User's Manual

Please read Precautions before using

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1. Introduction

The USB Disk is a compact, lightweight and portable storage device. It is one of the smallest USB flash drives on the market, which literally fits right into the palm of your hand! USB ports allow for fast data transfer and you do not need a separate power device or cable.

Just plug the USB Disk into the USB port of your computer and the driver is install immediately on its own. It is truly a Plug and Play device. No more hassles of downloading software. You can also cross platform your data from PC to Mac and vice versa.

On your desktop or notebook, the USB Disk looks and functions just like another hard drive. Carry it on a strap around your neck, slip it into your pocket, or just hold it in the palm of your hand. Now you can carry and secure your favorite movie, music, graphics library, valuable data or that very important business presentation with you wherever you go!!

2. Features

No drivers required*
Possible to divide the drive to two partitions
Plug-N-Play via USB port on PC and Mac
Powerful Application Software
    X-Format : USB Disk format program
    X-Key : USB Disk device Lock
    X-Mailer : portable e-mailer
    X-File security : File Encryption program
    X-PC Lock : PC Locking program
    X-Autorun : USB Disk file auto-run program
Bootable function: Use as booting disk (support USB-HDD, USB-ZIP)
Various memory capacities ranging
Ideal for transferring large data files between computers
Fantastic for backing-up critical files
Able to cross platform from PC to Mac and vice versa
Great for taking data from office to home and back to office
Excellent for storing data, music files, pictures and important business presentations

* Installation program is required only for Windows 98/SE. This program CD is supplied with the accessories or can be downloaded from website http://www.universalsmartdrive.net

3. Specifications

Supported OS		Windows 98/S.E, Windows ME, Windows 2000, Windows XP and Mac 8.6 or higher, Linux 2.4X or higher
System Requirements		IBM PC/AT or compatible Desktop / Notebook / Sub-Notebook / Laptop computers / Mac (Pentium® @ 100MHz or better) with USB ports
Power Supply		USB Bus-powered (4.5V to 5.5V)
Capacities	Universal Smart Drive	16MB/32MB/64MB/128MB/256MB/512MB/1GB
	Upgradeable Main unit	16MB/32MB/64MB/128MB/256MB/512MB
	Upgradeable Memory chip	64MB/128MB/256MB/512MB
Illumination		LED Lighting: Device connected LED Blinking: Data receiving or transmitting
Data Reading/Writing Speed		Max 1Mbyte/sec (depending on PC system)
Operating Temperature		0°C ~ +50°C
Storage Temperature		-30°C ~ +80°C
Dimension (L x W x H)	Universal Smart Drive	86 x 25 x 11mm
	Upgradeable Universal Smart Drive	77.2 x 28 x 17.6mm (main unit) 36.2 x 19.5 x 10.2mm (upgradeable memory chip) 97.5 x 28 x 17.6mm (with upgrade memory chip)
Weight	Universal Smart Drive	16g
	Upgradeable Universal Smart Drive	18g (main unit) 23g (with upgrade memory chip)
Package Accessory		Unit, USB Extension cable, CD-ROM, Neck Strap, User Manual, Warranty Card
Provided Software		X-Format / X-Key / X-Mailer / X-PC Lock / X-File Security / X-Autorun
Certification		FCC, CE, MIC
Warranty		1 year limited liability warranty

4. Precautions for Using Device

1. For using the bootable function of the USB Disk, your computer must support "USB-ZIP" or "USB-HDD" in the bootable section of CMOS (ROM-BIOS). Do not use the USB DISK by setting up the bootable function of a PC which does not support "USB-ZIP" or "USB-HDD" in CMOS because it may possibly cause some troubles in your PC.

2. The data in the USB Disk might be damaged for several reasons such as: 'user's carelessness', 'system down', 'Abnormal stop of electric current', etc. So, please backup your data on another storage device as a precaution.

3. When disconnecting the USB DISK in Windows Me, Windows 2000 and Windows XP, you must double click the icon "Unplug or Eject Hardware" which is located at the bottom right corner of your screen and follow the instructions before removing. If you are using a Macintosh OS, we suggest that you use the "Eject" or "Put Away" option before unplugging the USB DISK. In LINUX you should un-mount the USB DISK before unplugging.

