

(Refer to the separate “control software guide.pdf” for details.)

The screenshot displays the AR2300 Control Soft interface. The top-left window, titled 'Ctrl 1 Main Control', shows the following parameters:

- AUTO Ant 2 IF +0
- BUSY 0001.233000 MHz
- VFO-A
- MODE:WAM(IF15k) IF BAND:15k STEP:009.000k
- AF:011 SQL:000 RF Amp:ON Att:0dBm
- TEXT 長崎放送 (NBC) 長崎・島原・諫早
- TEXT(RCV)
- LAST HIT PASS :
- LAST LEVEL :dB TONE :
- HIT COUNT
- SEL DTMF:
- PR

 The top-right window, titled 'Ctrl 2 S Meter', shows a signal strength meter with a scale from -120 dB to -40 dB. The current reading is -109 dB.

The main window, titled 'AR2300 Control Soft', features a spectrum analyzer plot. The plot shows a signal at 0006.233000 MHz. Three peaks are identified:

- Peak 1: -1.610750MHz -41dB
- Peak 2: -2.063875MHz -40dB
- Peak 3: 0.295500MHz -42dB

 The plot's frequency range is from -003.767000 to 0006.233000 MHz.

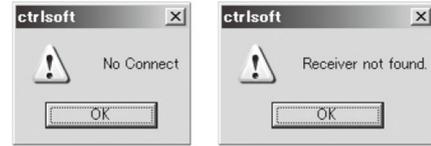
Below the spectrum analyzer is a table with tabs for Database, Schedule, Recording, and Antenna Setting. The 'Database' tab is active, showing a list of memory banks:

Frequency	Bank	Channel	Mode	Antenna	Memo	Database	Bank Title
0146.760000	00	000	NFM(IF15k)	Ant 2	144	test0	test0
0146.770000	00	001	NFM(IF15k)	Ant Prg	144	test0	test0
0146.910000	00	002	NFM(IF15k)	Ant Prg	144	test0	test0
0147.030000	00	003	NFM(IF15k)	Ant Prg	144	test0	test0
0145.200000	00	004	NFM(IF15k)	Ant 2	144	test0	test0
0145.260000	00	005	NFM(IF15k)	Ant 2	144	test0	test0
0145.320000	00	006	NFM(IF15k)	Ant 2	144	test0	test0
0145.380000	00	007	NFM(IF15k)	Ant 2	144	test0	test0
0145.390000	00	008	NFM(IF15k)	Ant 2	144	test0	test0
0145.410000	00	009	NFM(IF15k)	Ant 2	144	test0	test0

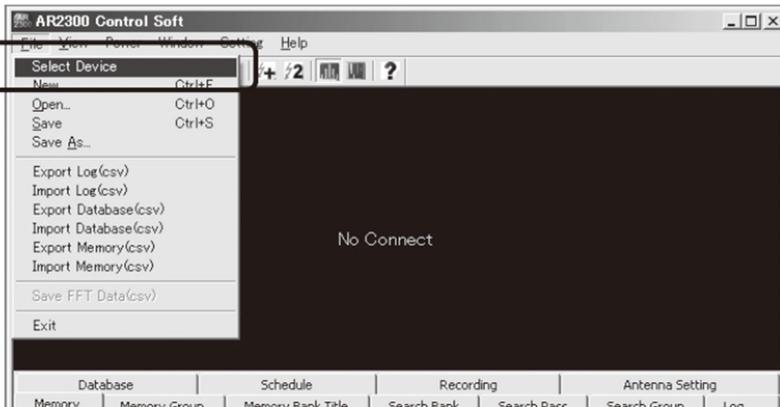
The bottom status bar shows 'Ready' and a 'NUM' button.

5. Troubleshooting

If one of following error message is displayed on the monitor screen while starting the control program, perform the following steps:



5-1. On the main screen, click the “File” tab, then click the “Select Device” tab.



5-2. Wait for several seconds until the following screen is displayed.



5-3. If the number (may vary) in the Detect box is displayed, then click “OK”.

5-4. If no number is displayed, check the following:

- The power switch of the AR5001D is turned on.
- The AR5001D and the PC are connected through the USB cable.
- Check the COM port number in the Windows System Manager and enter the COM port number in the Detect Box. Then click “OK”.