TOUCH DISK™
Biometric USB Storage Drive

MiNAVI

TOUCH DISK™

Biometric USB Storage Drive

User's Manual

- Fingerprint Security
- Rewriteable
- Works with Windows, Mac, Linux
- USB 1.1 or USB 2.0

Trust at your fingerprint!

http://www.navisys.co.kr

Index

Before Using Touch Disk 3

What is Touch Disk? 4

Installing/Using Touch Disk in Microsoft Window ME/2000/XP 5

Installing/Using Touch Disk in Microsoft Windows 98/98SE 6

Installing/Using Touch Disk Mac OS (Mac OS 9.0 or higher) 8

User Guide of TDiskMan Utility 9

Safe ejection 15

FAQs 17

Specifications 19

Warranty 20

Before Using Touch Disk

Welcome to Touch Disk.
This user guide is designed to help you using Touch Disk correctly and safely. Please read this before to use Touch Disk.

[Safety Instructions] given below include the directions and precautions you have to follow during using the product to secure your safety and to prevent any damage to the product and your data.

Warning: Indicates that failure to follow the directions could result in serious personal injuries.
Caution: Indicates that failure to follow the directions could result in minor personal injuries or damage to the product or data.

Safety Instructions

Warning
- If there occur any smoke or strange smells or noise, make sure to turn off your computer and peripheral devices immediately and disconnect the power cords.
- Be careful not to bend or drop the product. Do not place any heavy material on the product.
- If the product is wet with any liquids such as water, chemicals, and oil, make sure not to use it because there is a danger of short circuit and it may cause a fire or electrical shock.
- Never disassemble or modify the product. It can cause malfunction of the product.

Caution
- Do not use your Touch Disk in the place exposed to the following conditions. Otherwise, it can cause malfunction of the product :
  Vibration or shock; wetness, moisture or dust; much temperature variation
  Strong electrical discharge; strong magnetic interference, and heat.
- Be careful that any foreign material does not enter the insertion holes of Touch Disk.
- Do not impose any vibration or shock to the product or disconnect the product from the USB port while transferring (reading or writing) data. Otherwise, your data can be corrupted or lost.
- NAVI does not have any responsibility for corruption or loss of the saved data and accompanying results due to your incorrect use of the product. Make sure to periodically backup the data saved in your Touch Disk because it is difficult to recover data once they have been corrupted or lost.

What is Touch Disk?

Touch Disk is a removable biometric storage device using USB interfacing and authentication fingerprint.
Equipped with fingerprint authentication sensor, large memory storage, and its won applications, Touch Disk is a portable versatile multi-functional personal authentication device.

Before Using Touch Disk

Your Touch Disk has been formatted and initialized with FAT file system before delivery.
The following describes operating system requirements for Touch Disk.
Check whether your operating system supports USB interface or not.

Operating System Requirements

Is driver installation required?		Operating system
Operating System Requirements	Not required	1. Win ME, Win2000, WinXP 2. Mac OS 9.0 or higher 3. Linux 2.4.0 or higher 4. Microsoft Windows CE 3.0 or higher.
	Required	1.Win98, Win98SE

For Microsoft Windows ME/2000/XP, MAC 9.0 or higher, Linux 2.4.0 or higher, Touch Disk supports hot-plug without driver installation. For Microsoft Windows 98/98SE, hot-plug is supported if you have installed the driver. If you need the driver, you can get it from enclosed CD or download it from Touch Disk homepage, www.navisys.co.kr.
For Linux, it is required to mount SCSI.

Installing/Using Touch Disk in Microsoft Window ME/2000/XP

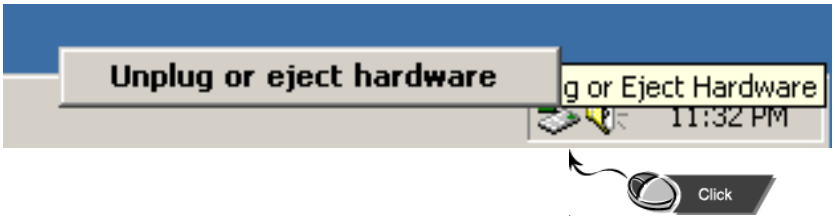
1. Start Windows ME, 2000 or Windows XP.
2. Remove the cover from your Touch Disk and plug it into an USB port of your computer.
   If it is the first time to use Touch Disk, Windows will automatically recognize it and install drivers.
3. The Status LED will flicker with a red light during installation or recognition procedure.
4. Click **[My Computer]** on Windows Desktop. You can find that Touch Disk is recognized as a removable disk as shown in the following figure.

