

ThinkPad

*ThinkPad USB Portable Secure
Hard Drive User Guide*

Note

Before installing the product, be sure to read the information in Lenovo Limited Warranty on page B-1 and Before you begin the installation on page 3.

First Edition (November 2008)

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About the ThinkPad USB Portable Secure Hard Drive

This manual provides information about the ThinkPad® USB Portable Secure Hard Drive.

The appendices of this guide contain warranty information and legal notices.

Note: Before you install and use the option, be sure to read Before you begin the installation on page 3.

This option package includes:

- ThinkPad USB Portable Secure Hard Drive with a primary USB data cable
- Auxiliary power cable
- USB data extension cable
- Carrying case
- *ThinkPad USB Portable Secure Hard Drive Setup Poster*

Product description

The ThinkPad USB Portable Secure Hard Drive (hereafter called the Secure Hard Drive) is a portable, light-weight, high-speed USB 2.0 standard option that offers high level data security. In addition to all the regular USB hard disk drive functions, it also provides you with an easy-to-use full disk encryption solution. All the functions are integrated into the Secure Hard Drive, therefore, you can manage passwords and access the Secure Hard Drive without using other software applications.

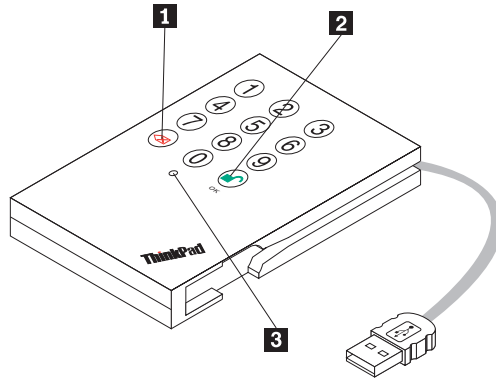
The Secure Hard Drive has three working modes:



- Standby Mode (In this mode, the Secure Hard Drive is locked.)
- User Mode (In this mode, the Secure Hard Drive is unlocked.)
- Admin Mode (In this mode, the Secure Hard Drive is locked.)

Note: Passwords are required for the Admin Mode and User Mode. Accordingly, they are called Admin Password and User Password.

Secure Hard Drive button panel


The Secure Hard Drive button panel is shown as follows:



- 1**  button
- 2**  button
- 3** Indicator light

The  button can be used to:

- Cancel current operation
- Return to the previous step when you knowingly entered a wrong password
- Exit the Admin Mode

The  button can be used to access the Secure Hard Drive and it can also be used as an OK acknowledgement in the following operations:

- Entering a password
- Confirming a new password

The indicator light displays the following colors to indicate the various modes of operation:

- Red: Standby Mode
- Blue: Admin Mode
- Green: User Mode

The indicator light has other display methods to indicate different status of the Secure Hard Drive. Details are provided later in this chapter.

Installing the Secure Hard Drive

This chapter provides information about installing the Secure Hard Drive.

Before you begin the installation

Be sure to review the following information before you begin to install and use the Secure Hard Drive.

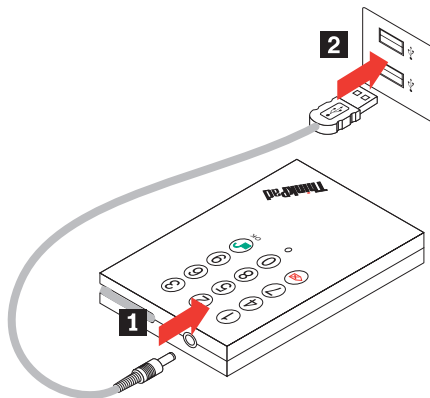
Attention: Use only the cables that come with this option. You might damage the drive if you use a cable not included with the option package. The option is designed for portable use without an AC power adapter. Do not attach an AC power adapter to this drive.

- To avoid damaging your Secure Hard Drive, handle with care. When transporting the drive or when it is not in use, place it in the carrying case that comes with the option.
- For reliable performance of the Secure Hard Drive, make sure that both USB cables are attached directly from the drive to the computer USB connectors or to an AC-powered USB hub. Do not connect the USB cables to a non-powered USB hub.

