Arcus USB Driver and the Raspberry PI

Addendum Revision1.00

Introduction

This addendum will detail the steps that need to be taken to establish communication between an Arcus USB device and a Raspberry Pi. In this example, the Arcus product DMX-J-SA and the Raspberry PI B+ are used.

Formatting the MicroSD Card

1. Acquire a miniSD card of at least 4GB.
2. Format the microSD card. You can download formatting software here: https://www.sdcard.org/downloads/formatter_4/

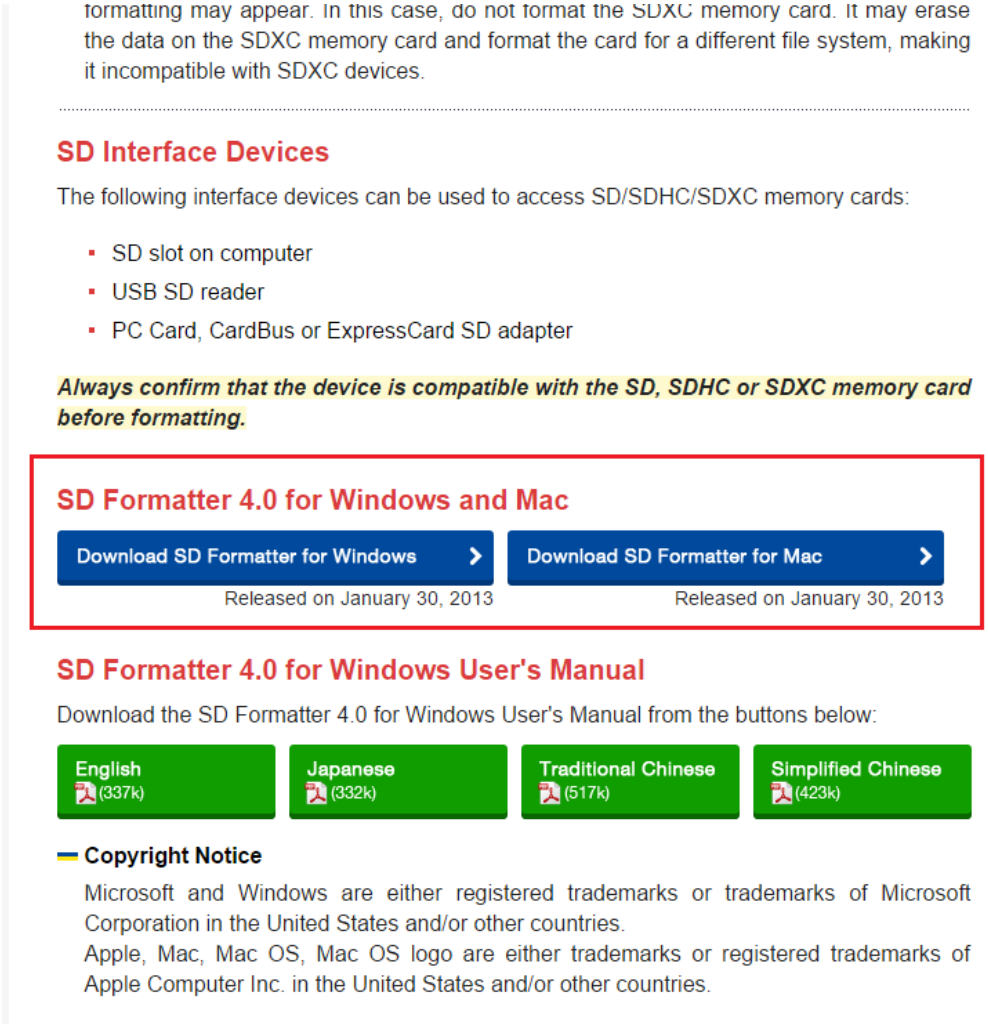

Figure 1

3. Open SDFormatter.

