**1. Getting started**

You will find a detailed description on the attached CD. With free Adobe Acrobat Reader software, you can view and print Adobe PDF files: http://www.adobe.com/uk/products/acrobat/readstep2.html

Read the detailed instructions, which accompany the equipment.

Only use the supplied battery typ NP60.

Only use the plug-in power supply unit supplied with the device.

The device is not designed for commercial use.

**2. Inserting battery and memory card**

Remove the cover to insert the battery and memory card.

- Hold the camcorder with the battery compartment cover facing upwards.
- Remove the cover as depicted on the right.
- Place the battery with the lettering facing downwards in the designated compartment in the camcorder.
- Make sure the battery is placed in the battery slot correctly, ensuring the polarity of the batteries.

To close the cover, place the cover on the battery compartment and push the cover upwards until it clicks into place.

**2.1 Inserting a memory card:**

- Open the cover located behind the macro switch.
- Take an SD/SDHC memory card and push it into the SD/SDHC card slot located under the cover, behind the macro switch.

Make sure that the contacts of the card are positioned in the direction of the display.

**3. Charging the battery**

To charge the battery connect the camcorder to the power supply.

Plug the mains adapter into a 230 V – 50 Hz socket.

The battery requires approximately six hours to reach full charge for the first time.

Tips for proper use of batteries can be found in the section (safety tips / avoiding damage to the battery).

**4. Switching the camcorder on and off**

To activate the camcorder, open the display panel as shown below.

Turn the display panel so that you can easily see the 3" LCD display.

To turn the camcorder off, either simply fold the display panel back to its original position or press the on/off switch until the LED changes briefly from green (ready to operate mode) to red and then switches off.

Take care to turn off the device after use to avoid using power unnecessarily.

**5. Changing the mode of operation**

After start-up the camcorder is in recording mode. You can start taking photos or recording films immediately.

- Press Record/Play to change from recording mode to playback mode.
- Press Record/Play again to change back from playback mode to recording mode.

**Main menu**

In the main menu there are five sub-menus represented by appropriate symbols. Here you can select the following settings:

- To open the menu, press the OK button once.
  1. Movie Mode
  2. Camera Mode
  3. Smart Function
  4. Effect
  5. Settings

- To select a menu, press the RIGHT/LEFT buttons until the required menu is in the dark area.
- To open the required menu, press the OK button.

- To achieve the best picture quality during playback, please remember that:
  - Connect your camera using an HDMI cable to your TV set with a digital HDMI input to view your photos in HD format.
  - The LC monitor is switched off while the camera is connected to a TV set.

You cannot take photographs at a high resolution while the camera is connected to a television set.
**Recording films**

Proceed as follows in order to record films:
- Lift the LC display flap.
- Select the required display window using **TELE/WIDE-ANGLE**.
- Press the shoot FILM button to start recording.

While the film is being recorded, the time is shown on the LC display (hours: minutes: seconds).

Press the shoot FILM button again to stop recording.

**Film playback**

There are different options for viewing the films recorded in the internal memory or on the optional memory card. This describes how to play back the images or film’s on the camcorder’s LC screen. If you want to use the other playback options, please refer to the advice in the operating instructions.

**Playback on the LC display**

Proceed as follows to view the films on the camera’s LC display:
- Press **RECORD/PLAY**.

The main menu for playback mode will appear.
- Use the **RIGHT/LEFT** buttons or **TELE/WIDE-ANGLE** to select the menu option required.
- Press **OK**.

The most recently recorded film will be shown on the LC display. The number of the film selected will be shown in the top left-hand corner of the display. The second digit indicates the number of films recorded.

- Use the **RIGHT/LEFT** buttons in order to move to the previous or next film.
- Press the shoot FILM button to start playback.
- Use the **RIGHT/LEFT** buttons to fast forward or rewind during film playback.
- Release the button again to stop the fast forward or rewind function.
- You can use **TELE/WIDE-ANGLE** to adjust the volume during playback.
- Press **TELE/WIDE-ANGLE** towards “T” to increase the volume.
- Press **TELE/WIDE-ANGLE** towards “W” to decrease the volume.