4. When removing the USB DISK from the USB port, please ensure that the Green light on the USB DISK is not flashing and that the light is in fact solid blue. This will ensure that your data on the device is not lost. It is very important that you check the USB DISK light even if the dialog box on your computer shows that the data transfer is finished.

5. Please disconnect the USB DISK from the USB port before turning your computer on/off. It is also important to ensure your computer has finished booting before connecting the USB DISK.

6. Windows 2000 user must download and install Microsoft' Windows 2000 Service Pack 3 from below site. (If you don't install, you cannot devide partitions and it could make problems.)
- download site : http://www.microsoft.com and click download.

7. Please ensure that you follow the instructions manual for proper driver installation if your operating system is Windows 98/SE (see section 6 & 7 Driver Installation for Windows 98/SE).

Note: If your operating system is Windows ME, Windows 2000, Windows XP, Macintosh Version 8.6 or higher or Linux Kernel Version 2.4.x or higher, DO NOT install the Windows 98/SE driver. If your operating system is Windows 98/SE, it is required that you install the Windows 98/SE drivers, which are included on the provided CD-ROM (See section 6 & 7 Driver Installation for Windows98/SE).

5. How to use?

The USB Disk functions as a removable disk drive on your computer. When you insert the USB Disk to the USB port of your PC or Mac, then the "removable disk" icon will appear in the "My Computer Folder". You can use the USB DISK the same way as a Floppy disk or a Hard drive on your computer. When you disconnect the USB DISK from the USB port, the above icon will disappear (see section: 4. Precautions for using the USB Disk).

You can determine if the USB controller is installed properly by selecting "Control Panel" - "System Properties" "Device Manager" as the "USB Mass Storage Device" or "GENERIC USB Mass Storage" should appear under "Universal Serial Bus controllers", "Disk drives" and " SCSI controllers".

1. Macintosh Operating System

The USB Disk supports Macintosh versions 8.6 or higher.

When you connect the USB DISK to the USB port of your Mac, the drive's icon will appear on your desktop. When you disconnect the USB DISK from the USB port, the icon will disappear. It is required that you use the "Eject" or "Put Away" option before disconnecting the USB DISK. Another option would be to drag the icon to the "Trash" icon from your desktop.

Mac OS 8.6 Ensure to install "USB Mass Storage 1.3.5.smi" at apple's web site.

http://download.info.apple.com/Apple_Support_Area/Apple_Software_Updates/English- North _American/Macintosh/USB_Updates/USB_Storage1.3.5.smi.bin

2. Linux Operating System

The USB DISK supports Linux kernel versions 2.4.x or higher.

The following installation instructions have been documented below regarding Linux commands for the USB DISK. Please note that when disconnecting the USB DISK, we suggest that you un-mount the USB DISK before removing.

Linux Instructions for the USB Disk:

[Installation]
1. Install Linux kernel version 2.4.x or higher.
2. Login as "root".
3. Open terminal window after booting with X-Window.
4. Connect the USB DISK to the USB port.
5. Enter the following commands in the terminal window (shell input mode).

[Access to USB SCSI devices]
1. # ls /proc/scsi/usb-storage-0
   The numbers of USB SCSI device are displayed (0, 1, 2,....).
2. # cat /proc/scsi/usb-storage-0/0
   The information of the firmware related to the USB DISK is displayed.

[Set Partitions or format mode]
1. # fdisk /dev/sda
   You can use the "fdisk" function in Linux (Look for the fdisk manual for more details).

[DOS format]
1. # mkfs.msdos /dev/sda1
   You can format with DOS/FAT(note: You cannot format when the USB DISK is mounted).