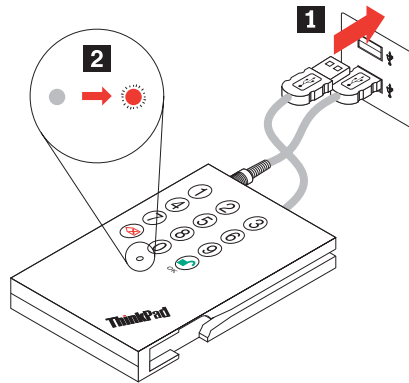
Installing the Secure Hard Drive

To install the Secure Hard Drive, do the following:

1. Attach one end of the auxiliary power cable to the Secure Hard Drive, and then attach the other end to an available USB port on your computer, as shown:



- Depending on the distance between the Secure Hard Drive and your computer, attach either the primary USB data cable or the USB data extension cable to an available USB port. The indicator light turns red, as shown:



Using the Secure Hard Drive

This chapter provides information about using the Secure Hard Drive.

Entering and exiting the Standby Mode, Admin Mode, and User Mode

This section provides information about how to enter and exit the Standby Mode, Admin Mode, and User Mode of your Secure Hard Drive.

Entering the Standby Mode

The Standby Mode is the default working mode of the Secure Hard Drive and is the gateway to other working modes.



To enter the Standby Mode, attach the Secure Hard Drive to your computer. The drive automatically goes into Standby Mode and the indicator light turns red. In this mode, the Secure Hard Drive is locked. It cannot be recognized by the operating system and it does not provide either the regular functions or the encryption function. However, it enables you to enter and switch between the Admin Mode and the User Mode.

Note: To switch between the Admin Mode and the User Mode, you are required to switch to the Standby Mode first, and then you can enter the mode of your choice.

Entering the Admin Mode

Note: The Secure Hard Drive cannot be recognized by the operating system in the Admin Mode.


To enter the Admin Mode, do the following:

1. Attach the USB cable to an available USB port on your computer. The Secure Hard Drive goes into the Standby Mode, and the indicator light turns red.
2. Press and hold  + 0 for five seconds until the indicator light flashes red. This indicates that you can enter the Admin Password.
3. Enter the Admin Password and press . The default Admin Password is 123456. The Secure Hard Drive is in Admin Mode when the indicator light has changed to blue.

Note: If the indicator light flashes red for a few seconds, indicating the Secure Hard Drive has returned to the Standby Mode, go back to Step 2. This is due to one of the following conditions:


- You entered an incorrect Admin Password in Step 3.
- No activity was detected within two minutes in the Admin Mode.

Exiting the Admin Mode

To exit the Admin Mode, press the  button in the Admin Mode until the indicator light turns red. This indicates that you are in the Standby Mode.

Entering the User Mode

To enter the User Mode, do the following:

1. Attach the Secure Hard Drive to your computer. It enters the Standby Mode.
2. Enter the User Password or the Admin Password and press . The indicator light turns green indicating that the drive is in the User Mode. If the indicator light flashes red, you need to re-enter the correct password.

Exiting the User Mode



To exit the User Mode, double-click the **Safely Remove Hardware** icon from the Microsoft® Windows® desktop, and then remove the Secure Hard Drive from your computer. Attach the Secure Hard Drive to your computer again and the indicator light turns red. This indicates that you are in the Standby Mode.

Password Management


This section provides information about managing your password in the Admin Mode and User Mode.

Changing the Admin Password

You can change the Admin Password by doing the following:

1. Enter Admin Mode.
2. Press and hold  + 9 until the indicator light flashes blue.
3. Enter the new password (a minimum of 6 digits and a maximum of 16 digits) and press . The indicator light flashes green three times.

Note: If the indicator light flashes red three times, this indicates that the password is less than 6 digits or more than 16 digits. Enter a password that contains 6 – 16 digits after the indicator light flashes blue intermittently.



4. Re-enter the new Admin Password and press . The indicator light stays solid green for three seconds and the Admin Password is changed successfully.

Notes:


- a. If the indicator light flashes red intermittently and then blue intermittently, go back to step 3. This is due to one of the following conditions:
 - You waited longer than 10 seconds before entering a password.
 - The new password was entered incorrectly.
- b. If no activity is detected within two minutes in the Admin Mode, the Secure Hard Drive will return to the Standby Mode.

Adding a new User Password

You can add a new User Password by doing the following:

1. Enter the Admin Mode.
2. Press and hold  + 1 until the indicator light flashes blue intermittently.
3. Enter a User Password (a minimum of 6 digits and a maximum of 16 digits) and press . The indicator light flashes green three times.

Note: If the indicator light flashes red three times, this indicates that the password is less than 6 digits or more than 16 digits. Enter a password that contains 6 – 16 digits after the indicator light flashes blue intermittently.

4. Re-enter the new User Password and press . If the indicator light stays solid green for three seconds, the User Password was added successfully.

