

Instruction manual Keychain #11



Description

The Shutter button is the small button all the way to the front.

The Power button is the larger button, right behind the shutter button.

The Reset button is located under the small pinhole situated between the USB connection and the SD card slot. It can be pressed using the end of a paper clip or similar object.

The other two buttons are dummy. They have no function.

You may use any micro SD or micro SDHC card with a capacity of up to 32GB with this camera. A minimum card with a speed rating of Class 4 is recommended but not required.

Supplied Cable(s)

In early models, if the camera came with a short cable and a long cable, the long cable is the standard cable, the short cable is the "special" cable (see below). With later models the "special" cable can be recognized by the 2-wire structure and comes together with a car charger. If two cables were supplied and there is still doubt about which cable is which, the thinner cable will always be the "special" cable. A "special" cable will only work with this camera. It will not work with other USB devices.

If the camera came with only one cable, it came with a "standard" cable. You can use any standard mini USB cable with the camera.

Software

For XP, Vista and Windows 7 no drivers are required for Webcam mode or for accessing the camera as a removable disk.

Versions

The first two versions (V1 and V2) are almost identical. The only visible difference is a number stamped on the CMOS module cable inside the casing.

Version 3 (V3) appeared at the end of May 2011 and has a slightly different printed circuit board design. At the same time, a completely different #11 keychain design appeared on the market. Functionally, these "Jumbo #11" cameras operate in the same manner as the #11 V3 cameras but have an extended recording length of up to 100 minutes due to the larger internal battery. In mid October 2011 another #11 in the form of a yellow smiley was released. This camera is larger than the standard (keychain) #11 and houses the same battery as found in the "Jumbo" versions. This manual specifically addresses the standard #11, but since the firmware is the same for all models, the instructions for the "Jumbo #11" and "Smiley #11" are identical to the instructions for the V3.

Before you start

Before using the camera for the first time, ensure that it is fully charged.

Connecting the camera to the PC

Always connect the camera directly to the PC. Do not use a USB hub.

Terminology

The following terminology is used in this manual:

Short-press:

Press the button indicated until a click is heard. Immediately release the button.

Long-press:

1. If the yellow LED is initially off, press the button indicated and keep it pressed until the yellow LED remains on (i.e. it must be on for at least 3 seconds).
2. If the yellow LED is initially on, press the button indicated and keep it pressed until the yellow LED remains off (i.e. it must be off for at least 3 seconds).

** "Safely remove" Hardware Icon

Always click on the small icon in the system tray / notification area (the right most collection of icons) of the task bar before removing the camera. This will avoid potential data corruption. In Windows 7 you may have to first click the "Show hidden icons" button.

Formatting

This document refers to the standard formatting tools provided by the operating system. These tools do not optimize the SD card's performance. For optimal card performance it is recommended to format all SD cards using the third party SD Formatter which can be downloaded from http://www.sdcard.org/consumers/formatter_3/

* Automatic Power Off from Standby mode

If the camera is in Standby mode (Video mode or Photo Mode) you must take a picture(s) or start a video recording within 60 seconds. The camera will automatically turn off after 60 seconds of no activity.

Charging

- Connect one end of the supplied standard USB cable to the camera.
- Connect the other end to a USB, 5V DC power source (wall charger, PC or external battery).
- When charging, the red LED will be on.
- When charging is finished, the red LED will be off.
- Charging takes about 1 hour.

Note: You may also use the "special" cable to charge the camera, but the red LED will always be off for the V1 or V2 cameras.

Turn ON the camera

- Important: Ensure that an SD memory card is properly inserted into the SD slot.
- The camera is turned on by short-pressing the Power button.
- After 2-3 seconds the yellow LED will flash once, very slowly.
- After another second, the yellow LED will turn on and remain on.
- Always be patient and WAIT for the yellow LED to remain on.

Turn OFF the camera

- The camera is turned off by long-pressing the Power button until the camera turns off (all LEDs will be turned off).

Using the camera to take a video

- Disconnect the USB cable from the camera if it is connected.
- Ensure that an SD memory card is properly inserted into the SD slot.
- Turn ON the camera by short-pressing the Power button.
- After 2-3 seconds the yellow LED will flash once, very slowly.
- After another second, the yellow LED will turn on and remain on.
- The camera is now in Standby mode*.
- By default, the camera will be in Video Mode.
- Short-press the Shutter button.
- The yellow LED flashes very quickly 3 times and turns off.
- The camera is recording video. It will soon become warm.
- To stop the recording, short-press the Shutter button.
- The yellow LED will turn on, which indicates standby mode.
- (Optional) To take another video clip, repeat the 5 steps above.
- (Optional) Short-press the Power button to enter Photo mode (see below).
- To turn the camera off, long-press the Power button until all LEDs are off.

