1 m Snake Camera



# TC 1 Deluxe 1 m Snake Camera





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# Manual contents: TC 1 Deluxe

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#### **Disposal of used Electrical & Electronic Equipment**



The symbol on the product or its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. If your product contains easily removable batteries or accumulators please dispose of these separately according to your local requirements. For more information about where you can drop off your waste for recycling, please contact your local authority, or where you purchased your product.

REG NO: NPWD292299 (BATTERIES) REG NO: NPWD292300 (WEEE)

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# Contents list: TC 1 Deluxe

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Reference	Description
А	TC 1 Standard Snake Camera
В	AV Cable (AV/out) *
С	Mini DVR *
D	USB Data & Charge Cable *
E	Micro SD® Card (4 GB) *
F	Battery *
G	Shower Protector *
Н	Mini Torch *

\*Included with TC 1 Deluxe kit only.



To turn on the Mini DVR, ensure the mode switch (standby) is set to position "N", the power button must be then be held for 10 seconds until the blue light illuminates and the screen turns on.

# **Contents list: TC 1 Deluxe**

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Reference	Description
1	Power Button / Camera Button
2	Video Record Button
3	Rewind Button (menu back)
4	Fast Forward Button (menu forward)
5	ESC Button
6	OK/ Enter Button
7	Micro SD® Card Slot
8	Speaker (Not in use with TC 1)

Reference	Description	
9	Microphone (Not supplied with TC 1)	
10	Video Feed Connector (AV/ in)	
11	Charging Indicator	
12	System Status Indicator	
13	AV Output (AV/ out)	
14	USB Port	
15	Mode Switch ("Q" standby / "N" On)	



Please fully charge battery before first use to prolong the life of the battery.



Remove batteries if the Mini DVR is to be stored for long periods.

# Safety information: TC 1 Deluxe

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#### Trademark Information:

- 1. Micro SD® and its logo are registered trademarks of SD-3C, LLC.
- Microsoft, Windows and windows logo are trademarks, or registered trademarks of Microsoft Corporation in the United States and/ or other countries. Windows is an abbreviated term referring to the Microsoft® Windows® Operating system.
- Other company or product names mentioned are trademarks or registered trademarks of the respective companies.

#### Battery Safety:

- 1. Always switch the device off and unplug the USB cable before removing the battery. To unplug the USB cable hold and pull the plug, not the cord. Only charge indoors.
- When your USB cable is not in use, unplug it. If left unused, a fully charged battery will lose its charge over time.
- Always keep the battery between 15°C and 25°C (59°F and 77°F) for optimal performance. Extreme temperatures reduce the capacity and lifetime of the battery.
- 4. Accidental short-circuiting can happen when a metallic object touches the metal strips on the battery. This may damage the battery or the other object.
- 5. Do not dispose of batteries in a fire as they may explode.
- 6. Obey local regulations. Recycle when possible. Do not dispose as household waste.
- Do not dismantle, cut, crush, bend, puncture, or otherwise damage the battery in any way. If a battery leaks, do not let liquid touch skin or eyes. If this happens, immediately flush the affected areas with water, or seek medical help.
- Do not modify, attempt to insert foreign objects into the battery, or immerse or expose it to water or other liquids. Batteries may explode if damaged.
- 9. Use the battery for its intended purposes only. Improper use, or use of unapproved or incompatible batteries or chargers may present a risk of fire, explosion, or other hazard.
- 10. Never use a damaged battery. Do not charge your device during a lightning storm.

#### Safety Regulations:

- 1. Please read this instruction manual carefully before operating the product.
- 2. Please observe the safety and warning regulations.
- 3. Failure to observe these regulations will exempt the manufacture from all liability.
- 4. Keep instructions in a safe place.
- 5. Failure to comply with the safety instructions and warnings can lead to serious injury or death of persons.

#### Warning:

- 1. During transport ensure equipment is stored in the supplied appropriately.
- 2. Do not operate the appliance when other people are in the work space.
- 3. Store equipment in a safe place, away from children and domestic animals.
- 4. When the snake camera is passed onto a third person, it must be accompanied by the operating manual.
- 5. Data loss may incur if used with a low battery.
- 6. Always use the monitor with the supplied protective case to avoid damage.
- 7. Before each use check the product has been correctly assembled, and that it is in a functional and undamaged condition. Damaged parts must never be used.
- If the TC 1 is carried from a cold location to a warm place, condensation may form on the inside of the camera, lens, Micro SD® card or Mini DVR. When this occurs it is recommended that system be turned off whilst the condensation clears.
- 9. If the LCD display is damaged avoid contact with skin and eyes and do not ingest. Seek immediate medical assistance should any of these situations arise.
- Always turn off the Mini DVR and ensure the TC 1 snake camera is disconnected before replacing components of the snake camera. Never remove the casing of the Mini DVR monitor, this can cause electric shocks or a fire.

# Assembly instructions: TC 1 Deluxe

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\*Charge times are approximate for a flat battery scenario.

