

# NEXTO VIDEO STORAGE pro

## Portable Storage for Professional Video Cameras



- User Guide
- Version 07/09



NEXTODI, Inc.  
[www.nextodi.com](http://www.nextodi.com)

Dear customer,  
 Thank you for purchasing this NEXTO VIDEO STORAGE pro product.  
 The NEXTO VIDEO STORAGE product allows videographers to save footage from camcorders to a hard drive, without using a computer. The camcorder can then be used to record new data. NextoDI has optimized performance so that data transfers from memory card to NEXTO VIDEO STORAGE pro more quickly than to other storage devices. Data stored on the NEXTO VIDEO STORAGE pro (NVSPRO) can later be copied to a computer. The NVSPRO can also be used as a computer backup device.

NEXTO VIDEO STORAGE pro supports professional video cameras from many manufacturers, including Sony and Panasonic, and memory formats such as SxS, P2, Compact Flash (CF), Secure Digital (SD), SDHC, Multi Memory Card (MMC), Memory Stick (MS) Card.

Please read this manual before using the product. Follow operating instructions carefully to avoid damage to the product, or personal injury. This guide assumes that your NEXTO VIDEO STORAGE pro unit contains a properly formatted hard disk and a charged battery. If this is not the case, refer to the User Manual for instructions on formatting a hard disk and charging the battery.

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#### Important safety notice

- Do not drop, jar, bump, shock, or expose NVSPRO to severe vibration while data is being transferred.
- Do not use near open flames (candles, stoves, grills, fires,) or sparks (fireworks, welding torches.).
- Backup your data. Under no conditions is NextoDI, Inc. liable for loss of or damage to a computer; or loss of, or damage to, a program, records, or data; or any consequential or incidental damages.

For more inquiries, contact or consult our technical advisory service:

[http://www.nextodi.com/en/support/en\\_qna.php](http://www.nextodi.com/en/support/en_qna.php)

\* NextoDI Co.,Ltd. reserves the right to make improvements and/or changes to the product and programs described in this User's Guide at any time without notice.



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## 1. Product description

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The NEXTO VIDEO STORAGE pro (hereafter NVSPRO) includes 2.5"Serial ATA(SATA) hard drive and Li-Poly battery. The NVSPRO offers following functions:

### 1. Memory card backup

The NVSPRO contains a 2.5" SATA hard drive and Li-Poly rechargeable battery. It can copy the contents of a memory card to the internal hard drive without a PC in the field where no power source is available. You can copy SxS cards and P2 cards through ExpressCard slot on the left side of the device and can copy CF/SD/SDHC/MMC/MS through the CF slot and 3-in-1 slot on the top of the device. For IKEGAMI GFPAK, you can copy through the eSATA/USB\_host combo port on the bottom of the device. For complete backup information, please refer to Chapter 11 of this manual.

### 2. Multi-Copy

The NVSPRO can copy the contents of a memory card to the internal hard drive and an external USB hard drive at the same time, allowing you to make two copies in a single operation using this function. For details of the Multi-Copy feature, see chapter 12.

### 3. Sync

The NVSPRO can synchronize the contents of its folder with the folder of an external USB hard drive. This allows you to make a secondary copy of the backup folder to an external USB hard drive without a computer. For details of the Sync function, see chapter 14.

### 4. Video Preview

The NVSPRO can display the video footage taken with professional video cameras such as the XDCAM or P2CAM, or the IKEGAMI with the color TFT LCD. The NVSPRO provides an accurate reference preview of the video clip. For details on Video Preview, see chapter 13.

### 5. Computer connection

The NVSPRO can be operated via USB2.0, Firewire(IEEE1394) or via high speed eSATA interface at a corresponding connection of a computer, in order to recopy data. For details of Computer Connection, see chapter 10.

### 6. Button operation

All the functions of the NVSPRO are controlled by two buttons, one for power on/off and the other for function control. The power button can also be used as a function control as well.

For details on Power On/Off and Button Operation, see chapter 8.

### 7. Internal rechargeable battery and external AA battery pack

The NVSPRO contains a Li-Poly battery so it can be used without the power adapter connected. The power adapter is used to charge the internal battery, supplying power to the main unit. The external battery can be used to charge the internal battery.

For details on Charging the Internal Battery, see chapter 7.

### 8. Internal hard drive

The NVSPRO offers [Hard drive format], [Hard drive capacity check], [Hard drive self test] functions for internal hard drive.

For details see chapter 9 and chapter 14.

### 9. Firmware upgrade

When new functions are added or new video format support added, a firmware is provided to users through the download page of website.

Download the new firmware to the memory card or internal hard drive of the NVSPRO. Then, you can upgrade your NVSPRO with the new firmware using the firmware update function provided by the NVSPRO.

For details, see chapter 14

### 10. Language selection

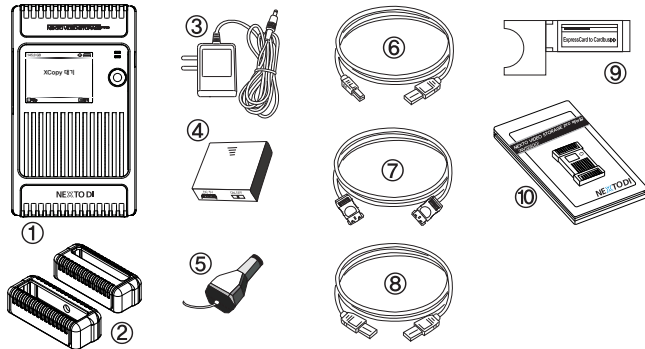
The NVSPRO supports various languages. You can select the language from the menu of the NVSPRO. (The language selection function is not supported on the Korean version NVSPRO, which is shipped to the Korean market.)

### 11. Buzzer on/off

The NVSPRO uses a buzzer sound to note the result of operation to users. A user can select on/off of the buzzer sound at the menu.

For details, see chapter 14.

## 2. Contents of the NEXTO VIDEO STORAGE pro



- ① Main storage unit
- ② Shock protective rubber jacket
- ③ AC power adapter (wall plug)
- ④ AA battery holder for recharging internal Li-Poly battery
- ⑤ Car Charger Cable for recharging internal battery
- ⑥ USB cable for computer connection or connecting external USB hard drive and GFPACK
- ⑦ eSATA cable for computer connection
- ⑧ IEEE1394 cable for computer connection
- ⑨ P2 card adapter for P2 card backup.  
(Not for computer use. Use with NVSPRO only)
- ⑩ User's Guide

If any of these components are missing, please contact your dealer for replacement.

## 3. Symbols in the document



The flash icon in a triangle is used to alert you to personal injury hazards such as electric shock



An exclamation mark in a triangle indicates important instructions in this operating manual which must be observed.



The "hand" icon gives you special tips and notes on the operation.

## 4. Safety Instruction



### Please Note:

In the case of any damages due to failure to observe these operating instructions, the warranty is voided. NextoDI does not assume liability for consequential damages. Nor do we assume liability for damage to property or personal injury, caused by improper use or the failure to observe the safety instructions. The warranty is void in any such case.  
Dear customer, the following safety instructions and danger warnings are not only to protect your well-being but also to protect the device. Please read carefully through the following points:



### Note and Warning:

- Unauthorized conversion and/or modification of the product is forbidden for safety reasons.
- Never open the product. This device is not user serviceable.
- Damaging the Li-Po rechargeable may result in explosion or fire!
- Maintenance, or repairs may only be carried out by authorized repair center.
- The AC power adapter unit is intended for use in dry conditions to avoid electric shock!





