

# Getting Started

Thank you for purchasing the HyperDrive SPACE Memory Card Backup Device. In your hand is the most advanced memory card backup and portable storage device with currently the world's fastest card backup and USB transfer speed, the longest battery performance in its class and a reliable system that can safely store and manage all your precious photos and digital content.

Please read this manual carefully before using the product to ensure proper operation.

Kindly inspect the contents of the package and contact your local dealer if there are any missing items or defects. Included in the package are the following items:

- HyperDrive SPACE Memory Card Backup Device**
- USB cable**
- AC power adapter**
- Car charger**
- Screwdriver**
- Instruction manual**
- Carrying case**

The HyperDrive SPACE is available both with and without an internal hard drive. Please check with your local dealer if your unit already comes installed with a hard drive. The HyperDrive requires a hard drive to operate.

Your local dealer may be able to help you to install the hard drive. You can also purchase and install your own hard drive, as recommended by your local dealer.

The information contained within this manual is correct at the time of printing. Due to continual improvements being made to our product, you are advised to visit our website or check with your local dealer for the latest information and updates.

# Safety Instructions

## **CAUTION!**

Using inappropriate batteries in the HyperDrive may prevent it from functioning normally and may even damage the product. Please use only the provided battery or batteries from HyperDrive authorized sources.

Please observe the correct polarity when inserting the battery. A wrongly inserted battery may prevent the HyperDrive from functioning normally. Serious damage may occur if the battery is short-circuited and may even result in fire.

Use only the provided AC adapter or car adapter. Use of other adapters or chargers with electrical ratings outside that of the HyperDrive operating requirements run the risk of electric shock, property damage or personal injury.

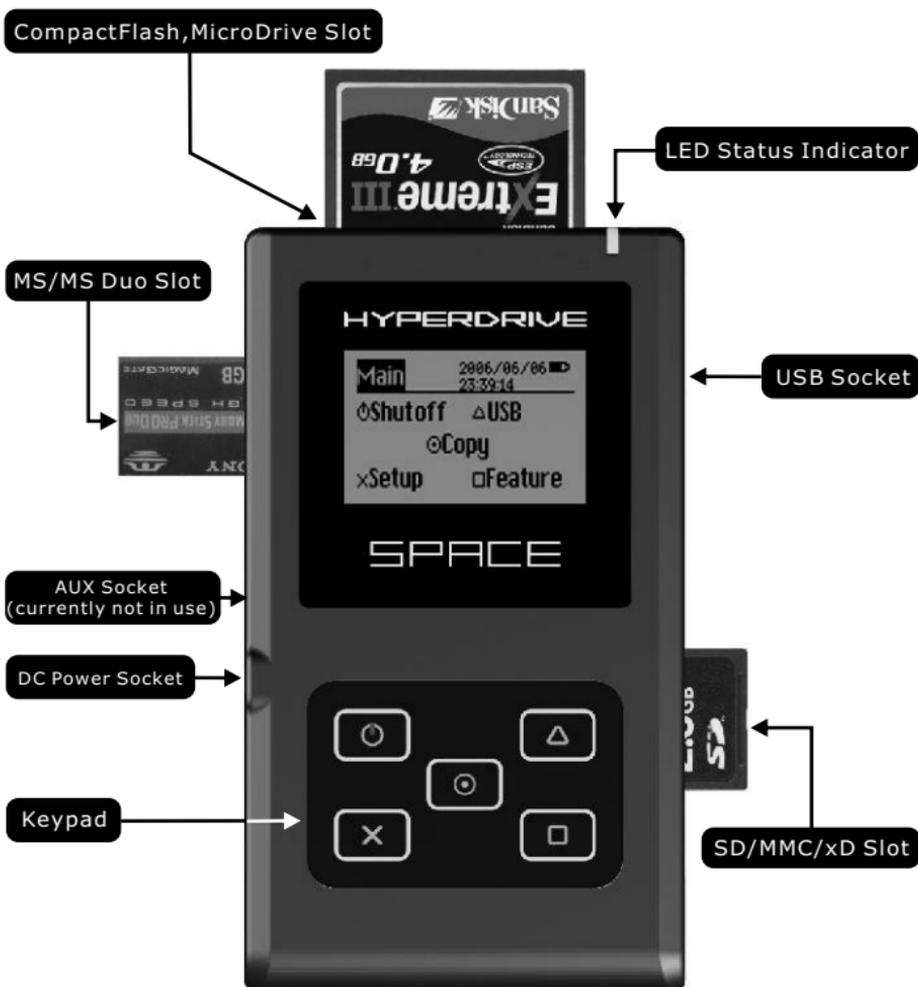
If the HyperDrive emits any burnt smell, excessive heat or smoke during battery charging, turn off the power supply immediately and contact your local dealer. Be careful when removing the battery as the battery may be very hot.

Do not operate the Hyperdrive in wet or moist environments and do not operate the HyperDrive with wet hands. If water enters the HyperDrive, immediately remove the batteries and return the HyperDrive to your local dealer for inspection. Do not use the unit as there is a danger of short-circuit resulting in fire.