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To turn on Mini DVR, ensure the mode switch (standby) is set to position "N", the power button must be then be held for 10 seconds until the blue light illuminates and the screen turns on.



Figure 1. Main menu.

 Turn on the Mini DVR, press ESC in any window to enter into the main menu (see Figure 1). The main menu can be navigated using the fast forward and rewind buttons on the front of the Mini DVR, to make a selection press the OK button. The following features can be accessed from this menu:

**1.1 Video record -** The main menu allows recording to a Micro SD® card (4 GB included). Your camera is shipped to record up to 30 min long files, once this time has elapsed a new file will begin (this interval can be made shorter). This allows videos to be managed easily by creating "chapters".

**1.2 Taking a Picture -** At any screen images can be captured by pressing the Power button on top of the Mini DVR, this activates camera mode. Note: To take another picture in succession please wait at least 5 seconds; these images are saved as JPGs in the photo directory accessed via Playback (see 1.4 below).

**1.3 Audio record -** This feature is not available on the TC 1.

**1.4 Playback -** Enables the playback of video, audio and photo files. Files can be deleted using this menu. To delete files on the Micro SD® card see (6.) page 11. Files can also be rename, see (6.) page 14.

**1.5 Mode switch button -** Located on the side of the Mini DVR next to the USB port. This switch activates standby mode to prolong battery life. "N" is for normal use and "Q" is for quit/ off. If "Q" is selected it pauses the system allowing it to be instantly switched back to normal "N" mode immediately resuming where you left off.

**1.6 Settings** - Use the settings menu of the Mini DVR to change the date/ time function, system reset and memory status.

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Figure 2. Record menu.

- Ensure the snake camera is assembled by following the assembly instructions section of this manual. In the video record menu (see Figure 2 above) the 'No signal' message will appear if the TC 1 snake camera or a PC (via USB) is not connected to the Mini DVR.
- 3. To begin recording press the record button on the front of the Mini DVR, this will begin recording 30 min files until stopped by pressing ESC, or until the Micro SD card runs out of memory. Whilst recording the blue system status indicator will pulse. A short press of the power button on top of the Mini DVR will take a screen capture of the monitor display (see page 8, Section 1.2).



Figure 3. Record settings menu.

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4. From the video record screen press OK on the front of the Mini DVR twice to access a menu called record settings. This menu can be navigated using the fast forward and rewind buttons, selections are made with the OK button (pressing ESC will cancel and return to the previous window). The following settings can be adjusted from the record settings menu (see Figure 3):

**Resolution -** Used to set the video capture resolution, for the highest quality 800 x 600 is recommended, however a lower resolution will reduce video file sizes.

**Switch setting -** Use this to change the function of the mode switch key located on the side of the Mini DVR (Recommended for advanced users only). Your camera is shipped with this set to lock and standby.

**Record time -** Adjust the interval at which a new "chapter" is created. Your camera is shipped to record up to 30 min long files, once this time has elapsed a new file will begin.

**Vibrating -** When turned on the Mini DVR will vibrate to warn of memory low etc. This should be turned off to preserve the battery life of the Mini DVR.

**FPS (Frames per second)** - Both video quality and video size depend on this setting, the higher the number of frames the better the quality of video.

**Remote control -** This feature is unused, a remote control is not supplied with the TC 1 at present. Your camera is shipped with this feature turned off.

**Standby setting -** Use this feature to set an automatic standby time during periods of inactivity. Your camera is shipped with this feature turned off.



**Overwrite enable - USE WITH CAUTION!** This feature will enable the oldest video files to be over written when memory is low. Your camera is shipped with this feature turned off.

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Figure 4. Playback menu.

- 5. Press ESC until the main menu (see Figure 1) appears. Navigate to the playback function using the fast forward and rewind buttons and press OK to select. Three options are available in the playback menu (see Figure 4), select any of the functions to show a list of the files present on the Micro SD® card in that format.
- 6. Fast forward and rewind can be used to navigate through the list of files, press OK to select and view a file. Pause a video by pressing OK when the video is playing. To remove files connect the Mini DVR to a PC and delete files as required. Alternatively you can delete files on the Micro SD® card by selecting the file you want to delete by using the Fast Forward or Rewind buttons then press the red Record button and then choose yes to confirm and press Ok.



Figure 5. System settings menu.

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7. Press ESC until the main menu (see Figure 1) appears. Navigate to the system settings function using the fast forward and rewind buttons and press OK to select. In the system settings menu (see Figure 5) a number of the features of the Mini DVR system can be controlled, these are as follows:

**Storage select -** Use this to select the video storage location. Your camera is shipped with this feature set to Micro SD® card as standard.

**Storage information -** This menu gives details on the available space on the Micro SD® card, details are given in MB.



Format - USE WITH CAUTION! This feature will cause all information stored on the Micro SD® card to be erased.

**System time setting -** The time and date stamp shown on videos will only display correctly if this is set, use the fast forward and rewind buttons to select the correct time/ date and press OK to move to the next input.