- The case of the hard disk must not get damp or wet. Protect the device from humidity or water, from sun, excessive heat (>45 °C) or cold (<0 °C), dust and dirt.
- When the product is brought from a cold into a warm room condensation may form. This could damage the product. Always let the product get to room temperature before use or before connecting the AC power adapter unit. This can sometimes take several hours.
- Do not use in tropical climate conditions
- The AC power adapter unit complies with safety class II. As a voltage source only a proper power socket of the public power supply system may be used. Note the input voltage/frequency imprinted on the AC Adapter. It must correspond to the voltage/frequency of the power outlet. The AC power adapter is equipped with an input voltage range of 100 - 240V, 50/60Hz. Adapters may be necessary for use in countries other than the US.
- The product is not a toy and should be kept out of reach of children!
- Do not place liquid near the product. Liquid could get inside the housing and cause fire or electric shock. In case of fire, damage or short circuit, de-energize the respective socket (e.g. turn off circuit breaker) and only then pull the AC power adapter unit from the socket. Do not attempt to use the product! Take it to your dealer for repair immediately.
- Never touch the AC power adapter unit when your hands are damp or wet.
- In industrial facilities, safety regulations for electrical equipment and facilities must be observed. If the product is used at schools, training facilities, or do-it-yourself/hobby shops it should not be handled unless supervised by trained, responsible personnel.
- Do not drop the NVSPRO device

**Caution!** The product must not get damp or wet. This product is not a toy. It contains fragile and swallowable glass parts, small parts and a rechargeable battery.

Any use other than the one described above may damage the product. Read these operating instructions thoroughly and carefully, they contain important information for installation, operation and handling. Take note of all safety instructions.

## 5. Notes on rechargeable batteries

A "Li-Poly" rechargeable battery is integrated in the NVSPRO (lithium-polymer). This rechargeable battery does not have the so-called "memory effect", i.e., the rechargeable battery can be charged whenever you want. Furthermore, it has a higher energy content than conventional NiCd and NiMH rechargeable batteries. Note these important instructions when handling the Li-Poly rechargeable battery.

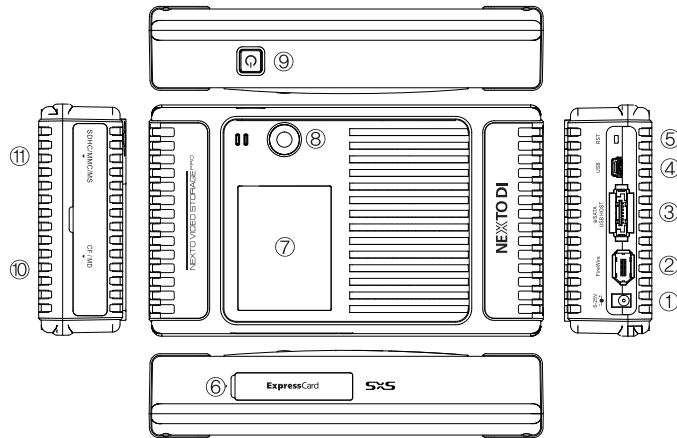
The rechargeable battery can be recharged 400 times. If the battery operation time gets shorter, it may be time to replace the battery. Consult your authorized NEXTODI dealer to replace the internal battery.



### Please Note:

- Never damage the rechargeable battery, do not remove it from the NVSPRO. Consult the chapter on "Disposal". Damaging the wrapping of the rechargeable battery might cause explosion or fire.
- Never short circuit the contacts of the rechargeable battery. Never touch connections or electric components inside the NVSPRO with metal objects.
- Charge the rechargeable battery regularly, even if you do not use the product. The NVSPRO needs "current" (a small quantity) at all times. Due to the Li-Poly rechargeable battery technology, it is not necessary to discharge the battery before recharging. Recharge the battery completely, about once a month. The device will be ready for use at all times.

## 6. Device Diagram



- ① DC IN" slot for AC power adapter unit (wall plug).
- ② Connector "Firewire" to connect to the computer with max 400Mbps speed.
- ③ Combo slot for "eSATA" and "USB\_Host"
  - "eSATA" slot to connect to a computer. "eSATA" cable does not provide power, so use the AC power adapter or connect USB/Firewire cable to PC when using eSATA.
  - USB Host slot to connect external USB hard drive or IKEGAMI GFPAC.
- ④ "USB" slot for USB2.0 device connection to a computer
- ⑤ Recessed Reset key, to be pressed with a tooth pick or similar tool; switches off the NVSPRO in the event of a hardware or software malfunction.
- ⑥ ExpressCard slot for SxS card and P2 card connection. P2 card needs P2 card adapter which is delivered with the product.
- ⑦ LCD Display
- ⑧ Control key. Controls up/down/left/right/select of cursor during power on state
- ⑨ Power key. Controls power on/off and selecting command during power on.
- ⑩ 3-in-1 connector for SD/SDHC/MMC/MS
- ⑪ CompactFlash slot

## 7. Charging the rechargeable battery

The battery can be charged using the AC power adapter unit delivered with this product.

1. Turn off the NVSPRO!
2. Connect the charger's wall plug to the NVS's "DC IN" slot.
3. Plug the AC power adapter unit into a wall socket.
4. The LED above the Control key shows red during the charging.
5. When the battery is charged, the red LED turns off.
6. If there is an error when charging, the LED blinks. If this happens, unplug the AC adapter unit and plug it in again.

Charging via Car charger cable or USB/Firewire cable or AA battery holder is also possible.

With a completely empty rechargeable battery, the charging procedure lasts approximately 4 hours with AC power adapter or cigar jack cable or Firewire cable.

With USB cable, it takes about 7 hours

With AA battery holder, it takes about 10 hours. AA battery pack charges about 40% of internal battery capacity.

### Reference

- Charging takes place only if the NVSPRO is turned off.
- Charging via USB without the AC power adapter unit included in the delivery is possible. A high power USB connection is needed, i.e. a USB connection with its own power supply (the USB port of a computer or a USB hub with power unit).
- If the NVSPRO is operated with a notebook, then you must always use the AC power adapter unit to charge the NVSPRO since notebooks may not deliver the necessary amount of current via USB.
- The NVSPRO works about two hours with fully charged internal battery.
- When connected to a computer using Firewire or USB, the NVSPRO draws power from the computer, not the internal battery.
- If an NVSPRO unit is discharged completely, the performance of the battery may be degraded. It is recommended to re-charge the battery of an NVSPRO unit before the battery gauge goes to an empty level. (See the Chapter 8 for more information on the battery gauge.)