# Table Of Contents

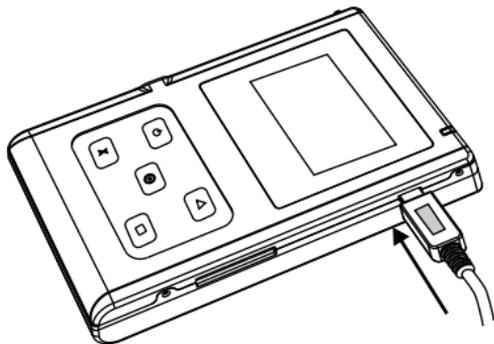
<b>Instructions</b>	1
<b>Basic</b>	
Battery Charging (via USB)	2
Battery Charging (via AC Power)	3
Turning on HyperDrive	4
Auto Start HyperDrive	4
Turning off HyperDrive	5
Formatting Hard Drive	6
Copy Memory Card to HyperDrive	7
Error Handling During Copy	8
<b>Setup</b>	
Date & Time	10
Folder Name	11
Backup Time Stamping	11
Transfer Speed	12
Verification	13
Hard Drive Mode	14
Startup	14
<b>Advance</b>	
Erase Memory Card	15
Restore Factory Settings	16
Check Remaining Hard Drive Space	16
Browse/Delete Files/Folder	17
Copy Files/Folders back to Memory Card	18
Connecting HyperDrive to Computer via USB	19
Safely Disconnecting HyperDrive from USB	20
Maximizing Memory Card Backup Speed	21
Hard Drive Installation/Replacement	22
Battery Installation/Replacement	23
<b>Specifications</b>	24

# Instructions

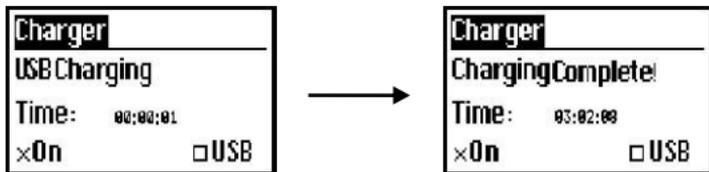


## Battery Charging (via USB)

Without turning on the HyperDrive, plug in the USB cable into the USB socket on the HyperDrive (as shown in diagram) and connect the other end to your computer or a compatible USB power source. When connected via USB, the HyperDrive will charged at 5V, 500mA.



You will see the following display screen when battery charging is in progress.

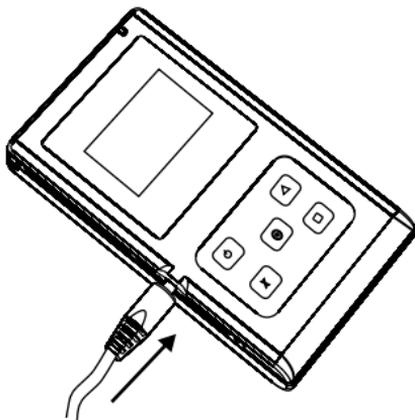


### Note:

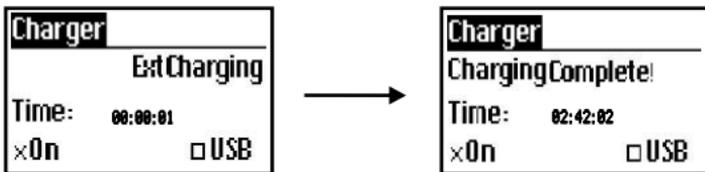
You can still charge the battery via USB when the unit is turned on, but you will not see the above battery charging display screen. Charging will automatically stop when the battery is full.

## Battery Charging (via AC power)

Without turning on the HyperDrive, plug in the AC adapter to the DC socket on the HyperDrive (as shown in diagram). When connected via DC, the HyperDrive will be charged at 5V, 1A.



You will see the following display screen when battery charging is in progress.

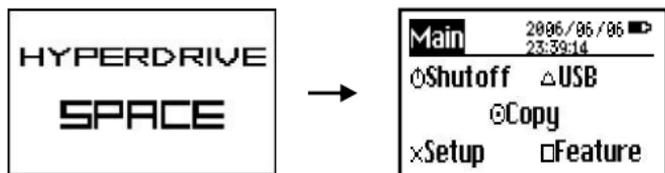


### Note:

You can still charge the battery via AC adapter when the unit is turned on, but you will not see the above battery charging display screen. Charging will automatically stop when the battery is full.

