

Getting Started

Thank you for purchasing the CompactDrive Portable Storage Device PD70X. In your hand is one of the most advanced portable storage device, with currently the fastest transfer speed in the world, ultra efficient battery management system giving you the longest battery performance not seen in any similar device and a reliable operating system that ensures that all our precious photos and data are safely stored in the CompactDrive PD70X. All these excellent features are all packed in a sturdy and lightweight aluminum casing that can withstand some of the hardest knocks.

Please read this manual carefully to ensure proper operation.

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

- PD70X Portable Storage Device**
- USB cable**
- AC adapter**
- Screwdriver**
- Instruction manual**
- Carrying case**

Please ensure that the hard disk and batteries purchased are of appropriate capacities to suit your needs. Your dealer will be able to provide you with the correct hard disk and batteries or you may wish to purchase these items yourself.



Due to differences in retailer bundles, the PD70X you bought may already include a hard disk or batteries.

The information contained in this handbook is correct at the time of printing. Due to continued improvements to our product, please refer to our website for the most recent information or check with your dealer.

Safety Information

WARNING

Using inappropriate batteries in the CompactDrive may prevent it from functioning normally or even result in damage. Please refer to the instructions within to determine the correct type of batteries for use.

Please observe the correct polarity when installing the batteries. Wrongly inserted batteries may prevent the CompactDrive from functioning normally. Serious damage may occur if the batteries are short-circuited and may even result in fire.

Use only the provided AC adaptor or car adaptor (optional). Use of other adaptors or chargers with electrical ratings outside of the CompactDrive operating current and voltage requirements runs the risk of electric shock, property damage or personal injury.

Do not disassemble the CompactDrive other than for the purpose of installing the hard disk. Contact with high voltage circuits may result in electric shock. If the battery compartment exterior is damaged, please shut off the input power source and cease using the CompactDrive immediately.

Avoid leaving the batteries charging in the CompactDrive for more than 24 hours. If the CompactDrive emits any strange sounds or smell, abnormally high heat or smoke, immediately cut off the power and remove the batteries. Take care while removing the batteries so as not to get burnt.

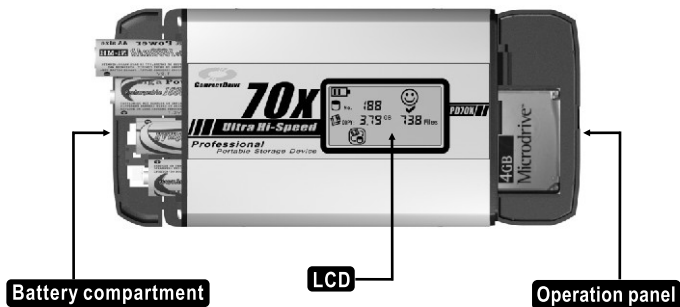
Do not use the CompactDrive in moist environments. Also please do not handle the CompactDrive with wet hands. If water enters the CompactDrive, immediately take out the batteries and return the CompactDrive to your dealer for inspection. If the CompactDrive is corroded by liquid there is a danger of short-circuit resulting in a fire.

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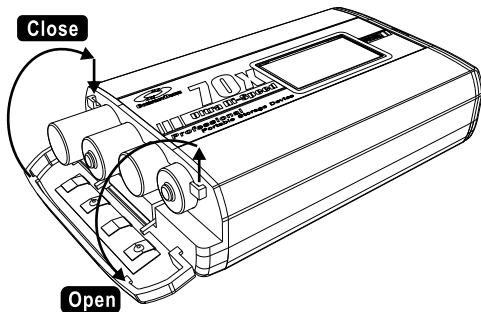
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Introducing the CompactDrive

Front View:

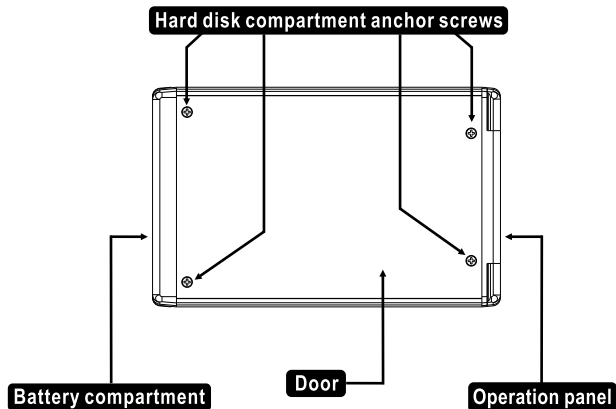


Battery compartment:

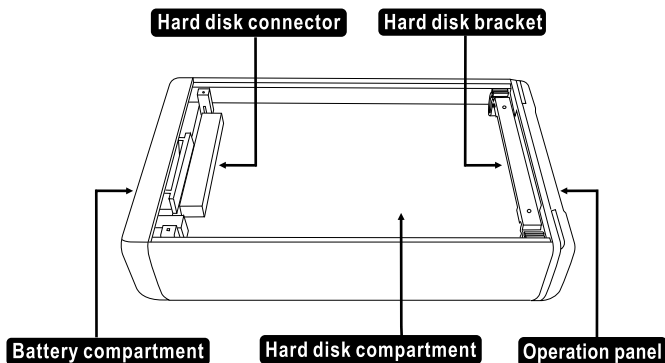


Please refer to the arrow directions in the diagram to open/close the battery compartment.

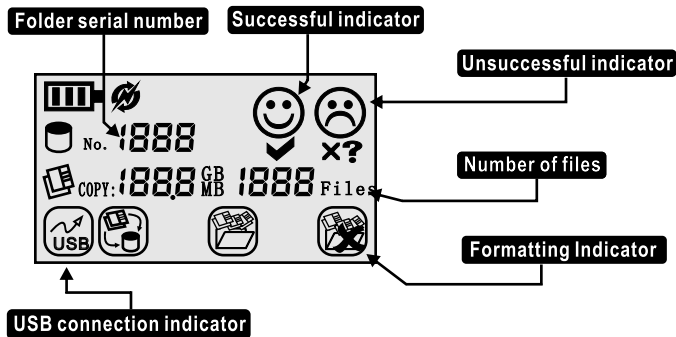
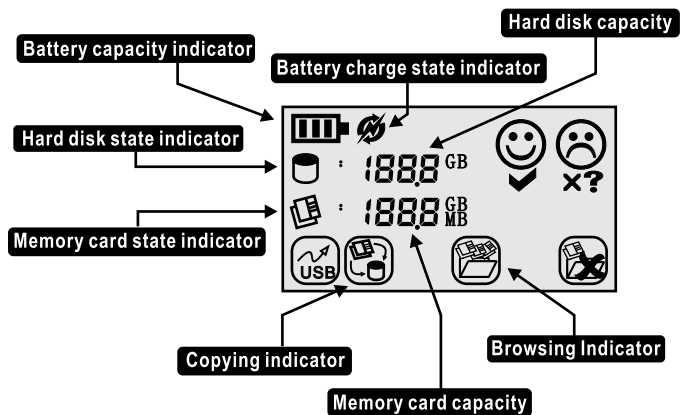
Hard disk compartment:



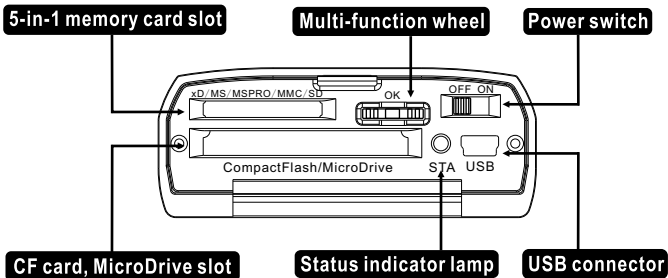
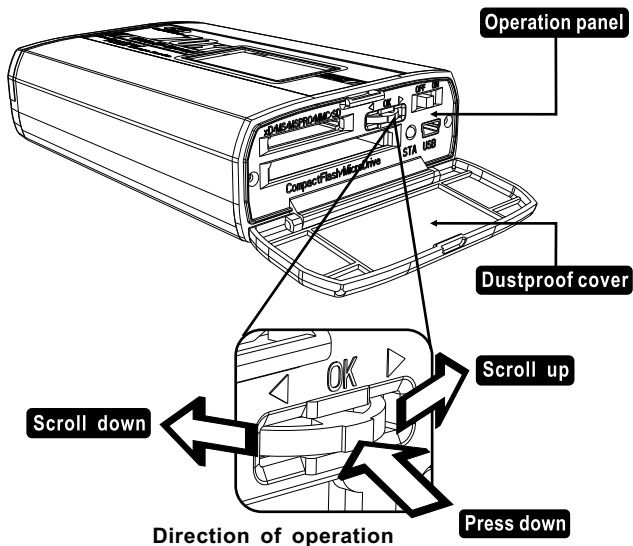
The hard disk compartment is located on the back of CompactDrive. The compartment door can be opened by removing the screws.



Liquid crystal display:



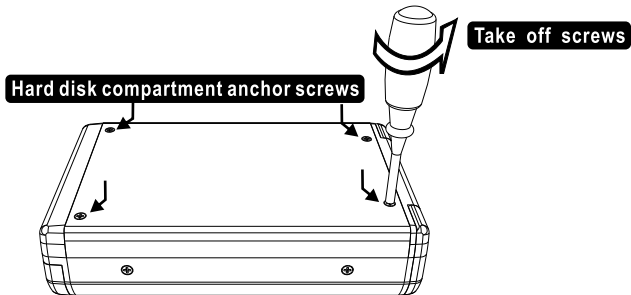
Operation panel:



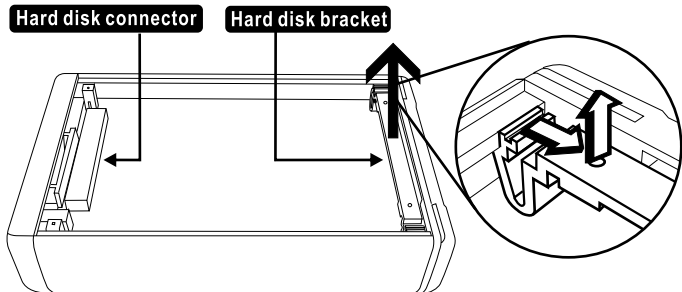
Preparing the CompactDrive for use

Hard disk installation

Remove the four screws from the hard disk compartment according to the diagram. Pay attention not to lose them.



Remove the hard disk bracket according to the diagram.

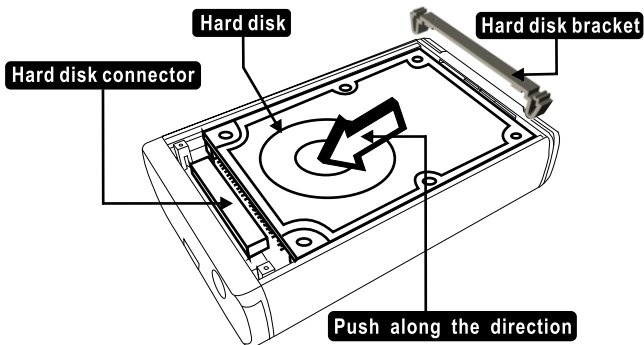


Hard disk installation

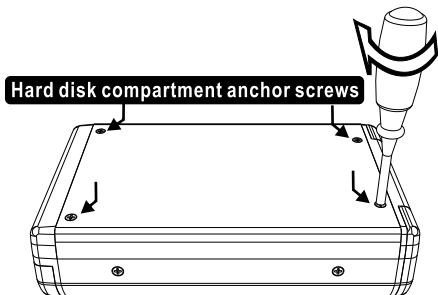
The hard disk must be less than 10mm in thickness, 44 pins IDE, 2.5 inch hard disk, 5V (+/- 5%) power supply

Before installing the hard disk, please ensure that it is set to "Master".

Please refer to the arrow direction in the diagram to install the hard disk. After the hard disk is inserted into the connector, replace the hard disk bracket back into the compartment.



Close the hard disk compartment and tighten the four screws.

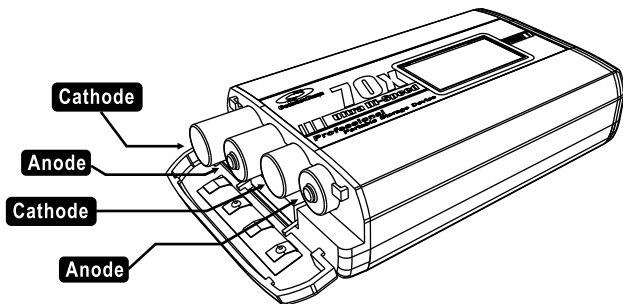


Battery installation

Please use AA size Ni-MH (recommended) batteries. Using other types of batteries may result in damage to the CompactDrive.

Please do not mix batteries of different types (e.g. alkaline with rechargeable nickel metal-hydride) or capacities in the compartment. Doing so may cause the CompactDrive to malfunction.

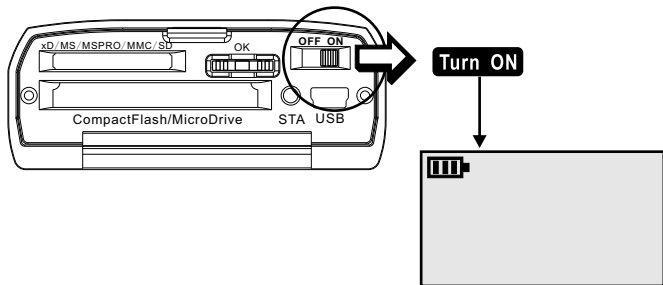
Refer to the diagram below to ensure that the batteries are inserted in the correct polarity. Batteries inserted in the wrong polarity for long periods of time may cause the CompactDrive to malfunction or even damage the CompactDrive.







After inserting the batteries, turn on the CompactDrive to ensure that it is working properly. If the CompactDrive fails to work, take out the battery immediately and inspect the batteries for any defects.