[Mount]
1. # mkdir /mnt/usd
   Make a directory where the USB DISK will be mounted.
2. # mount /dev/sda1 /mnt/usd
   Mount the USB DISK to "/mnt/usd" directory.
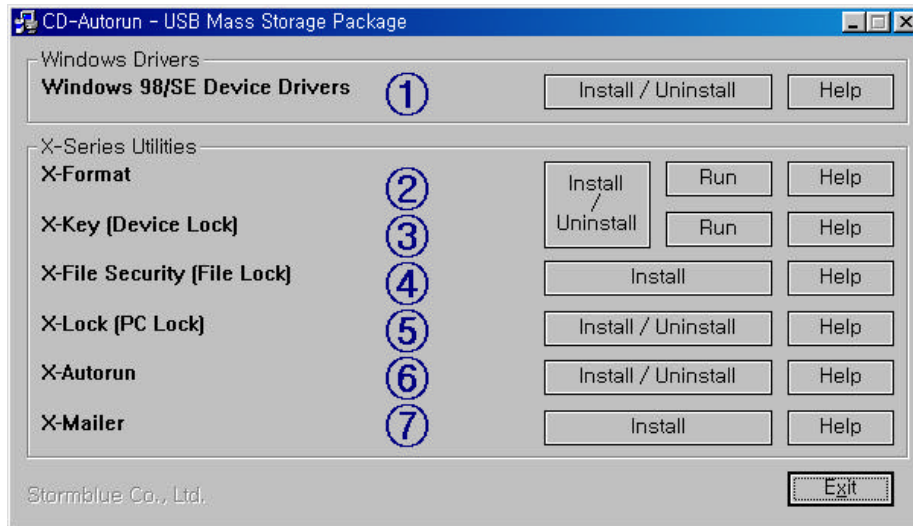   (The USB DISK will be linked to "/mnt/usd" if there is no special message.)

[Unmount]
1. # umount /dev/sda1
   Release mount.

[Tips]
1. The command to un-mount the USB DISK is "umount".
2. If you're in "/mnt/usd" directory, the USB DISK cannot be un-mounted.
3. We recommend you mount the USB DISK with "/etc/fstab" and "/dev/sda1 /mnt/usd auto defaults 0 0" in the text editor.
4. In Red Hat Linux, you can use "Disk Management (User Mount Tool)" in "GNOME" for Mount management.
5. You should unmount the USB DISK before you disconnect the drive; ensure the LED turns from blinking to lighting, which may take a few seconds.

6. CD Auto-run Program (only for Windows' users)

Auto-run program is executed automatically when you insert the CD-ROM in your PC.
You can install required software through this program.

Windows 98/SE Device Drivers : USB Disk format program. Refer to " **7. 1 Auto Installation**"

X-Format : Refer to " **8. X- Format**"

X-Key [Device Lock] : USB Disk device Lock. Refer to " **9. X- Key**"

X-File Security[File Lock] : File Encryption program. Refer to " **X- Series Utility**" **Manual**

X-Lock [PC Lock]: PC Lock program. Refer to " **X- Series Utility**" **Manual**

X-Autorun : USB Disk file automatic- running program. Refer to " **X- Series Utility**" **Manual**

X-Mailer : No SMPT Mobile e- mailer program. Refer to " **X- Series Utility**" **Manual**
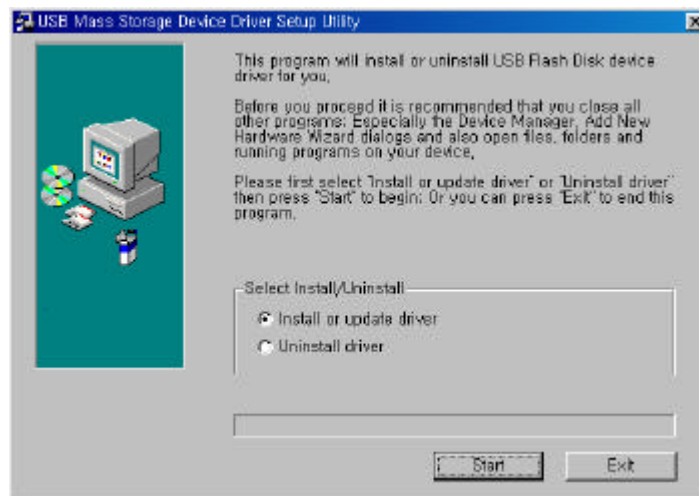
7. Driver Installation for Windows â 98/SE

1. Auto Installation

1) Please plug in the USB DISK into the USB port and insert the CD-ROM in PC.
* When the dialog box " Add new Hardware Wizard" appears, you should close this dialog box.

2) On Auto-run program (setup.exe), click " Install/Uninstall" button of Windows 98/SE Device drivers.