**Safety Instructions**

- Children should be supervised in order to ensure that they do not play with the device. This device is not intended to be used by individuals with limited physical, sensory or intellectual abilities or limited experience, and/or a lack of knowledge (including children), unless they are being supervised by an individual responsible for their safety or receive instructions from them concerning how the device must be used.
- Also, keep the plastic packaging out of reach for children to avoid danger of suffocation.

**Preventing electric shocks**

- Never open the camcorder casing or mains adapter plug except to insert the battery.
- Connect the mains adapter plug to a professionally installed 230 V, 50 Hz mains socket.
- To remove the mains adapter quickly and easily from the mains in an emergency, the socket must be easily accessible and close to the appliance.
- Do not bend or crush the mains cable.
- Take measures to prevent moisture or liquid from penetrating the camcorder or mains adapter.
- Do not touch the mains cable with wet hands.
- Never use the camcorder if the mains adapter is damaged.
- Always have repairs carried out by qualified professionals.
- Switch the camcorder off immediately if it malfunctions.
- Do not allow the camcorder or mains adapter to come into contact with rain or be splashed by water.
- Do not place containers containing liquid, e.g. vases, on the appliance, the mains adapter or near to these and protect all parts of the device from rain and water. The container may tip over and the liquid will impair the electrical safety.

**Risk of explosion**

- Never expose batteries or rechargeable batteries to excessive heat such as sunshine, fire or similar.
- Do not throw batteries into a fire.
- Never short-circuit any (rechargeable) batteries.
- Do not dismantle (rechargeable) batteries.

**Taking photos**

Proceed as follows to take photos:
- Lift the LC display flap.
- Select the required display window using **TELE/WIDE-ANGLE**.
- Press the **PHOTO** shutter release.

To take photos close up, activate the macro function.

**Viewing photos**

There are different options for viewing the films recorded in the internal memory or on the optional memory card. This describes how to play back the images or film’s on the camcorder’s LC screen. If you want to use the other playback options, please refer to the advice in the operating instructions.

**Playback on the LC display**

Proceed as follows to view the photos on the camera’s LC display:
- Press **RECORD/PLAY**.

The playback mode menu will be displayed.
- Use the **RIGHT/LEFT** buttons or **TELE/WIDE-ANGLE** to select the menu option required.
- Press **OK**.
- Use the **RIGHT/LEFT** buttons in order to move to the previous or next photo.
- Slide the **TELE/WIDE-ANGLE** towards the “I” in order to enlarge the photo on the LC display.
- Slide the **TELE/WIDE-ANGLE** towards the “W” to reduce the photo on the LC display.

Proceed as follows to select a specific area of the photo for enlargement:
- Slide the **TELE/WIDE-ANGLE** towards the “I”.
- Two rectangles will be displayed, one inside the other. The outer rectangle represents the whole photo. The inner rectangle represents the selected area within the photo.
- Press **OK**.
- The frame of the inner rectangle will change colour.
- Using the **TELE/WIDE-ANGLE** or **RIGHT/LEFT** buttons move the inner rectangle onto the area to be enlarged.
- Press **OK**.

**Preventing fire hazards**

- Always uncoil the entire length of the mains cable.
- Ensure there is adequate ventilation and never cover the mains adapter.
- Do not place naked flames such as lit candles on or near the unit.

**Risk of poisoning**

- Keep the battery out of reach of children.

**Risk of chemical burns**

- If the battery is depleted remove it from the device immediately. There is an increased risk of leakage. Avoid contact with skin, eyes and mucous membranes. If these areas come into contact with battery acid, rinse them immediately with plenty of clean water and contact a doctor immediately.

**Preventing damage to the eyes**

- Do not use the flash close to anyone’s eyes.
- Always maintain a minimum distance of one metre when using the flash, especially with small children.
- When using the camera function do not direct the flash towards the eyes of people or animals.

**Preventing damage to the ears**

- Give careful consideration to volume levels when using ear or headphones. Volume levels that are too high can produce excessive pressure and can lead to loss of hearing.

**Preventing damage to the camcorder**

- If the battery is leaking remove it from the camcorder immediately. Clean the contacts before inserting a new battery.
- Use type NP60 lithium-ion batteries only.
- Before inserting the battery, check that the contacts in the camcorder and on the batteries are clean. Clean the battery connections if necessary with a clean, dry cloth or an eraser.
- Do not touch the lens or lens mounting.