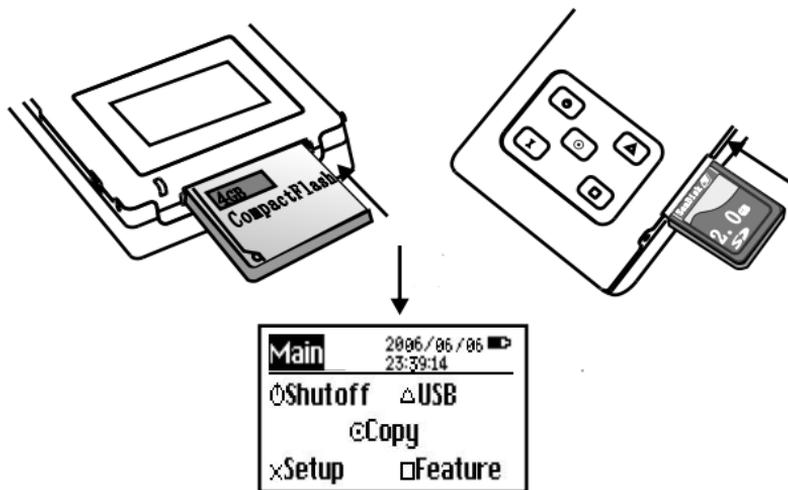
# Turning on HyperDrive

Press the  button for 1 second, You will see the following startup screen and then the Main Menu:



## Auto Start HyperDrive

When inserting any type of memory card or microdrive, the Hyperdrive will auto switch on.



### Note:

If the HyperDrive was turn on automatically by memory card insertion, removal of the memory card will also automatically turn off the HyperDrive.

# Turning off HyperDrive

From the Main Menu, press the  button to turn off the HyperDrive.

From any screen, you can also press the  button continuously for 5 s to turn off the HyperDrive.



**CAUTION!**

**Ensure that all memory cards are removed from the HyperDrive, otherwise the HyperDrive will not be able to shut down completely and will continue to consume a small amount of battery power. If the card remains in the unit, the battery may be exhausted in a week's time.**

# Formatting Hard Drive

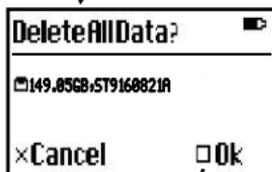
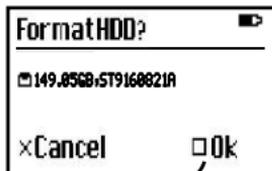
The HyperDrive can only operate with FAT32 formatted hard drive. If your hard disk is brand new or not in FAT32 format, you will need to follow the steps below to format the hard drive.



**CAUTION!**

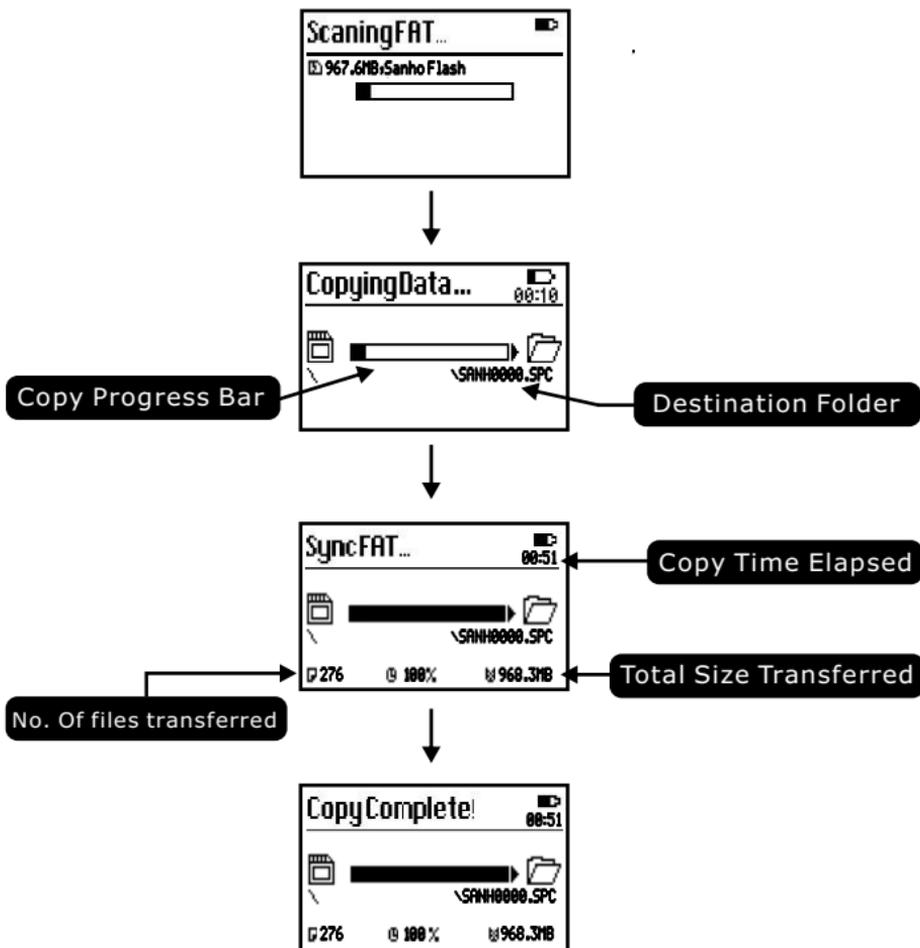
Formatting the hard drive will delete all the data on the hard drive including the partitions. Please ensure that the hard drive does not have any data that you may require.

