

IronKey VP80ES External SSD User Manual – Rev. 1.0

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# User Manual

## IronKey Vault Privacy 80 External SDD

**FIPS 197 Certified**

**Hardware-Based**

**Advanced Encryption Standard (AES)**

**256-bit Encryption in XTS Mode**



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## At A Glance

### Introduction

Congratulations on your purchase of the IronKey Vault Privacy 80 External SSD (VP80ES) 256-bit AES in XTS mode encrypted external SSD.

The VP80ES was designed to be user-friendly with a touch-screen and menus. However, to make the most of its features, we recommend that you review this User Manual to ensure that you become familiar with all that your VP80ES has to offer.

### General Operation of the Encryption: Hardware-Based Encryption Security

Your VP80ES utilizes a hardware-based encryption engine inside the metal casing to encrypt and decrypt data that you store on the SSD. When your drive is plugged in and powered on, you will authenticate with the onboard system using your password to enable the encryption/decryption and access your data. When you lock, power off or disconnect your drive, the data is stored in an encrypted or protected state. The VP80ES uses a Common Criteria EAL5+ certified secure microprocessor to protect against drive tampering.

### Updating Your Drive

Updated software and documentation are available for download at our website:

- Latest drive updates, documentation, and FAQs - [kingston.com/IKVP80ESresources](https://kingston.com/IKVP80ESresources)

**Important:** Only the latest drive updates (if there are any updates) should be applied to the drive. Downgrading the drive to an older firmware version is not supported and can potentially cause a loss of stored data or impair other drive functionality. Please contact Kingston Technical Support if you have questions or issues.

### About the VP80ES

The VP80ES is a FIPS 197 certified drive built around a powerful AES 256-bit with XTS mode cryptographic hardware architecture. It uses an intuitive touch-screen interface to make usage as simple as using a mobile phone – no need to constantly refer to a manual to figure out how to make changes to settings, as visible menus are used. It is backed by a limited 3-year warranty with free Kingston technical support.

The VP80ES is fully cross-platform compatible and **OS independent** - with no software or special drivers required, it works transparently with Windows, Linux, macOS, Chrome OS, or any system that supports USB mass storage devices.

## Getting Started

### Tap with Precision to Input Data

The VP80ES allows you to navigate its durable touch-screen very accurately using a pointed but non-puncturing stylus. You can also use the tip of your finger. The screen uses a resistive technology that takes input from precise mechanical presses/taps. In the password entry screen, a yellow touch indicator marks where the drive has detected the tap. For the input to be successful, most of the indicator needs to appear over the expected target character.



*As an instruction, an animation displays during startup.*

*You can skip the animation by tapping anywhere on the screen.*

### Randomized Keys on Touch-screen

By default, the input keys of the password entry screen are randomized on each use. The randomization will keep alphabetic character rows in order but mix the rows, or rearrange the numbers randomly on the keypad screen. The randomization is a security measure to guard against smudge attacks, where an attacker analyses the fingerprint patterns on the drive. It also helps against sneak peek attacks if someone gets a glance at the password taps on the screen.

### Best Practices

#### Power to your VP80ES

- Only connect the VP80ES to certified USB ports. The drive has a minimum power requirement of 5 Volts and 1A of current drawn from the USB port.
- Safely disconnect or eject the drive from the operating system before removing it. For more information, see [Disconnecting your VP80ES](#).

#### Using a Strong Password

The strategy to strong data security is to utilize a password that will be hard for an attacker to guess. There are entire web sites dedicated to listing common passwords that are easily guessed, like "PASSWORD1". Attackers utilize social engineering techniques to guess passwords based on what they know about the owner of the USB drive.

Your VP80ES comes with strong security countermeasures. This includes a Password Counter for invalid password entries in a row that will stop an attacker guessing passwords and will wipe out the encrypted data – formatting the VP80ES back to factory state. This is known as Brute Force Attack protection.

The VP80ES is designed to allow you to set up your password rules (such as Minimum Password Length) on the Admin menu, along with whether numbers and/or alphabetic characters are required. This allows you to set passwords that are secure yet easier to remember.

First, the VP80ES allows you to select two passwords – an Administrator password (we will call it the Admin password from here on) and a User password. Admin can access the drive at any time and set up options for User – Admin is like a Super User.

User can access the drive as well but compared to Admin has limited privileges. If one of the two passwords is forgotten, the other password can be used to access and retrieve the data. The drive can then be set back up to have two passwords. **It is important to set up BOTH passwords and save the Admin password in a safe location while using the User password.**

Second, the VP80ES supports two password modes. When password rules are selected by Admin, both the Admin and the User passwords must comply with the set rules requiring at least one number and/or at least one alphabet character. There are two password modes:

- **Numeric (or PIN):** You can select 6-64 numbers as your password. This is like the PIN on a mobile phone or bank card where you authenticate by selecting the numbers on a touch-screen. In this case, alphabetic characters are not required in the password.
- **Alphanumeric (or Passphrase):** As people have more and more Complex Passwords to remember, it can get a bit complicated to track and remember. The VP80ES supports Passphrases up to 64 characters.

A Passphrase is basically any combination of alphanumeric characters and the space key from a minimum of 6 characters up to 64 characters. This allows you to select multiple words, a phrase, lyrics from a song, a line from poetry, etc. Good passphrases are among the most difficult password types to guess for an attacker yet may be easier to remember for users.

Examples of strong Passphrases:

- **ESPRESSO MILK SUGAR** – coffee recipe
- **RED YELLOW PURPLE** - colors
- **2B OR NOT 2B** – Shakespeare poetry
- **LET IT BE** – Song name
- **8 X 8 EQUALS 64** – Math
- **MY DOG IS 1 YEAR OLD** - Personal

The possibilities are endless. The ideal passphrase would have multiple words that are very difficult for an attacker to guess. It should be meaningful to you.

Using the Admin and the User Passwords, you have two independent passwords. Kingston recommends saving one in a safe location, just in case the other password is forgotten.

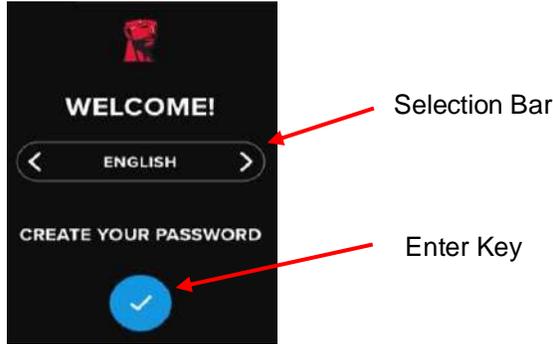
**If both passwords are forgotten or lost, there is no other way to access the data.** Kingston will not be able to retrieve the data as the security has no back doors. Kingston recommends that you have the data also saved on other media. The VP80ES can be Secure Erased and reused, but the prior data will be erased forever.