Note: If the indicator light flashes red intermittently and then blue intermittently, go back to step 3. This is due to one of the following conditions:



- You waited longer than 10 seconds before entering a password.
- The new password was entered incorrectly.

Notes:

1. The Secure Hard Drive enables you to have up to 10 User Passwords in Admin Mode. When the indicator light flashes red three times and then returns to solid blue, this indicates that the limit has been reached, and no additional User Passwords can be added.
2. If no activity is detected within two minutes in the Admin Mode, it will return to the Standby Mode.



Deleting the User Passwords

You can delete all User Passwords by doing the following:

1. Enter the Admin Mode.
2. Press and hold 7 + 8 +  for five seconds until the indicator light flashes blue intermittently. After the indicator light flashes green three times and then blue intermittently.
3. Press and hold 7 + 8 +  a second time for five seconds until the indicator light goes on solid green for three seconds and then back to solid blue, this indicates that the User Passwords were deleted successfully.


Changing the User Password

You can change the User Password by doing the following:

1. Enter the User Mode.
2. Press and hold  + 1 for five seconds until the indicator light flashes red.
3. Enter the current User Password and press . The indicator light turns green for three seconds, and then it will flash blue intermittently.

Note: If the indicator light flashes red intermittently, go back to Step 2. This is due to one of the following conditions:

- You waited longer than 10 seconds before entering a password.
- The new password was entered incorrectly.

4. Enter the new password (a minimum of 6 digits and a maximum of 16 digits) and press . The indicator light flashes green three times and then blue intermittently.

Note: If the indicator light flashes red three times, this indicates that the password is less than 6 digits or more than 16 digits. Enter a password that contains 6 – 16 digits after the indicator light flashes blue intermittently.

5. Re-enter the new password and press . When the indicator light stays solid green, this indicates that the User Password was changed successfully.

Note: If the indicator light flashes red three times and then blue intermittently, go back to Step 4. This is due to one of the following conditions:


- You waited longer than 10 seconds before entering a password.
- The new password was entered incorrectly.

Completely resetting the Secure Hard Drive



If you forget all the User Passwords or Admin Passwords, you can perform a complete reset to remove all the User Passwords, and restore the Admin Password to the default 123456.

Attention: Completely resetting the Secure Hard Drive will erase all the data on the drive. You will need to partition and format the Secure Hard Drive with disk management applications.

To perform a complete reset of the drive, do the following:


1. Press and hold the  button while you attach the Secure Hard Drive to an available USB port on your computer. The indicator light will flash blue and red alternately.

Note: If no activity is detected for 30 seconds in this step, the Secure Hard Drive will go into the Standby Mode.

2. Press and hold  +  + 2 for 10 seconds until the indicator light turns solid green for three seconds. You have successfully reset the Secure Hard Drive.

Initializing and formatting the Secure Hard Drive after a complete reset



A complete reset of the Secure Hard Drive will erase all information and partition settings. You will need to initialize and format the Secure Hard Drive. To initialize your Secure Hard Drive, do the following:

1. After a complete reset, attach the Secure Hard Drive to the computer.
2. Enter the default User Password 123456 and press  to enter the User Mode.
3. Wait until the operating system successfully installs all the USB device drivers for the Secure Hard Drive.
4. Right-click **My computer**, and then click **Manage** from the Windows desktop.
5. In the Computer Manage window, click **Disk Management**. In the Disk Management window, the Secure Hard Drive is recognized as an unknown device that is uninitialized and unallocated.
6. Do one of the following to make the drive recognized as a basic drive.
 - If the Initialize and Convert Disk Wizard window opens, click **Next** → **Next** → **Finish**.
 - If the Initialize and Convert Disk Wizard window does not open:
 - a. Right-click **Unknown Disk**, and then select **Initialize Disk**.
 - b. In the Initialize Disk window, click **OK**.

7. Right-click in the blank area under the Unallocated section, and then select **New Partition**. The Welcome to the New Partition Wizard window opens.
8. Click **Next**.
9. Select **Primary partition** and click **Next**.
10. If you need only one partition, accept the default partition size and click **Next**.
11. Click **Next**.
12. Create a volume label, select **Perform a quick format**, and then click **Next**.
13. Click **Finish**.
14. Wait until the format process is complete. The Secure Hard Drive will be recognized and it is available for use.