## 8. The NEXTO VIDEO STORAGE pro Interface

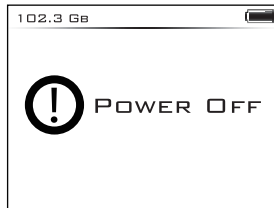
### 1. Turning the NVSPRO on/off



Press the power key on the right side of device for more than 2sec in order to switch the NVSPRO on. The power up logo and firmware version is shown on the LCD. If you see the logo on the LCD, release the button. Or, the NVSPRO will power down automatically.



After checking the system, the NVSPRO goes into [XCOPY ready] mode. You can copy a memory card in this mode.



The NVSPRO turns off automatically after approx. 50 seconds if you do not use it. Also if the (L)Off control menu appears on the LCD, the NVSPRO can be powered off by pressing down the control key or power key for more than 2 seconds.



#### Reference

- The product can be reset via the recessed RESET key (see chapter 6). This will also switch it off.

### 2. Key operation

The NVSPRO is operated by a single Control key, which can be used in five different ways. The display shows you the “S” or “L” symbol as a cue to how to invoke the desired function.

Symbols	Operation
<b>Power key</b>	
S	Press once and release immediately.
L	Press and hold the key for more than two second.
<b>Control key</b>	
S	Press down once and release immediately.
L	Press down and hold the key for more than two second.
▲▼◀▶	Push the key to the appropriate direction. Up/down/left/right push is supported. Long push to up/down direction results in repeated executions of the operation.

### 3. The LED indication



- ① Red indicates battery is being charged.
- Green indicates “power on” without external power.
  - Yellow indicates “power on” with external power.
- ② Blinking red indicates that a data transfer is occurring.

#### 4. The LCD Display



- ① Remaining capacity of the hard disk  
If the capacity value may not be correct, the display is greyed out.  
In this case, the capacity check performed automatically during power on or power off.  
The capacity check also can be activated at the menu mode.
- ② Remaining capacity of the rechargeable battery  
The battery capacity is represented by four cases(3->2->1->empty) according to the battery gauge.
- Full: 80% ~ 100%
  - 2Gauge: 30% ~ 80%
  - 1Gauge: 5% ~ 30%
  - Empty: Under 5%
- ③ Current status
- ④ Available control command

The display varies depending on the function in use.

#### 9. Formatting Hard Drive

The hard disk in the NVSPRO should already be formatted in the "FAT32" file system. Only one (or the first) partition can be used.  
Do not attempt to format with the computer. Use only the format function on the NVSPRO. This allows it to be read by either Windows or Mac operating systems.

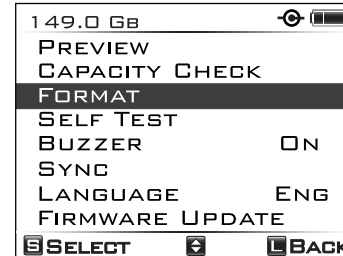


##### Please Note:

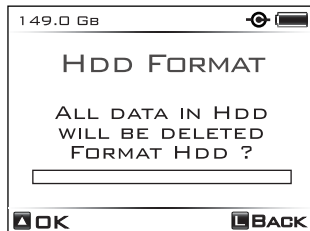
If you are installing a 60Gbyte hard disk and creating and formatting a partition via the operating system "Windows XP", the file system "NTFS" will be installed. Via USB2.0, the hard disk in the NVSPRO can be used like a conventional external hard disk. If the NVSPRO is disconnected from the computer and you want to copy the data from a memory card onto the hard disk, this is not possible. The NVSPRO can work with one partition in the file format "FAT32" only. Therefore, NVSPRO offers its own possibility of formatting the hard disk in the file system "FAT32".

##### To Format a New Hard Disk

The NVSPRO must not be connected with the computer via USB or eSATA. Remove any memory card and USB cards.

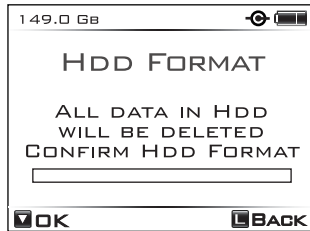


To re-partition/format the hard disk, press the control key once at the [Xcopy] mode to get to the menu ("S-Menu"). Move the high lighted cursor to [Format] menu by pushing the control key downward. Press the control key once to select [Format].



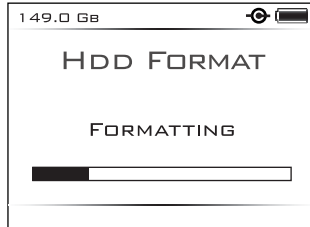
Confirm the selection by pushing the control key to upward. You can cancel the operation by long pressing the control key or power key.

**Note:** With Windows XP, hard disks and partitions are formatted (with a size of more than 32GB) only with the file system "NTFS"; the "FAT32" option is no longer available. For MAC OS, hard drives are formatted with the file system HFS+ (MAC OS Extended). These formats are incompatible with the NVSPRO.



Afterwards, you can repartition and reformat the hard disk; to confirm push the control key to downward. All data on the hard disk will be lost!

You can cancel the operation by long pressing the control key or power key.



Formatting the drive now.



Now, ready to copy/re-copy data from/to hard disk.

## 10. Using the NVSPRO as a Hard Drive

The NVSPRO can be connected to your computer as an external hard disk. Three connection methods are supported.

1. Connect to the computer's USB2.0 slot via the NVSPRO "USB slot" and the USB cable.
2. Connect to the computer's Firewire slot via the NVSPRO "Firewire slot" and the Firewire cable.
3. Connect to the computer's eSATA slot via the NVSPRO "eSATA/USB-Host combo" slot and the eSATA cable.

The CF slot and the 3in1 memory card slot don't work when connected to a computer. Therefore, the NVSPRO cannot be used to connect CF cards, or other video cards, to your computer.

Device drivers for the NVSPRO are included in the Microsoft Windows Vista, ME, XP and 2000 operating systems. Drivers for Windows 98 systems can be downloaded from the NextoDI website. To download drivers, go to

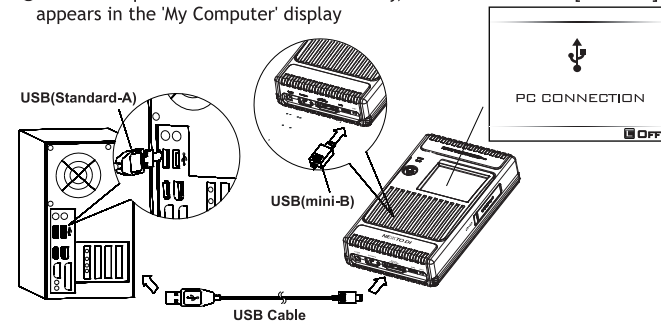
<http://www.nextodi.com/en/support/>

<http://www.nextodiusa.com/support.htm>

When you have successfully connected the NVSPRO to your computer, the content of the NVSPRO hard disk appears in Windows File Explorer.

