



Ninja Micro™ camcorder Owner's Manual

Revision 1.01

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Before You Begin

FCC Verification

NOTE: This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interferences in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer of an experienced radio/TV technician for help

IMPORTANT NOTE: Prohibition against eavesdropping

Except for the operations of law enforcement officers conducted under lawful authority, no person shall use, either directly or indirectly, a devices operated pursuant to the provisions of this Part for the purpose of overhearing or recording the private conversations of others unless such use is authorized by all of the parties engaging in the conversation.

WARNING: Modifications not approved by the party responsible for compliance could void user's authority to operate the equipment.

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Package Contents

- NinjA Micro™ camcorder
- Belt Clip
- Universal Mount Bracket
- Wall Bracket
- USB Cable
- 4GB Micro SD card
- Silicone Cover
- Neck Strap
- Power Adaptor



Before Using the NinjA Micro™ camcorder

The NinjA Micro™ camcorder has a built-in lithium ion battery (the same sort of battery as most mobile phones use, only smaller). We charge them up before we send them out – however, due to time in transit, you'll need to top it up before using it.

To charge the NinjA Micro™ camcorder:

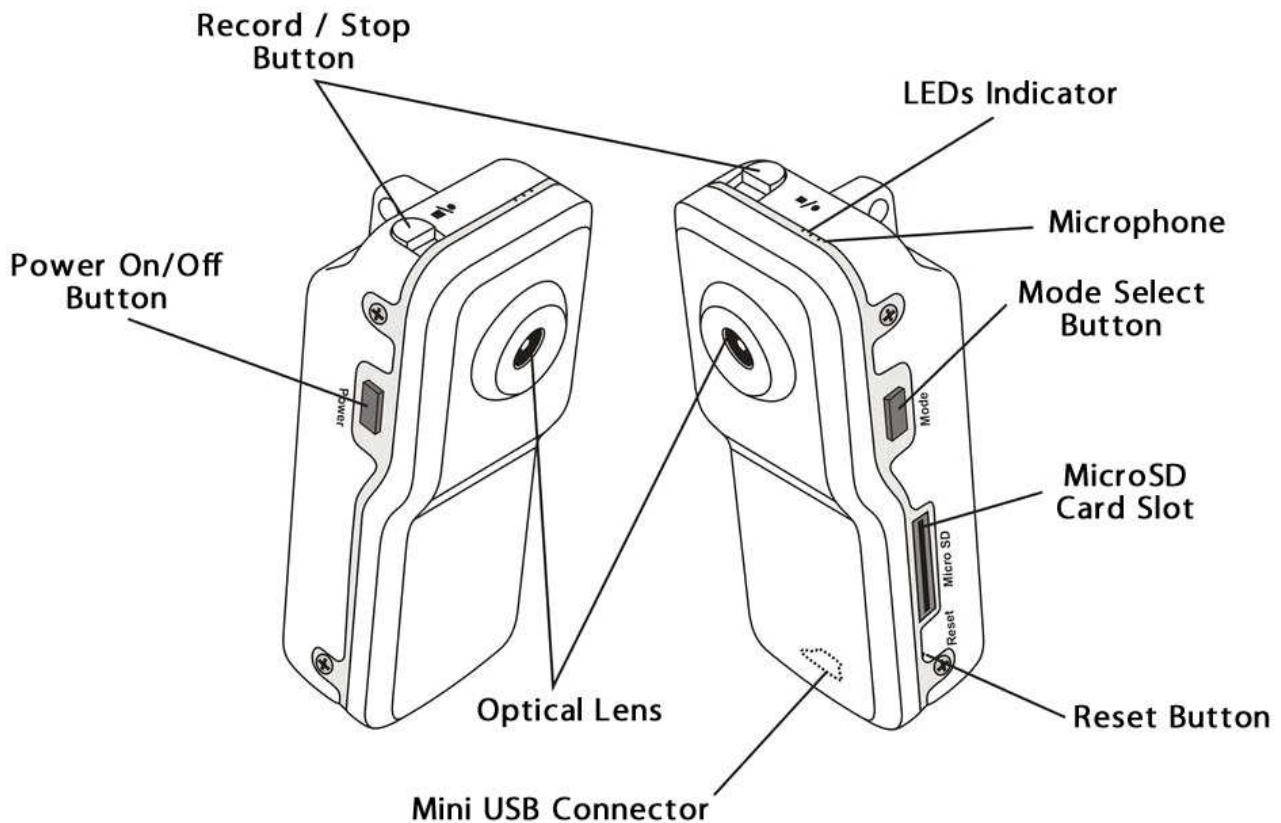
1. Locate the mini-USB port on the base of the NinjA Micro™ camcorder
2. Using the supplied USB cable, attached the NinjA Micro™ camcorder to a USB port on your computer, or to supplied USB wall charger
3. While charging, the both blue LED and the red Led will stay on
4. The NinjA Micro™ camcorder requires 2 -3 hours to achieve a full charge. It is important, particularly the first charge, to leave the NinjA Micro™ camcorder charging for the full duration – not doing so can have a negative impact on the performance of the battery

