

Howto: Installing RS-92 under Linux

Installing RS-92 on a Linux computer

Icom sell a piece of software, RS-92, to complement the IC-E92D D-Star 2m/70cm handheld transceiver. The software is packaged with a serial connection cable. In the UK, the ONLY way of obtaining this cable is to buy the software/cable package, despite the cable having a separate ICOM part number.

The RS-92 software is 'Windows only' software – but it will install and run just fine under wine, the free, open-source, Windows compatible API that is available for most Linux distributions.

I have installed and tested RS-92 under Ubuntu 8.04LTS workstation on a 3.0GHz P4 and on an Asus EeePC (1.6GHz Intel Atom) under EeeBuntu. Both machines were running wine 1.01.

Installation

Before you install you should note the serial number from the CD-ROM. This is printed in the form of a part number followed by a six-digit serial number (usually below the part number). It might look like 307102-abcdef. To install the software, insert the CD into your drive and it should auto-mount on to the desktop. If you open the disk folder you will find an executable file called setup.exe. With most wine installations you should be able to double-click that file and have it run directly. If that does not work, use your terminal to cd to the appropriate directory and type:

```
wine ./setup.exe
```

The Windows installer will run.

The installer will put a link to the RS-92 application on your desktop (with or without the icon, depending on your distribution – I found that Ubuntu native did include the icon but there was a default wine icon on the EeePC) and in your Applications/wine/Programs drop-down menu.

NOTE: For the RS-92 help file to work, you'll need to ensure that wine-gecko is installed. This is worthwhile and can be done using the System/Administration/Synaptic Package Manager tab. It doesn't seem to matter if this is installed after the application.

Running & Setup

RS-92 is a pretty simple application and does not require many specific settings. However, you will need to connect the radio to your serial port and select a COM port before the machine will talk to the radio at all. The application only accepts numeric COM port designations such as '1' for 'COM1' etc. Of course your Linux machine doesn't know about the limitations of memory-addressed i/o imposed by primitive Windows so a mapping needs to be made.

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I used an USB-RS-232 adapter from Maplin. These are inexpensive, often available for £10-£12, and work well with any machine running Windows, Linux or Mac OS X. The supplied driver is only needed for Windows owing to its very primitive i/o arrangements.

Once such a device is plugged in to your Ubuntu based machine, you will find that a new device is automagically created in the /dev directory. To find this type:

```
ls -al /dev | more
```

and use the space bar to tab through what might be an unfeasibly long list. You are looking for a device (or more than one) with the name:

```
/dev/ttyUSBx
```

where 'X' is an integer.

In my case, the first serial port was called /dev/ttyUSB0. You then need to find your wine devices directory thus:

```
cd ~/.wine/dosdevices
```

Most likely this directory will be empty which you can check by typing:

```
ls -al
```

You need to create a special symbolic link to support the device under wine. This should be done using temporarily assigned root privileges:

```
sudo ln -s /dev/ttyUSBx com1
```

There you have it. Go back to the running RS-92 and select '1' in the COM port panel and, if your radio is connected, you should have a view of your radio keyboard and display on your screen. If this doesn't work, try quitting the app and executing it again. You'll still need to put in the COM port number manually.

Running the application

So far, I have not found any features of RS-92 that do not work. I had no problem saving my settings nor restoring the settings or importing settings from a third party file.

Disclaimer

Your mileage with this may vary. The author shall not be held responsible for any damage, disruption, misoperation or other dysfunction whatsoever howsoever caused as a result of following or attempting to follow the instructions in this note. The reader is reminded that RS-92 is copyright software and you are obliged to purchase a licence to use the software before you can use it under any circumstances.