## Use the Correct File System

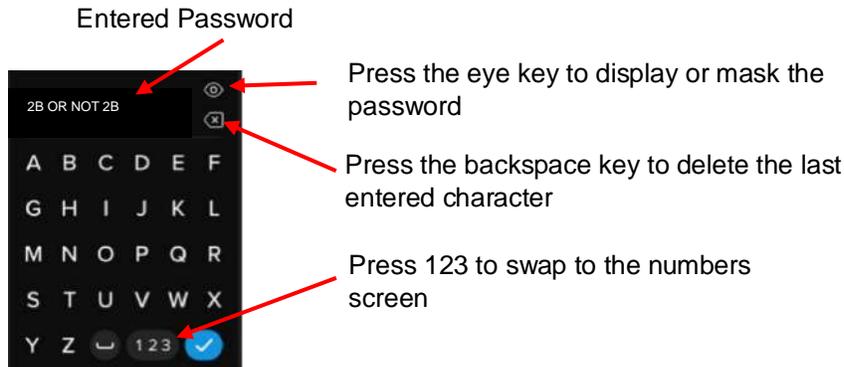
The VP80ES comes preformatted with the exFAT file system. It will work on Windows and macOS systems. However, there could be some other options, such as NTFS for Windows and others for macOS. You can reformat the data partition if needed but data is lost when the drive is reformatted. See [Formatting Your VP80ES](#) for more information.

## Initializing and Connecting Your VP80ES

1. Connect the VP80ES to your computer with one of the included USB cables.
2. The drive will display “PERFORMING SELF TEST” and then will display an IronKey loading screen.
3. Select your Language using the Selection Bar by tapping on < or > to see the available languages.
4. When you have selected your language, tap the Enter key.

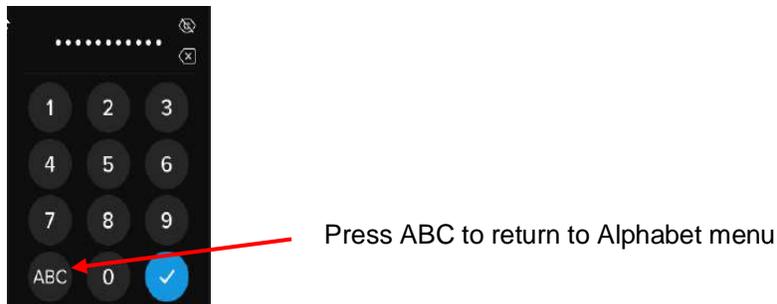


5. You will then be prompted to create a password. Tap the Enter key to continue. You will see the first screen where you can enter your password (we have entered **2B OR NOT 2B** as an example below):



**Note:** The initial password entry screen will display the password and not show the Eye button, but the Eye button will be shown on the Confirm Password screen.

6. Your VP80ES will show an “ENTER NEW PASSWORD” prompt. Enter a desired password and then tap the Enter key. Tap **123** to swap the keyboard to numbers. Tap **ABC** to swap back to letters.



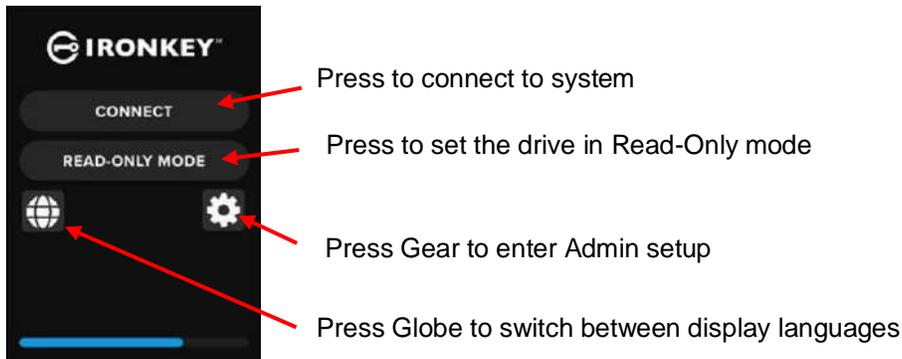
**Note:** Linear and repetitive passwords are not supported, and passwords must contain a minimum of 6 characters by default. It is recommended that you use a combination of letters and numbers for your password.

Some examples of invalid passwords are: '78901234', '432109', '123456', '111111'.

7. Confirm your password and tap the Enter key.

If the confirmed password does not match the password entered in Step 6, the drive will ask you to enter a new password and to confirm the password again. This process will repeat itself until the passwords match each other.

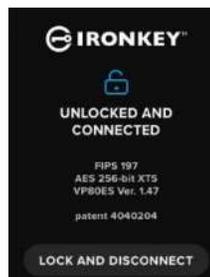
8. After the drive password is input, the **CONNECT** screen is shown.



9. Tap **CONNECT** to connect the VP80ES instantly. Otherwise, the drive will automatically connect to the computer after 10 seconds. Selecting **READ-ONLY MODE** will connect the drive with read-only access. This allows data to be read from the drive, but not modified or deleted.

Tapping the Gear icon on the screen will take you to the Admin setup menu. See [Using the Admin Menu](#) for more information. Tap the Globe icon to change and cycle through the display language.

10. After the drive successfully connects, the VP80ES will show the **UNLOCKED AND CONNECTED** screen with a **LOCK AND DISCONNECT** option available.



11. A volume labeled "KINGSTON" will be mounted to the computer and be available for use. You can now work with the drive as a standard external storage drive on your computer. All data is transparently encrypted by the hardware when you store it on the VP80ES.

**Note:** To prevent data loss or damage to the drive, it is recommended that the VP80ES drive be properly ejected from the Operating System. For more details, see [Disconnecting Your VP80ES](#). Alternatively, tapping **LOCK AND DISCONNECT** will disconnect the drive from the computer.

## Disconnecting Your VP80ES

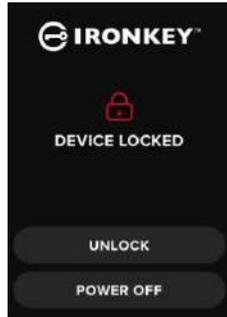
To prevent data loss or corrupted data, it is recommended that you properly eject the VP80ES drive using your computer's Operating System (OS) when you're finished using it. The best practice is to use your OS's Safely Remove Hardware or Eject function before you power down or remove the drive from the host system. This will also help prevent damage to the drive.