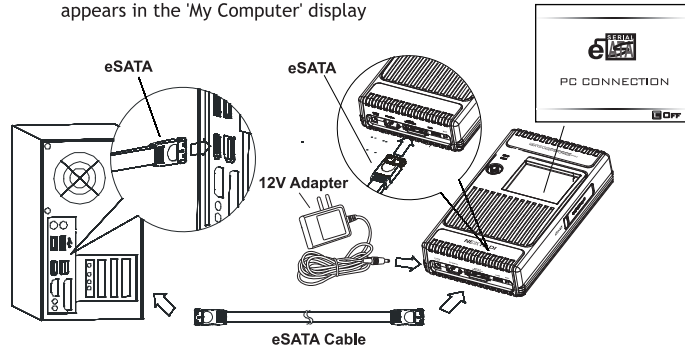
### 1. Connect via USB

- ① Switch your computer on. Wait until the operating system is completely booted.
- ② Switch the NVSPRO on.
- ③ Connect the NVSPRO "USB" slot via the USB cable with a free USB2.0 port of your computer. A USB1.1 port can be used also.
- ④ Check the "PC Connection" at the LCD display of NVSPRO.
- ⑤ If the computer detects NVSPRO correctly, a new drive named [NEXTODI] appears in the 'My Computer' display



## 2. Connect via eSATA

- ① Switch your computer on and wait until the operating system is completely booted.
- ② Switch the NVSPRO on.
- ③ Connect the NVSPRO "eSATA" slot via the eSATA cable with a free eSATA port of your computer. The eSATA cable does not provide power. Use the AC power adapter unit or USB/Firewire cable to provide power. If no power is provided, NVSPRO shows "Connect power" message and waits for external power applied.
- ④ Check the NVSPRO LCD display. If the connection has been made, you will see "PC connection".
- ⑤ If the computer detects NVSPRO correctly, a new drive named [NEXTODI] appears in the 'My Computer' display



The eSATA cable does not provide power. Use the AC power adapter unit or USB/Firewire cable to provide power. If no power is provided, the NVSPRO shows the "Connect power" message and waits for external power to be applied.

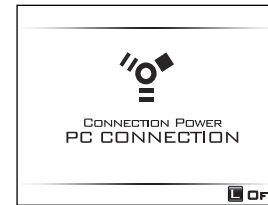
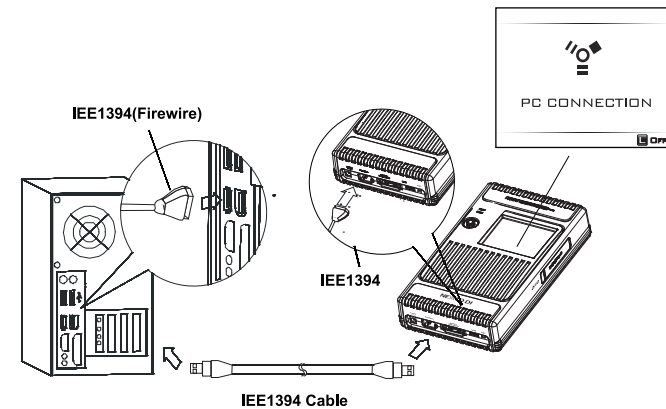


### Please Note:

- DO NOT connect the eSATA cable during Firewire/USB connection to the computer. You may lose your data.

## 3. Connect via Firewire(IEEE1394)

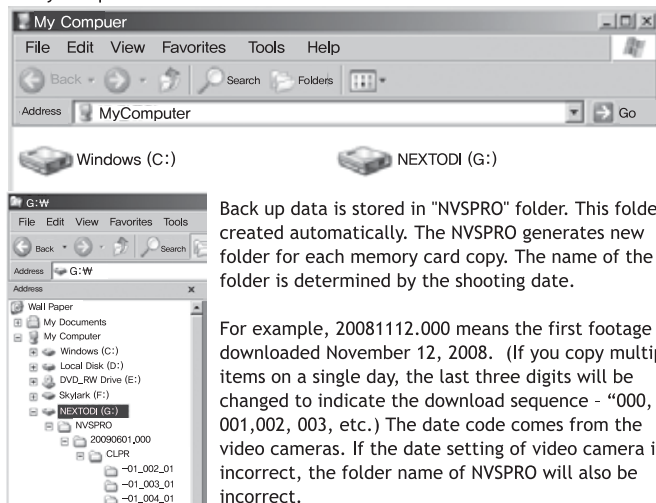
- ① Switch your computer on. Wait until the operating system is completely booted.
- ② Switch the NVSPRO on.
- ③ Connect the NVSPRO "Firewire" slot via the Firewire cable with a free Firewire port of your computer.
- ④ Check the "PC Connection" at the LCD display of NVSPRO.
- ⑤ If the computer detects NVSPRO correctly, a new drive named [NEXTODI] appears in the 'My Computer' display.



The 6pin-4pin Firewire cable does not provide power. Use the AC power adapter unit or USB cable to provide power. If no power is provided, the NVSPRO shows the "Connect power" message and waits for external power to be applied.

#### 4. Browsing at computer

If computer detects NVSPRO correctly, a new drive named [NEXTODI] appears on 'My Computer'.



Back up data is stored in "NVSPRO" folder. This folder is created automatically. The NVSPRO generates new folder for each memory card copy. The name of the folder is determined by the shooting date.

For example, 20081112.000 means the first footage downloaded November 12, 2008. (If you copy multiple items on a single day, the last three digits will be changed to indicate the download sequence - "000, 001, 002, 003, etc.) The date code comes from the video cameras. If the date setting of video camera is incorrect, the folder name of NVSPRO will also be incorrect.

#### 5. Disconnecting NVSPRO from Your Computer

For Windows  
Right click the Storage device icon in the System Tray (lower right corner of your screen) and select Safely Remove Hardware or Unplug or Eject Hardware. Then remove the cable from the NVSPRO and your computer.

For MAC  
Drag and drop the NEXTODI icon to the trash. Then remove the cable from the NVSPRO and your computer.



Do not connect the eSATA cable when either the USB or Firewire cable is connected to the computer. Data could be lost. The CF slot and the 3-in-1 memory card slot do not work when connected to a computer. The NVSPRO cannot be used to connect CF cards, or other video cards, to your computer. Do not disconnect the eSATA cable when the computer is powered on. Hot plugging out of eSATA connection is not completely supported by computer. Remove the eSATA cable only after computer is turned off.

## 11. Data Backup and Verify

This chapter represents the 'Copy' and 'Verify' functions. Slide a memory card into the corresponding memory slot. The slot for CF/SD/SDHC/MMC/MS/MSPRO is located on the top side of the NVSPRO. The slot for SxS and P2 card is located on the left side of the NVSPRO. The P2 card needs to be used with P2card adapter delivered with the product. The Ikegami GFPAK can be connected through the "SATA/USB-Host" combo slot using the USB cable.

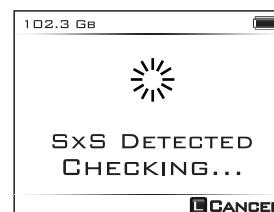
The NVSPRO must not be connected to a computer. This device can copy or move a memory card onto the internal hard disk via the built in memory slot or via the "eSATA/USB-Host" combo slot connector with a USB cable. After the backup, the copy procedure can be verified. The data on the memory card and the data on the hard disk are compared with one another. This ensures that the data has been copied properly ("Verify"). You can do "New Copy" or "Verify" according to the contents of the memory card.



#### Please Note:

Do not connect more than one memory card or USB device to the NVSPRO. Only the first one connected will be detected.