Checking battery capacity

After the batteries are inserted, turn on the power switch as shown in the diagram, the CompactDrive will now display the battery power level in the upper left-hand corner of the LCD screen.



The battery level display is based on the actual voltage of the battery:

-  When the battery voltage is higher than 4.8V, the display shows full power
-  When the battery voltage is higher than 4.6V, the display shows 2/3 power
-  When the battery voltage is higher than 4.4V, the display shows 1/3 power
-  When the battery voltage is lower than 4.4V, the display shows 0/3 power

When the battery level display shows 0/3 power, you should replace with new batteries. If the battery voltage is below 4.2V, the CompactDrive cannot continue operation and will power down.

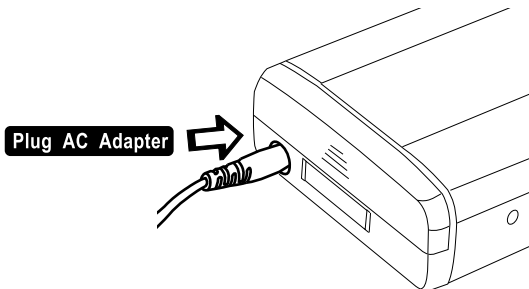
Although the actual voltage of the batteries fluctuates according to remaining battery power, regulators inside the CompactDrive ensure that a constant voltage is supplied to the internal circuitry and to the hard disk.

The normal operating voltage of Ni-MH batteries is 4.6V-4.8V. Hence for most of the time, CompactDrive will appear at only 2/3 power. It is normal for fully charged batteries to show 2/3 instead of full power.

When you use MicroDrives, the battery voltage will typically drop by 0.2V. Hence power levels displayed and battery operating times are also reduced. If you must use MicroDrives, please prepare enough batteries for extended operation.

Using external power supply

Ensure that the power switch is in the "OFF" position before connecting to the AC adapter or car charger.



When on external power, if batteries are inserted in the CompactDrive at the same time, it will draw power from both external power and batteries. If you do not want to drain the batteries, please remove them before connecting the external power supply.

As the USB cable is not able to supply enough power by itself to power the CompactDrive, please use either the external power supply or batteries for operation.

When on external power, if no batteries are inserted in the CompactDrive, it will not display the battery power symbol.



Use only the provided AC adapter or car adapter (optional). The adapter used must be within the prescribed input voltage. Use of other adapters or chargers with voltage exceeding the allowable limit runs the risk of electric shock, property damage or personal injury.

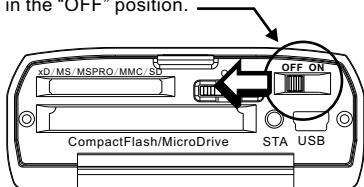
Charging batteries

Insert AA sized Ni-MH rechargeable batteries into the CompactDrive.

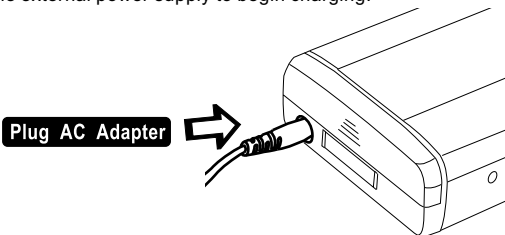


Do not attempt to charge any batteries other than AA size Ni-MH rechargeable batteries. Doing so may cause damage to the CompactDrive and the batteries

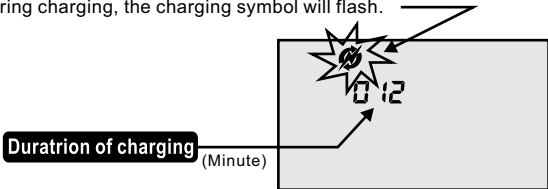
Ensure the CompactDrive is in the "OFF" position.



Connect the external power supply to begin charging.



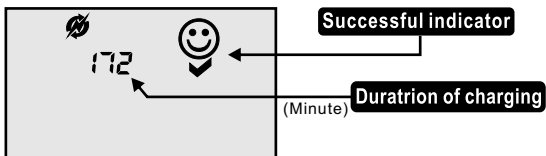
During charging, the charging symbol will flash.



Switching on the CompactDrive while the external power supply is still connected will stop the charging process immediately.

Charging batteries

After the charging is completed, the charging symbol will stop flashing and the “Successful indicator” symbol will be displayed.



The built-in AA battery charger is an intelligent high-speed charger. When one of the following conditions are satisfied, charging will end:

- 1, Detected battery voltage no longer continues to increase and begins to drop (delta-V).
- 2, Detected battery voltage exceeds 6.29V.
- 3, Charging has exceeded 4 hours.

After the batteries are fully charged, temperatures naturally will be high. We recommend you set the unit aside for a short while before using it.



Ni-MH batteries even when not in use will self-discharge. If not used after several days the power level will gradually drop. Different batteries will self-discharge at different rates. Therefore we recommend only charging batteries just before use. Charging batteries way ahead of time will not allow them to perform to their maximum capacity.

After the charging process is completed, you must remove the external power supply to exit the charging state.

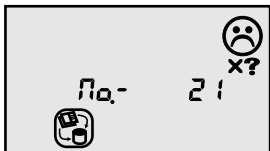
Charging batteries

WARNING

When charging conditions are not met, the CompactDrive will stop charging and display an error message. You should shut down the external power supply immediately and remove the batteries. The batteries may be very hot. Please take care when removing the batteries to avoid burning yourself.

The CompactDrive may display the following error messages while charging:

No.-21: External power supply output voltage is wrong. Please shut down external power supply immediately and replace with an appropriate external power supply adapter.



No.-22: The battery detected cannot be charged or cannot be used. Kindly remove and replace with appropriate batteries.

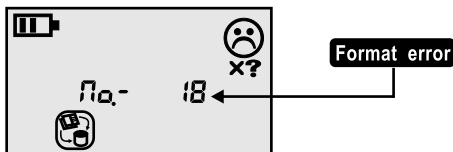


Some batteries should only be recharged with their own specialized charger. Kindly check your battery usage instructions.

Formatting the hard disk

The CompactDrive utilizes the FAT32 file system for the hard disk. Before copying your memory card ensure that the hard disk is formatted to the correct file system.

If your hard disk has not been formatted or is not in FAT32 format, the screen will display error No.-18 when the CompactDrive is turned on.



At this time you may choose to turn off the unit or format the hard disk.



Error No.-18 only indicates that the hard disk format is not compatible with the CompactDrive. It does not necessarily mean that the hard disk is not formatted. Therefore before carrying out the formatting operation, please ensure that you do not have any important data on the hard disk.



WARNING

The hard disk formatting operation will delete all data on the hard disk. If the hard disk contains multiple partitions, all partitions will be deleted.