(The drive name is different from the systems which you use)

5. You can use Touch Disk to read or write data as the same with the hard disk.

✥ Removing Touch Disk in Microsoft Windows ME/2000/XP

1. Close all files currently opened from Touch Disk.
2. For Microsoft Windows 2000, click [USB Mass Storage Device - Stop Drive (F)] on the system tray as shown in the following figure. For other operating systems, this step is not needed and you can unplug Touch Disk directly.



3. Click **[OK]**.
4. Unplug Touch Disk from the USB port.

> ⋆ **Caution** : Never remove or unplug Touch Disk while the Status LED is very fast flickering with a red light, because your data or FAT table can be corrupted.

Installing/Using Touch Disk in Microsoft Windows 98/98SE

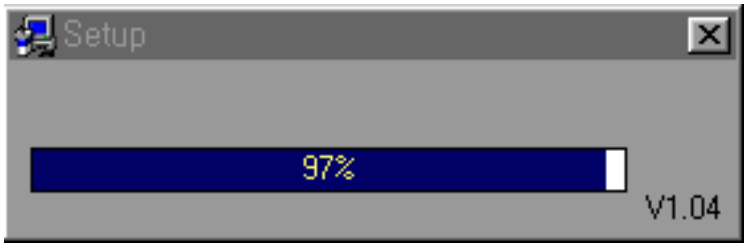
For Microsoft Windows 98/98SE, hot-plug is supported if you have installed the driver. If you need the driver, you can get it from enclosed CD or download it from Touch Disk homepage, www.navisys.co.kr.

✥ Installing Device Driver

1. Start Windows 98 or Windows 98SE.

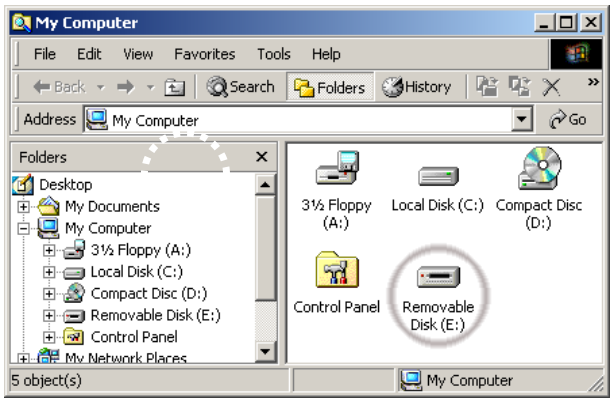
2. Insert the enclosed CD into the CD drive.

3. Click **[Windows 98/98SE Device Driver Installation]** in the CD and then the progress bar appears, as shown in the following figure.



4. When driver is successfully installed, you will find the figure as below.

5. Remove the cover from your Touch Disk and plug it into an USB port of your computer.
6. Click **[My Computer]** on Windows Desktop. You can find that Touch Disk is recognized as a removable disk as shown in the following figure.



(The drive name is different from the systems which you use)

Removing Touch Disk in Microsoft Windows 98/98SE

1. Close all files currently opened from Touch Disk.
2. Unplug Touch Disk from the USB port..

* Caution：Never remove or unplug Touch Disk while the Status LED is very fast flickering with a red light, because your data or FAT table can be corrupted.

Installing/Using Touch Disk in Mac OS (Mac OS 9.0 or higher)

1. Start Mac OS.
2. Remove the cover from your Touch Disk and plug it into an USB port of your computer.
   If it is the first time to use Touch Disk, MAC will automatically recognize it. Install drivers necessary for operating it.
3. Touch Disk is recognized as an [untitled] folder in MAC.

4. You can use Touch Disk to read or write data as the same with the hard disk. In the case of MAC 8.6, you can enable hot-plug function for your Touch Disk by downloading and installing drivers and patches from www.apple.com.

Removing Touch Disk

1. Close all files currently opened from Touch Disk.
2. Drag and drop the **[untitled]** folder to the Recycle Bin.
3. Unplug Touch Disk from the USB port.

* Caution : Never remove or unplug Touch Disk while the Status LED is very fast flickering with a red light, because your data or FAT table can be corrupted.