Select **Feature->Advance->Format:**



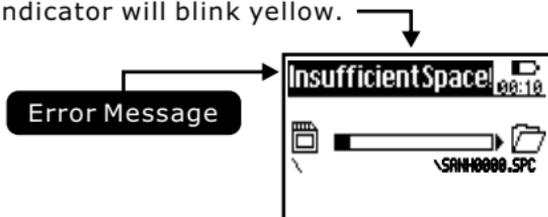
# Copy Memory Card to HyperDrive

Insert the memory card and on the Main Menu, select **Copy**:

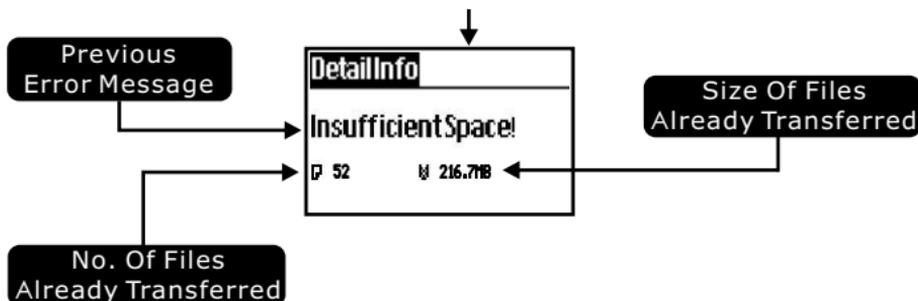


# Error Handling During Copy

If a critical error (e.g. insufficient hard drive space, low battery etc.) occurs during the memory card copy process, the HyperDrive will cease copying and display an error message. At the same time, the LED indicator will blink yellow.

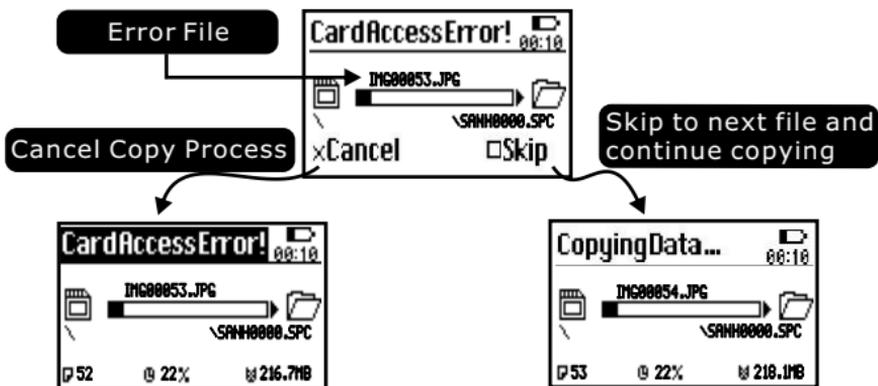


During then, you have 2 minutes to press  to clear the error message, otherwise the HyperDrive will shut down and the error message will appear again the next time you turn on the unit.



## Error Handling During Copy

If a non-critical error (e.g. file error or bad sector on the memory card) occurs, the HyperDrive will cease copy and allow you to either cancel the copy or skip to the next file. If you press  , the HyperDrive will skip the error file and continue to copy the rest of the memory card. As a safety precaution, the HyperDrive will also now copy at the most conservative (normal) speed to ensure maximum memory card compatibility and that all the files are safely retrieved.



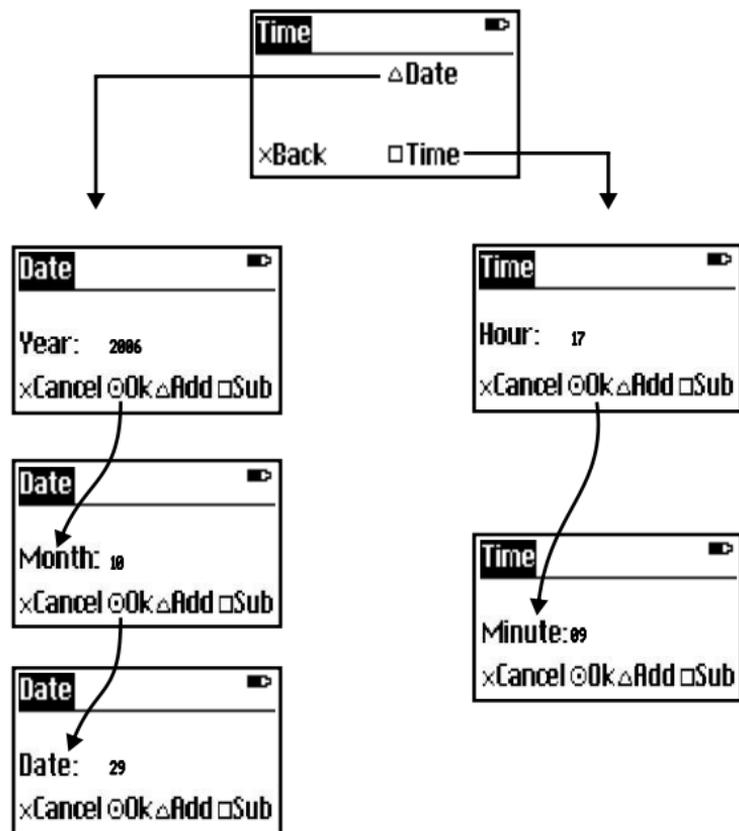
This is a very useful feature as it will allow you to retrieve the rest of the data on the memory card even if the memory card is defective or damaged.