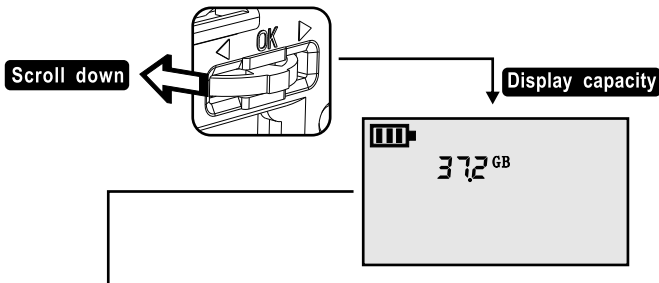


WARNING

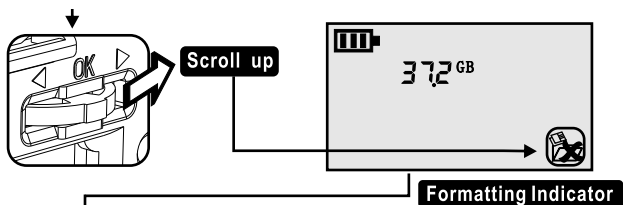
If error No.-18 is displayed and the hard disk contains important data, turn off the power immediately and remove the hard disk. Put the hard disk into a computer and backup the data before proceeding further. Then re-install the hard disk into the CompactDrive to complete the formatting operation.

Formatting the hard disk

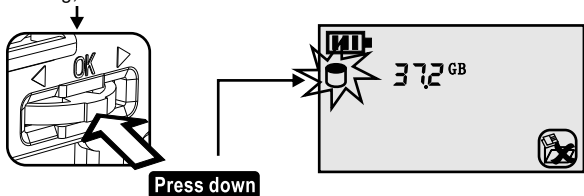
When Error No.-18 is displayed, scroll the multi-function wheel downwards once to display the hard disk maximum capacity.



When the maximum capacity is displayed scroll the multi-function wheel upwards once, the screen will display the 'Formatting indicator' icon.

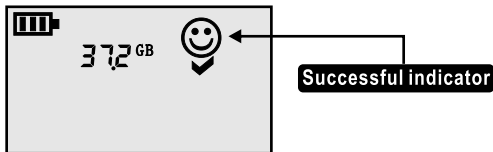


When the 'Formatting indicator' icon is displayed, press down the multi-function wheel to start the formatting operation. While the hard disk is formatting, the "Hard disk state indicator" icon will flash.



Formatting the hard disk

After the hard disk successfully formatted, the 'Successful indicator' icon will be displayed. At this point in time, we may switch off the unit.



The displayed hard disk capacity may not tally with the manufacturer's stated capacity. This is because the CompactDrive capacity is based on 1GB=1024MB and 1MB=1024KB whereas manufacturers go by 1GB=1000MB and 1MB=1000KB. Therefore a 40GB hard disk would actually have 37.2GB available space.



The above three operations must be performed in the correct sequence to start the hard disk formatting. Otherwise the hard disk formatting will not be able to proceed.

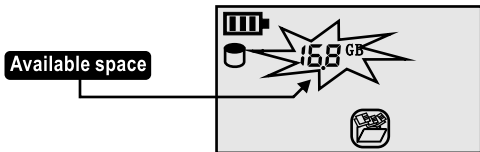
Checking hard disk capacity

Ensure that the memory card is not in the memory card slot.

Load the batteries or connect the external power supply.

Turn on the CompactDrive.

The CompactDrive will start to calculate the available hard disk space. At this time the hard disk space on the LCD screen will continue to increase.



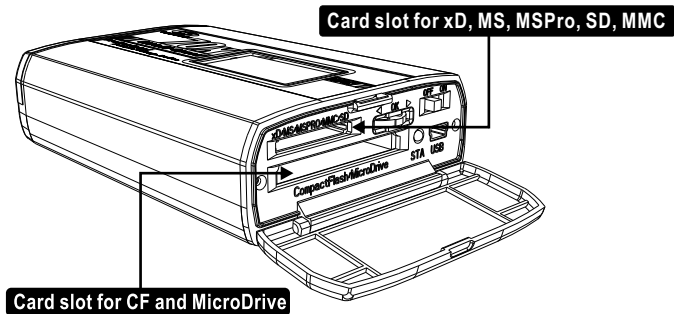
When the hard disk space stops increasing, the displayed capacity is the available hard disk space. You may switch off the power at this time.



The CompactDrive only uses the contiguous hard disk space to store data from the memory card. Even if there is a lot of available space, sometimes you may be unable to copy the memory card. This is because the available space is too fragmented. In this situation you may use the Defragment software provided with the Windows operating system or similar Mac software or you may re-format hard disk. We recommend that you format or defragment the hard disk before any important trips or activities to ensure maximum available hard disk space.

Inserting the memory card

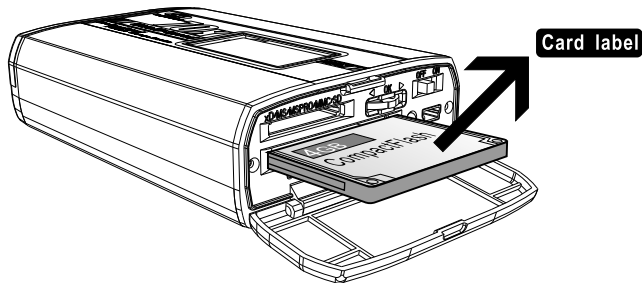
The CompactDrive has two memory card slots located on the operation panel.



Use the appropriate slot depending on the memory card to be copied. The upper slot is compatible with SD, MMC, MS, MS Pro and xD cards. The lower slot is for CF Type I/II cards as well as MicroDrives.

Inserting the memory card

When inserting the memory card please ensure that the card label faces upwards. Insert gently according to the memory card slot track.



Do not use excessive force or else the memory card and card slot may be damaged.



As the CF slot is not very deep. Please take care to insert the card so as to avoid slot damage.

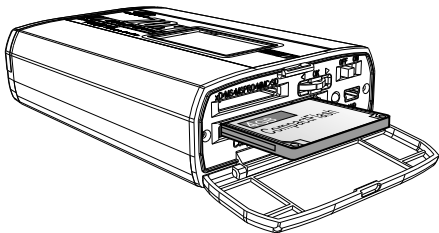
WARNING

If while inserting the memory card you encounter resistance, do not try to force in the card. Kindly take out the memory card and inspect the slot and card for any foreign matter, or if the memory card contact pins are bent.

Copying memory card to CompactDrive

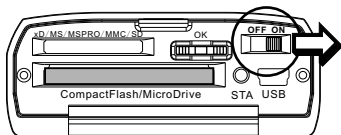
Insert the memory card

You must insert the memory card into the CompactDrive, ensuring that it is inserted properly into the CompactDrive.



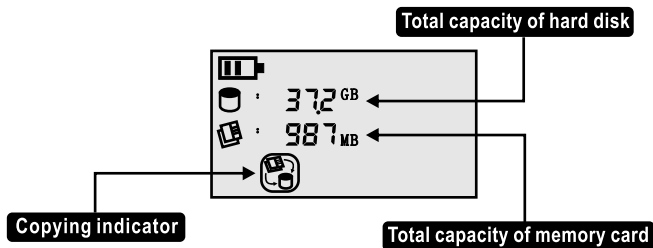
Switch on the power supply

Before turning on the CompactDrive, ensure that the batteries are inserted or the CompactDrive is connected to an external power supply.



