Raspberry Pi

- Model A, 256MB, single USB port
- Model B, 512MB, dual USB
- Model B+, 512MB, 4-USB ports, no composite output, uses only the MICRO SD card.
- Power required is a stable 5V 2A through micro USB port. Recommend you use a USB hub with separate power supply for all other attachments if possible.
- List of SD cards that will work found at http://elinux.org/RPi_SD_cards
- Format SD card with Windows.
- Good site to visit http://www.raspberrypi.org/introducing-noobs/
- Download NOOBS (**N**ew **O**ut **O**f **B**ox **S**oftware)Place it in an easily found file and unzip it.
- Copy and paste or drag the unzipped files to the formatted SD card.
- Slide the SD card into place and attach monitor, USB hub, mouse and keyboard.
- Power up. At the first screen you will select the operating system (Raspbian recommended) and make sure you select US English not the default UK which will give you a different keyboard. Takes 20-30 minutes to load the OS.
- The Configuration screen will appear next and for now you can use the default configuration. To get back to the config screen, at the command prompt enter

  sudo raspi-config

If everything went as it should you now have a functioning RPi computer. Login ID is "pi" and the pass word is "raspberry". After you have logged in enter "startx" at the prompt and you will be in the main RPi screen. You can go to the config screen and change the OS to boot up directly to the RPi screen and bypass the login.

If you are using a small monitor and need to change the font size on the terminal:

sudo dpkg-reconfigure console-setup
UTF-8
Guess optimal character set
Terminus Bold
11x22 (or whatever works best for you)

Join the DVAPDongle yahoo group for more information and answers to questions, files and ideas. The following is from a file on the DVAPDongle yaloo site.

Raspberry Pi with a DVAP

Instructions on how to install the DV Access Point (DVAP) Dongle on your Raspberry Pi with auto start from Mike , W2SWR

Step 1 Start fresh.
Start with a fresh install of Raspbian Wheezy 2013-02-09 and during the initial setup under “boot_behavior”, choose to start desktop on boot. If your operating system is already installed, you can run: sudo raspi-config from your LXTerminal and set it there.

Step 2 Installing the DVAPTool software.
a) make sure you are running and are connected to the internet with your Pi. b) open a LXTerminal (DO NOT use Root Terminal) window and run: sudo apt-get install qt4-dev-tools & [enter]. Answer "Y" when prompted. c) in terminal window run: curl -O http://opendstar.org/tools/DVAPTool-1.04-rpi.tgz & [enter] d) in terminal window run: sudo tar xzPf DVAPTool-1.04-rpi.tgz & [enter]

Step 3 Create a DVAP subfolder and move the DVAPTool into it.
a) in terminal type: cd /home/pi & [enter] , then type: mkdir DVAP &[enter]
b) in terminal type: cd /home/pi/.config & [enter] , then type: mkdir autostart &[enter]
c)Open your file manager and navigate to the “/home/pi” directory and drag the file “DVAPTool” into the DVAP folder

Step 4 Download and add a desktop icon.
a) Open your web browser and go to the DVAP Yahoo Group http://groups.yahoo.com/group/DVAPDongle
b) Download the file “dvap.png” from the yahoo group folder that contained these instructions and place it in the folder “home/pi/DVAP”

Step 5 Build the desktop shortcut
a) Download the file “DVAP_Tool.txt” from the yahoo group folder that contained these instructions
b) Open the text file with leafpad. Copy the contents where indicated and paste into a new leafpad window .
c)Save the file as “/home/pi/DVAP/DVAP_Tool.desktop” and save a second copy as “/home/pi/.config/autostart/DVAP_Tool.desktop”

Step 6 First time setup of DVAPTool.
a) From your File Manager, go to /home/pi/DVAP and double click the file DVAPTool . This will open DVAPTool without opening the port.
b) Enter the required info as per the DVAPTool instructions.

Step 7 Finishing up your work.
Plug in your DVAP to the USB port. Close all windows and reboot your Raspberry Pi. When your Pi boots back up, your DVAPTool should automatically open as well as the port.

Special Note on remote desktop operations:
By default, You will only see the DVAPTool open on the screen which is connected to the HDMI or Video port. If you open a remote desktop and login from another pc, a second instance of DVAPTool will attempt to open. You MUST close it. If you wish to see the session from your remote desktop, you may terminate DVAPTool from your pi’s Task Manager, then reopen it by double clicking the desktop icon.
Credits: Thanks to Robin AA4RC for his hard work on the DVAPTool for Pi. Thanks to VK4TUX for the “DVAPTool –open” and autostart folder.

In the following, this ham has put a lot of effort into explaining the procedure and is worth reading. Robin Cutshaw, AA4RC developed the Dongle and the DVAP. The meat of the information is attached next. AB4BJ uses the UK software for the interface. I felt the Interface presented by Robin Cutshaw worked better or at least was easier to install. The download from the UK site is in the .raz format which requires downloading of the 7-ZIP program to unzip the files if you go that route.

http://ab4bj.com/wordpress/2013/02/setting-up-a-raspberry-pi-to-work-with-a-dv-access-point-dongle-dvap/

A point to remember, once you have written anything in the Linux codes to a SD card or hard drive for that matter, Windows can not reformat it. To handle that problem, and you will need, is a formatting program called SDFormatter. Be careful using this program as it will format your entire HD on your computer if you are not careful! This is not a problem if you carefully check which drive you are formatting before hitting Enter.

Programs you may need:

- Win32DiskImager Allows an image to be written to a SD card.
- SDFormatter Formats cards written in Linux or Windows
- 7-Zip UnZips many files Windows can't handle
- NOOBS Operating systems for the RPi.

Sources of hardware and information:

- Amazon.com At least check them out for information and prices
- Adafruit.com Cost a little more but service and customer support is excellent
- Internet Take your chance but good source of information and an excellent source of help with Linux commands.
- Raspberry Pi Haynes Manual ISBN 978 0 85733 295 0
- Raspberry Pi User Guide Eben Upton Co-creator of the RPi ISBN 978-1-118-46446-5
- Many of the WiFi adaptors do not work on Linux systems because a drivers has not been written for them. The edimax Wireless USB adaptor is a true “plug and play” device. (Mine was purchased from Amazon)

I wish I could take credit for the information contained here but I can't. I've only tried to gather information from many sites and put together a cookbook that you could follow to get up and running with the RPi. This is after many failed attempts and head scratching before a lot of the information was published. The Banana Pi looks to be very promising because of a faster processor and more memory, but like the RPi when it was first released, there is minimal documentation, and if you don't speak Linux...

73
Jim
K4PZ