**Do note that the error file may still show up on the HyperDrive hard drive but it will most likely be corrupted. The rest of the files will not be affected.**

# Date & Time Setup

You may set the date and time according to the following steps.

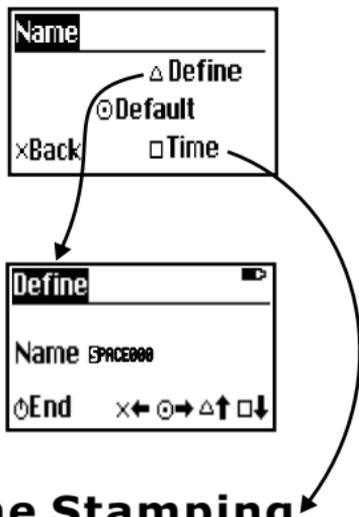
Select **Setup->System->Time**:



## Folder Name Setup

The HyperDrive will create a new folder in the root directory of the hard drive during each backup process. All the data from the memory card will be downloaded into this folder. By default, the new folders will be named SPACEXXX (where XXX will be a sequential number running from 000 to 999). Alternatively you can define your own 8 character folder name as per the following steps.

Select **Setup->Name:**

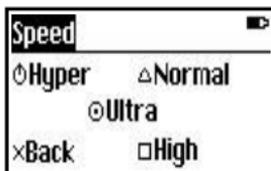


## Backup Time Stamping

HyperDrive is also able to name the folder according to the current time when the folder is created in the format of YYMMDDHH.mms (Year/Month/Day/Hour/minute/second)

# Transfer Speed Setup

Select **Setup->Speed**:



## **Hyper Speed:**

Designed for SanDisk Extreme III and Extreme IV CF cards, able to achieve the maximum transfer speed of 20MB/s.

## **Ultra Speed:**

Designed for professional series CF cards, able to achieve a maximum transfer speed of 16MB/s.

## **High Speed:**

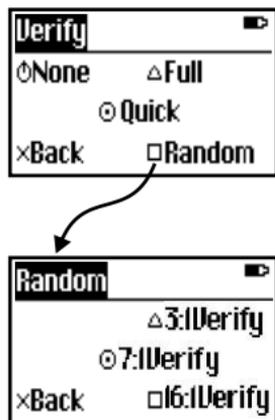
Designed for majority of CF cards, able to achieve a maximum transfer speed of 12MB/s.

## **Normal Speed:**

Suitable for all type of memory cards and guaranteed maximum compatibility.

# Verification Setup

Select **Setup->Verify**:



## Full Verification:

After each file copy, the file on the HyperDrive hard drive is compared bit by bit with the same file on the memory card to ensure that the data is identical and successfully transferred. This is the slowest but most accurate verification process.

## Quick verification:

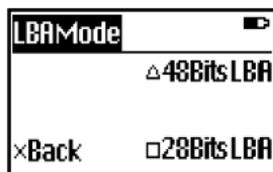
This is the fastest verification process as it only verifies 1 out of every 32 sectors of data.

## Random verification:

This process will carry out full verification on one out of several (3 or 7 or 16) files. By default, it will verify 1 out of every 7 files.

# Hard Drive Mode Setup

Select **Setup->System->LBAMode**:



## 48Bits LBA(Logical Block Address):

Select this for large hard drive (over 128GB) support. Do not use this mode for smaller hard drives (128GB & below) as they may perform slower and have compatibility issues.

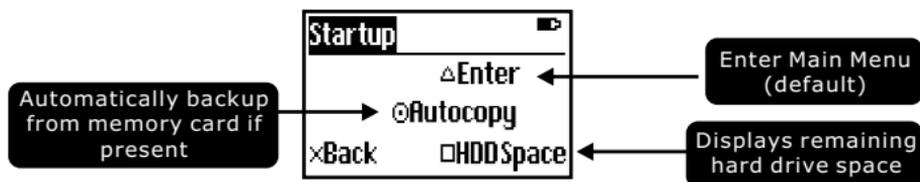
## 28Bits LBA:

Select this for smaller hard drive (128GB & below) support.

# Startup Setup

You can select the function that the HyperDrive automatically performs during startup (i.e. when it is turn on).

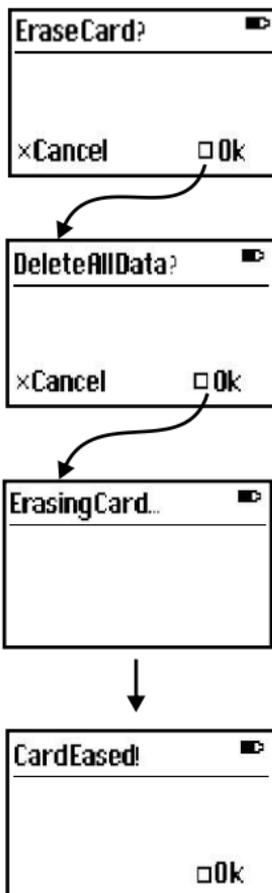
Select **Setup->System->Startup**:



# Erase Memory Card

This feature will erase/delete all the data that is on the memory card.