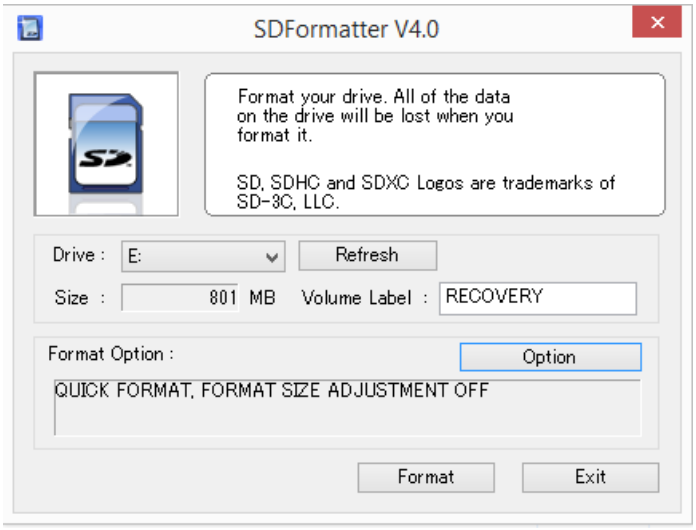

Figure 2

4. Find out which drive is the microSD card. This can be done from the “My Computer” window.

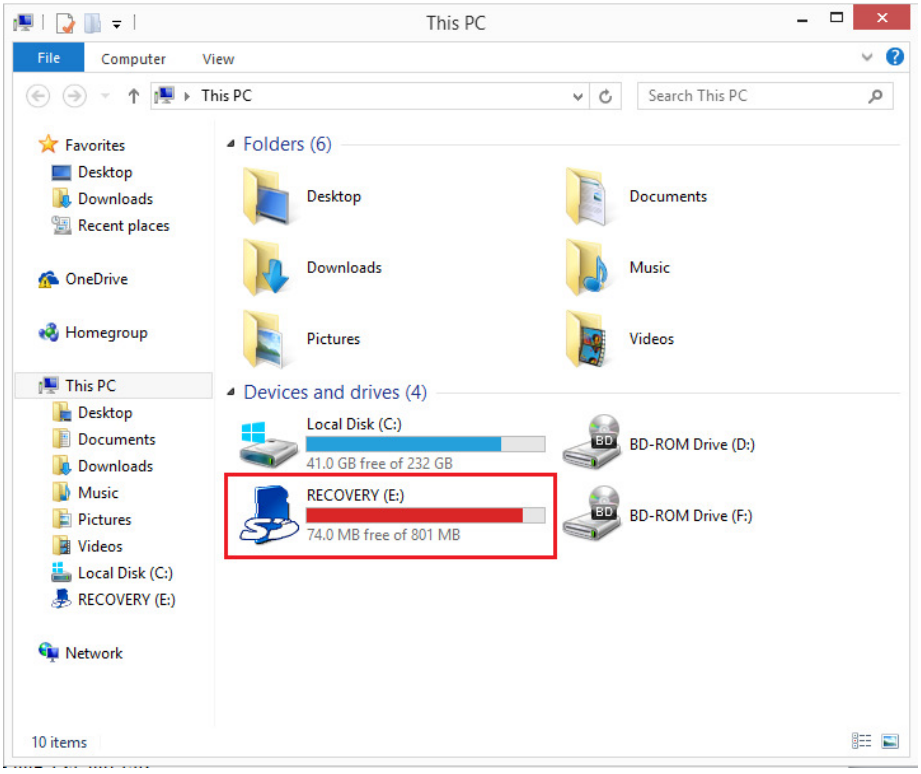

Figure 3

5. Click the option button and change the FORMAT TYPE from QUICK to FULL (ERASE).

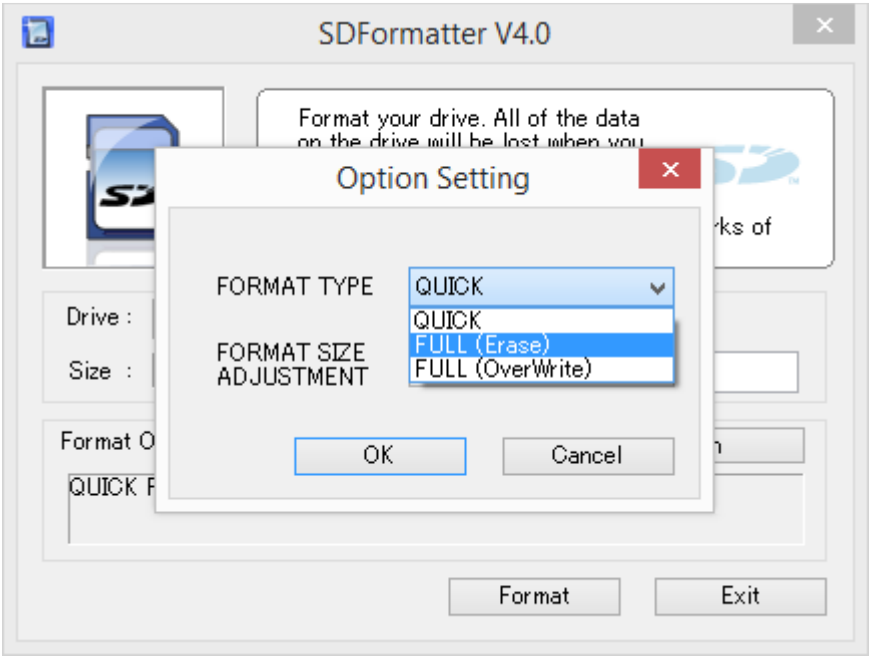

Figure 4

6. Choose the correct drive and press format.

Installing NOOBS on the Raspberry PI B+

1. Downloads the NOOBS zip file here: http://www.raspberrypi.org/downloads/

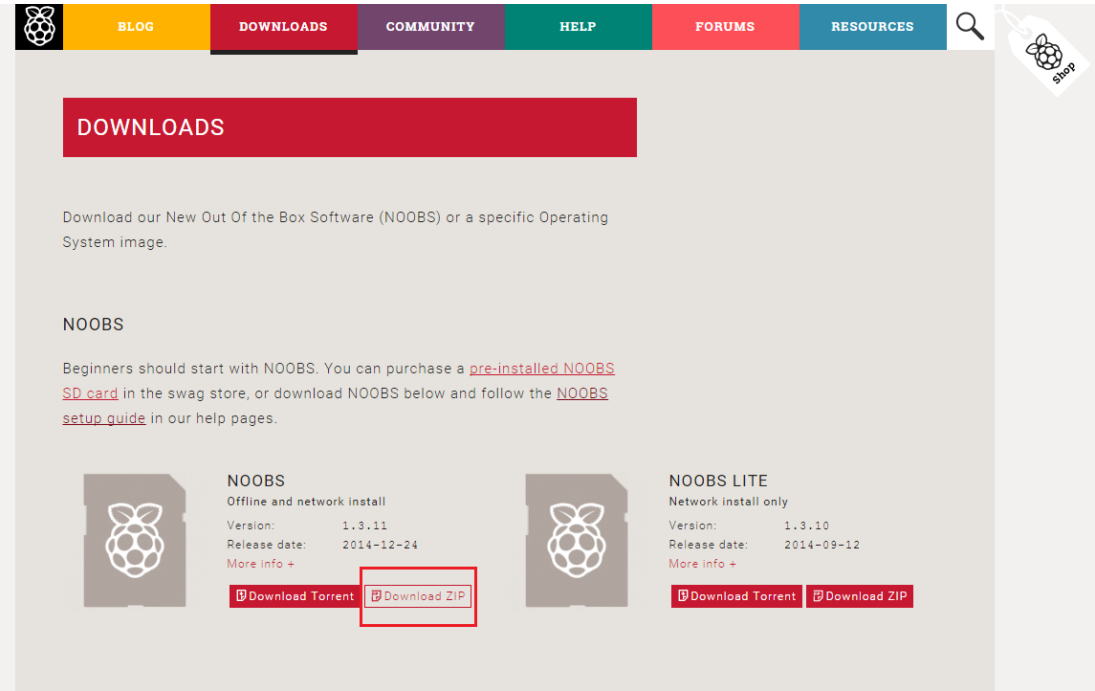

Figure 5

2. Extract the NOOBS.zip file.