Using the ThinkVantage Rescue and Recovery program with the Secure Hard Drive

If the ThinkVantage® Rescue and Recovery® program is available on your computer, you can use the Secure Hard Drive as a storage device. To use the ThinkVantage Rescue and Recovery program with the Secure Hard Drive, do the following:

1. Attach the Secure Hard Drive to an available USB port on your computer.
2. Enter your User Password or Admin Password and press  to enter the User mode.
3. Wait until the operating system recognizes the Secure Hard Drive.
4. Create backups and store them on the Secure Hard Drive using Rescue and Recovery program.
5. Turn off your computer.
6. Restart your computer with the Secure Hard Drive attached to the computer.
7. Press F12 to pause the start process, as the Secure Hard Drive needs several seconds to unlock itself after entering the User Mode.
8. When the Secure Hard Drive is powered on and available, the indicator light turns solid red. Enter your User password and press  to enter the User Mode.
9. If the Secure Hard Drive is not displayed in the boot list, restart the computer by pressing Ctrl + Alt + Del while the Secure Hard Drive remains attached to the computer.
10. Press F12 and select the Secure Hard Drive from the boot list. Your computer will start from the Rescue and Recovery workspace on the Secure Hard Drive.

Note: For more information about the Rescue and Recovery program, go to <http://www.lenovo.com>

Hibernating, Suspending, or Logging off from the operating system

Be sure to save and close all the files on your Secure Hard Drive before hibernating, suspending, or logging off from the Windows operating system. It is recommended that you log off the Secure Hard Drive manually before hibernating, suspending, or logging off from your system. To log off the Secure Hard Drive, double-click **Safely Remove Hardware** on the Windows desktop and remove the Secure Hard Drive from your computer.

Attention: To ensure the data integrity of your Secure Hard Drive, be sure to lock or log off your Secure Hard Drive if you are:

- away from your computer
- using the switching user function by sharing a computer with others

Troubleshooting

This section contains troubleshooting information for the Secure Hard Drive. If you encounter any of the following problems when using the Secure Hard Drive, refer to the corresponding answers.

Q: How do I use the Secure Hard Drive the first time?

A: You can use it in one of the following ways:

- Enter the Admin Mode with 123456 (default administrator password), and then you are able to change the Admin Password or create a User Password
- Directly enter the Secure User Mode with 123456 (default Admin Password) to use the Secure Hard Drive

Q: What can I do if I forget the User Password?

A: Use your Admin Password to enter Admin Mode, and then create another User Password in Admin Mode.

Q: What can I do if I forget the Admin Password?

A: There is no other way to retrieve the Admin Password except a complete reset of the Secure Hard Drive. After a complete reset, all data will be lost and you will need to initialize, allocate and format the Secure Hard Drive manually. Then you will be able to use the default Admin Password 123456.

Q: Why did the operating system not recognize the Secure Hard Drive after I enter the User Mode and completely reset the computer?

A: You need to initialize, allocate and format the Secure Hard Drive manually. For more information, refer to Initializing and formatting the Hard Drive after a complete reset.

Q: Can I initialize and format the Secure Hard Drive with Windows user account?

A: No, this is a Windows limitation, you must use the Admin account to initialize and format the Secure Hard Drive.

Q: How do I use the Secure Hard Drive without a password?

A: As a full disk encryption product, the Secure Hard Drive can never be used without a password.

Q: What encryption algorithm is used in this product?

A: AES 128 bits algorithm.

Q: Why could I not change my User Password which has the same digits as the Admin password?

A: You can change it only in the Admin Mode. In the User Mode, the User Password which has the same digits is created in the Admin Mode cannot be changed or deleted

Q: Why could I not create recovery media using the ThinkVantage Rescue and Recovery software?

A: Ensure that your Secure Hard Drive could be accessed correctly. If you still cannot create recovery media, format the Secure Hard Drive with NTFS file system of your computer and try again.

Q: Why could I not initialize, partition or format the Secure Hard Drive?

A: Ensure that you have administrator privileges. You can use only the administrator account to initialize, partition or format the Secure Hard Drive in the Admin Mode.

Q: Why could the system not boot from the Secure Hard Drive after I entered the User Password?

A: The Secure Hard Drive is a full disk encryption device that requires several seconds to unlock after you enter the correct User Password.

1. Press F1 or F12 to pause the boot process to enable the Secure Hard Drive several seconds to unlock itself.
2. Enter the correct User Password and the indicator light turns green.
3. Press Ctrl + Alt + Del and the Secure Hard Drive will remain in the User Mode during the reset process and you can then boot from the drive.

Q: Why could the system not boot from the Secure Hard Drive when it is attached in a dock?

A: As the dock will shut down the power of USB port during warm boot, the Secure Hard Drive could not unlock itself in limited time. An easy solution is to attach the Secure Hard Drive directly to computer (not the dock), and this will enable the computer to boot from the Secure Hard Drive during a recovery process.