Copy in progress

The CompactDrive will first display the 'Copying indicator' icon as well as examining the memory card capacity and hard disk total capacity:



The memory card and hard disk capacity displayed is the total capacity, not the amount of capacity in use.



The displayed memory card capacity may not tally with the manufacturers stated capacity. The CompactDrive display is based on 1GB=1024MB, 1MB=1024KB. Therefore a memory card with 128MB capacity will actually display as 122MB.

Copy in progress

When the total card capacity is displayed, press the multi-function wheel to start copying the memory card.



Press down



If you do not press the multi-function wheel within 30 seconds, the CompactDrive will enter power saving mode. If you need to resume operation you must switch the CompactDrive off and on again.

Every time the CompactDrive makes a copy of a card, it will create a new folder on the hard disk. The folders are labeled 'CARDnnnn.UHS' where 'nnnn' is a 4 digit serial number. You may wish to note this serial number for future reference.

Serial number of folder



If the memory card folder serial number exceeds 1,999 it may not be displayed correctly, however the copying process will still continue.

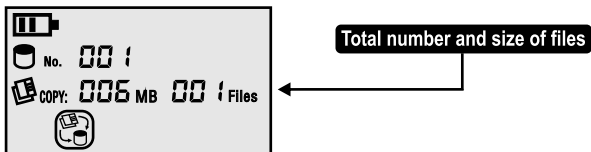
Copying indicator



Before the CompactDrive displays the folder serial numbers it may take some time to search the hard disk to determine the location of free space. Depending on your hard disk capacity this may take 1 to 30 seconds.

Copy in progress

When copying starts, the hard disk symbol as well as the memory card symbol will flash. As it copies it will display in realtime the total number and size of the files that have successfully been copied.



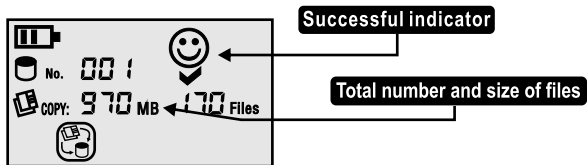
The CompactDrive will only update the LCD display after a file has been successfully copied. Therefore, the status of files which are very large will not be updated immediately.



The maximum number the CompactDrive can display is 1,999. When it exceeds 1,999 the display may show "----". However it will still continue copying and does not affect the data integrity of the copy in any way.

Successful copy

After the memory card copy is completed the CompactDrive will display the 'Successful indicator' icon as well as the total capacity and number of files copied.



This display will appear for 30 seconds after which the 'Copying indicator' icon disappears. At this time the CompactDrive has entered power saving mode and users must first switch off and on the power to continue operation.

Copying another memory card

If you need to immediately copy in another memory card, take out the current memory card and insert another memory card. Press the multi-function wheel within 30 seconds after the copy completion of the previous memory card. The CompactDrive will re-examine the card and display the new card capacity. Press the multi-function wheel once more to start the copy process of the new memory card.



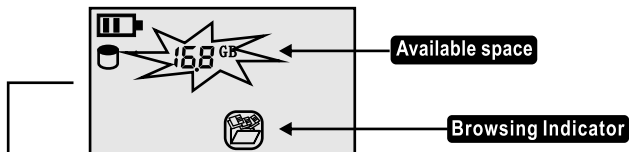
If the current card copy completes and the multi-function wheel is not pressed within 30 seconds, the CompactDrive will enter into power saving mode and will not copy the new memory card. (The 'copying indicator' icon will disappear from the LCD screen).

Checking the backup folder file quantity and capacity

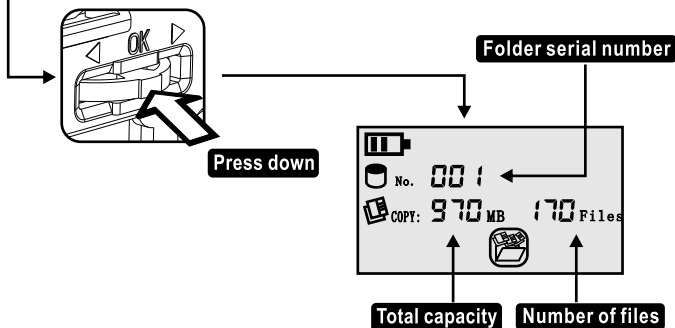
The CompactDrive has a simple built-in browser to check the copied files and folders without the need to connect to a computer.

Before carrying out this operation please ensure that there are no memory cards inserted in the card slot. Turn on the CompactDrive.

The CompactDrive will first check the available space on the hard disk.

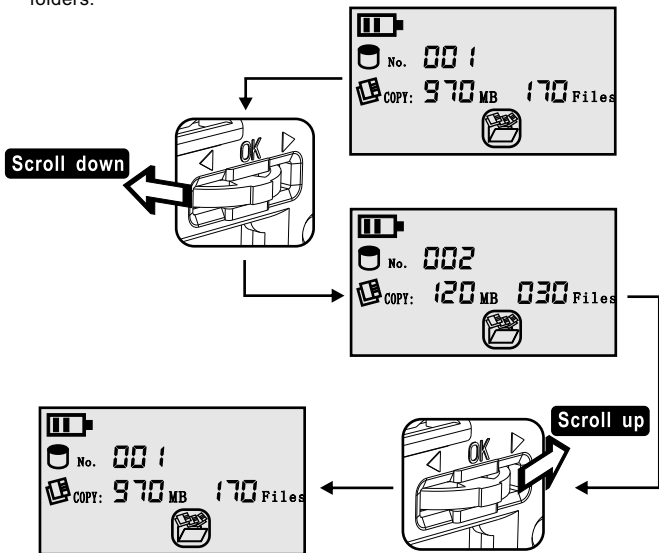


Press the multi-function wheel and the CompactDrive will display the first memory card folder serial number, number of files and total capacity.



Checking the backup folder file quantity and capacity

Move the multi-function wheel upwards or downwards to navigate between folders.



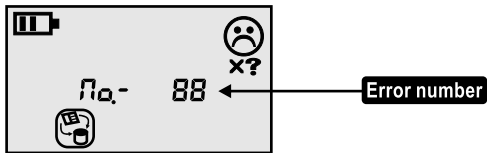
If you are presently in the last memory card folder, moving the multi function-wheel downwards will exit browsing mode. If you are in the first folder, moving the multi-function wheel upwards will also similarly exit browsing mode.



When browsing the memory card folders, pressing the multi-function wheel will exit browsing mode. If 30 seconds pass without any user input, the CompactDrive will automatically enter into power saving mode. You will need to turn off and on the CompactDrive to continue operation.

Common error messages and solutions

On the rare occasion, users may encounter errors and an error number will appear on the LCD screen. Please refer to the following table for explanations on these errors and how to resolve them.



When any error occurs, the red indicator lamp on the operation panel will turn on. The CompactDrive will not enter power saving mode until you turn the unit off.