3. Copy the extracted files onto the formatted microSD card.

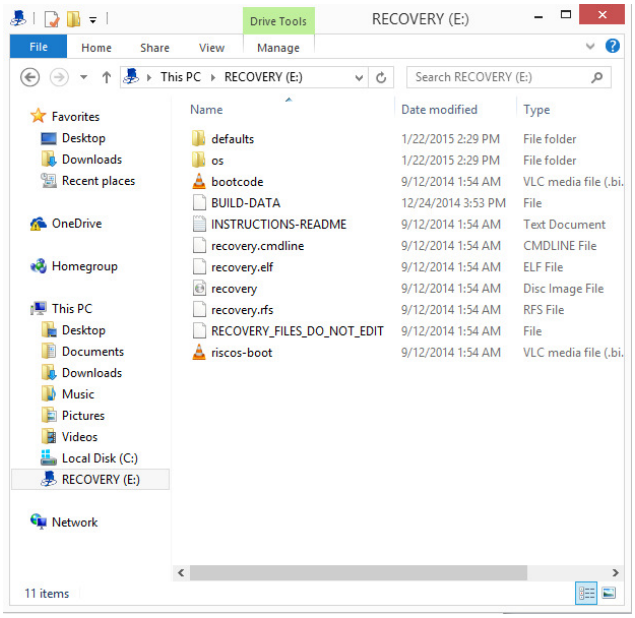

Figure 6

Setting Up the Raspberry PI

1. Attach monitor, mouse, keyboard, Ethernet cable or Wi-Fi dongle, and microSD card.
2. Power on the Raspberry PI.
3. Select the Raspbian [RECOMMENDED] option and click Install.
4. Confirm your selection.
5. Once Raspbian has been successfully installed, you will be directed to a configuration screen.
6. Select Finish.
7. When allowed, type: startx
8. If needed, the default username: pi, with password: raspberry