User Guide of TDiskMan Utility

- Please execute first **TDiskMan** which is application program in the enclosed CD for enrolling or deleting your fingerprint.
  Before executing **TDiskMan**, please put Touch Disk into PC

- If you don't have the CD, you can download the program in our website : http://www.navisys.co.kr and use it.

The utility which is contained in enclosed CD is windows application program. Maximum enrolling fingerprint is **five** and initial state of Touch Disk doesn't have any enrolled fingerprint. If enrolled fingerprint in Touch Disk is zero, Touch Disk is called non-security mode. In this case, verification of fingerprint is not needed. If enrolled template in Touch Disk is not zero(fingerprint > 0), Touch Disk is called security mode. Because Touch Disk is only recognized for mobile storage device without verification stage in non-security mode, everyone can easily access data in Touch Disk. But user who is enrolled through the enrollment in security mode has been verified, he can only access data in Touch Disk. After plugging Touch Disk into PC, verification of fingerprint must be done within **10 seconds** in security mode. If verification of fingerprint fails within 10 seconds, you cannot use it.

There are two major functions in TDiskMan :

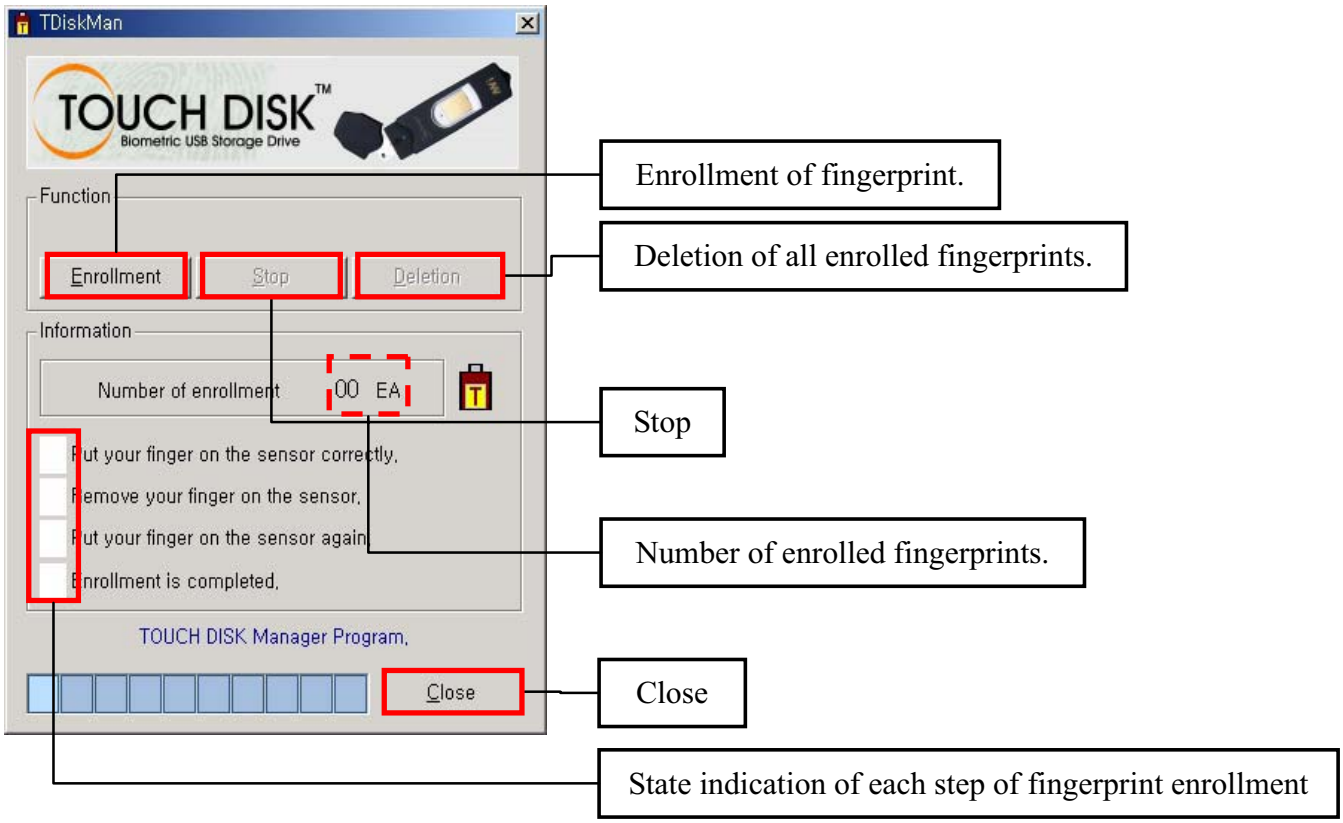
"Enrollment of fingerprint" and **"Deletion of fingerprint"**

To use function of enrolling or deleting your fingerprint, please use the Touch Disk as follows.

