

# WD PiDrive Foundation Edition FAQ's

KBA #14993

## Hardware FAQ's:

1. Q: Must the WD PiDrive device and included microSD™ card be used together?

A: Yes, both the WD PiDrive device and microSD card are preloaded with software that enables easy installation of popular Raspberry Pi operating systems (OS) we've selected. After setting up the hardware (attach the WD PiDrive device, your video monitor, keyboard and mouse to your Raspberry Pi 3, 2 or Pi Zero), insert the microSD card and apply power to the Raspberry Pi board to launch the OS installation software. An Internet connection via a WiFi USB adapter or Ethernet is not required to set-up and use the WD PiDrive system, but may be used to download additional OS's (these appear in the menu if connected to Internet).

2. Q: The product doesn't include a cable. What type of cable is required?

A: A good-quality, short (24" or less), USB 2.0 (or USB 3.0) micro-B to standard-A male/male cable will work in most cases. The critical requirement is providing enough power to the drive as issues may arise if cables limit the current flow (e.g. long cables or thin wire gauge) and/or if the Raspberry Pi's USB bus is heavily-loaded. For best results, we recommend the WD PiDrive Cable kit, which includes a custom "Y" cable and low-resistance USB power cable that power the drive directly from the included 3A 5V power adapter, bypassing the Raspberry Pi's USB bus power circuit.

3. Q: What type of 5V power adapter is required?

A: A 3A 5V adapter with low-resistance USB power cable (as described above) is recommended. Your set-up might work with something less (such as 2A or 2.5A power adapter), but it depends on what model of Raspberry Pi is used, USB peripherals that are attached, network devices that are active, the software workload on the device, and the type of USB cables that are used, as well as other factors. Powering issues can lead to unpredictable behavior and data corruption and are hard to troubleshoot.

4. Q: The LED is constantly flashing and is very bright. Is this normal? Can the brightness be turned down?

A: Upon installation or re-selection of the OS's to install, the WD PiDrive device is re-partitioned and formatted. The formatting operation takes a while (~30 minutes) and involves a high-level of drive activity that causes the LED to flash constantly. Unfortunately, the LED brightness can't be changed via software. The light can be

blocked/shielded by an enclosure or with a marking pen or piece of opaque tape if desired.

5. Q: My WD PiDrive device is making a clicking sound and the software set-up is asking for a network connection to proceed. What's going on?

A: A clicking sound can indicate insufficient power to the WD PiDrive device. The drive cannot initialize and the software cannot access the installation files preloaded on the drive so it asks for a network connection to download the installation files. See FAQ number 3 above for more info.

## Software FAQ's:

1. Q: What is "Foundation Edition"?

A: Foundation Edition is a version of the WD PiDrive device that includes the Operating System installer software that is preloaded on the drive and on the included microSD card. The software is a special version of the Raspberry Pi Foundation's "NOOBS" OS installer, modified to coordinate and optimize operation of the microSD card and drive. The WD PiDrive version also enables select OS's to be installed from the drive without a network connection. Please see [www.raspberrypi.org/downloads/noobs/](http://www.raspberrypi.org/downloads/noobs/) for more info on the regular NOOBS version.

2. Q: What's different between the WD PiDrive version of NOOBS and the original version on the raspberrypi.org download page?

A: The main differences are as follows:

- The OS's selected by the user in the OS installation menu are installed on the WD PiDrive device instead of being installed on the microSD card. The system still boots from the microSD card, but it transitions operation to the WD PiDrive device after booting. This means the root directory is located on the WD PiDrive device.
- NOOBS' Win10 IoT downloadable OS does not currently support installation on an external drive and is therefore not presented in the OS installation menu for the WD PiDrive version of NOOBS.
- Wolfram and Oracle Java SE components are not included in the Raspbian installation files that are preloaded on the WD PiDrive device, but they may be added later by Raspbian desktops add software utility when connected to the Internet.

3. Q: The set-up screens state that OS's are being installed on the SD card (and if de-selected, removed from the SD card), is this correct? I thought the OS's are installed on the drive?

A: The references to a MicroSD card in the setup screens are incorrect. The software does install to the external drive and can be verified after the install is complete.

4. Q: How much disk space is available for each OS I install?

A: Upon installation and re-installation, the drive is partitioned based on which OS's are selected. In general, the available disk space is divided equally across the OS's selected, except for Raspbian, which is fixed at 24GB. This allocation is predetermined by the software and cannot be changed by the user. Resizing partitions after multiple OS's are installed may be possible but requires an advanced level of knowledge. In the specific case where Raspbian is the only OS installed, it will still be installed in a 24GB partition and the FAQ below provides instructions for expansion.

5. Q: When I install only Raspbian, it's installed in a 24GB partition, but the rest of the WD PiDrive device is not accessible. How can I access the remaining capacity?

A: For the specific case that Raspbian is the only item selected in the OS install menu, the partition may be expanded from the fixed 24GB size to the maximum space available via the following steps:

1. If you haven't already done so, install Raspbian as the only item selected. If you want to re-install with only Raspbian, reboot system and press the <shift> key when prompted.
2. After installation, the dialog box will say "OS(es) Installed Successfully". Click "OK" and the system will reboot into the Raspbian desktop.
3. Open the console (click the third icon on the top menu bar, the one that looks like a computer monitor)
4. Enter the following, pressing the <enter> key after each line:

```
sudo -i
parted /dev/sda
resizepart
2
230GB
resizepart
6
230GB
quit
resize2fs /dev/sda6
reboot
```

The system will restart. Do not press the <shift> key during the splash screen. The system will boot into the Raspbian desktop and the root partition (that contains Raspbian) on the WD PiDrive [device](#) should be at its max capacity. You can verify this by opening the console (third icon on top menu bar) and typing "sudo fdisk -l" followed by the <enter> key. You should see "/dev/sda6" showing as 213GB (this is the root partition with Raspbian).

**Note:** In "sudo fdisk -l", the -l is lower-case "L".

6. Q: After I install the OS's, if I want to change what's installed (using the recovery mode boot option) and delete an installed OS, will I be able to reinstall it later?

A: Yes, initiating recovery mode (by rebooting the system and pressing <shift> when prompted by the screen) provides access to OS's just like the first-time set-up.