Getting The DMX-J-SA Running

1. Open the web browser.

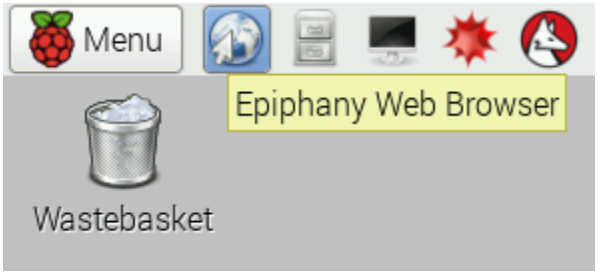

Figure 7

2. Download the Performax_Linux_Driver_104 file here:

http://www.arcus-technology.com/support/downloads/download-info/linux-usb-source

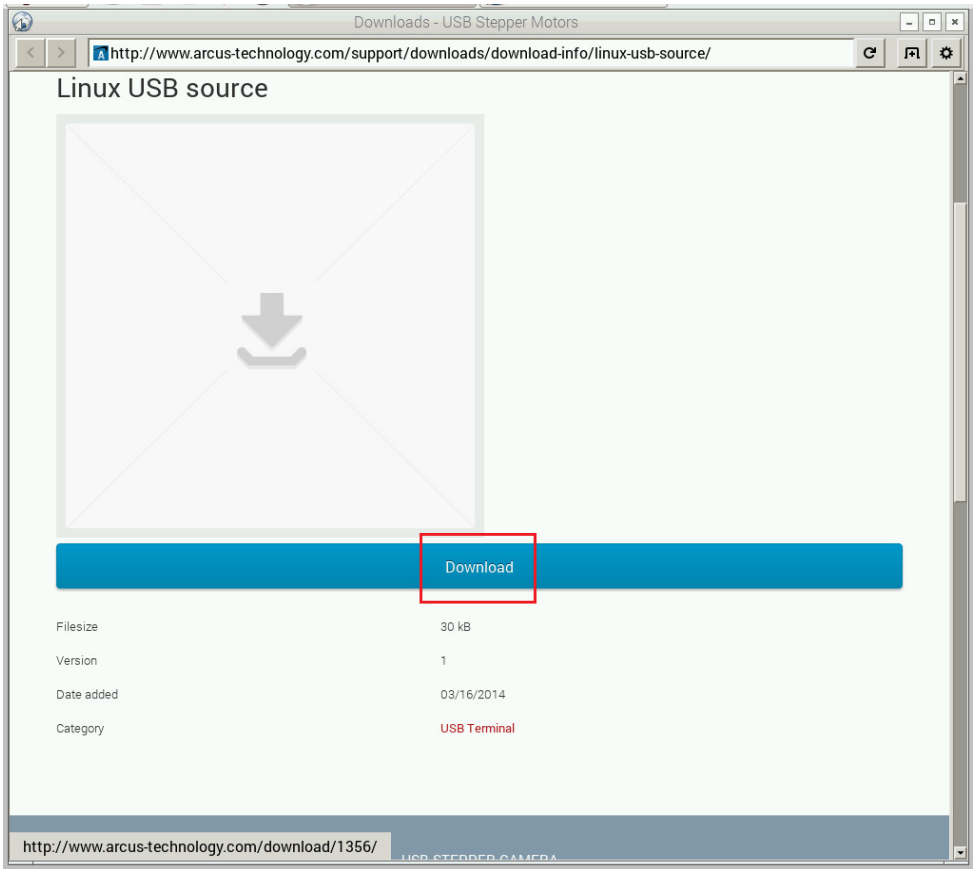

Figure 8

3. Extract Performax_Linux_Driver_104 to its own folder.
4. Open the terminal.

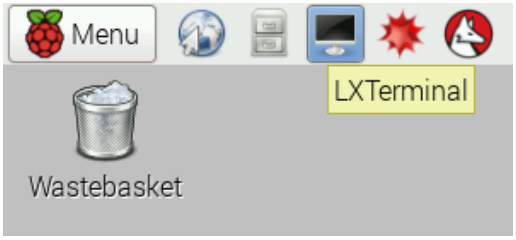

Figure 9

5. Open up the terminal and type: sudo apt-get install libusb-1.0-0-dev

```
pi@raspberrypi ~/Desktop $ sudo apt-get install libusb-1.0-0-dev
Reading package lists... Done
Building dependency tree
