

## 3K3y User Manual

### ***3K3y Installation***

Refer to the install manual for your PS3 model.

### ***Using the 3K3y***

### **Operating Modes**

3K3y can operate in two emulation modes:

- 3Dump. Uses the drive keys from your PS3 to provide a full emulation, no original game disk is required. Game ISOs can be used without any post processing.
- NoKeys. Requires an original PS3 game disk. Game ISOs must be decrypted with the Ripp3r app before use.

### **3K3y Boot Modes**

3K3y can boot into one of two modes

- Passthru mode, connects the BD drive to the PS3. The PS3 will play disks as normal
- Emulation mode, connects the 3K3y to the PS3. The PS3 will play ISO files from a USB HDD

Selecting the boot mode depends on your PS3 model.

<b>PS3 Model</b>	<b>Passthru</b>	<b>Emulation</b>
Fat	Power on the system with a disk in the BD drive	Power on the system without a disk in the BD drive
Slim	Power on the system with a disk in the BD drive	Power on the system without a disk in the BD drive
Super Slim	Power on the system with the BD drive cover open	Power on the system with the BD drive cover closed

## 3K3y Remote

The 3K3y Remote is an optional device that connects to 3K3y via USB. With the remote you can select a game to load, view configuration information about your 3K3y system and receive feedback about the system especially during 3K3y updates. It is a useful diagnostic tool that, while not necessary to use 3K3y, will greatly enhance your experience with 3K3y.

The 3K3y Remote has three buttons that allow you navigate its menu structure. Up & down buttons scroll through the menu structure, the middle button performs two functions. A short press selects the currently selected menu item, a long press takes you back up a level in the menu system.

The 3K3y Remote informs you when a HDD is attached or removed from the 3K3y system & the total number of HDD attached, it also displays a message when the 3K3y (plus WiFi interface) has attached to your network.

To launch a game, navigate through the menu system to the game you want to launch and select it with the center button. You will then be prompted to insert your original game disk, after that the ISO will load and run.



## 3K3y ISO Menu

3K3y can emulate a data disk containing jpeg images. The data disk is generated dynamically by 3K3y based on the games it finds on an attached HDD, each image in the data disk represents a game on the HDD.

When 3K3y boots into emulation mode and the 3K3y ISO menu is enabled (see configuring the 3K3y below) the data disk is automatically loaded\*. The data disk appears in the PS3 XMB under the photos menu, select the data disk and browse as usual.

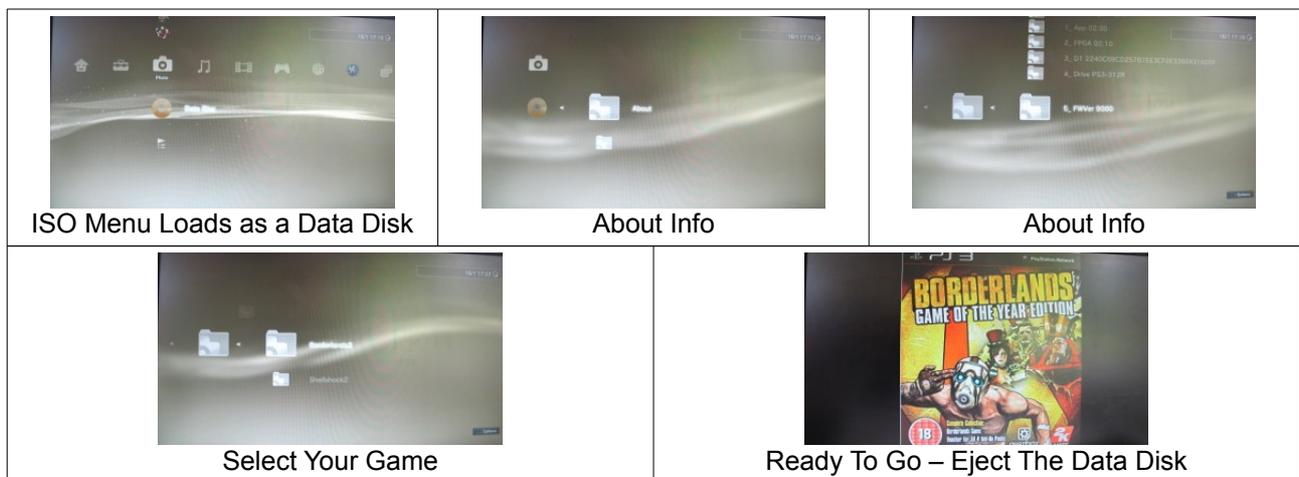
At the top level the ISO menu has two entries, an About directory where you can find information about your 3K3y system and a directory representing your HDD. To select a game, navigate the data disk to the game you want to launch and select it. You must open

the image full screen in order to select it. After you have selected the game press the eject button on your PS3, the data disk will unload and the game you selected will be loaded. Super Slim users must manually open and then close the disk cover.

You can customise the look of the ISO menu by copying JPG images into the same folder as the game ISO. The JPG must have the same name as the game ISO, for example: *Borderlands2.iso* & *Borderlands2.jpg*

**IMPORTANT:** Software running on the PS3 could be used to detect ISO Menu (or homebrew manu systems running on the PS3). While this option works and is supported it is *not* considered stealthy

**\*Note:** On PS3 Super Slim the BD drive cover must be closed for the data disk to load.



## Configuring the 3K3y

### Configuration Options

3K3y is configured using a text file call 3key.cfg. By editing the contents of the configuration file you can control the way 3K3y behaves.