3) Click " Install or update driver" in the dialog box and press ' Start' .

2. Basic Installation

1) Plug the USB DISK into the USB port and insert the CD-ROM in the computer. A " USB Mass storage Device" message appears and the following dialog box " Add New Hardware Wizard" will show up on your screen. Then press " Next" .

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2) The dialog box shows how Windows searches for the drivers. Choose "Search for the best driver." and press "Next".

3) The dialog box shows where to locate the USB DISK device drivers. Select the option "CD-ROM drive". Press the "Next" button

4) The dialog box shows that Windows has located the USB DISK driver in drive 'D'. Press the "Next" button.

5) The dialog box shows that Windows has finished the installation of the USB Disk driver. Press the "Finish" button.
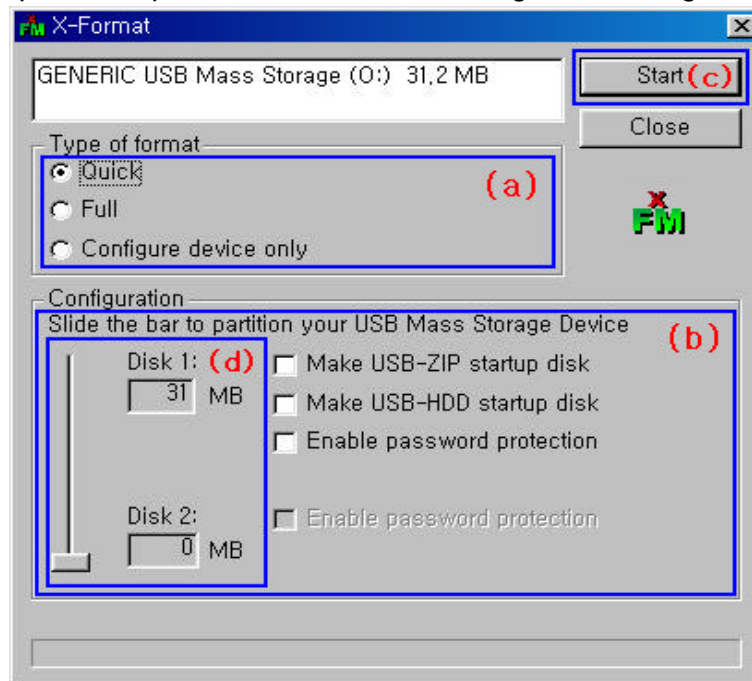

Now all drivers and controllers have been installed into your system. You should see the 'Removable Disk' icon appearing in the window when you activate the "My Computer" icon. Now you are ready to easily transfer data between your USB DISK and your computer.

8. X-Format

* The USB Disk has been formatted at the Factory without the X-Key program and without the Bootable disk program. You may format the drive again before using the above programs with your operating system.
After format is completed, unplug and reconnect the USB Disk to the USB port.

1. Open the X-Format program window, you can choose one of three types of formats as the following picture depicts [(a) in Pic].

   1) Quick Format: As Logical Format, it's similar to Windows Format.
   2) Full Format: As Physical Format, it makes all sectors of the memory clean, but it takes longer.
   3) Configure device only: It will perform "Configuration" [(b) in Pic.] such as "Make startup disk" or "Enable password protection" without checking or formatting the disk.

Click "Start" button then execute format. [(c) In Pic.]