#### 1. Parsing the memory

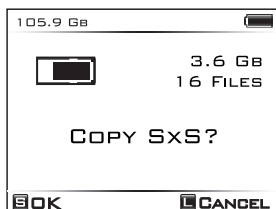


The data on the memory card is compared with the data stored on the hard disk. According to the comparison result, the NVSPRO operates as follows:

- New Copy
- Verify

New Copy	If the contents of the memory card are completely new, then make a new folder on the hard disk and copy the memory card data to the hard disk.
Verify	If the memory card was copied before and not modified since, then you can verify the data stored in hard drive and memory card.

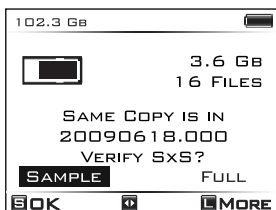
## 2. New Copy



Make a new folder on the hard disk and copy all the files and folders in the memory card onto the internal hard disk. The content of memory card is not deleted.

- : Copy, press the key briefly
- : Cancel the copy, press the key for more than 2 seconds.

## 3. Verify



Compare the data stored on the hard disk and memory. The verification logic compares full bit-by-bit verification, and detects any single bit difference.

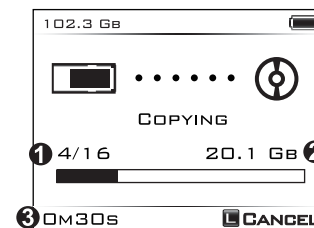
- : For verification, press the key briefly
- : Another option: press the key for more than 2 seconds. Select to make one more copy of this memory card.

Two options are available for verification using left/right key selection.

Sample verify	Compare first 1MByte of each file.
Full verify	All the data is compared. This takes longer time.

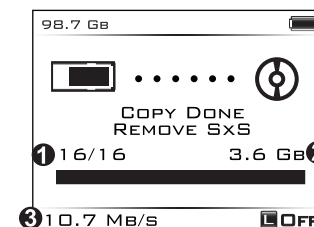
Current operation status is shown on the LCD display.

- (1) Total number of files in the memory card versus number of copied files.
- (2) Copied capacity
- (3) Elapsed time



If the operation completes successfully, the elapsed time is displayed with beep sound.

- (1) Total number of files in the memory card versus number of copied files.
- (2) Copied capacity
- (3) Copy speed in (MB/s)

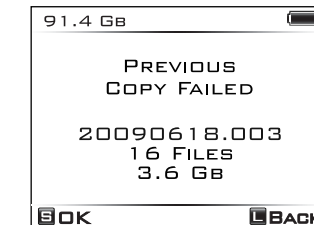
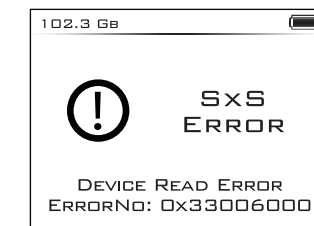


## 4. Error Case

If any error occurred during copy, the NVSPRO indicates that error and turns off the power automatically.



- Remove the memory card to return to initial display.
- If you don't remove the memory card, after 50 seconds, the NVSPRO automatically turns itself off to save the battery.



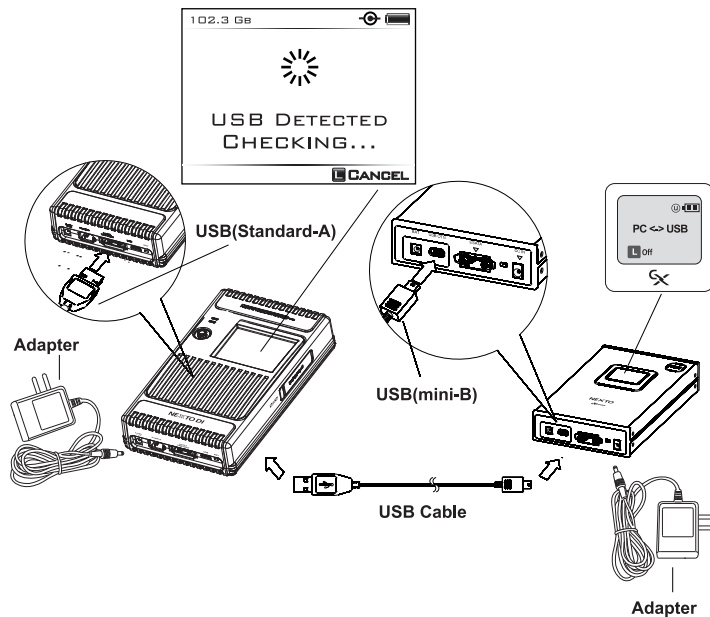
The NVSPRO shows previous operation status at the next power up so the user can know whether their backup was successful or not.

## 12. Multi-Copy

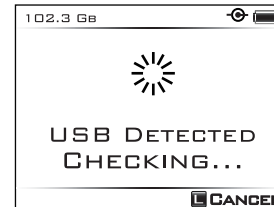
Copy a memory card to the internal hard drive and an external USB hard drive at the same time making two copies of data in a single operation. The NVSPRO offers “Multi-copy”function to make the backup more reliable.

### Reference

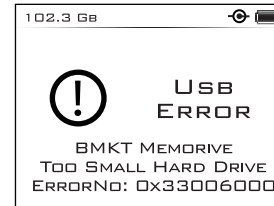
- The capacity of the external USB hard drive should be larger than 100GB.
- Connect the AC power adapter to both the NVSPRO and the external USB hard drive. The NVSPRO does not provide enough power via the USB-Host port. If used with a Nexto series product such as the ND2700 or ND2725, the NVSPRO does not need AC power connected.
- The ‘Verify’ function does not work during ‘Multi-Copy’ mode. The memory card is copied regardless of the contents of memory.



### 1. Connect external USB hard drive to NVSPRO

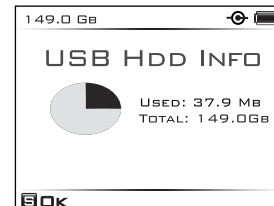


Connect external hard drive during “Xcopy ready” mode. The NVSPRO detects the device and checks the external hard drive.

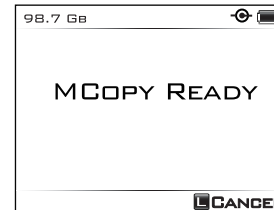


If the drive capacity is smaller than 100GB, the NVSPRO shows “USB ERROR” and power off automatically. Use a larger hard drive for the external hard drive.

### 2. Multi-Copy mode

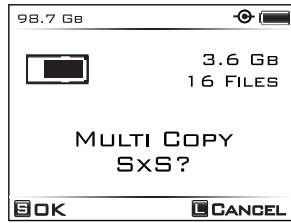


If a correct external hard drive connected, the NVSPRO shows the info on that drive. Short press the key or leave 10sec then go into the “Multi-Copy”mode.



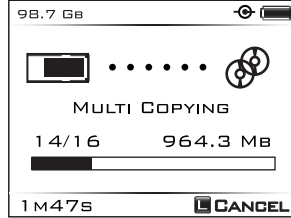
The remaining operation is the same as the “Xcopy ready”mode. The menu function cannot be used. This mode could be exited using a long press of the key or by removing the USB cable from the NVSPRO.

