

## Howto: Installing RS-92 under OS X

### **Installing RS-92 on a Mac running OS X 10.4+ under Wine**

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 OS X distributions running on Intel processors. This does not include iPad and Apple TV devices.

I have installed and tested RS-92 under OS X 10.6.8 on a 3.06GHz iMac. The most version specific part of the installation is the serial port driver which should work on any Intel Mac running OS X 10.4 and upwards. The version of Wine being used is 1.4.1.

### **Installation**

There are a couple of sources for Wine under OS X. First, it will only run on Intel powered Macs – for those of you with PPC Macs, I am afraid that I don't have a solution for you.

I use Winebottler<sup>1</sup> which is a pre-packaged version of Wine with some additional utilities, none of which are known to be required in order to run RS-92 so it is likely that most up to date Wine installs should suffice.

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 may put a link to the RS-92 application on your desktop (with or without the icon, depending on your distribution) but if it does not, you can run the program directly from the Wine File Manager by looking for RS92.exe which will be in the following directory:

```
C:\Program Files\Icom\RS-92
```

NOTE: As far as I can tell, unlike the case for Linux Wine variants, the Help file should be

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<sup>1</sup> <http://winebottler.kronenberg.org/>

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installed automatically.

### 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 Mac doesn't know about the limitations of memory-addressed i/o imposed by primitive Windows so a mapping needs to be made.

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.

However, it is possible that your OS X may not intrinsically recognise the serial port. I noticed that when migrating from 10.4 to 10.6 the machine lost touch with the serial port along the way. As I was not paying too much attention at the time, I cannot be sure which version lost the driver. The good news is that there is an open-source driver for the most common type of USB RS232 port module which is based on the Prolific Technologies 2303 device and instructions for installation can be found at Davy Schmeits' web site<sup>2</sup>.

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

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

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

```
/dev/cu.PL2303-00001004
```

You then need to find your wine devices directory thus:

```
cd ~/Wine Files/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/co.PL2303-00001004 com1
```

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<sup>2</sup> [http://schmeits.wordpress.com/2009/09/15/usb-to-serial-for-mac-OS X-snow-leopard/](http://schmeits.wordpress.com/2009/09/15/usb-to-serial-for-mac-OS-X-snow-leopard/)

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Substitute the actual device file in place of the 'co.PL2303-00001004' above if your port name differs.

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.