### Windows Users

1. Right click the Safely Remove Hardware icon located on the lower right-hand corner of the Windows taskbar.
2. Once the popup menu appears, click the VaultPrivacy80ES to safely eject the drive from Windows. Your VP80ES will automatically lock when ejected.



3. Tap **POWER OFF** on your VP80ES and unplug from the computer. Tap **UNLOCK** to start a new session.



### macOS Users

1. a. Click the Eject button that corresponds with the Kingston VP80ES,

OR

- b. Drag the drive to the trashcan in the macOS dock.

**Note:** The trash can will transition to an eject button while dragging the drive.

2. Once the drive has been ejected from macOS, press **LOCK AND DISCONNECT** on the drive.
3. Tap **POWER OFF** on your VP80ES and unplug from the computer. Tap **UNLOCK** to start a new session.

## Additional Windows Configuration Changes

By default, Windows 10 attempts to shut off USB drives after a set period of inactivity. If the VP80ES is put into this low power state, the drive will automatically lock and require reauthentication.

It is recommended that you perform the steps below to ensure the best VP80ES user experience on Windows.

### Disabling Windows 10 Power Save

**NOTE:** You will need to complete the following steps once for each drive plugged into your computer.

1. Log in as a local administrator on your computer.

**NOTE:** If you are not an administrator on Windows, you will receive a warning indicating you won't be able to make changes when you open Drive Manager. Please contact your administrator for further assistance if required.

2. Unlock your VP80ES drive.
3. Right click the Start button and select "Drive Manager".
4. Click on the arrow next to "Universal Serial Bus controllers".
5. Right click on "USB Mass Storage Drive".
6. Click "Properties".
7. Click the "Power Management" tab.
8. Uncheck "Allow the computer to turn off this drive to save power".
9. Click OK and close the "Drive Manager" window.

### Disabling Windows 10 Selective Suspend

1. In the search box on the taskbar, type **control panel**.
2. Click and Open **Control Panel**.
3. Click on **Hardware and Sound**.
4. Click on **Power Options**.
5. Click the **Change plan settings** link for the plan you're currently using.
6. Click the **Change advanced power settings** link.
7. Click **(+)** next to "USB settings".
8. Click **(+)** next to "USB selective suspend setting".
9. Select "Disabled" from the drop-down menu.

**NOTE:** If you are using a device with a battery (i.e. laptop or tablet), you will need to set this for **OnBattery** and **Plugged in**.

10. Click **OK**.

## Formatting Your VP80ES

### Selecting the Correct File System

Your drive is formatted as **exFAT** from the factory.

The VP80ES can be reformatted to any file system of your choosing to accommodate a different operating system or to remove file size restrictions.

Recommended file systems:

#### exFAT

- Pros: No file size limitations.
- Cons: Not supported by legacy operating systems.

#### NTFS

- Pros: No file size limitations.
- Cons: Limited cross-platform compatibility - Windows, macOS (**read-only**), and Linux (**read-only**).

**Note:** Reformatting your VP80ES drive will erase all your files but will not erase your drive password and settings. As such, formatting should not be used as a method of securely erasing files. To securely erase your files, perform a **Secure Erase** function. For more information, see the **Secure Erase** section.

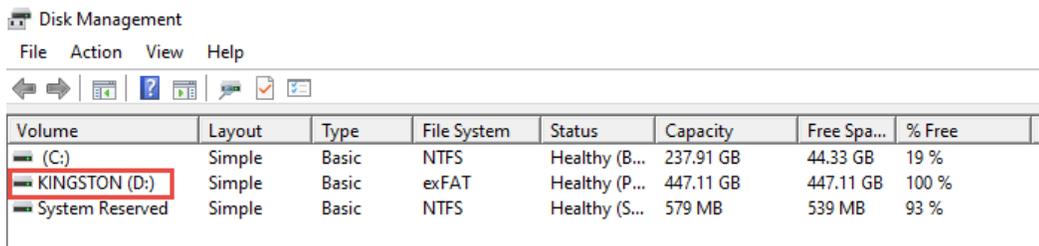
**Important:** Before you reformat the drive, back up your drive to a separate location, for example, to cloud storage or your computer.

### Formatting Your VP80ES on Windows

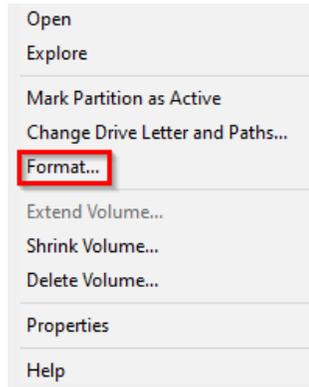
1. Connect the VP80ES to the computer and log in. See **Initializing and Connecting your VP80ES** for more information.
2. In the search box on the taskbar, type **control panel**.
3. Click and Open **Control Panel**.
4. Click on **System and Security**.
5. Click on **Create and format hard disk partitions**.



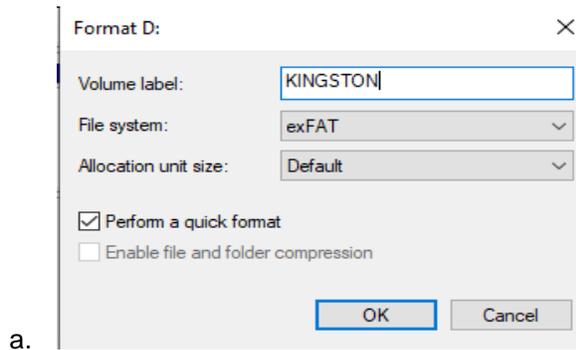
6. Right click on the drive letter that corresponds to your VP80ES. This example shows (D:).



7. Select **Format**.

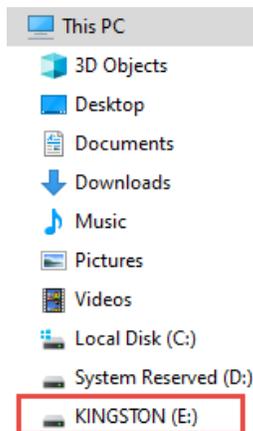


8. Choose an appropriate 'Volume Label' and 'File system'. Click **OK**.



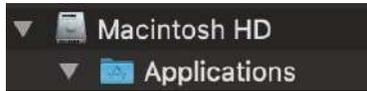
9. You will be warned that all data will be erased and asked if you would like to continue. Press **OK**.