Select **Feature->Advance->Erase :**



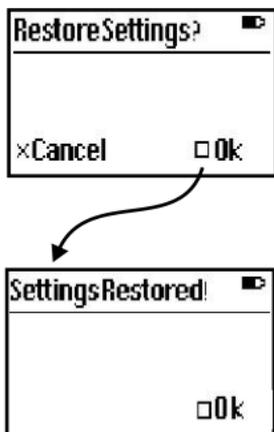
## Note:

The Hyperdrive is not able to delete any files from memory cards with FAT12 format.

## Restore Factory Settings

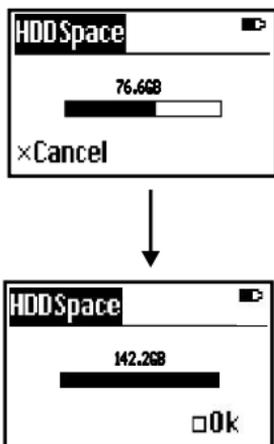
This function will restore the HyperDrive to factory settings.

Select **Feature->Advance->Reset**:



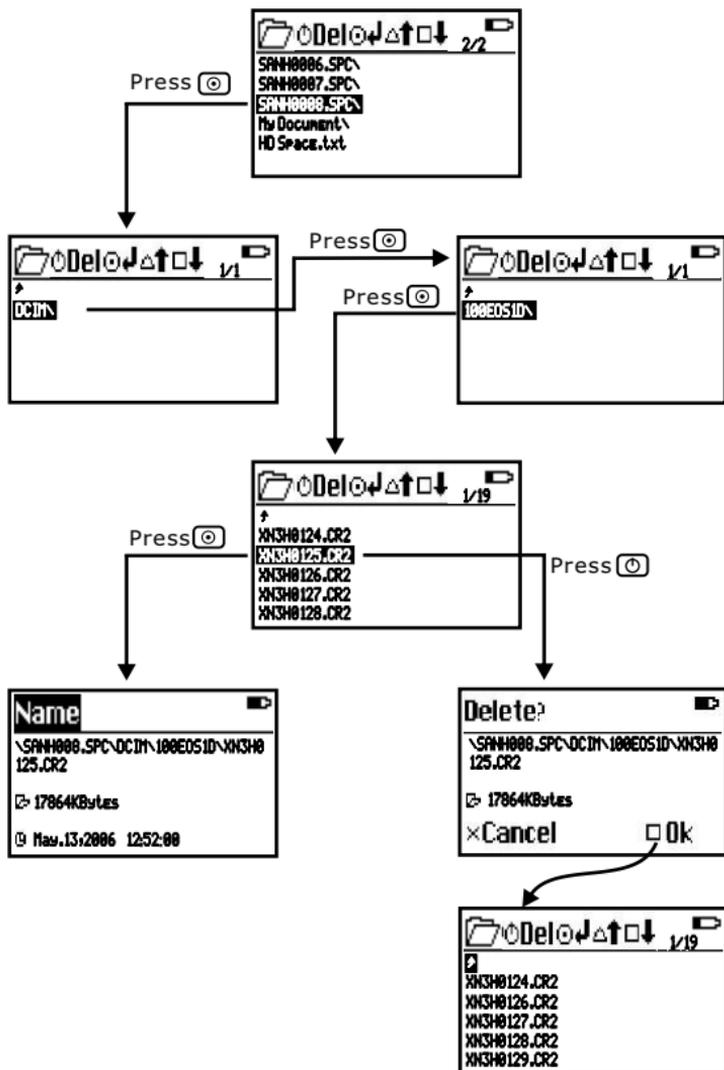
## Check Remaining Hard Drive Space

Select **Feature->Browser->HDDSpace**:



# Browse/Delete Files/Folders

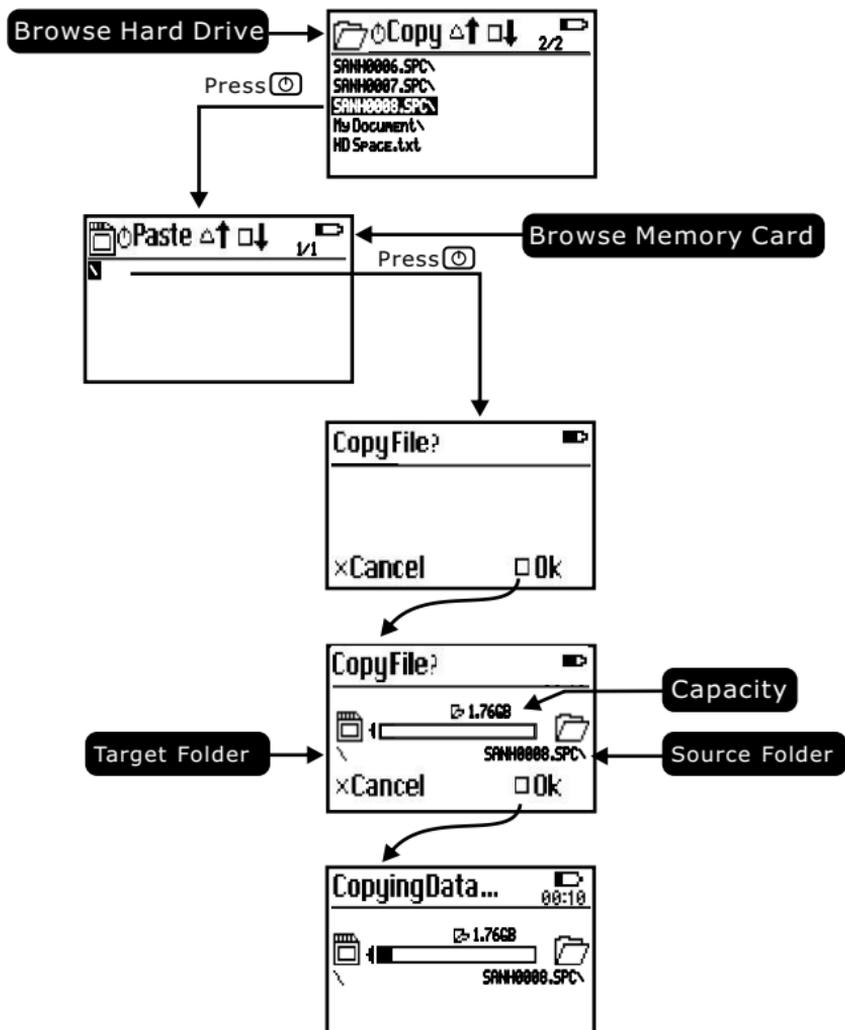
To browse Hard Drive, select **Feature->Browser->HDD**:



## Copy Files/Folders back to Memory Card

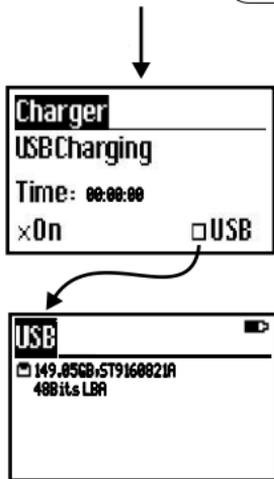
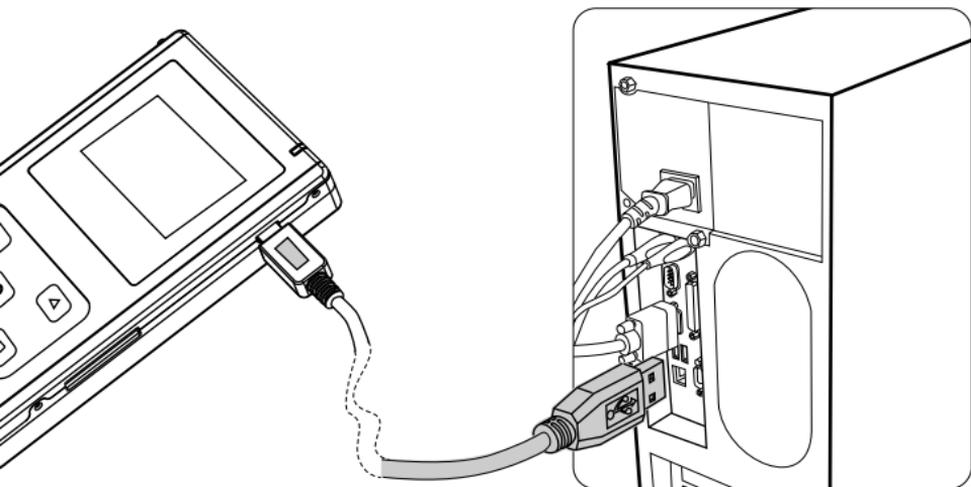
This feature allows the user to copy any file/folder from the HyperDrive hard drive to any folder on the memory card.

Select **Feature->ToCard**:



## Connecting HyperDrive to Computer via USB

Without turning on the HyperDrive, connect the USB cable to the HyperDrive and the computer USB port.



You can also turn on USB connection on the Main Menu. Select **Main->USB**.

## Safely Disconnecting HyperDrive from USB

You must safely disconnect the HyperDrive from the computer before removing the USB cable.

### On Windows:

Click "Safely remove hardware" icon and select "USB Mass Storage Device"



Disconnect the USB cable to turn off the HyperDrive.

### On Mac OS:

Drag the "Removable Drive" symbol to the "Trash Can" to eject the HyperDrive.



Disconnect the USB cable to turn off the HyperDrive.