Reading state information... Done
libusb-1.0-0-dev is already the newest version.
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
pi@raspberrypi ~/Desktop $
```

Figure 10

6. When finished, type: sudo apt-get install build-essential

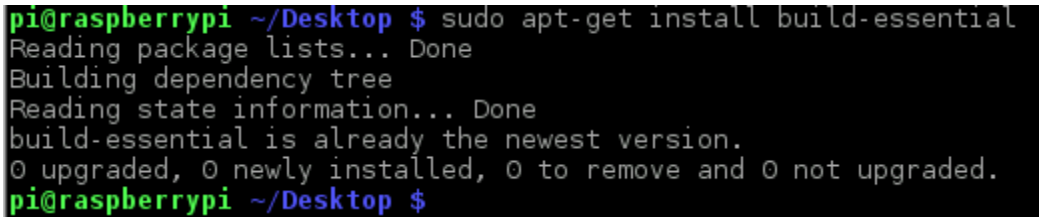

Figure 11

7. In the terminal window, navigate to the folder that contains the extracted contents of Performax_Linux_Driver_104

Figure 12

8. In the terminal window type :gcc –o test test.c ArcusPerformaxDriver.c –lusb-1.0

Figure 13

9. When finished, type: sudo ./test

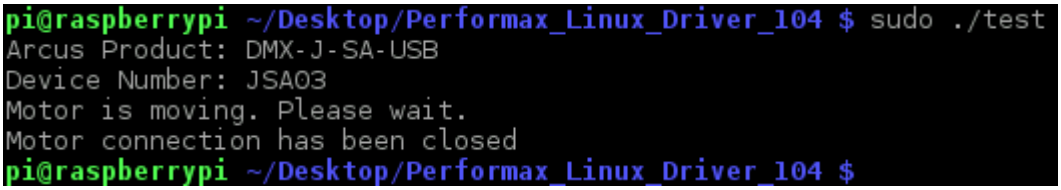

Figure 14