Using the camera to take a picture

- Disconnect the USB cable from the camera if it is connected.
- Ensure that an SD memory card is properly inserted into the SD slot.
- Turn ON the camera by short-pressing the Power button.
- After 2-3 seconds the yellow LED will flash once, very slowly.
- After another second, the yellow LED will turn on and remain on.
- The camera is now in Standby mode*.
- By default, the camera will be in Video Mode.
- Short-press the Power button to enter Photo mode.
- The yellow LED will flash once and remain on.
- Short-press the Shutter button to take a picture.
- The yellow LED flashes once and then turns back on, indicating that a picture has been taken.
- Repeat the two steps above to take more pictures.
- (Optional) Short-press the Power button to return to Video mode (see above).
- To turn the camera off, long-press the Power button until all LEDs are off.

Using the camera as a removable disk - Method 1

- Turn off the camera if it is turned on.
- Ensure that an SD memory card is properly inserted into the SD slot.
- Connect one end of the supplied standard USB cable to the camera.
- Connect the other end to the USB socket on the PC.
- To avoid possible problems, always connect the camera directly to the PC. Do not use a USB hub.
- The red LED will show that the camera is charging. It will be off if the camera is already fully charged.
- Short-press the Power button.
- After a few seconds the camera will be recognized as a removable disk. If this is the first time that the camera is connected as a removable disk, Windows will probably install the required drivers and pop-up windows may be shown.
- Always "safely remove" the camera before disconnecting from the PC.
- Long-press the Power button until the camera turns off.
- It is now safe to unplug the camera.

Using the camera as a removable disk - Method 2

- Turn off the camera if it is turned on.
- Disconnect the USB cable from the camera if it is connected.
- Ensure that an SD memory card is properly inserted into the SD slot.
- Turn on the camera by short-pressing the Power button.
- After 2-3 seconds the yellow LED will flash once, very slowly.
- After another second, the yellow LED will turn on and remain on.
- The camera is now in Standby mode*.
- Connect one end of the supplied standard USB cable to the camera.
- Connect the other end to the USB socket on the PC.
- To avoid possible problems, always connect the camera directly to the PC. Do not use a USB hub.
- After a few seconds the camera will be recognized as a removable disk. If this is the first time that the camera is connected as a removable disk, Windows will probably install the required drivers and pop-up windows may be shown.
- Always "safely remove" the camera before disconnecting from the PC.
- Long-press the Power button until the camera turns off.
- It is now safe to unplug the camera.

Using the camera as a Webcam

- Turn Off the camera if it is turned on.
- Ensure that an SD memory card is properly inserted into the SD slot.
- Connect one end of the supplied standard USB cable to the camera.
- Connect the other end of the standard cable to the USB socket on the PC.
- To avoid possible problems, always connect the camera directly to the PC. Do not use a USB hub.
- The red LED will show that the camera is charging. It will be off if the camera is already fully charged.
- Press the Shutter button and keep it pressed. Now also press the Power button and keep it pressed as well.
- After about 1-2 seconds the yellow LED will flash for about a second.
- Don't release the buttons.
- The yellow LED will soon flash briefly and then turn on and remain on. It may take up to 30 seconds for the driver to recognize the Webcam, so please WAIT until the yellow LED remains on.
- Release the buttons.
- The camera should now be recognized as a Webcam. If this is the first time that the camera is connected as a Webcam, Windows will probably install the required drivers and various pop-up messages will be shown.
- You can use AmCap, or just about any other webcam program to view the video stream from the camera. For a reliable connection, the camera should be connected BEFORE running the webcam program.
- Don't press any buttons while in Webcam mode or the video stream may hang.
- To turn the camera off, long-press the Power button until the yellow LED is off. The Red LED may remain on, indicating that the camera is charging.
- It is now safe to unplug the camera.

Switching between 10 Mb/s to 7 Mb/s video recording mode

Some cameras allow recording with two different compression rates. There is a slight decrease in the video quality when recording with 7 Mb/s instead of 10 Mb/s but recording with 7 Mb/s will give longer recording times and smaller files for the same recording times.

- Follow the instructions for taking a picture, and take 1 picture.
- Short-press the Power button to enter Video mode.
- Follow the instructions for recording a video from where the camera is in Video mode.