1. Plug Touch Disk into USB port.
2. Insert the enclosed CD into the CD drive.
3. Double click the **Application Program** in CD..
4. The initial screen of **TDiskMan** appears, as shown in the following figure.

Refer to the next page on the explanation of the initial screen of TDiskMan and TdiskmMan's function.

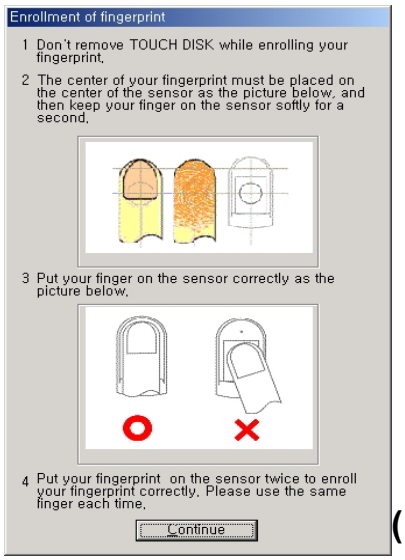
The initial screen of TDiskMan



- Click **[Enrollment]** button when you enroll your fingerprint.
- Click **[Stop]** button when you cancel enrolling your fingerprint.
- Click **[Deletion]** button when you delete your all enrolled fingerprints.
- Maximum enrolling fingerprint is **five.**

✥ Enrollment of fingerprint

1. Click **[Enrollment]** button, then a notice screen appears as the picture below.**(Picture. 1)**



(Picture. 1)

2. Put your finger on the sensor for a second. **(Picture. 2)**

3. Remove your finger on the sensor. It will take 7~8 seconds to enroll your fingerprint. **(Picture. 3)**

(Picture. 2)

(Picture. 3)

4. Put the finger on the sensor again to verity the enrolled fingerprint. **(Picture. 4)**

5. If the process of enrollment is completed, the number of enrolled fingerprint appears as the picture below.**(Picture. 5)**

(Picture. 4)

(Picture. 5)

6. When you click **[OK]** button, the condition to enroll a new fingerprint or delete the enrolled fingerprint will automatically appear as the picture below. **(Picture. 6)**

(Picture. 6)

✥ Deletion of fingerprint

1. Click **[Deletion]** button, then Dialog box appears.**(Picture. 7)**
2. After Clicking **[YES]** button, put your enrolled fingerprint on the sensor in order to verify your fingerprint. When the verification is successful, dialog box appears as the picture below.**(Picture. 8)**

(Picture. 7)

(Picture. 8)

3. When you click **[Yes]** button, all enrolled fingerprints are deleted.**(Picture. 9)**
4. When you click **[OK]** button, the condition to enroll a new fingerprint will automatically appear as the picture below. **(Picture. 10)**

(Picture. 9)

(Picture. 10)