10. When finished, your VP80ES will be available under 'This PC'.



## Formatting Your VP80ES on macOS

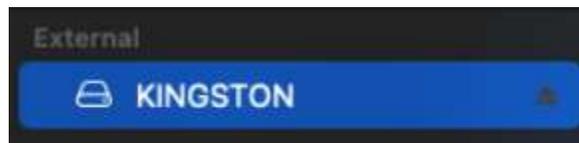
1. Go to Applications under your Finder.



2. Click Utilities and open Disk Utility. You will receive a warning message that the drive is not readable. Click Ignore.



3. Select the unformatted VP80ES disk.



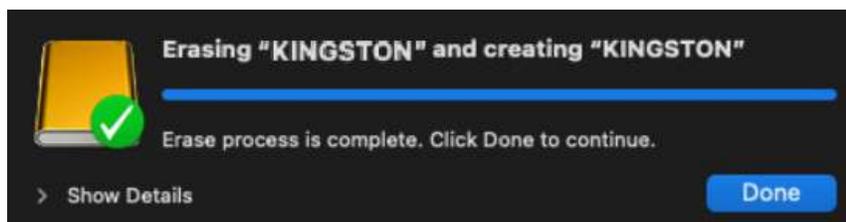
4. Click the Erase tab at the top of the screen.



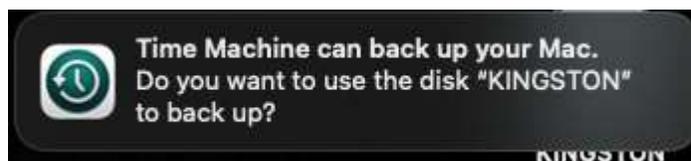
5. Rename the disk label to "KINGSTON" and choose a file system.



6. Click Erase. The drive will begin formatting.



7. When it is finished formatting, you may get a popup message asking if you would like to back up your drive with Time Machine. Choose your preferred option.



8. Click Done. Your formatted VP80ES should now appear under Drives.

## Linux Compatibility and Configuration

The VP80ES is OS independent, capable of being run with 100% compatibility on most systems. For optimal Linux or Unix based system compatibility, we recommend using at least the Linux 2.6.31 Kernel (released 9 September 2009), which implemented the xHCI specification for USB 3.0.

Although older versions should work, they might run in USB 2.0 mode, which can be significantly slower.

You can check your kernel version by typing the following command in the terminal:

```
# uname -r
```

In most newer distributions the drive should automatically mount. To format the drive, first enter terminal, then list detected hard disks using:

```
# fdisk -l | grep '^Disk'
```

Your configuration may vary. For this example, we'll assume the disk is at /dev/sdb. You will then type:

```
# fdisk /dev/sdb
```

Follow the instructions in fdisk to create a new partition. Finally, use the mkfs command to format the disk for Linux. Here, we use ext4.

```
# mkfs.ext4 /dev/sdb1
```

If you want to rename the drive, use the e2label command:

```
# e2label /dev/sdb1 /VaultPrivacy80ES
```

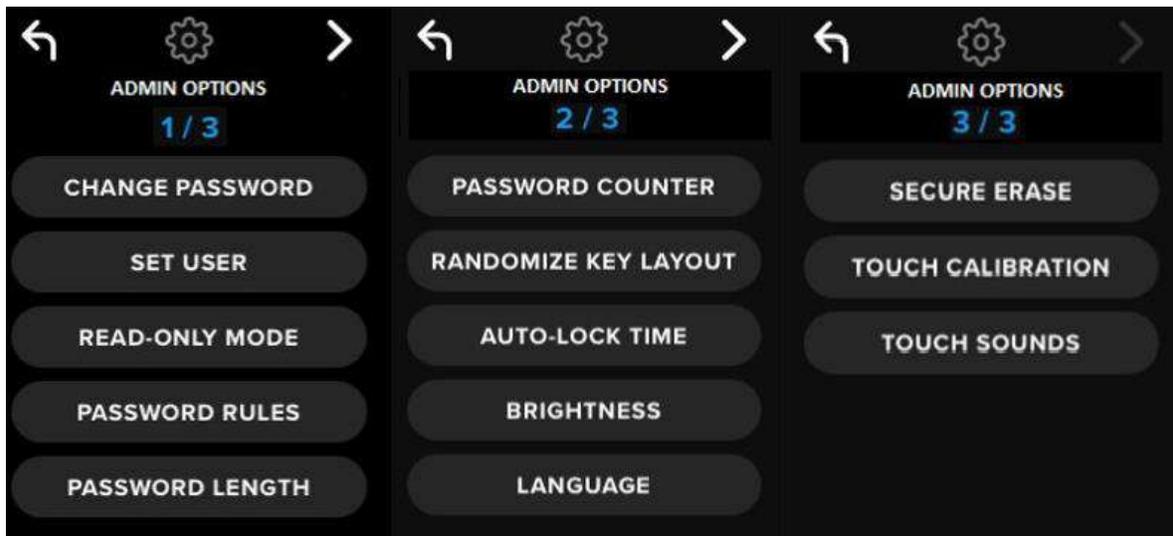
In this case, VaultPrivacy80ES is an example of a drive name.

## Using VP80ES Features

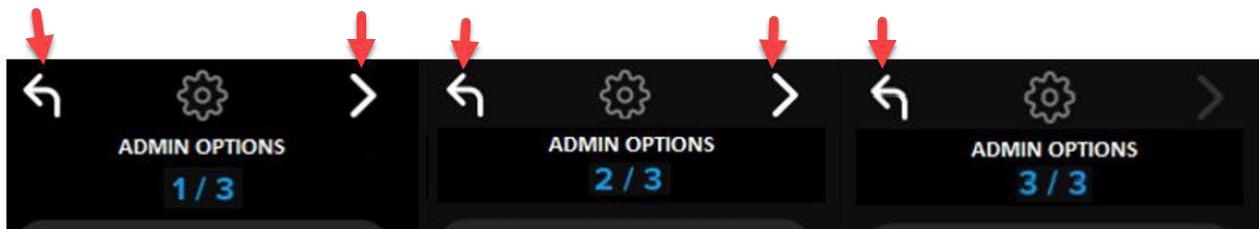
### Admin (Administrator) Menu

- Tap the Gear icon when you have unlocked the VP80ES to access the Admin Menu.
- Your configurations are saved when you disconnect the VP80ES.

VP80ES screenshot showing all 3 Admin Options menus:



Each menu has a Forward and a Back arrow to navigate between them:



On Menu 3, you can only go back to Menu 2 so only the back arrow is available.