# Maximizing Memory Card Backup Speed

The HyperDrive SPACE is capable of extremely fast memory card backup transfer speed. However there are many factors which may affect actual copy performance. You may wish to check the following points to improve copy performance:

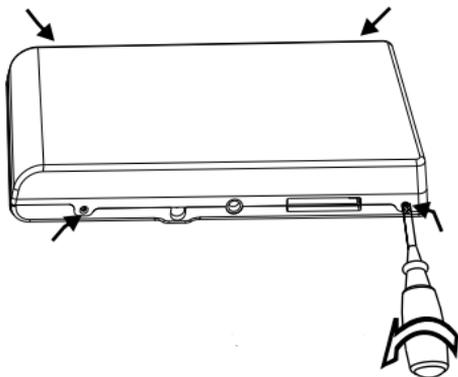
- A) Choose high speed memory cards designed for professional photographers. Normal speed memory cards cannot achieve high speed copy performance
- B) Use CompactFlash CF memory cards as far as possible. The CF card slot has a 16-bit data path to the HyperDrive which allow CF cards to copy faster than other types of memory cards. The HyperDrive SPACE is optimized for SanDisk Extreme III & IV CF cards.
- C) Format the memory card to FAT16 whenever possible. FAT16 formatted memory cards will have faster transfer speeds than FAT12 or FAT32 formatted memory cards.
- D) A hard drive with 8MB cache or more will achieve faster transfer speed. The cache size has a greater effect than the hard drive rotational speed. Hence a 4200rpm 8MB cache hard drive will perform better than a 5400rpm 2MB cache hard drive.
- E) Format the hard drive with the HyperDrive built-in formatter. This will improve copy performance especially for hard drives with smaller cache.
- F) The greater the number of files on the memory card, the slower the transfer speed. Some cameras when storing RAW files will create many small thumbnails. This will affect copy transfer speed.

# Hard Drive Installation / Replacement

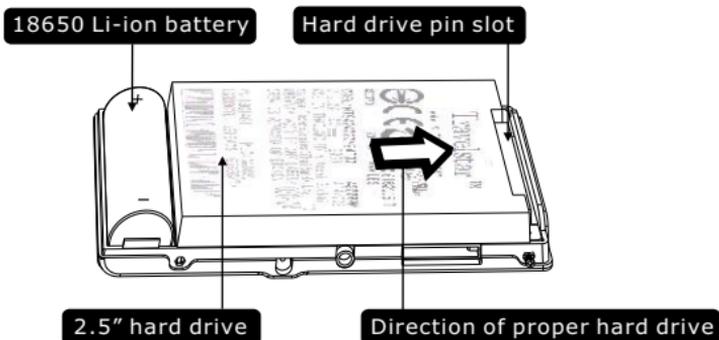
## Note:

Use this section only if the HyperDrive did not come with an installed hard drive or you are intending on changing or replacing the hard drive.

1. Remove the 4 screws and the back cover as shown in the diagram. Be careful not to lose the screws.



2. Install hard drive in the direction as shown in the diagram. Ensure that all the pins aligned properly with all the socket holes and the hard drive label is facing upwards.



3. Replace the back cover and 4 screws.

# Battery Installation / Replacement

## Note:

The battery is already installed on new units. Use this section if you are changing or replacing the battery.

Use only the 18650 Li-ion battery provided with the unit or from HyperDrive authorized sources. Other types of batteries may damage the Hyperdrive.



## CAUTION!

**If the battery is not installed in the correct direction according to its polarity (positive and negative ends), the HyperDrive will not be able to operate. Under certain circumstances, it may also damage the product. Please ensure that you identify the polarity of the battery correctly before installation.**

1. Remove the 4 screws and the back cover as per instructions in the previous page. Be careful not to lose the screws.
2. Install the 18650 Li-ion battery in the battery compartment. Please ensure that the battery is installed in the correct direction according to its polarity
3. Replace the back cover and 4 screws

## Note:

**Please turn on the HyperDrive after installing the battery to check if the unit will power up. If the unit does not power up, please remove the battery and check if there is any error in the installation.**

# Specifications

## Operating environment:

Temperature:	5 degree Celsius ~ 40 degree Celsius
Relative humidity:	8% ~ 90% non condensing
Temperature rate of change:	<20 degree Celsius/Hour

## Technical specifications:

Memory card slot:	First slot: CF Type I & II, MicroDrive Second slot: SD, MMC, xD Third slot: MS, MS Pro, MS Duo/Pro
Hard Drive Capacity:	5.0V (+/-5%) 1A power supply 44Pin 2.5" IDE/PATA/ATA-6 Support 48bits LBA mode
Computer Interface:	USB2.0 High Speed/Full Speed, USB1.0 Compatible
Data transfer modes:	Transfer from memory card to hard disk (stand-alone) Transfer from hard disk to memory card (stand-alone) From hard disk to computer (via USB)
Data transfer speed:	Stand alone mode sustained rate: 20MBytes/S USB 2.0 sustained transfer rate: 28Mbytes/S (based on internal testing)
LCD Display:	1.8" monochromatic LCD with EL Backlight
Operation controls:	5 Buttons
Battery :	Internal 18650 Li-ion battery (3.7V 2200mAh)
Battery autonomy:	Up to approximately 100GB of data transfer (based on internal testing)
Built-In battery charger:	Intelligent quick charger, Charging current 500mA ~ 1000mA (+/- 10%)
Dimension:	127mm x 73mm x 20mm (5" x 2.87" x 0.79")