2. Partition setting
   1) You can divide Disk (partition*) moving up and down the slide bar in left side of X-format window and control each capacity. [box (d)]
      - Disk 1; normal partition / Disk 2; password partition(X-Key)
   (Partition* divide : It means you divide one physical drive into several logical drives.)
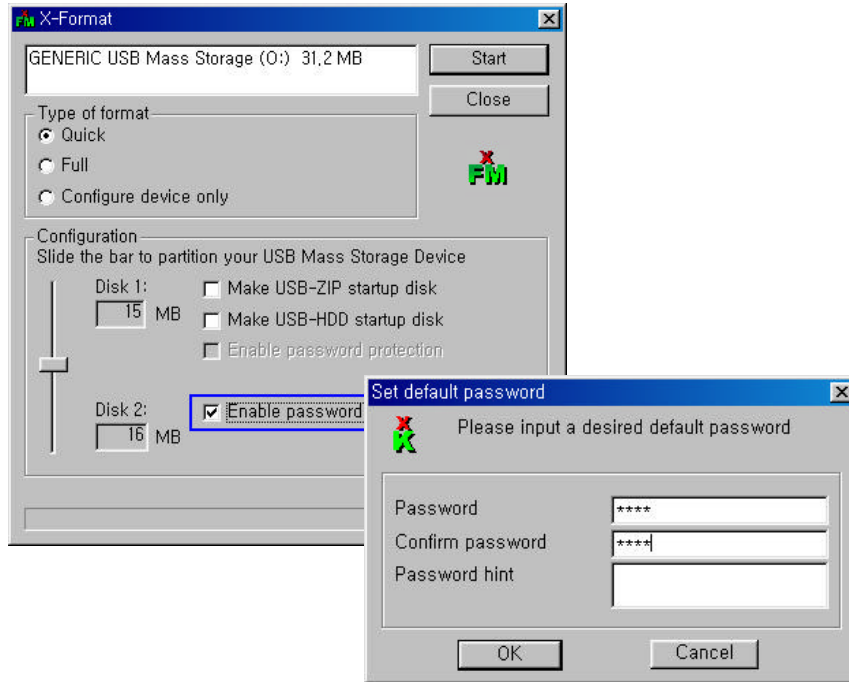
**In a case such as below, you must do "Full Format".
   1) The Fatal Exception error or BSOD (Blue Screen Of Death) appears during writing and reading. (It is caused by bad sectors being created inside the memory chip probably because of misuse.)
   2) Windows (or DOS) Format is not working.
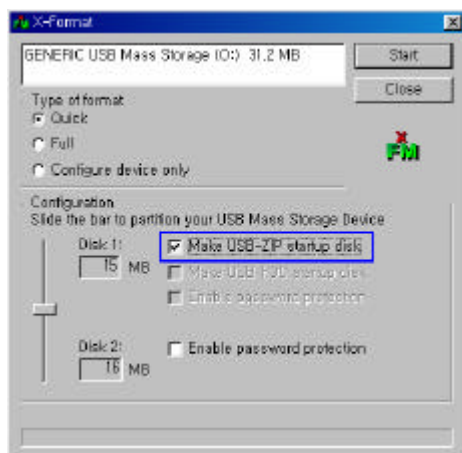   * Formatting will erase all the data in the device.

2. X-Key

You can use this function after check " Enable password protection" option and format. (Refer to 10. for how to use X-Key.)
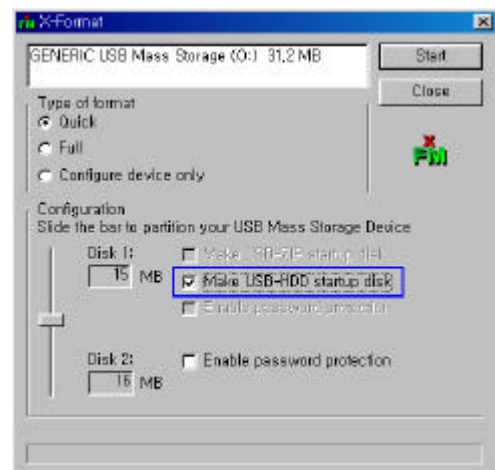