The following table shows all Admin (Administrator) Menu items and their function:

Menu Option	Details
<b>Previous Menu / Back Button</b>	Tap to go back to the previous menu screen and save the current settings.
<b>Next Menu / Forward Button</b>	Tap to go forward to the next menu screen.
<b>Admin Menu Page 1</b>	
<b>Change Password</b>	Change current Admin password.
<b>Set User</b>	Configure a User password for use on your VP80ES. Admin must enable the User password.
<b>Read-Only Mode</b>	Enable or disable Global Read-Only. User cannot override a set Global Read-Only.
<b>Password Rules</b>	Enable Numeric or Alphabet options for increasing password strength. Applies to both Admin and User passwords.
<b>Password Length</b>	Set the acceptable minimum password length (Default = 6, max = 64). Applies to both Admin and User passwords.
<b>Admin Menu Page 2</b>	
<b>Password Counter</b>	Set the maximum number of password retries (Default= 15, max = 30). This counter is shared between Admin and User retries.
<b>Randomize Key Layout</b>	Mixes up the Numbers and Alphabet keyboard rows so the keys appear semi-randomly for improved security.
<b>Auto-Lock Time</b>	Modify length of time before your drive automatically locks.
<b>Brightness</b>	Change the level of brightness for your drive's touch-screen.
<b>Language</b>	Set your preferred language for the drive.
<b>Admin Menu Page 3</b>	
<b>Secure Erase</b>	Crypto-erase the drive, including encryption key and data.
<b>Touch Calibration</b>	Calibrate the touch-screen interface if you are having problems.
<b>Touch Sounds</b>	Enable or disable touch sounds.

## User Menu

**NOTE:** This menu is only accessible after creating a User in the Admin menu.

Menu Option	Details
<b>Previous Menu / Back Button</b>	Tap to go back to the previous menu screen and save the current settings.
<b>Next Menu / Forward Button</b>	Tap to go forward to the next menu screen.
<b>User Menu Page 1</b>	
<b>Change Password</b>	Change current User password.
<b>Auto-Lock Time</b>	Modify length of time before your drive automatically locks.
<b>Brightness</b>	Change the level of brightness for your drive's touch-screen.
<b>Language</b>	Set your preferred language for the drive.
<b>Touch Sounds</b>	Enable or disable touch sounds.

## Accessing the Onboard Admin or User Menu

For detailed menu information, see [Using the Admin Menu](#) OR [Using the User Menu](#).

**NOTE:** If your drive was connected to your computer, disconnect your VP80ES (See [Disconnecting Your VP80ES](#)), unplug and reinsert the USB cable to your computer.

1. Connect the VP80ES to your computer with the included USB Cable.
2. Enter your password on the "ENTER PASSWORD" screen and tap the Enter key.
3. Tap the Gear icon to enter the Onboard Menu.

**NOTE:** After entering the password, the connect screen is briefly shown for 10 seconds. To enter the onboard Admin menu, you will need to tap the Gear icon quickly.



## Using the Admin (Administrator) Menu

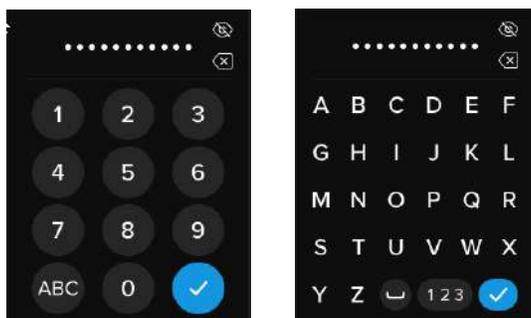
The Admin menu has various options and features spread over three screens as previously shown. The Admin menu helps you configure various functions that VP80ES offers, which are explained in the sections below.

### Change Password

This option allows Admin to change the current Admin password. When setting up a drive, Admin creates a password, and this is where that password can be changed.

Follow these steps to change the VP80ES Admin password.

1. From the Admin menu, tap **CHANGE PASSWORD**.
2. Enter the New Password and tap the Enter key.
3. You can tap the Eye button to display the password you are entering and see if there are typos. If you entered the wrong key, you can tap on the Backspace button to erase it.



4. Re-enter the password to confirm and tap the Enter key. You must confirm using the same password you entered in Step 2.
5. Upon successful completion, the drive defaults to page 1 of the Admin menu.

**NOTE:** The initial password entry screen will display the password and not show the Eye button, but the Eye button will be shown on the Confirm Password screen. **If you entered this screen accidentally or do not wish to change the password, tap the Enter key to exit this screen and return to the previous menu.**

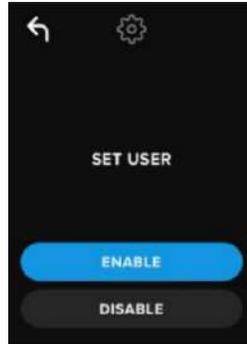
### Set User

This allows Admin to either **ENABLE** or **DISABLE** a User password. When a User password is created, your VP80ES will show a login selection screen upon the next VP80ES connection. Kingston recommends you always Set User as this allows you to have two passwords to access your drive.

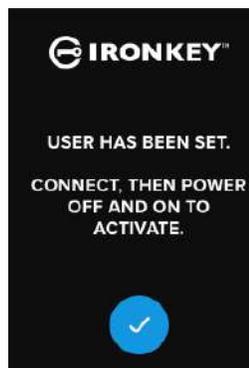
If **USER** is selected upon login, your VP80ES will force the User to create a user unlock password. The user will use this password to unlock the drive. The VP80ES User has a limited feature set compared to the Admin. For detailed information, see [Using the User Menu](#). To create a User profile for your VP80ES, follow these steps.

#### Step-by-step Process to Set User

1. From the Admin menu, tap **SET USER**.
2. Tap **ENABLE**. (Option is set to **DISABLE** as default).



3. Tap Back from upper left after selecting **ENABLE** and exit.
4. Your VP80ES will show a “**USER HAS BEEN SET**” prompt upon successful creation of the user. Tap Enter key.

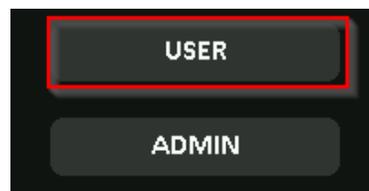


5. Your VP80ES will go back to the Admin menu. Proceed to connect the VP80ES to confirm your setting and then lock, and power off. On the next power on, the User selection will be available.

**Note:** The password for this User profile will be set when the drive is next plugged into a workstation and the **User** option is selected for log in. Detailed steps for the user profile configuration are below. The User login will have its own User menu. For detailed information, see [Using the User Menu](#).