General Guidelines

These are just a couple of points to keep in mind while using the NinjA Micro™ camcorder:

- Do not point the NinjA Micro™ camcorder towards exceedingly bright light sources such as the sun, high-powered headlights or stadium lights. The bright light may damage the image sensor, either leaving a permanent "shadow" on your videos where the light source has damaged the sensor, or rendering the sensor completely inoperable.
- Avoid adverse weather conditions. Excessive heat (direct or ambient) and moisture (such as rain or humidity) will cause the NinjA Micro™ camcorder to behave erratically or not work at all. Acute exposure to these elements may permanently damage the NinjA Micro™ camcorder.
- Do not dispose of in fire. Lithium-ion batteries can, when exposed to significant heat, explode quite dramatically.
- The small lens on the NinjA Micro™ camcorder can be difficult to clean. Avoid dusty or dirty environments.
- If the lens does become dirty, clean with cleaning alcohol and/or a specialized lens cleaning cloth (these are available from all good camera stores).
- Follow proposal disposal guidelines in your locality if you intent to dispose of the NinjA Micro™ camcorder. Many localities have strict guidelines as to the disposal of electronic items, particularly those with built-on rechargeable batteries.

Structure Layout



Lens: The business-end of the camera, used to focus light on to the image sensor. For best result, ensure the lens is clean and free from debris.

Mode Select: Changes the recording mode of the camera.

Micro SD Card Slot: The slot for inserting the Micro SD card which the NinjA Micro™ camcorder records to. To insert a card, simply push it into the slot. To remove it, push it in again, and it will “pop” right out.

Reset Button: Used to quickly return the NinjA Micro™ camcorder to its initial booted state. This is typically used only if the NinjA Micro™ camcorder freezes and needs to be reset.

Strap Clip: Used to attach the included neck strap. Alternatively, it can be used to attach the NinjA Micro™ camcorder to just about anything – such as a key-chain or similar.

Power: Press to turn the NinjA Micro™ camcorder on and off. Do not turn off the NinjA Micro™ camcorder while recording, or immediately after recording.

Record/Stop: Starts and stops the NinjA Micro™ camcorder recordings.

Microphone: The device which records sound. If these holes are blocked, then the range and quality of the audio recording will be significantly reduced.

LEDs: Small colored lights which will indicate the current state and function of the NinjA Micro™ camcorder. There are two LEDs, one red and one blue. In bright light (such as sunlight) these might be difficult to see.

Operating the Ninja Micro™ camcorder

To turn the Ninja Micro™ camcorder ON:

- Press and hold the Power Button for approximately one second.
- The blue and red LEDs will come on. When the red LED turns off and the blue LED stays on, this indicates that the Ninja Micro™ camcorder is now ready to record.