3. If you check " Make USB-ZIP startup disk" or " Make USB-HDD startup disk" option and format, you can use it as a substitute for Booting Floppy Diskettes (or Booting CD-ROMs etc). But if you want to use this function, " USB-ZIP" or " USB-HDD" must be in Bootable section of CMOS (ROM-BIOS). For more information, please ask your PC motherboard manufactures.
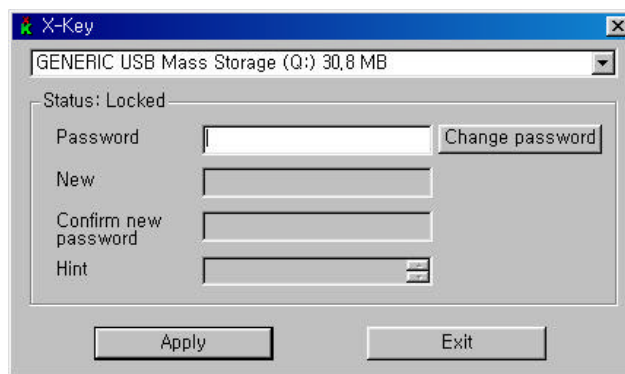
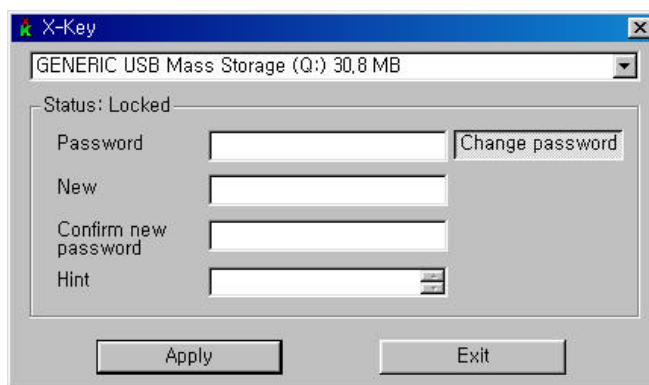1) USB-ZIP startup disk   2) USB-HDD startup disk

* Bootable function is available only for Windows 98/98SE/ME.

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9. X-Key

1. X-Key Program is a device lock security program that protects your important files from the approach of other people.

2. For using X-Key Program, you have to format after select "Enable password protection" option in X-Format. (Refer to 9 for how to use X-Format.)

3. When the format is completed the X-Key program (xKey.exe) is saved in the USB DISK. You can run X-Key program in the USB DISK and can lock or unlock the USB Disk.

4. You can see the dialog box on the screen as the following picture depicts if executing the X-Key program. If you input a password and click "Apply", then the USB Disk is unlocked.

5. If you want to change the password, click "Change password" button. Enter your old password in "Password" text box, then enter the new password in the "New" text box. Confirm your new password in the "Confirm new password" text box and type in a password hint in the "Hint" text box. Click "Apply" to confirm the changes. To cancel the password click "Exit".

** To unlock X-Key, click "Change password" button. Enter your password in the "Password" text box but leave blank in "New" and "Confirm new password" text box and click "Apply".

6. If executing the X-Key program, the key-shaped icon is created in the Tray Bar on the right bottom. After placing the cursor of the mouse on the key-shaped icon, click the right button. You can select "Unlock USB Mass Storage Device" or "Change password".

7. After inputting a password you cannot use the USB Disk without the password. If you forget the password it is impossible to restore the data. The only way is that you have to format the entire drive to return to original conditions. As a result, all data in the USB Disk will be lost. So please be careful to remember the password!!!

10. Warranty Disclosure

Your USB DISK comes with limited one-year hardware warranty.

We warrant the USB DISK against defects in material and workmanship. This warranty applies only to the original purchaser of the USB DISK and is not transferable.

This warranty does not apply to any failure or deficiency which has been caused by misuse, neglect, alteration, improper installation or handling, unauthorized repair or modification, improper testing, accident or causes external to the USB DISK, such as, but not limited to, excessive heat or humidity, power failure or improper installation or removal of the device.
This warranty does not cover any damage or data loss due to problems with user's computer/ hardware/ software/ any other peripherals, operating conflict with other installed software, other accident or unavoidable damages.
We cannot accept liability for financial damages, lost profit, claim from third parties, etc., arising from the software provided with this unit.
Proof of purchase will be required before any warranty consideration by us.

The warranty as set forth shall not be enlarged, diminished or affected by, and no liability shall arise out of us, rendering of technical advice or service in connection with your order.

The warranty set forth above is not assigned by you.

This Warranty applies only to this product, and is governed by international laws.

This publication could include technical inaccuracies or typographical errors. Changes may be periodically made to the information herein.

11. Safety Note

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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 to correct the interference by one or more of the following measures:

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

**CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:
(1)This device may not cause harmful interference, and
(2)This device must accept any interference received,
including interference that may cause undesired operation.

12. Technical Support

All inquiries have to be made by e-mail only to the following address:

mailto:support@knetech.com

Or alternatively, more information, updates and technical support can be found on our web site:

http://www.universalsmartdrive.net