### 3. Multi-Copy operation

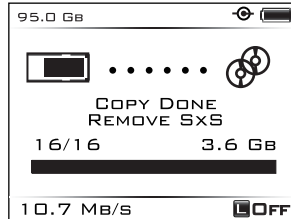


Slide the memory card in at the “Mcopy ready” mode. The NVSPRO detects/parses the contents of the memory card and asks you confirm the copy.

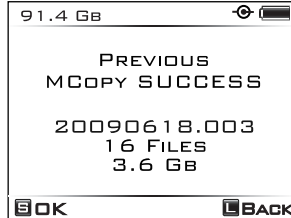
- : Copy: press the key briefly
- : Cancel the copy: press the key for more than 2 seconds.



When Multi-Copy is in progress, do not remove the memory card or disconnect the external USB hard drive.



Multi-Copy completed. Remove the memory card to return to initial display. If you don't remove the memory card, after 50 seconds, the NVSPRO automatically turns itself off to save the battery.



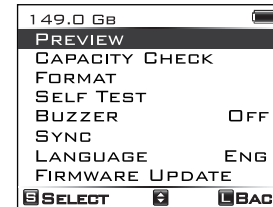
NVSPRO shows previous backup status at next power up.

## 13. Video Preview

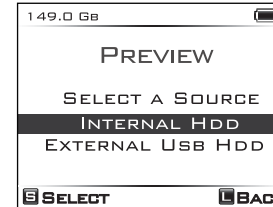
NVSPRO shows stored video files after backup depending on the file format. For details on the supported video format, see technical specifications in chapter 19.

Preview of both internal and external USB hard drives is supported. Users also can choose to delete the backup folders.

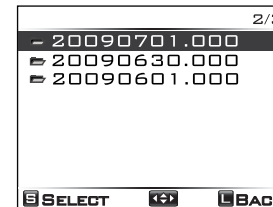
### 1. Preview from internal hard drive



Press the control key once at the “Xcopy ready” mode to activate the menu. Press the control key and select “Preview”.



Select ‘INTERNAL HDD’ to preview the video file stored in the internal hard drive.



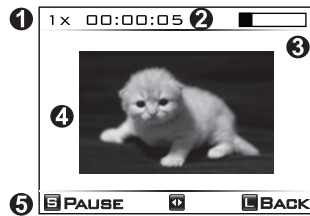
NVSPRO shows the contents of backup folder in date code order. The most recent folder is shown first.



Press the control key once to select any backup folder. Then you can choose to preview the video file or delete that folder



If "SHOW VIDEO CLIP" is selected, the NVSPRO shows a list of video files contained in that folder as a thumbnails. Unsupported video files are shown with [X] mark. Select video clip for preview using up/down/left/right push of the control key.



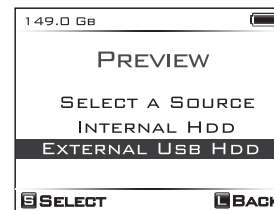
Press the control key once to select a clip. The NVSPRO shows a preview of that video file with reduced resolution. The user can select play/pause with the press of the control key. The user can also control the preview speed using a left/right push of the control key.

- (1) Preview speed
- (2) Elapsed time
- (3) Progress of preview in %
- (4) Preview video
- (5) Selectable command

### Reference

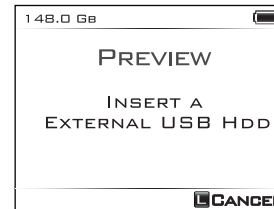
- For supported video formats, see Technical Specifications in chapter 17. Additional supported video formats will be added in the future without notice.

## 2. Preview from external USB Hard Drive

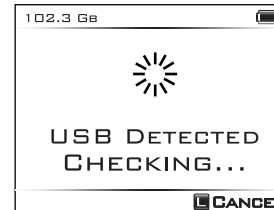


The NVSPRO also supports previewing the backup video files stored in external USB hard drive using Multi-Copy or SYNC function.

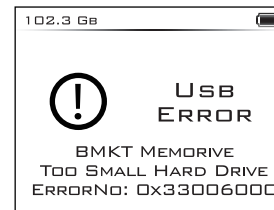
Select "EXTERNAL USB HDD" at the Preview menu.



Then connect external USB hard drive to the [eSATA/USB-Host] combo slot.

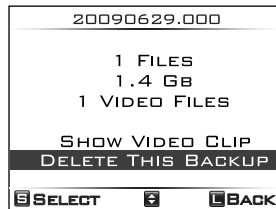


The NVSPRO check for the external USB hard drive.



If the capacity of external HDD is smaller than 100GB, or any other error happens, the NVSPRO shows the error code and turn off automatically.

### 3. Delete the backup data



Select "Delete This Backup" at the Preview menu.



The NVSPRO asks you twice to confirm the delete operation. (If you do not want to delete it, press the button for more than 2 seconds to go back to the main menu.)



Push the control key up and down to confirm the deletion.



The specific folder is deleted. Return to the main menu by pressing the control key once.

## 14. Advanced Functions

The NVSPRO has six advanced function menus, accessible from the Main Menu.

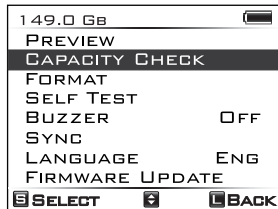
Menu	Operation
Capacity Check	Check for the used capacity and recordable capacity on the internal hard drive.
Self Test	Built-in test utility for testing physical errors on internal hard drive. This function does not fix any errors. If any error is detected during the self-test, consult your authorized NEXTODI dealer.
Buzzer	On/Off setting for buzzer sound. Factory setting is On.
Sync	Synchronize the data stored in the NVSPRO and external USB hard disk connected at "eSATA/USB-Host" combo connector via USB cable. Used for backing up data and making secondary copy of NVSPRO.
Language Selection	Change the language setting. The Korean version of the NVSPRO does not support this function.
Firmware Upgrade	Upgrade to new firmware with the firmware file stored in internal hard drive or memory card.



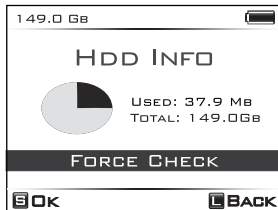
#### \* Enter Main Menu

Press the control key briefly in order to get to the main menu page.

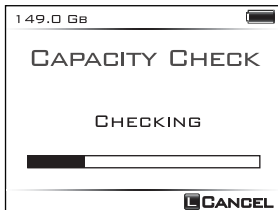
## 1. Capacity Check



Select "CAPACITY CHECK" at the main menu.

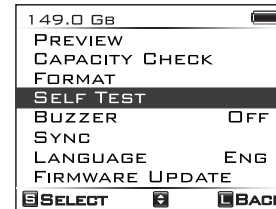


The NVSPRO shows the capacity info of internal hard drive using pie diagram.

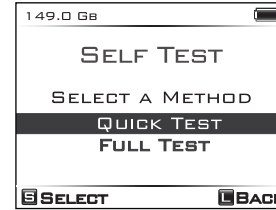


Select OK by pressing the control key briefly. Then the capacity check starts.