### Step-by-step Process for User Configuration

1. Plug your drive into the computer.
2. Tap **USER** when prompted to select login mode.



3. Tap **OK** on the “PLEASE CREATE YOUR PASSWORD” screen.
4. Enter desired password on the “ENTER NEW PASSWORD” screen. Tap the Enter key.
5. Confirm the new password and tap the Enter key. You must confirm using the same password you entered in Step 4.
6. Tap **CONNECT** to connect the VP80ES instantly or wait for 10 seconds for VP80ES to automatically connect to your computer.

**Note:** The User Menu can be accessed by tapping the Gear instead of tapping **CONNECT**. For detailed information, see [Using the User Menu](#).

## Access User Data using the Admin Password

1. Power on your VP80ES.
2. Log in using the Admin password and unlock the drive
3. Connect. The User data is accessible on the private partition.

**NOTE:** Incorrect password attempts from both User and Admin are calculated cumulatively towards the Password Counter. The counter will reset upon a correct password attempt if Secure Erase was not yet activated. Please see [Password Counter](#).

## Access Drive to Reset User Password Using Admin Password

If the User password is forgotten, just use the Admin password to reset it:

1. Power off/on the VP80ES. Log in using the Admin password and unlock the drive.
2. Tap the Setup Gear icon.
3. Tap **SET USER** and tap **DISABLE. CONNECT**, Power off/on.
4. Unlock again using Admin password. Tap the Setup Gear icon.
5. Tap **SET USER** to **ENABLE. CONNECT**, power off/on
6. Enter and confirm the new User password. Connect to confirm and access your data.

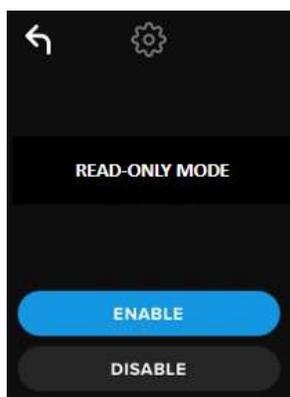
**NOTE:** Incorrect password attempts from both User and Admin are calculated cumulatively towards the Password Counter. The counter will reset upon a correct password attempt if Secure Erase was not yet activated. Please see [Password Counter](#).

## Read-Only Mode

The Admin can select the **READ-ONLY MODE** to globally enforce the VP80ES to always unlock in read-only (or write-protect) mode. Enabling this option will also enforce read-only access for the User profile (if the user profile is enabled). Once the global **Read-Only Mode** is enabled, data can only be read from the VP80ES and no data can be written or modified. Read-Only mode can also be used to protect the drive from Malware being written to it when used on untrusted computers,

To enable Read-Only Mode, follow these steps:

1. Tap the **READ-ONLY MODE** feature from the Admin menu.
2. Tap **ENABLE**.
3. Tap Back from the upper left to save and exit to the Admin menu.



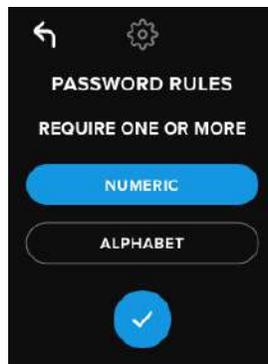
**NOTE:** As an alternative, the Admin and the User can each set **READ-ONLY MODE** for a single login by tapping Read-Only Mode after entering the password. The global **READ-ONLY MODE** will enforce this functionality for every login. The default **READ-ONLY MODE** is disabled.

## Password Rules

This menu allows the Admin to configure the password requirements, increasing password strength. There are 2 options that can be used in any combination.

- **NUMERIC** - Will require at least one number in the password when enabled
- **ALPHABET** - Will require at least one alphabet character or space when enabled.

When both options are off, the password will be a free form passphrase that has no requirements (this is the default). Below is a screenshot showing the requirement of at least one number in the Admin and User passwords.



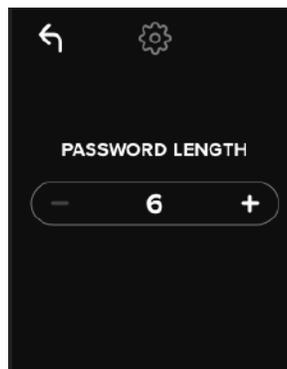
## Password Length

The Admin can set the minimum required password length between the minimum of 6 to a maximum of 64.

To modify minimum password length, follow these steps:

1. Tap the **PASSWORD LENGTH** option from Admin menu.
2. Tap **+** to increase the length and **-** to decrease the length.
3. Tap Back from the upper left to save and exit to the Admin menu.

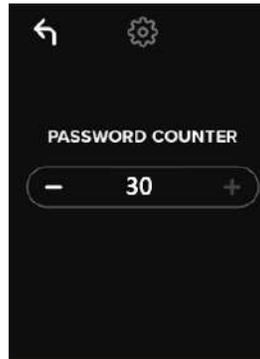
**Note:** The default **PASSWORD LENGTH** is 6.



## Password Counter

The automatic Secure Erase action helps prevent Brute Force Attacks by triggering when someone inputs an incorrect password too many times.

The **PASSWORD COUNTER** is set by Admin to the number of consecutive incorrect password attempts for the VP80ES before the Secure Erase occurs. The maximum number of allowed password attempts is 30 and the minimum is 10.



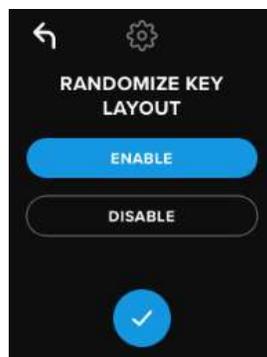
**NOTE:** Incorrect password attempts from both User and Admin are calculated cumulatively towards the Password Counter. The counter will reset upon a correct password attempt if Secure Erase was not yet activated after the maximum number of allowed retries. The default **PASSWORD COUNTER** is 15.

## Randomize Key Layout

To protect against someone analyzing the fingertip oil smudges on the touch screen or observing the password entry, the VP80ES supports the option to randomize the display of the Alphabet and Numeric keys.

If set, the following behavior will be seen:

- **Alphabetic:** The alphabet and space character rows will be randomized. So, the rows of consecutive letters will be mixed.
- **Numeric:** The numbers will appear in different places on every login, so that the fingertip touching of the touch-screen cannot be replicated to guess the numbers (especially if a PIN password is used).