To turn the Ninja Micro™ camcorder OFF:

- Press and hold the Power Button for approximately one second.
- **Do NOTE turn the Ninja Micro™ camcorder off whilst recording video, or immediately after recording video.**
- The Ninja Micro™ camcorder needs several seconds after stopping a recording to write the video on the Micro SD card – turning the Ninja Micro™ camcorder during the writing to card process will corrupt the data, and render the video file unusable.

Low Power & Automatic Shutdown:

When the Ninja Micro™ camcorder's battery starts to run low, it will automatically shut itself down. If it is currently recording a video, it will stop recording and finalize writing the video file to the Micro SD card before turning itself off. Recharge the battery fully before turning the Ninja Micro™ camcorder on again.

The Ninja Micro™ camcorder will also automatically shut itself down and about to run out of recording space on its Micro SD card. To fix this, replace the Micro SD card with a fresh (or, at least, not full) one, or connect the Ninja Micro™ camcorder to a PC and clear data off the card by cutting and pasting it, or simply deleting it.

Resetting the Ninja Micro™ camcorder:

Occasionally, particularly during long periods of constant use, the Ninja Micro™ camcorder may freeze and stop working correctly. If this happens, the Ninja Micro™ camcorder needs to be reset.

- Locate the Reset button, located immediately below the Micro SD card slot.
- Using a thin sharp object such as a tooth pick, unfolded paper clip or hair pin, gently press and hold the Reset button for approximately one second.
- Once the Ninja Micro™ camcorder has been reset, you'll need to set the Time and Date again.

Shooting Video

- Turn the Ninja Micro™ camcorder on.
- Wait several seconds for the Ninja Micro™ camcorder to properly initialize.
- When the red LED goes out and blue LED is on, the Ninja Micro™ camcorder is ready to record.
- Press the Record/Stop button to begin recording video.
- Whilst video is being recorded, the blue LED will stay on and the red LED will flash slowly.
- To stop the recording, press the Record/Stop button again. The red LED will flash quickly whilst video data is being saved.

Voice/Sound-Activated Recording:

The Ninja Micro™ camcorder can be configured to operate as a sound-activated recording device. This makes the Ninja Micro™ camcorder a sound-activated recording device. This makes the Ninja Micro™ camcorder a

great solution for a set-and-forget recording device. The internal battery will last for more than 10 hours of standby time if nothing triggers the Ninja Micro™ camcorder to record.

Soft sounds (for example, softer than a person speaking in a loud voice approximately 3ft/1m away) may not trigger the Ninja Micro™ camcorder to record.

To engage Sound-Activated Recording Mode:

- Turn the Ninja Micro™ camcorder on in the usual way.
- Wait until the red LED goes out, and the Ninja Micro™ camcorder is in standby.
- Press the Mode button.
- The blue LED will stay on, and the red LED will flash slowly to indicate that the Ninja Micro™ camcorder is in sound-activated recording mode.
- While armed in this mode, a moderate to loud sound will trigger the Ninja Micro™ camcorder to record.
- Once triggered to record, the Ninja Micro™ camcorder will continue recording for a minimum of two minutes, or longer if the sound continues.
- To deactivate the sound-activated recording mode, simply press the mode button. Once the red LED goes out, sound-activated recording mode has been deactivated.

Mounting the Ninja Micro™ camcorder

Neck Strap

Using the Neck Strap is pretty straight forward, and a great way to make sure you never lose the Ninja Micro™ camcorder – it'll be round your neck!

- Attach the clip on the end of the strap to the small tab on the top of the Ninja Micro™ camcorder
- Sling the strap around your neck
- For best results, hold the Ninja Micro™ camcorder steady whilst you're shooting video – leaving it on the neck strap will result in a very random, frenetic video which will rarely capture what you want.