## 2. Self Test - Quick test



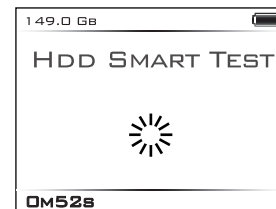
Select "SELF TEST" on the main menu.



The User can choose between quick test and full test. Choose quick test. Quick test uses S.M.A.R.T test offered by the hard drive



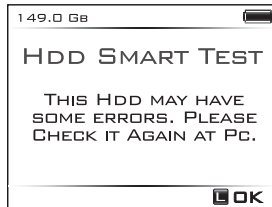
Quick test takes several minutes for testing the internal hard drive. Pressing the control key initiates the quick test.



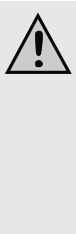
Quick test in progress.



No problem found at the quick test.



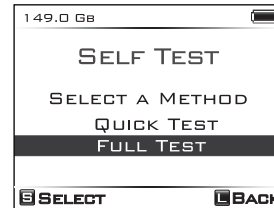
Error found during quick test. Further use of the NVSPRO may result in loss of backup data. Consult your authorized NVSPRO dealer for service.



**Please Note:**

- The NVSPRO indicates the completion of the test using a buzzer sound after the test. The power does not turn off automatically at this state.
- The NVSPRO returns to the initial mode only after the user pushes the control key for more than 2 seconds.

**3. Self Test - Full test**

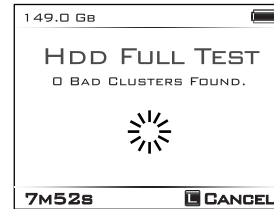


Select "FULL TEST" at the self test menu.

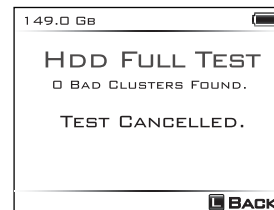


Full test takes several hours. The full test tries to read all the sectors in the internal hard drive and find out if any bad sector exists or not.

It is strongly recommended to connect the AC adapter for this process to prevent battery failure during the test.



Full test in progress.



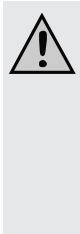
The user can cancel the full test by pressing the control key for more than 2 seconds.



No error found.



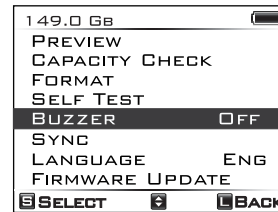
Error found during Full test. Further use of the NVSPRO may result in the loss of backup data. Consult your authorized NVSPRO dealer for service.



**Please Note:**

- The NVSPRO indicates the completion of test using the buzzer sound after the test. The power does not turn off automatically at this state.
- The NVSPRO returns to the initial mode only after the user pushes the control key for more than 2 seconds.

**4. Buzzer**



Select "BUZZER" at the main menu. The user can turn the buzzer sound on/off with the toggle button. (The picture shows an example that the buzzer is off.) The factory default setting is buzzer on.

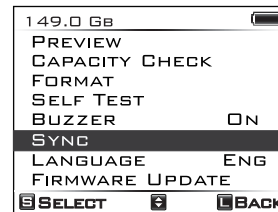
**5. SYNC Function**

The "Sync" synchronizes data between [NVSPRO] folder of the NVSPRO and [NEXT0] folder of external USB hard drive connected on the "eSATA/USB-Host" connector via USB cable. This function compares the folders stored in the [NVSPRO] folder of the NVSPRO and the [NEXT0] folder of USB hard disk. Only a new folder is copied to the USB hard drive, i.e. if a folder is in [NVSPRO] but not in [NEXT0], then that folder will be copied to [NEXT0].

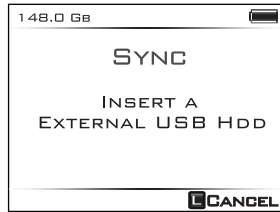


**Please Note:**

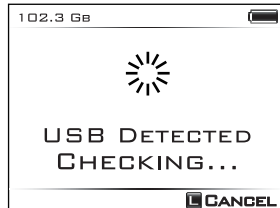
Be sure to connect the power adapter of both external USB hard drive and NVSPRO. The NVSPRO may not be able to provide the amount of power needed by the external USB hard disk. If the external USB hard drive is a Nexto series such as ND2700 or ND2725, the AC power adapter is not required.



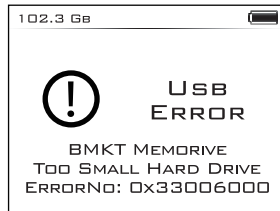
Move to "SYNC" at the main menu and select it



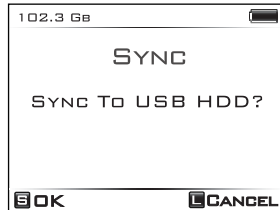
Connect the external USB hard drive to the [eSATA/USB-Host] combo port of the NVSPRO, in the way shown in the chapter 12.



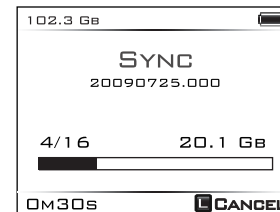
The NVSPRO detects and checks the external USB hard drive.



If the capacity of external HDD is smaller than 100GB, or any other error happens, the NVSPRO shows the error code and turn off automatically.



if no error is detected during the check, the NVSPRO asks for confirmation of the SYNC operation.

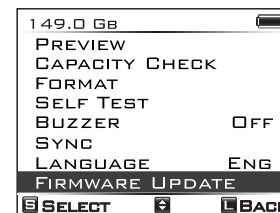


NVSPRO compares the [NVSPRO] of internal hard drive and [NEXT0] folder of external hard drive. If there are folders, which are in the [NVSPRO] but not in [NEXT0] folder, then NVSPRO copies those folders from the internal hard drive to the [NEXT0] folder of the external hard drive.

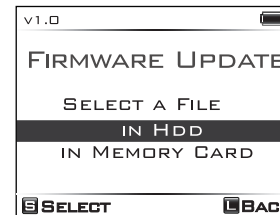
## 6. Language setting

The user can select the preferred language using this function. The Korean version of NVSPRO does not support this function.

## 7. Firmware Update



Select "FIRMWARE UPDATE" at the main menu.



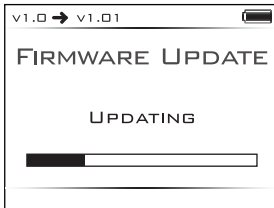
The firmware file(NVSPRO.BIN) should be placed in the root directory of memory card or internal hard drive. Select the HDD if the firmware file placed in the root directory of internal hard drive. Or select the Memory card if the firmware is placed in the root directory of the memory card. If you selected the memory card, slide in that memory card to NVSPRO.



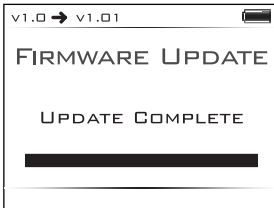
If the valid firmware file is not contained in specified device, the NVSPRO shows an error indication. Check if the device contains valid firmware at the root directory and repeat above process again.