Recording using an external power supply and a "special" USB cable

With this camera, it is possible to charge the battery and record at the same time using external USB 5V DC power. A "special" USB cable is required. This "special" cable may have been supplied with the camera. If you do not have this cable, you can make one yourself by following the instructions found at

<http://www.rcgroups.com/forums/showpost.php?p=17574069&postcount=2093>, or ask your supplier if he is prepared to sell the cable separately. Using the "special" cable and an appropriate USB power supply (USB wall plug, Battery pack, or even a PC) allows recording video until the SD card is full. You can expect up to 10 hours of continuous video using a 32GB SD card and recording at 7 Mb/s. Depending on the firmware, the video clips will automatically be split into 20 minute clips or 4GB clips (about 80 minute clips)

Recording using an external power supply and a standard USB cable

With this camera, you can record video with a standard USB cable connected to an external USB 5V DC power. The camera will, however, stop recording as soon as it finalizes the current clip it is recording. This means that the current clip size will be 20 minutes or 4GB, depending on which firmware version is installed.

To use this method, you must first start the video recording and then connect the standard USB cable.

Set the camera date and time using third-party software (only Windows)

The software can be downloaded from: <http://www.mytempfiles.info/hdkeychain/Nr11Timeset.exe>
Connect the camera as a removable disk (see above) and run the program Nr11Timeset.exe. Instructions are shown on screen and are simple to follow. The program is user friendly and no installation is necessary. This is the recommended method to set the date and time.

Set the camera date and time - the official method (*1)

The date and time are set by using a simple ASCII text file which must be copied to the root of the SD card.

The safest method to update the date and time is to use a freshly formatted card:

- Connect the camera as a Removable disk (see instructions above).
- Wait a few seconds and close the removable disk window if it opens.
- On Windows XP, Open "My Computer" or the Windows Explorer (right click on "Start" and select "Explore").
- On Windows 7, Open "Computer" or the Windows Explorer (right click on the Start button and select "Open Windows Explorer").
- Right-Click on the Removable disk which has been assigned to the camera.
- Select "Format".
- Make sure you have selected the correct disk (look at the size)!
- Check the box "Quick Format".
- Click "Start".
- Close the format window when finished.
- Copy the file "TIMESET.txt" to the Removable disk OR
- Create a new file called "TIMESET.txt" on the removable disk.
- Edit the "TIMESET.txt" with the correct date and time, without any formatting characters, as below:
 - 2011-03-22 15:34:00
- The format is Year-Month-Day (space) Hour:Minutes:Seconds
- The Year must be 4 digits, the hour is military (24-hour). Don't omit leading zeroes.
- Save the file.
- "Safely remove" the removable disk.
- Long-press the Power button until the camera turns off.
- Disconnect the camera from the PC.
- Take a picture or make a video as described above in order to check the date and time.
- The "TIMESET.txt" will be automatically deleted once the camera has set the date and time.

Update the firmware (*1)

There is always a danger that the camera will be bricked when the firmware is updated, so do this at your own risk, and follow these instructions EXACTLY.

Before attempting a firmware upgrade, ensure that the camera battery is FULLY CHARGED.

Currently, the following firmware files are available:

Version 1: Date Off, Date On, Continuous Recording (4GB, Stop/Save/Continue, without date and time stamp).

Version 2 (June 2011): Remove Time, Continuous recording & remove time (currently stops after first 4GB), Recover Time.

These files are available from the supplier or from the following site:

<http://www.rcgroups.com/forums/showpost.php?p=16951756&postcount=3>

All the firmware files are named "FW96630A.BIN" and are located in different folders. The correct file (NOT the folder) must be copied to the root of the SD card.

After the update, you must manually delete the firmware file.

The safest method to update the firmware is to use a freshly formatted card:

- Connect the camera as a Removable disk (see instructions above).
- Wait a few seconds and close the removable disk window if it opens.
- On Windows XP, Open "My Computer" or the Windows Explorer (right click on "Start" and select "Explore").
- On Windows 7, Open "Computer" or the Windows Explorer (right click on Start button and select "Open Windows Explorer").
- Right-Click on the Removable disk which has been assigned to the camera.
- Select "Format".
- Make sure you have selected the correct disk (look at the size)!
- Check the box "Quick Format".
- Click "Start".
- Close the format window when finished.
- Copy the correct firmware file "FW96630A.BIN" to the root of the Removable disk.
- "Safely remove"*** the removable disk.
- Long-press the Power button until the camera turns off.
- Disconnect the camera from the PC.
- Turn on the camera, but WAIT AT LEAST 15 SECONDS before pressing any buttons.
- DO NOT PRESS ANY BUTTONS until the yellow LED REMAINS ON for at least 5 seconds.
- Turn off the camera.
- Connect the camera to the PC as a removable disk.
- Delete the file "FW96630A.BIN" from the root directory.
- "Safely remove"*** the removable disk.
- Long-press the Power button until the camera turns off.
- Disconnect the camera from the PC.
- Test the new firmware by taking a picture or recording a video.