No. -20 Insufficient battery power

Solution: The battery power has been exhausted. Please replace the batteries or use the external power supply.

No. -13 Insufficient contiguous space on the hard disk available to copy data.

Solution: The CompactDrive uses contiguous hard disk space to store data from the memory card. If the hard disk space is exhausted or is very fragmented, it may cause the memory card backup to fail. Format the hard disk or delete some files to free up space. If the hard disk has adequate free space but is too fragmented, please use the Defragment tool under the Windows operating system or similar software to clean up the fragmentation.

No. -18 Incorrect hard disk format.

Solution: The CompactDrive uses the FAT32 file system for the hard disk. Please refer to the section on hard disk formatting.

No. -09 The memory card folder structure nesting is too complex.

Solution: The CompactDrive is mainly for storing data from digital camera memory cards. If you need to copy memory cards used in other devices, please check that the folders do not contain more than 250 sub-folders. If it exceeds this limit, the CompactDrive will not be able to copy. Windows OS on PC has a similar limit of 256 sub-folders

Common error messages and solutions

<p>No.-10 Appears when the CompactDrive encounters an I/O error, some No.-11 files may not have been transferred to the hard disk correctly. No.-12 Solution: Switch off the power and re-insert the memory card again. If this does not resolve the problem, test the CompactDrive using another memory card. The CompactDrive may not be compatible with your memory card.</p>
<p>No.-16 The memory card format is unrecognizable. Solution: The CompactDrive can only read FAT12/16/32 file systems. Please ensure that the memory card has been formatted in the digital camera.</p>
<p>No.-14 Too many files or folders in the memory card. Solution: When the number of files per folder in the memory card exceeds 2,000, memory card backup may fail. Please reduce the number of documents in a folder.</p>
<p>No.-19 Cannot detect hard disk. Solution: The CompactDrive requires a hard disk to operate. If a hard disk has already been installed, please inspect the hard disk to see whether it is installed correctly and whether the batteries have sufficient power.</p>

Viewing files through a computer

System requirements

The CompactDrive is compatible with the majority of personal computer systems.

Windows based computers:

Computers with USB ports running WindowsME, 2000 and XP do not require any additional drivers. Windows98 Second Edition users may need to install additional drivers.

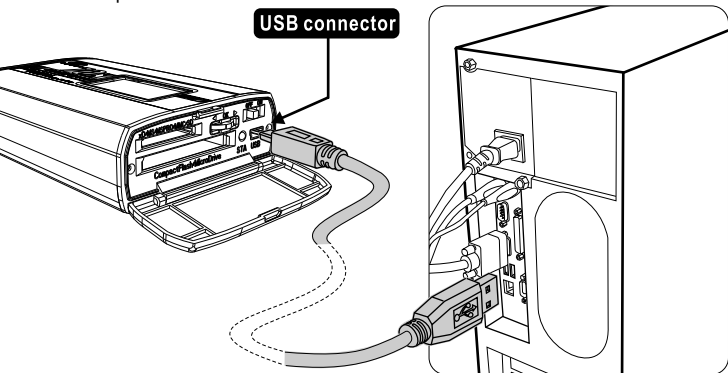
Mac OS based computers:

Computers with USB ports and Mac OS 9.X, 10.X operating systems.

Connecting to a computer via USB cable

Ensure that the CompactDrive is turned off.

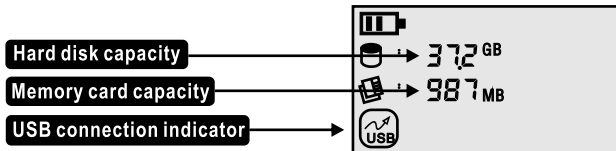
Insert the USB cable into the appropriate ports on the CompactDrive and computer.



Please use only the USB ports located at the back of the computer. Do not use USB extension cables or USB hubs, otherwise the computer may not be able to detect the CompactDrive properly.

Turn on the CompactDrive and after a few seconds the LCD display on the CompactDrive will display the total hard disk capacity. If a card is also inserted into the CompactDrive, it will display the capacity of the memory card.

When the computer connects to the CompactDrive, the LCD display on the CompactDrive will show the USB connection symbol.



Using the CompactDrive as a card reader

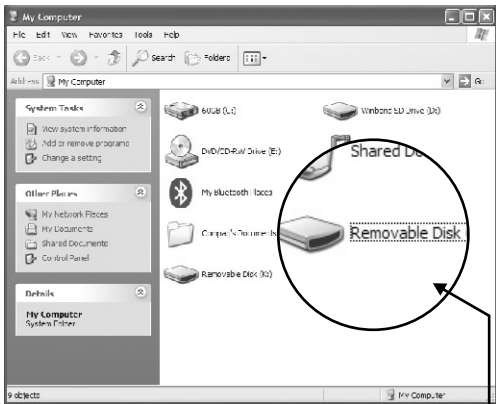
The CompactDrive can also be used as a card reader. If you need to use this function, you will need to insert the card into the slot before you turn on the CompactDrive. Only one slot can be used at a time. If two cards are inserted at the same time, only the CF slot will be recognized.



This function is only for copying data from the memory card to the computer and vice versa. Some memory cards cannot be formatted in the card reader. To ensure maximum card compatibility, please format the memory card in your camera.

Windows operation

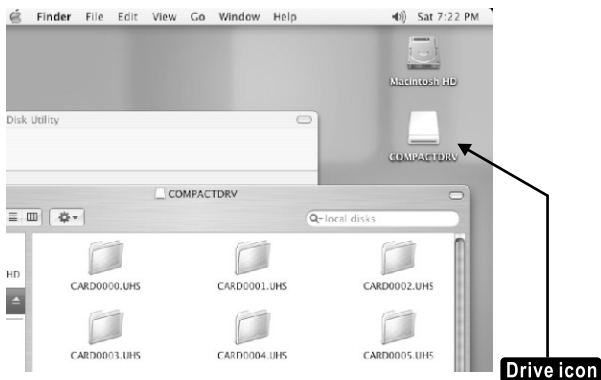
When Windows detects the CompactDrive it will appear as a new removable disk in 'My Computer'. You may then access the CompactDrive like an ordinary removable disk.



Removable disk

Mac OS operation

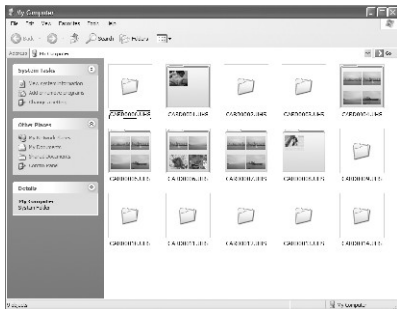
On Mac OS computers, a new drive icon will appear on the desktop



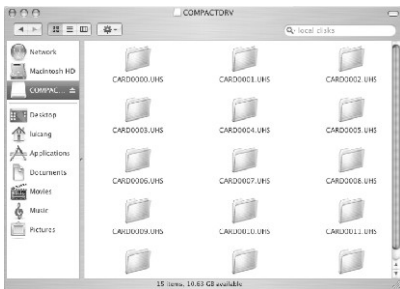
Folder structure of CompactDrive

When you open the CompactDrive from the computer your previously copied data will be stored in folders CARDnnnn.UHS. (Where 'nnnn' is the memory card serial number).

