HAM RADIO DELUXE

REMOTE SERVER

USER GUIDE



Simon Brown, HB9DRV Programmer-in-Chief

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Special thanks are due to Chris Taylor for his friendly and efficient service.

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INTRODUCTION

The HRD Remote Server supports a connection between Ham Radio Deluxe and a radio connected to a remote computer. The connection between the computers uses TCP/IP (the standard networking protocol).

REQUIREMENTS

The remote computer must be running Windows NT – that is NT 4.0, 2000, 2003 or XP. Windows 95, 98 and the various flavours thereof are not and never will be supported.

TECHNOLOGY

A Windows service is installed on the remote service. This listens on a port (usually 7805) for incoming connections from Ham Radio Deluxe.

INSTALLING

The HRD Remote Server files are:

- HRDRemoteSvr.exe the executable,
- HRDRemoteSvr.cfg configuration file, and
- HRDRemoteSvr README.txt essential reading.

To install the service:

- 1. Open a DOS window
- 2. Use CD to change the current directory to the directory containing HRDRemoteSvr.exe . This is the directory created when HRD is installed, for example:

C:\Program Files\Amateur Radio\Ham Radio Deluxe

3. Enter: HRDRemoteSvr.exe - install

This creates a new Windows service called *HRD RemoteSvr*. You now start the *Services* applet (Start – Settings – Control Panel – Administrative Tools – Services) to modify the properties of the service.

The default service Startup Type will be *Manual:* if you want to start the service when the system restarts then change this to *Automatic* (just double-click on the entry to bring up the *Properties* window).

DEBUGGING

To run the service from a DOS window enter: HRDRemoteSvr -debug

You see the service running with full debug information (required by the HRD development team when in severe panic mode). This is most useful to verify that the service is running properly.

A logfile is maintained by the service in the service's own directory.

FIREWALLS

Remember to allow incoming TCP/IP access to the port used by the remote server, this is usually 7805.

If you don't do this then external computers will not be able to connect to the server.

CONFIGURING

#

The service is configured with HRDRemoteSvr.cfg – you can edit this file with Notepad or the editor of your choice.

```
#
   Ham Radio Deluxe Remote Access Server
#
    _____
#
#
   Copright (c) 2004 by Simon Brown, HB9DRV.
#
#
   Note: this only runs on Windows NT/2K/XP. It does not run
#
   on Windows 95/98/ME/SE.
#
#
   This file defines the configuration of the Remote Access Server.
   The format of each entry is TOKEN = VALUE.
#
#
#
   Supported tokens
#
   _____
#
   COM
#
   PORT
#
   USER1 to USER20
#
   WELCOME
#
#
#
   A comma-separated list of COM ports that are returned. If not defined then
#
   the server returns a list of all COM ports available on the computer.
#
#COM = COM1, COM2, COM3, COM4
#COM = COM1
#
   The TCP/IP port on which the server listens for connections. If not defined
#
#
   then the default value of 7805 is used. Select any port number you want which
#
   is not in use by other programs.
#
PORT = 7805
#
#
   Username/passwords, these are case-insensitive. Spaces are removed
#
   from the beginning and end of the username and password.
#
#
   The format is USERx = username, password
#
USER1 = Simon, SnowTime
USER2 = Peter, Uberwald
USER20 = Donald, California
#
#
   Welcome text, displayed on the remote user's computer. Note that
#
   \n is replaced with a newline. Enter up to 511 characters on a single line.
#
WELCOME = Welcome to the HRD Remote Access Server.\n\nPlease don't break anything!
```

The contents of this file should be obvious.

CONNECTING

To connect to the remote server from Ham Radio Deluxe enter values as normal but select the *Remote* port, then press Connect.

Conne	ct		
Company: Radio:	ICOM	Visit www.hb9drv.ch for 'A basic guide to CAT and Audio interfacing' which contains many designs for both CAT and audio interfaces for use with Ham Radio Deluxe.	
COM Port: Speed:	Remote 💌	[Company] Select your radio manufacturer from the drop- down list.	
CI-V Add:	6A	ICOM: disable the CI-V Transceive option for best performance.	
Flow con	itrol □ <u>D</u> TR ☑ <u>B</u> TS	Kenwood: make sure Packet communication mode is switched OFF (if supported). Most Kenwood radios require CTS and RTS to be ON for flow control.	
🛃 Coni	nect 🥑 Help	[Radio] Select your radio model from the drop-down list.	~

When you press Connect the Remote Connection window is displayed.

Enter connection information:

- 1. Address the remote computer address in either numeric or alphabetic form for example 195.154.179.101 or www.laax-drv.ch .
- 2. Port the port assigned to the remote service, usually 7805.
- 3. Username a valid username defined in the configuration file. This is case-insensitive.
- 4. Password the password corresponding to the username. This is case-insensitive.
- 5. If you want to save these values make sure the *Save settings* option is checked X.

Press <u>Connect</u>. If the connection is successful the text *Username/password authenticated*. *Select a remote COM port and connection speed, then press 'OK'* is displayed.

[1] Remote Computer Connection		[2] Remote COM Port
Address:	207.195.142.162	COM1 -
Port	7805 Default = 7805	
Username:	Ridcully	- [3] Connection Speed
Password:	*****	 Slow: dial-up, ADSL or cable
Connect	Save settings	Fast: 2048 Mb/s or higher

Now select the COM port and connection speed. You should select the Slow connection speed unless you are using an internal LAN.

Press OK to connect to the remote COM port and start the HRD radio display.

PERFORMANCE

A Remote Status display window shows you the data throughput and average round-trip time.

Remote Co	nnection 🗐 🗆 🔯
Send:	0.24 kB/s
Recv:	0.21 kB/s
Average round-tr	ip time: 59 milliseconds
Refresh All	

The average round-trip time is the time required to send a message from HRD to the remote server and get a response. This will be very similar to the value shown when you use Ping to interrogate a remote host. Typically values of 50 milliseconds or less is very usable.

When you select the slow connection speed only the frequency and s-meter are refreshed. To refresh all other buttons and slider click Refresh All.

AUDIO (VOIP)

The remote server does not support audio. For audio (or VOIP) the following options are available:

- SKYPE www.skype.com,
- MSN Messenger,
- Audio streaming for example the Helix Server Basic from RealNetworks Inc. www.realnetworks.com .



SIMON BROWN HB9DRV

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Postfach 159 7031 Laax Switzerland

simon@hb9drv.ch www.hb9drv.ch