(*1)

If a card reader is available, it is preferable to use the card reader to copy and delete the files. In this case, the camera is NOT connected to the PC and all reference to the removable disk are for the card reader. Connect the card reader directly to the PC. Do not use a USB hub.

Trouble shooting

Q. The yellow LED flashes every 3 seconds.

A. There is no micro SD card inserted, or the card is not properly inserted. The card must be inserted with the gold contacts facing upwards, towards the buttons. There should be a distinct spring action when inserting the last 5 mm and there should be no friction whatsoever.

When the card is pushed 1 mm inside the body the card should latch with a distinctive click.

Never force the card, and never push the card more than max. 1 mm into the camera body.

Sometimes the card holder metal frame is not positioned properly in the body and is clearly visible in the card slot. If this is the case, insert the card above (on the button side) of the visible metal frame.

Q. The camera is not recognized as a removable disk or as a Webcam.

A. The operating system must be XP or greater. The camera must be connected using a standard USB cable. The "special" cable will not work. Confirm that the cable is not defective by attaching another USB device using the same cable. Do not use a USB hub. Try using another USB port.

Q. The date and/or time of the files is not correct.

A. The date and time must be set correctly. See above

Q. After loading a new firmware version the camera does not react any more.

A. Do the following. If you don't have any success, try the next 2 Q+A (below).

- Copy the "Recover time" version of the FW96630A.BIN firmware file to the root directory of the memory card (see "Update the firmware", above).
- Very long-press the power button for **at least 30 seconds**.
- Release the power button and wait 5-10 seconds.
- Short-press the power button. The yellow LED should flash once or twice and then, after max. 12 seconds, remain on.
- Remove the firmware update file from the root directory.
- If you were successful, you may replace the firmware with the version desired following the "Update the firmware" routine above.

Q. The camera does not react, but the red LED is on when charging (#1).

A. The following method should work if the above method failed.

- Use a paper clip or similar to press the Reset button.
- Wait 10 seconds.
- Turn on the camera.
- If the camera still does not react, try to enter Webcam mode or Removable disk mode.
- If there is still no reaction, press the Shutter button AND the Power button together for 60 seconds.
- Wait 10 seconds and then press the reset button using a paper clip.
- If the camera still does not react, repeat the above one or two more times.
- If there is still no reaction, update the camera with the "Date On" firmware, following the firmware update procedure to the letter.
- Repeat the above tests if necessary.
- Sometimes, repeating the tests 12 hours later will bring the camera back to life.

Trouble shooting, continued

Q. The camera does not react, but the red LED is on when charging (#2).

A. The following method may work if the above 2 methods failed. Follow the instructions **exactly**.

- Ensure that the camera battery is FULLY CHARGED. (see above)
- Make sure the camera is not connected.
- Remove the memory card from the camera.
- Use a paper clip or similar to press the Reset button.
- Place the memory card into a card reader and plug the card reader into the computer.
- Copy the "Recover time" version of the FW96630A.BIN firmware file to the root directory of the memory card (see "Update the firmware", above).
- Unplug the card reader from the computer and remove the memory card.
- Insert the memory card into camera.
- Press the power button for 2 seconds and then let go.
- Turn on the camera and WAIT. DO NOT press any other buttons.
- Wait for the yellow LED to come on. This may take up to 20 seconds.
- Remove the memory card from the camera.
- Press the reset button on the camera.
- Place the memory card into a card reader and plug the card reader into the computer.
- Delete the FW96630A.BIN firmware file from the memory card's root directory.
- Unplug the card reader from the computer and remove the memory card.
- Insert the memory card into camera.
- Press the camera's Power button, and the camera should now work correctly

Q. When I press the shutter button to take a picture or make a video, the yellow LED doesn't flash but remains ON (solid yellow LED).

A. This indicates that the SD card is full or data on the SD card is not as expected. Maybe the card was previously used in another device. Format the card and try again. If this fails, try another card.

Q. When I press the shutter button to take a video, the yellow LED flashes three times as normal. However, when I press the shutter button to stop the video, the yellow LED does not come back on or the camera does not respond.

A. The SD card is most probably defective. Try a new, freshly formatted card.

Q. The clock is running much too fast.

A. This is a hardware failure and the camera should be returned for replacement. However, if the camera is updated with the 4GB Stop/Save/Continue firmware (Continuous firmware) the clock may run correctly.