On Windows:



On Mac OS:



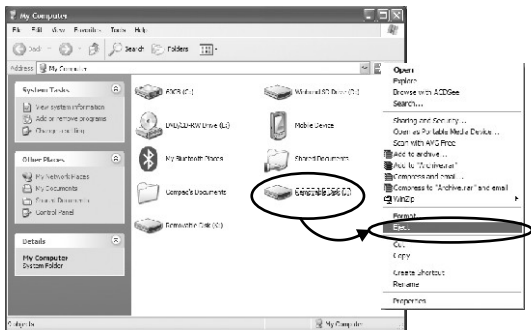
The memory card serial number is automatically assigned when the card is copied. Every generated number is unique but if you have previously deleted folders from the CompactDrive the new serial number may not follow the previous sequence.

Safely disconnecting the CompactDrive from the computer

If you do not wish to continue using the CompactDrive, you must safely disconnect the CompactDrive from the computer.

On Windows:

Right click on 'Removable Disk' in 'My Computer' and choose "Eject..."



Click 'Safely remove hardware' icon and select 'USB Mass Storage Device'.



When Windows confirms that the drive has been removed, turn off the device and disconnect the USB cable.

On Mac OS:

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



Turn off the CompactDrive and disconnect the USB cable.

Advanced Operation

One-handed operation

The CompactDrive can be operated single handedly. Please ensure that you have enough batteries before traveling.

We recommend keeping the CompactDrive in the carrying case provided which can be attached to your belt. Please insert the CompactDrive with the operation panel facing upwards.

When you wish to use the CompactDrive:

Open the carrying case and open the dustproof cover.

Insert the memory card the correct way.

Turn on the CompactDrive, after 2 seconds the indicator light will turn red.

When the CompactDrive has detected the memory card, the indicator light will turn green.

Press down the multi-function wheel, and the indicator lamp will turn off. The CompactDrive will search the hard disk for available space. This may take 1 to 30 seconds depending on available space and hard disk formatting method.

When the indicator lamp turns green, the CompactDrive will start to copy the memory card. While copying data, the indicator light will flash continuously.

After the copy has completed successfully, the indicator lamp will turn green and disappear after 3 seconds.

When the copying is completed, you may remove the memory card. If you do not wish to copy another memory card you may turn off the unit.



If while copying the indicator lamp turns red, you must remove the CompactDrive from the carrying case and check the error message on the LCD screen.

Increasing memory card copy speeds

The PD70X Ultra High Speed CompactDrive has an extremely high data transfer rate. However there are many factors which may affect actual copy performance. You may wish to check the following points to improve performance:

Choose high speed memory cards designed for the professional photographers. Normal speed memory cards cannot achieve high copy speed performance.

Use Compact Flash memory cards as far as possible. The Compact Flash memory card slot has a 16-bit data path to the CompactDrive which allows it to copy faster than the other types of memory cards.

Using a hard disk with a 8MB cache or more may achieve faster copy speeds. The cache size has a large effect on copy speed, but hard disk rotational speed is not an essential factor. Therefore a 4200rpm 8MB cache hard disk will perform better than a 5400rpm hard disk with 2MB cache.

Format the hard disk with the built-in formatter or CDFormatter software. This can improve copy performance especially for hard disks with smaller cache.

As far as possible store only pictures from the camera on the memory card and delete non-essential files. If there are many small files on the card, it will lower the copy speed of the CompactDrive. Some cameras when writing RAW files also create small thumbnails. This will affect copy speed.

Where possible the memory card should be formatted in FAT16 format. The copy speed with FAT16 is faster than that of FAT12 or FAT32.

Copying cards with complex folder structures

The CompactDrive can process folder structures produced by digital cameras as well as digital camcorders.

Occasionally your memory card may have data copied from the personal computer. This data may have been organized in complex folder structures.

The CompactDrive can process up to 250 folders. In other words the memory card cannot have more than 250 folders (including sub-sub-folders). Generally speaking, computer data is not stored in such complex structures. However if such situations arise we recommend copying directly from the computer through the USB connection and not through the memory card.

The memory card backup is limited to 2,000 files in any folder. Too many files in a folder also does not facilitate easy retrieval. The CompactDrive is unable to copy from memory cards with more than 2,000 files in a folder.

If you need to transfer complex folder structures into the CompactDrive, do so through the USB connection.

Improving hard disk performance

The CompactDrive uses the FAT file system to store data. However with continuous copying and deletion the hard disk will become highly fragmented. The PD70X cannot use this fragmented space to store data. In order to maximize your hard disk space, we recommend regular formatting of the hard disk or running the Defragment tool provided with Windows. If the hard disk is excessively fragmented the CompactDrive will run out of space prematurely.

To ensure that you will always be able to back up to the CompactDrive, you should defragment or format the hard disk before any major outing. Formatting or the defragmenting will not reduce the hard disk lifespan. In fact, it extends the hard disk lifespan as a lesser fragmented hard disk requires lesser access time to read/write data every time and places less stress on the hard disk motor.

CompactDrive auto folder numbering system

Every time a memory card is copied the CompactDrive will create a folder in the hard disk root directory labelled CARDnnnn.UHS. where 'nnnn' is the card folder serial number. The CompactDrive ensures that each memory card folder serial number is not redundant. However this serial number will not always be in sequence.

The CompactDrive numbers the folders according to their relative position in the root directory. The first position is 0, second position is 1, third position is 2, and so on. The following is an explanation with examples of the folder numbering system:

- 1)** Three memory cards are copied to a newly formatted hard disk. These three memory card folders are named in turn:
CARD0000.UHS, CARD0001.UHS, CARD0002.UHS.
- 2)** The CompactDrive is connected to a computer and a new folder named 'MYFOLDER' is created in the CompactDrive. At this point the CompactDrive root directory has four folders:
CARD0000.UHS, CARD0001.UHS, CARD0002.UHS, MYFOLDER.
- 3)** The CompactDrive is disconnected from the computer and another memory card is copied to the CompactDrive. The folder created this time is CARD0004.UHS. Note that the CompactDrive has not produced CARD0003.UHS. This is because the root directory 4th position has been occupied by 'MYFOLDER'.
- 4)** Now the CompactDrive is connected to the computer and folder CARD0001.UHS is deleted. Four folders are left in the CompactDrive:
CARD0000.UHS, CARD0002.UHS, MYFOLDER, CARD0004.UHS.
- 5)** The CompactDrive is again disconnected from the computer and another card is copied to the CompactDrive. The newly created folder is CARD0001.UHS. Note that the CompactDrive has not created CARD0005.UHS. This is because the 2nd position in the CompactDrive root directory is empty, therefore the last copy created folder serial number 0001.