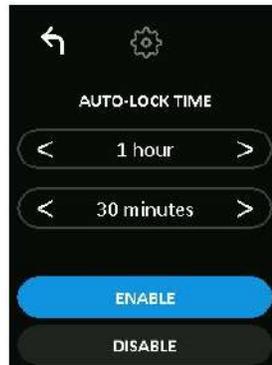
**NOTE:** The default **RANDOMIZE KEY LAYOUT** is Enabled.

## Auto-Lock Time

This feature can be enabled by the Admin or the User. **AUTO-LOCK TIME** will disconnect the drive once it is idle (i.e. zero activity) for the configured amount of time. The amount of idle time required to time out the drive is configurable from 5 minutes to 12 hours.

To enable auto-lock, follow these steps:

1. Tap **AUTO-LOCK TIME** from the Admin menu.
2. Configure the desired number of minutes the drive can remain unlocked and idle.



**NOTE:** You can increase or decrease this limit in increments of hours and minutes.

3. Tap **ENABLE**.
4. Tap Back from the upper left to save and exit to the Admin menu.

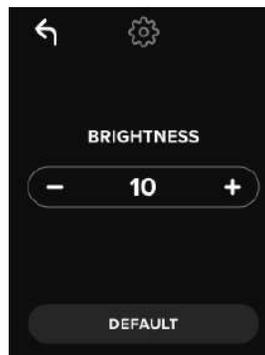
**Note:** The default **AUTO-LOCK TIME** is Disabled.

## Brightness

Your VP80ES screen brightness can be adjusted via this feature.

To change the value, follow these steps:

1. Tap the **BRIGHTNESS** option from the Admin menu
2. Tap **+** to increase the brightness and **-** to decrease the brightness.



**NOTE:** The minimum **BRIGHTNESS** is 1 and the maximum is 30.

3. Tap Back from the upper left to save and exit to the Admin menu.

**Note:** The default **BRIGHTNESS** is 10.

## Language

A total of 4 languages can be selected. The selected language will be used for all on board menu prompts. The available languages are:

- English
- French
- German
- Spanish

To set a preferred language, follow these steps:

Tap the **LANGUAGE** option from the Admin menu.

1. Tap your desired language.
2. Tap Back from the upper left to save and exit to the Admin menu.



**NOTE:** The Admin and User can both select their own preferred language from their respective menus.

## Secure Erase Drive

This feature allows Admin to crypto-erase the drive (known as Secure Erase on SSDs). Performing this action deletes all the data, removes the User and Admin passwords, and wipes out the Data Encryption Key (DEK) and regenerates it.

**NOTE:** There are two options available when you **Secure Erase** the drive:

1. **Secure Erase** - Tap **SECURE ERASE** from the Admin menu and follow on-screen steps.
2. **Factory Initialize** - Tap & hold **SECURE ERASE** in the Admin menu for 5 seconds. Your drive will show a "**FACTORY INITIALIZE**" prompt.

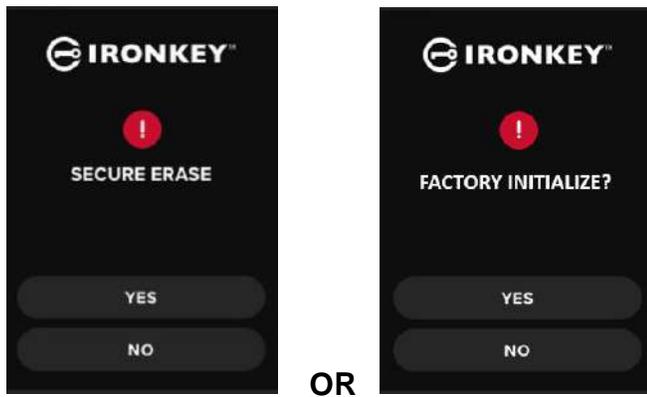
Although both Secure Erase processes reset the VP80ES, there's a slight difference. See the chart below for the difference:

Feature	SECURE ERASE	FACTORY INITIALIZE
	<b>Tap and Release</b> <b>Secure Erase</b>	<b>Tap and Hold</b> <b>Secure Erase for 5 seconds</b>
<b>Admin Password</b>	Deleted	Deleted
<b>User Password</b>	Deleted	Deleted
<b>Admin Config Settings</b>	<b>Saved</b>	<b>Reset to factory defaults</b>
<b>Drive Data and Encryption Key</b>	Deleted	Deleted

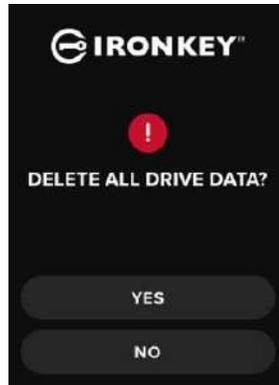
For assistance with either process, please see the steps outlined below.

### How to Secure Erase your VP80ES

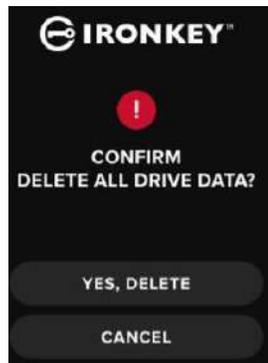
- Use the table above to assist with the decision if you want to:
  - A) Secure Erase** - Tap **SECURE ERASE** from the Admin menu.
  - B) Factory Initialize** - Tap & hold **SECURE ERASE** in the Admin menu for 5 seconds. Your drive will show a "FACTORY INITIALIZE" prompt.
- When your drive asks for "SECURE ERASE" (A) or "FACTORY INITIALIZE" (B), tap **YES**. Selecting **NO** will cancel the process.



- When your drive asks for "DELETE ALL DRIVE DATA?", tap **YES**. Selecting **NO** will cancel the Secure Erase process.



4. When your VP80ES shows the “CONFIRM DELETE ALL DRIVE DATA?” prompt, tap **YES, DELETE**. Selecting **CANCEL** will cancel the process.



5. Upon successfully completing the Secure Erase process, you will see “PLEASE INITIALIZE AND REFORMAT THE DRIVE”. Tap Enter key to continue.



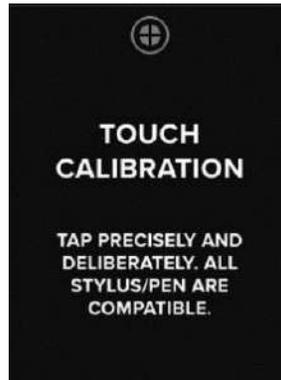
**NOTE:** You must now follow the initialization process as shown in the [Initializing and Connecting Your VP80ES](#) section of this manual.