Safe Ejection

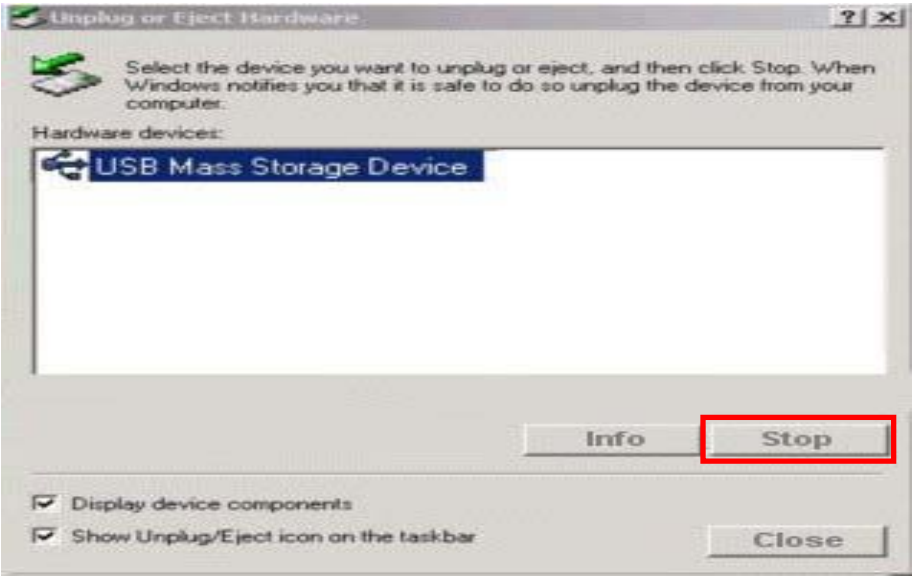
Many users complain about USB disk may cause data loss, because they don't "eject "USB disk before remove it from PC. When you copy files from or to Touch Disk, operation systems (ex: Windows 2000) will create a memory area called "buffer" to manage file I/O on Touch Disk. If you suddenly remove Touch Disk from PC, data in "buffer" would be lost because there is no time for Windows to flush the data in buffer into Touch Disk.
To avoid data loss, please use "Safe ejection"

Safe ejection

1. Double click "Unplug or eject hardware" in right-bottom corner of Windows desktop. **(Picture. 11)**

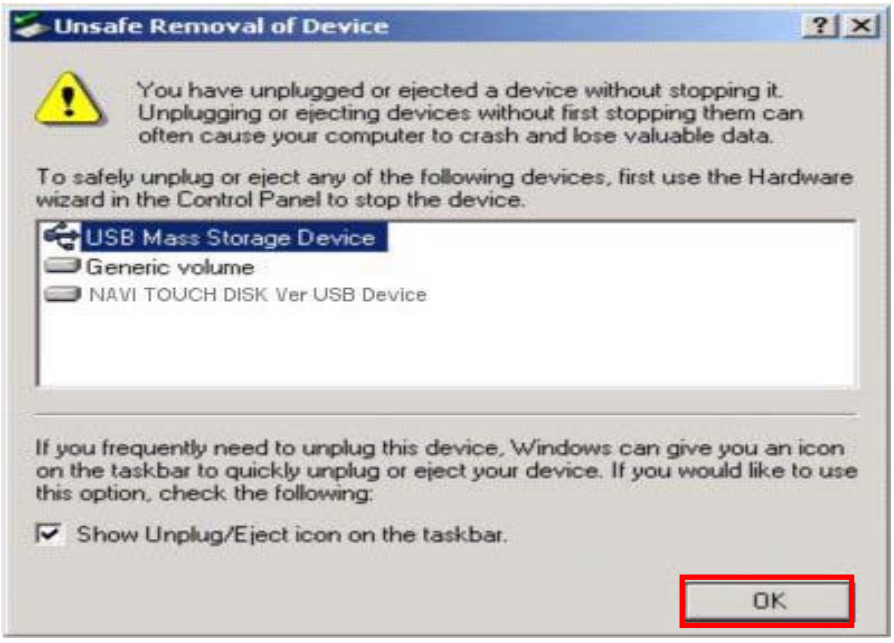
(Picture. 11)

2. In "Remove or Eject hardware" dialog box, click **[Stop]** button.**(Picture. 12)**



(Picture. 12)

3. Choose the device you want to stop, than click **[OK]** button.**(Picture. 13)**



(Picture. 13)

4. When you see this message, the Touch Disk has been safely ejected from PC.**(Picture. 14)**

(Picture. 14)

FAQs

Q. I do not have any Touch Disk driver CD. What can I do?

A. Visit http://www.navisys.co.kr and download to install the driver.

Q. What operating system does Touch Disk work for?

A. Microsoft Windows 98/98SE/ME/2000/XP, Mac, Linux, and Microsoft Windows CE.

Q. I want to use Touch Disk in other computer, but I do not have the driver installation CD.

A. The best advantage of Touch Disk is that it supports 'hot-plug' for Microsoft Windows ME/2000/XP, MAC 9.0 or higher, Linux 2.4.0 or higher, Microsoft Windows CE 3.0 or higher. It means that you need not to install any driver if the operating system is one of those. Just plug your Touch Disk to the USB port of the desired computer. If you are using Microsoft Windows 98/98SE, you need to install the driver. For the driver, please download the installation program from www.navisys.co.kr

Q. My computer does not recognize Touch Disk.

A. Click Start Settings Control Panel System and select Device Manager tab. Then check whether your computer has a USB controller.
When your computer has a USB controller:
If Touch Disk is configured as an unknown device, remove it by clicking [Remove] and install the driver again.
If Touch Disk is not configured as an unknown device, re-install the driver using the New Hardware Installation applet.