From the example above you should have a better idea how the CompactDrive allocates folder serial numbers. To ensure that the serial number increases every time to avoid confusion, do not delete the folders after you have copied or deleted the files. This will ensure that folder numbers will increase each time you do a copy.

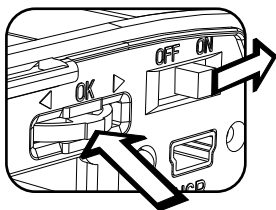
Upgrading CompactDrive firmware

With firmware updates, the memory card copy functions or performance may be improved. The CompactDrive has the ability to self-update its firmware. In order to upgrade the firmware, you must follow the step-by-step instructions carefully.

WARNING

If it is not necessary, we do not recommend you perform the firmware upgrade. The firmware upgrade operation will attempt to rewrite the data in the chip. If this operation is unsuccessful, it may cause the CompactDrive to cease functioning and you may be required to return the unit to your dealer for servicing.

- 1) Download the firmware upgrade files which you require from our website (Only FIRMPD70.BSC and FIRMPD70.UMS are appropriate files.)
- 2) Prepare a memory card of between 256MB and 2GB. The memory card must be formatted to FAT16 (FAT12 or FAT32 file systems will not work in this case of firmware upgrading).
- 3) Copy the firmware upgrade file to the memory card. (Note that only one firmware upgrade file should be copied onto the memory card at any time.)
- 4) Ensure that there is sufficient power to run the CompactDrive and connect the CompactDrive to the external power supply.
- 5) Insert card with the firmware upgrade file into the memory card slot.
- 6) Hold down the multi-function wheel while turning on the CompactDrive.

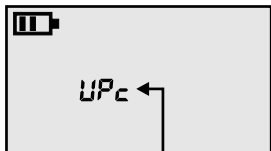


Turn on it at the same time

Hold down

Upgrading CompactDrive firmware

7) Continue holding down the multi-function wheel until the CompactDrive LCD screen displays "Upc" or "Upu", then release.

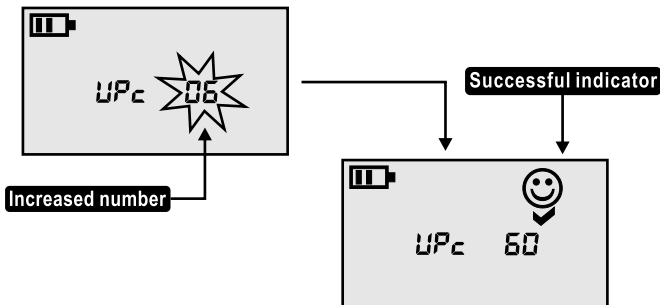


Use 'FIRMPD70. BSC'



Use 'FIRMPD70. UMS'

8) The CompactDrive will automatically read the firmware file and upgrade the firmware. While upgrading the LCD display number will continue to increase until the "Successful indicator" icon appears.



While the LCD numbers are running do not switch off the power, otherwise it will damage the device. If the numbers have stopped moving for 10 seconds but no 'Successful indicator' icon appears, it might mean that upgrading was unsuccessful.

9) Remove the memory card and delete the firmware files from the card.

10) Turn off the CompactDrive and restart it to check that it is operating correctly.

Choosing appropriate batteries

The CompactDrive can use AA size rechargeable nickel metal-hydride (Ni-MH) batteries. Many of such batteries are available on the market, when choosing batteries, please note the following points:

- 1)** As far as possible choose branded batteries as they guarantee quality and safety. Do not use nickel cadmium (Ni-Cd) batteries.
- 2)** Higher capacity batteries are not necessarily better. If the battery has a high internal resistance it will not be able to last very long as the energy is lost to resistance.
- 3)** Nickel metal-hydride batteries have a high self-discharge rate. In other words, even if you do not use them, they will gradually lose their charge over time. Choose a battery with as low self-discharge rate as possible.
- 4)** The built-in battery charger has a peak charging current of 1000mA. When choosing batteries please ensure that they can handle this level of current.

Re-formatting hard disk

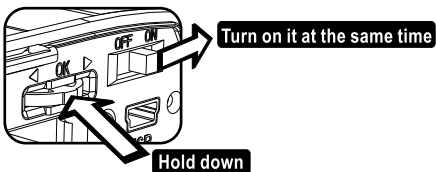
The CompactDrive has the ability to re-format hard disk by itself. In order to clear the fragment on the hard disk, you need to re-format the hard disk periodically.

WARNING

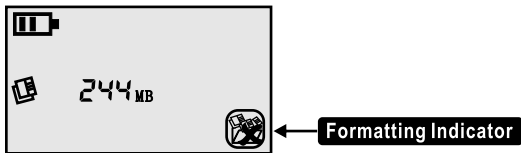
The hard disk formatting operation will delete all data on the hard disk. If the hard disk contains many partitions all partitions will be deleted.

In order to re-format the hard disk, you must follow the step-by-step instructions carefully.

- 1) Prepare a memory card of between 256MB and 2GB. The memory card must be formatted to FAT16 (FAT12 or FAT32 file systems will not work).
- 2) Create a file named 'FORMAT70.CMD' in the root directory of the memory card. The file name must be in all caps.
- 3) Ensure that there is sufficient power to run the CompactDrive or connect the CompactDrive to the external power supply.
- 4) Insert card with the 'FORMAT70.CMD' file into the memory card slot.
- 5) Hold down the multi-function wheel while turning on the CompactDrive.

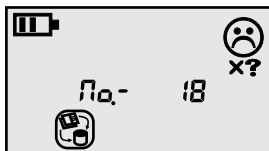


- 6) Continue holding down the multi-function wheel until the CompactDrive LCD screen displays 'Formatting indicator' icon, then release.



Re-formatting hard disk

7) The CompactDrive will display error No.-18 . Please refer to page 16 on this manual to start formatting the hard disk.



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 interface:	3.3V (+/-1%) power supply First slot: CF Type I & II, MD Second slot: SD, MMC, xD, MS, MS Pro
Hard disk interface:	5.0V (+/-5%) 1A power supply 44Pin 2.5" IDE hard disk
Computer interface:	USB2.0 High Speed/Full Speed, USB1.0 Compatible
Data transfer modes:	Transfer from memory card to hard disk (stand-alone) From hard disk to computer (via USB) From memory card to computer (via USB)
Data transfer performance:	Stand alone mode burst rate: 16000KBytes/S USB 2.0 sustained transfer rate: 8190Kbytes/S
Display monitor:	Monochromatic liquid crystal display monitor, Displays battery capacity, Hard disk capacity, Memory card capacity, Copy number, Copied files quantity and capacity.
Operation controls:	Multi-function wheel, 3 positions
Battery specifications:	Uses rechargeable AA size Nickel Metal-Hydride batteries
Battery autonomy:	Up to approximately 50GB of data transfer (based on 2000mAH Ni-MH batteries)
Built-In battery charger:	Intelligent quick charger, Charging current 500mA ~ 1000mA (+/- 10%)
Size:	132mm(L) x 83mm(W) x 33mm(H)