## Touch Calibration

Your VP80ES’s touch-screen interface can be manually calibrated when needed. To calibrate the interface, follow the below steps. Proceed with care and preferably use a stylus pen. The precision of the calibration highly influences how accurately the drive receives input.

1. Tap the **TOUCH CALIBRATION** option from the Admin menu.

2. You will now be prompted to touch your VP80ES screen in 3 various spots one after the other. Tap the on-screen *Target* icon each time you are prompted using your stylus.



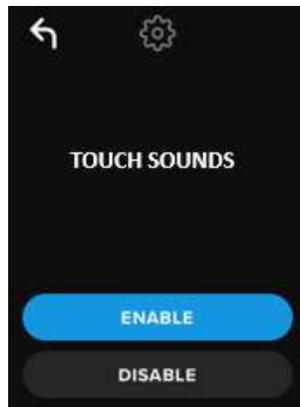
3. Once complete, your VP80ES will return to the Admin menu.

**Note:** If Touch Calibration is done incorrectly, your touch-screen may not work correctly. Please redo the touch calibration with a pen or stylus and properly select the touch points that are displayed.

## Touch Sounds

The VP80ES touch sounds are enabled by default. To disable these sounds, follow these steps:

1. Tap the **TOUCH SOUNDS** feature from the Admin menu.
2. Tap the **ENABLE** or **DISABLE** button.
3. Tap Back from the upper left to save and exit to the Admin menu.



**Note:** The default **TOUCH SOUNDS** is Enabled.

## VP80ES is Not Correctly Taking Input

If your VP80ES is not correctly detecting your taps on the screen, it can be due to a failed Touch Calibration. It is possible to enter the Touch Calibration without entering a password. Tap & hold the screen for exactly 5 seconds (use a timer if needed) when the IronKey logo appears with a progress bar. Follow the [Touch Calibration](#) steps.

## Using the User Menu

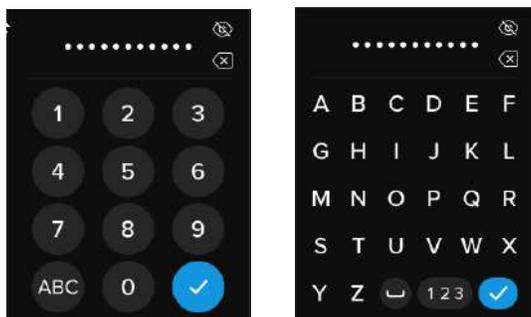
Once inside the User menu, the back button can be used to navigate back to the connect screen. The back button can also be used to save and exit out of any of the option menus to get back to the User menu.



### Change Password

This option allows the user to change the current User password. When setting up a user profile, the user password is created. This screen allows for changing the User password.

1. Tap the **CHANGE PASSWORD** option from the User menu.
2. Enter the New Password and tap the Enter key.
3. You can tap the Eye button to display the password you are entering and see if there are typos. If you entered the wrong key, you can tap on the Backspace button to erase it.



4. Re-enter the password to confirm and tap the Enter key. You must confirm using the same password you entered in Step 2.
5. Upon successful completion, the drive defaults to the User menu.

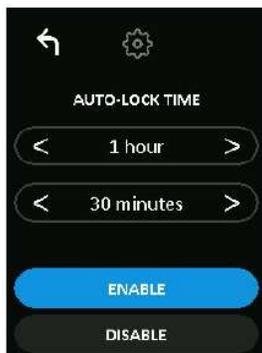
**Note:** The initial password entry screen will display the password and not show the Eye button, but the Eye button will be shown on the Confirm Password screen. **If you entered this screen accidentally or do not wish to change the password, tap the Enter key to exit this screen and return to the previous menu.**

### Auto-Lock Time

This feature is disabled by default but can be enabled by the VP80ES Admin or User. Auto-lock will disconnect the drive once it is idle (i.e. zero activity) for the configured amount of time. The amount of idle time required to time out the drive is configurable from 5 minutes to 12 hours.

To enable auto-lock, follow these steps:

1. Tap **AUTO-LOCK TIME** from the user menu.
2. Configure the desired number of minutes the drive can remain unlocked and idle.

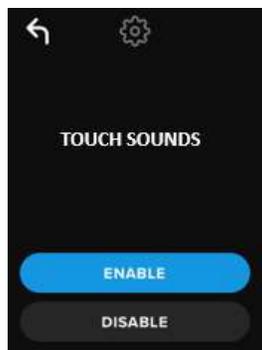


3. Tap **ENABLE**.
4. Tap Back from the upper left to save and exit to the user menu.

## Touch Sounds

The VP80ES touch sounds are enabled by default. To disable these sounds, follow these steps:

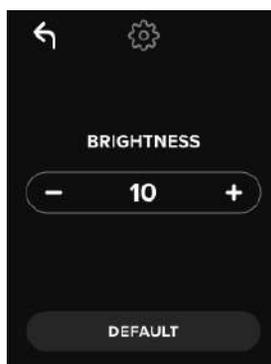
1. Tap the **TOUCH SOUNDS** feature from the user menu.
2. Tap the **ENABLE** or **DISABLE** button.
3. Tap Back from the upper left to save and exit to the user menu.



## Brightness

Your VP80ES screen brightness can be adjusted via this feature. The default value is 10. To change the value, follow these steps:

1. Tap the **BRIGHTNESS** option from the user menu.
2. Tap **+** to increase the brightness and **-** to decrease the brightness.
3. Tap Back from the upper left to save and exit to the user menu.



**NOTE:** The minimum Brightness value is 1 and maximum is 30.

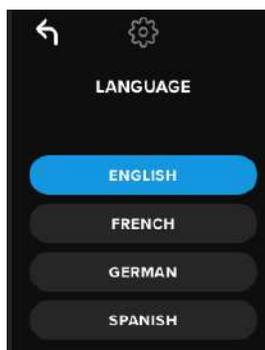
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To set a preferred language, follow these steps:

1. Tap the **LANGUAGE** option from the user menu.
2. Tap your desired language.
3. Tap Back from the upper left to save and exit to the user menu.



**NOTE:** Admin and User can select their own preferred language from their respective menus.

## Drive Information

To see information about the drive without logging into it, plug your VP80ES into your PC. Before entering the password, tap the Enter key.

Drive information shown:

- QR Code Serial Number
- Alphanumeric Serial Number
- Firmware Version
- Capacity
- Certification Logos
- Patent Information

## Disclaimer

**Kingston IronKey is continuously updating its products. The images and text in this manual may vary slightly from the images and text displayed by your VP80ES. These changes are minor and should not adversely affect the ease of setup.**

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