If valid firmware is found at the specified location, the NVSPRO indicates a firmware found message on the LCD. Confirm the firmware upgrade by pressing the control key briefly.



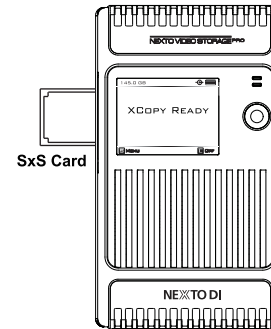
Updating the firmware. Be careful not to turn off power during firmware upgrade. Applying the AC power adapter is recommended.



Firmware upgrade completed. The NVSPRO automatically turns off.

## 15. Examples

### 1. Copying SxS card



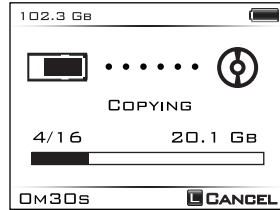
1. Turn on NVSPRO by pressing the power button for more than 2 seconds. Wait for "Xcopy ready" mode then insert SxS card to the ExpressCard slot located on the left side of the device.



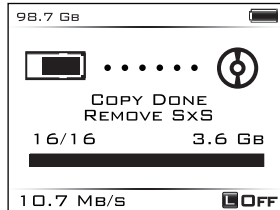
2. The NVSPRO detects the memory card and analyzes it.



3. The result of analysis is shown on the LCD. The total number of files and the capacity inside the SxS card is shown on the LCD. And, the NVSPRO waits for the confirmation of start of copy.

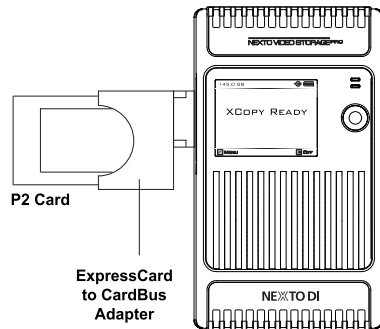


4. The copy status is shown on the LCD.



5. If the copy completes, the result is shown on the LCD. Remove the SxS card to return to the initial "Xcopy ready" mode.

## 2. Copying P2 card



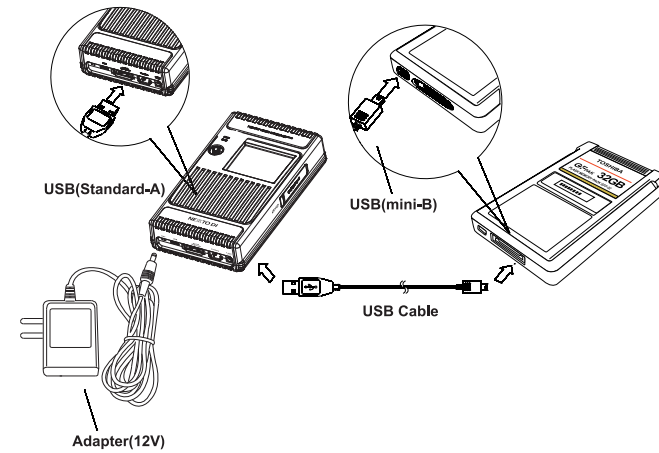
Copying a P2 card is the same as an SxS card except the P2 card needs the P2 card adapter which is delivered with the product.

Connect P2 card to P2 card adapter first, before sliding it into the ExpressCard slot of NVSPRO.

The NVSPRO will error if an empty P2card adapter is inserted.

## 3. Copying GfPAK

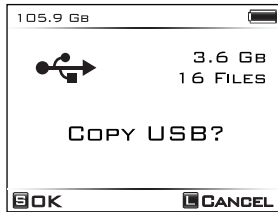
The NVSPRO supports copies of IKEGAMI GfPAK using the "eSATA/USB-Host" combo slot connected via the USB cable.



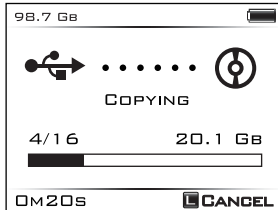
The NVSPRO should be powered by the AC power adapter to support copying GfPAK. The detailed connection is shown above.



If the GfPAK is connected correctly, the NVSPRO detects and checks it automatically.



The NVSPRO asks for confirmation on the copy from the USB on a GFPak connected device.



The data of the GFPak is copied onto the internal hard drive. After the completion of copy, remove the USB cable to return to the initial mode.

## 16. Battery Disposal

Batteries/rechargeable batteries containing harmful substances are marked with the following symbols: Cd=cadmium, Hg=mercury, Pb=lead. You can return your batteries/rechargeable batteries free of charge to any authorized disposal station in your area, in our stores or in any other store where batteries/rechargeable batteries are sold. Do not dispose of used batteries in household trash.

The Li-Poly rechargeable battery integrated in the NVSPRO must be removed from the housing before disposal. Please see your authorized NVSPRO dealer for this service.

### FCC Rules and Regulations - Part 15

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the 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 instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.

## Technical Specification

Device	NEXTO VIDEO STORAGE pro (NVSPRO)	
Model Number	NVS2500	
LCD	2.4"Color TFT LCD: 320*240, 64K colors	
Video Preview	XDCAM MPEG2 4:2:0 AVC-Intra100/ AVC-Intra50/ DVCPROHD/ DVCPRO50/DVCPRO25 Ikegami MPEG2 4:2:2 / Convergent Design MPEG2 4:2:2 JVC MPEG2 4:2:0 HDV/ AVCHD (TBD. Octobel End)	
Preview Speed	3x, 15x, 30x	
Card Slots	SxS	ExpressCard/34 Compatible, Follows SxS Spec,
	CF	CF Type 1/2, Micro Drive
	3in1	SD/ SDHC/ MMC/ MMCPlus/ MemoryStick/ MS Pro-HG/ MS Pro MagicGate
Backup Speed (Avg.)	SxS: 80MB/sec CF: 26MB/s    SDHC: 20MB/s    MSPro: 10MB/s	
Battery	Internal: 3.7V 4600mA rechargeable Li-Poly battery (120 min) * Rechargeable by AC adapter, USB cable, FireWire 6-pin cable, and Ciger Jack charger External : Battery holder for recharging Internal battery with four standard AA cell batteries (40 min)	
AC Power Adapter	Input: 100-240V AC Output: 12V/1A DC	
Bus Power Operation	Operate with USB bus power or FireWire(IEEE1394) cable power	
Computer Interface	eSATA : 3.0Gbit/sec    USB2.0 : 480Mbit/sec FireWire(IEEE 1394) : 400 Mbit/sec	
File System Format	Internal hard drive : FAT32 Memory card (including SxS) : FAT12/16/32	
OS Compatibility	Windows VISTA/XP/2000/ME MAC OS 9.2 or above, Linux2.4.18 or above	
Dimensions	154mm * 91mm * 33mm (6.1inch * 3.6inch * 1.3inch)	
Weight	430g/15.1oz (with Hard drive)	
Contents	NVS2500 Main unit / USB cable / AC power adapter / Shock protection rubber jacket / Manual / eSATA Cable / FireWire cable / AA battery holder / Ciger Jack charger cable / P2 card adapter / QuickStartGuide	