Belts/Pockets Clip (or Silicone Case)

- Inset the Ninja Micro™ camcorder into the bracket.
- The four corners of the clasp will lock into position on the four corners of the Ninja Micro™ camcorder
- The Ninja Micro™ camcorder can now be clipped onto a belt, pocket, collar, or any other location which offers suitable support for the clip.
- To remove the Ninja Micro™ camcorder from the clip, hold it in the middle and twist gently. The clip is easiest to remove one corner at a time.
- The silicon sleeve works in a similar manner, and has a loop on the back to attached to a belt or similar. The differences are primarily that a) the silicon sleeve is more delicate, and could tear if mistreated and b) the silicon sleeve will offer some degree of protection from scratches, dust and moisture.

Wall /Ceiling Mounting Options

The Ninja Micro™ camcorder comes with two options for permanent mounting, a permanent clip and a clip-to-wall mounting. If you want to use the Ninja Micro™ camcorder with the belt/pocket clip, use the free-pivot Wall Bracket mounting that the clip can attach to. To mount the Ninja Micro™ camcorder only, use the standard wall clip.

- The Wall Bracket (used with the belt/pocket clip) is capable of attaching double side adhesive tape or Velcro to any suitable surface. This is handy for mounting the clip onto a PC monitor as a webcam. For permanent installation, we recommend using the screw holes.
- The standard wall clip needs to be screwed, glued or taped into place. Screws and cable ties are preferred for resilient mounting option.

Setting the Time & Date

You can setup the Ninja Micro™ camcorder to print the date and time that a recording was taken directly onto the video, like a watermark. To enable this function, you'll just need to set the time and date – the Ninja Micro™ camcorder will keep track of it from there.

To set the Date and Time:

- Open *Notepad*. It's usually located in the Accessories folder in the Start Menu (assuming you're using a Microsoft Windows ®). If you don't have a *Notepad*, any plain text editor will work fine.
- Enter the date and time in the following format:

```
[date]
YYYY/MM/DD
HH:MM:SS
```

So, if it was eight-thirty five in the night on the 21st of February 2012, then the file would read:

```
[date]
2012/02/21
20:35:00
```

- Save this file, naming it "tag.txt"
 - Copy this file to the Micro SD card
 - With the Micro SD card already inserted into Ninja Micro™ camcorder, turn the Ninja Micro™ camcorder ON.
 - The Ninja Micro™ camcorder will read the text in the file, and update its internal clock to match the date and time as set by you.
 - The date and time will be updated to the Ninja Micro™ camcorder's internal clock when it is turned on.
- Note:** If the Ninja Micro™ battery is completely drained of power or if you've pressed the Reset button, the data and time will be reset.

Connecting to your PC

You can playback the video from **Micro SD card** in the Ninja Micro™ camcorder by connecting the Ninja Micro™ camcorder to your computer.

- Locate the mini-USB plug on the bottom of the Ninja Micro™ camcorder
- Find a spare USB port on your computer
- For maximum speed, find a free USB port on your computer, and avoid using USB extension cables or hubs
- Connect the spare USB port on your computer to the mini-USB port on the Ninja Micro™ camcorder using the supplied USB cable
- The Ninja Micro™ camcorder will be detected as a USB storage device, and can be accessed in the same way as you would any other USB flash drive
- The video recordings are stored as an AVI file in folders named *100MEDIA*, *101MEDIA* and so on.

Using the NinjA Micro™ camcorder as a PC Camera

You can also connect the NinjA Micro™ camcorder to your computer and use it as a PC camera. A typical use of this feature would be to use the NinjA Micro™ camcorder as a webcam for Internet chat programs.