Q. I plugged Touch Disk into the USB port of my computer. But I still cannot find the "removable disk" icon from My Computer or Windows Explorer.

A. Please unplug Touch Disk and plug again. If your operating system is Microsoft Windows 98/98SE, ensure that you have installed the driver. Then, if you cannot still find the "removable disk" icon, contact NAVI service engineer.

Q. I have deleted data from Touch Disk by chance. What can I do?

A. Touch Disk operates the same as a hard disk. You can not recover the data once it has been deleted.

Q. Touch Disk is soaked in water. What can I do?

A. Please dry Touch Disk completely prior to plugging it again. If you use Touch Disk which is wet, the internal circuit of Touch Disk may have a short circuit, then it will not operate. If you still have a problem in operation, contact NAVI service engineer.

Q. Can I print files directly from Touch Disk?

A. Yes. But, you need to read the file from Touch Disk using an application program prior to printing it.

Q. Does Touch Disk work for Windows NT?

A. No. Because Windows NT does not support the mass storage device that uses USB interface.

Q. Can Touch Disk be infected by computer virus?

A. Since Touch Disk is a mass storage device, it can be infected by computer virus. Once your Touch Disk has been infected by a computer virus, you can cure it using the corresponding vaccine program.

Q. I formatted Touch Disk for the NTFS file system. Can it be used in other operating system?

A. Microsoft Windows 98, 98SE and ME does not recognize the NTFS file system. If you want your Touch Disk compatible for all operating systems, format it for FAT because all operating system support it.

Q. How long can I use Touch Disk?

A. The lifetime of Touch Drive is related with the expected life span of flash memory. You can use it semi-permanently except the case of loss, disaster or damage due to strong impact.

Specifications

The appearance and specifications can change for enhancements of the product without prior notice.

Model	Touch Disk
Storage capacity	16MB/32MB/64MB/128MB/256MB/ 512MB/1GB
Interface	USB Spec 1.1 / USB Spec 2.0
Maximum data rate	12 Mbps
Power	USB bus-powered (4.5V~5.5V)
Operating Temperature / Storage Humidity	0°C ~ 70°C / 5% ~ 95%
Dimensions (including cabinet)	90mm x 22mm x 12mm
Weight (including cabinet)	19g

Accessory

User Guide & Driver Installation CD, Neck Strap

If you encounter any technical problems or the product is damaged, please contact our service team.

e-mail : navi@navisys.co.kr TEL : +82 • 31 • 222 • 8917
web site: http://www.navisys.co.kr/ FAX : +82 • 31 • 222 • 8918

FCC Information

This device complies with Part 15 of the FCC Results. Operation is subject to the following two conditions:

(1) This Device may not cause harmful interface, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for CLASS B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try correct the interference by one or more of the following measures:

1.1. Reorient or relocate the receiving antenna.
1.2. Increase the separation between the equipment and receiver.
1.3. Connect the equipment into an outlet on a circuit different from that to which receiver is connected.
1.4. Consult the dealer or experienced radio/TV technician for help.

WARNING

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Warranty

Warranty Information

1. This product has been delivered after strict quality control and inspection.
2. We provide free repair if your product is damaged during normal operation within the applicable warranty period.
3. If your product has been damaged due to any one of reasons of charged service given below, you will be charged for the service even if the problem occurs within the applicable warranty period.
4. This warranty certificate is valid only in the domestic.
5. The warranty period on this product is for the first one year from date of user purchase.
6. Please fill out the form in this warranty certificate and keep it securely.
7. If you encounter any problems or the product is damaged, please contact the local product distributor.

Product	
Model	

Purchase Date	Day month year	Warranty Period	One year from Purchase
Product Distributor			
Telephone			

Customer	Address	
	Name	
	Telephone	

Charged Service

Warranty is voided in next cases:

- Product malfunction or damage due to unexpected used of the product.
- Product malfunction or damage due to disassembly or modification by the user.
- Product malfunction or damage due to force majeure such as fire, damage from salt water, flood damage or earthquakes.

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