Setting	Values	Notes
MENUISO	Y/N	Enable (Y) or Disable (N) the MENUISO
RESUMELAST	Y/N	Automatically reload the last game you were playing
AUTOEJECT	Y/N	Automatically eject the game disk from the drive when 3K3y has finished using it
D1		The D1 data for your original game disk
KEY		The WiFi Key that was supplied with your 3K3y WiFi adapter*
SSID		The SSID of your WiFi Network*
PSK		If you use WPA/WPA2 this is the Pre Shared Key for your network*
WEP		Don't use WEP, it's rubbish*
IP		If you want to use a fixed IP address put it here (DHCP is the default)*
NETMASK		If you want to use a fixed IP address put the subnet mask here (DHCP is the default)*

\* Only required if you have a WiFi adapter

Once you are satisfied with your changes to the 3key.cfg file you can update the 3K3y, see section 'Updating the 3K3y Configuration, Firmware & FPGA'.

### 3Dump

If you have obtained your drive keys by running the 3Dump application on a CFW PS3 you should copy it to the 3K3y's micro SD card. Insert the micro SD card into a SD card reader attached to your PC. Your PC will detect a 1MB FAT formatted partition, copy your 3Dump.bin file to this partition and then eject/safely remove the SD card

### Updating the 3K3y Configuration, Firmware & FPGA

Every time 3K3y detects a new HDD has been attached it checks for the presence of certain files, if those files are present then a further check is made to determine if they match the files currently in use. If they do not match then an update is performed and the new files are copied to the SD card.

The files that are checked are:

- 3key.cfg – the 3K3y configuration file
- ulmage – The Linux Kernel

- rootfs – The Linux Root File System
- fpga.vme – The FPGA configuration

To update one or more of these files, copy them to the root of your HDD and then plug the HDD into your 3K3y.

When the update process begins a message will be displayed on the 3K3y Remote, at the end of the update a new message will be displayed to confirm that the update is complete. Users without a remote can observe the blue disk status LED on their PS3, when the update starts the LED will start flashing, when the update is complete the LED will stop flashing.

Do not turn off your system while an update is in progress. Once the update is complete power cycle your PS3 for the changes to take effect. It is recommended that the update files are deleted from the USB storage device,

## **Storage**

### **HDD & Flash Drives**

3K3y allows one or more USB storage devices to be attached, these storage devices can be HDD or Flash Memory. The storage devices can be connected directly to the 3K3y's USB adapter or, if the 3K3y Remote is being used, to the Remote.

Power for the USB storage device is taken from the PS3's USB port, some HDD require more power than the PS3's USB port can supply. There are several ways to solve this problem:

- Use a 'Y' lead, this allows power to be taken from two USB ports
- Use a powered USB storage device
- Use a powered USB hub, plug this between the 3K3y USB adapter and the USB storage device.
- Use the supplied USB power cable to take power from another PS3 USB port (3K3y remote only)
- Use an external power supply connected to the 3K3y remote (5V 2 Amps, center positive)

### **File Systems**

3K3y supports the following FileSystems:

- NTFS
- EXFAT
- Ext2/3/4fs

## ISOs

3K3y is an Optical Drive Emulator (ODE), it can only do things that a real Optical Disk Drive (ODD) can do. An ODD reads data from an optical disk (CD/DVD/BD disks) and an ODE reads data from a file that contains a copy of the data from an optical disk. These files are commonly known as ISOs.

3K3y searches for ISO files in a folder called 'games' in the root of any USB storage device attached to it, 3K3y will also search any subfolders within the 'games' folder. The subdirectory structure is reflected in the menu system that 3K3y displays, this means that you can group your games in subfolders and use that to quickly find a particular ISO. You can choose to group ISO files in anyway you please, alphabetically, by genre or not at all.

It is important to understand that this search takes time, the more ISO files present on the USB storage device, the longer the search will take. Keeping only the ISO files you use on the USB storage device will reduce the search time

Refer to the 3K3y Ripp3r manual for information on creating, preparing and rebuilding game ISOs.

## Trouble Shooting

### 3K3y

The 3K3y main PCB has two LEDs, one indicates that the board is powered, the other gives feedback about the state of the 3K3y. 90 seconds after power on the 3K3y diagnostics will be stable and can be interpreted as follows:

LED State	Meaning	Action
Slow Flashing	SD card incorrectly seated / corrupt	Reseat / re-image the SD Card
Fast Flashing	Detecting PS3 drive controller	Check FFC from 3K3y to BD drive Check solder points A-D
Solid	Waiting for PS3	Check FFC from 3K3y to PS3 Check solder points E-H
1 flash	3K3y is in Passthru mode	
2 flashes	Bad FPGA/FPGA Version	Update the FPGA
3 flashes	Bad BD	Check FFC from 3K3y to BD drive Check solder points A-D
4 flashes	Bad D1	Update the 3Key.cfg with a valid D1
5 flashes	3K3y is in Emulation mode	

### Error 80010017

This is caused by an incorrect D1, there are three possible causes

- Using a 3K3y Ripp3r ISO without decrypting it first\*
- Selecting an incorrect IRD when encrypting an ISO\*

- Incorrect D1 in the 3key.cfg

\* Only applies to to NoKeys firmware3