To use the NinjA Micro™ camcorder as a PC camera, first install the driver:

- Download the latest driver from <http://www.w3gear.com/>
- Locate and Run the downloaded driver file, follow further on-screen prompts
- You may be asked to confirm your choice to run this file, or be warned that this driver is "not digitally signed". This is normal: choose to continue running and installing the driver
- Once the installation is complete, you will now have an icon on the desktop labeled "AMCAP"

To Connect the NinjA Micro™ camcorder in PC Camera Mode:

- Connect the NinjA Micro™ camcorder to your computer via the USB cable
- If you have not already done so, turn the NinjA Micro™ camcorder on
- Wait until your computer has detected the NinjA Micro™ camcorder as a removable USB Mass Storage Device
- Press the Mode button. This will switch NinjA Micro™ camcorder as a USB PC webcam
- Double click the AMCAP icon on your desktop. Once the program runs, you'll be able to use the NinjA Micro™ camcorder as a PC camera

Note: Webcam function is only supported on Microsoft Windows XP/Vista/7 based PC

Shooting Guide

Framing:

- Typical, about 3 feet (1m) is about right if filming a shot of someone's face – this way, their face will occupy approximately half the vertical space in frame.
- To get a whole person in frame (assuming they're approximately six feet tall) then you'll need to be about 10ft (3m)

Focus:

- The NinjA Micro™ camcorder has a fixed focus lens, which means you'll never need to adjust focus.
- The fixed lens will achieve focus within approximately 30cm (1 1/2 ft) from the lens, varying slightly depending on the amount of available light. It will hold focus to infinity.

Exposure:

The NinjA Micro™ camcorder will adjust exposure automatically, varying its gain setting autonomously, reacting to the amount of available light. There are a couple of things to bear in mind, however:

- Shooting a dark subject in front of a bright background can cause the auto-exposure feature of the NinjA Micro™ camcorder to become confused, and drop the exposure down so that the background is correctly exposed whilst the subject becomes a silhouette. Avoid brightly lit backgrounds, unless you want this effect.

- To decrease exposure, the Ninja Micro™ camcorder shortens its electronic shutter speed, thus exposing each frame for a shorter time. This means that you'll get better high-speed photographic performance in bright light – useful for shooting fast events, like sports.
- On the other hand, in low-light, each frame needs to be exposed longer to get enough light into the (very small) lens. This can be effect can be minor (such as shooting in a shopping mall or a stadium under lights) or particularly serious (in situations such as shooting under a street lamp).
- The image quality, depth of field and exposure range will all improve dramatically as more light is available.

Tips & Tricks: Photography is an art – there is no right or wrong way to shoot. Practice makes perfect. The best way to get better results is just to keep using the Ninja Micro™ camcorder. Besides, it's not like you'll be wasting film; just delete off the old files on Micro SD now and then, and you'll be set!

Troubleshooting

Problem: I've recorded videos, but the Micro SD card seems to be blank.

Solution: Chances are that this problem is caused by turning the Ninja Micro™ camcorder off before the video files have been properly saved to the Micro SD card. Always use the Record/Stop button to stop recordings and waiting until the red LED has gone off before turning the Ninja Micro™ camcorder off.

Problem: The Ninja Micro™ camcorder won't turn on.

Solution: Try charging the battery again. When doing so, avoid using a USB hub – some USB hubs will not provide a full 5V to attach devices and thus will not charge the battery properly. You can also charge the Ninja Micro™ camcorder from a stand-alone USB charger.

Problem: My videos and pictures seem blurry.

Solution: If the lens becomes dirty, this can cause the Ninja Micro™ camcorder videos to be distorted, soft and blurred. Clean the lens using a dedicated lens cleaning cloth and lens cleaning solution (typically a type of cleaning alcohol).

Problem: My videos seem too shaky.

Solutions: As a general rule, this usually indicates that the mount you've used for the camera (or arm, if you're shooting hand-held) needs to be more stable. Generally, this will occur if you use the lanyard or belt/pocket clip whilst recording video, and are moving or travelling in a vehicle which is moving. Generally, you'll achieve the best results holding the Ninja Micro™ camcorder with both hands in front of you, resting your elbows on your torso. That way, your body and both arms form a kind of rudimentary tripod, greatly steadying your videos.