**Display setting -** The Mini DVR screen can be displayed on a larger TV screen using the supplied AV Cable. Use this to change the AV out signal if an image is not shown on your screen. Set to TV\_PAL Output, the standard system for UK TV's.

**Brightness** - Use this option to set the screen brightness, remember a higher brightness will reduce the battery life.

Language - Use this to select the required language.



**Default - USE WITH CAUTION!** This option will return the screen back to default settings! To re - set the language back to English; - carry out the procedure below:

Turn on Mini DVR, Press ESC, press fast forward 3 times and press OK, then press fast forward 6 times, then select English.

#### Preventing data loss: TC 1 Deluxe

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 The Mini DVR system supplied with your TC 1 uses a Micro SD® card for the storage of videos, photos and audio files. The recording process is performed electronically and enables the erasure of data as well as the re-recording of data. Care and attention should be paid to the following notes to avoid the potential corruption and loss of data:



Data may be corrupted or erased due to internal system faults, it is recommended that regular back-ups be taken of important data to other media such as a PC hard disk, DVD, CD - R or CD - RW. Please note Lance Lab<sup>™</sup> Ltd assumes no responsibility for data that is lost or destroyed.



Removal of the memory card or turning off the power during communications (i.e. during recording and playback) will result in data loss.

- Store Micro SD® cards out of the reach of children.
- When inserting a Micro SD® card into the Mini DVR, hold the card straight as you push it in.
- Do not expose the Micro SD® card to shocks, pressure or bending.
- Do not store Micro SD® cards in hot or humid conditions.
- Clean Micro SD® cards with a soft dry cloth when dirty.
- The Micro SD® card will work for a long time, however soon or later may stop functioning correctly. If this happens replace the card Micro SD® card.
- Never remove the Micro SD® card or turn off the Mini DVR during data recording or erasing as this will result in data loss.
- The Micro SD® card may feel warm when it is removed from the Mini DVR, this is normal.
- Do not put labels on Micro SD® cards, peeling labels can cause the Mini DVR to not work properly.
- Do not delete the directory files created on the Micro SD® card, this will make it impossible for the card to communicate with the Mini DVR. Should this happen format the card using the instructions on Page 12.

#### Transferring files to a PC: TC 1 Deluxe

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- 1. Ensure the battery and required Micro SD® card are fitted in to the Mini DVR.
- 2. Turn the PC on.
- Connect the Mini DVR to the USB socket of a PC using the supplied cable. Do not use extension cables or USB hubs as the Mini DVR may not communicate correctly with the PC. Ensure the USB Data cable is pushed firmly into both sockets.
- 4. No drivers should be required in order to access the files on the Micro SD® card, locate the drive and drag and drop files into the required directory.
- 5. Delete the files stored on the Micro SD® card to free space for further recordings and unplug USB Data cable once communications complete.
- 6. Video or Photo files can be renamed when the Mini DVR is connected to a PC. To rename a file (Video or Photo), open the Mini DVR drive on the PC and then double click on the Video or Photo folder containing the file you wish to rename then right click the mouse/ touch pad to rename.



Do not format the Micro SD® card on the PC.



Do not disconnect the USB cable or change Micro SD® card when the Mini DVR is communicating with the PC. If the cable is disconnected during communication data loss will be caused.

### Connecting to a TV: TC 1

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- 1. Ensure the battery and required Micro SD® card are fitted in to the Mini DVR.
- 2. Connect the supplied AV cable to the AV/ out socket of the Mini DVR.
- 3. Connect the yellow connector of the AV cable to the TV (red and white should also be connected if the video uses sound).
- 4. Turn on the TV and find the correct AV channel, refer to the instructions provided with your TV for further information on doing this.
- 5. Turn on the Mini DVR and Press ESC until the main menu (see Figure 1) appears. Change the display settings in the menu to TV\_PAL Output, the standard system for UK TV's.
- 6. Load the playback function by pressing the ESC button until the main menu appears and selecting the relevant icon. From here videos, photos and sound files can be played on the TV.

#### Prolonging your camera's life: TC 1 Deluxe

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#### Storage places to avoid:

- 1. Areas subjected to heavy rain, high humidity, dirty or dusty environments.
- 2. In direct sunlight, or places of extreme heat such as a closed car on a hot summers day.
- 3. Extremely cold environments.
- 4. Places which experience strong vibrations.
- 5. Places subjected to smoke or steam.

#### Cleaning your TC 1:

- 1. Use a soft brush or soft, dry cloth to remove dust from the lens of the TC 1 camera or LCD display of the Mini DVR.
- 2. Do not scratch hard objects against the TC 1 camera or Mini DVR LCD display.
- 3. The product should be cleaned with a soft, dry cloth only. Do not use volatile substances or cleaning products as these can cause damage.

#### **Spares & Replacement Components List:**

Reference	Replacement Component Description
1	Replacement TC 1 Snake Camera
2	Replacement Mini DVR USB cable
3	Replacement Mini DVR AV cable
4	Replacement Mini DVR
5	Replacement Mini DVR 4 GB Micro SD® card
6	Replacement Mini Torch
7	Replacement Mini DVR Battery
8	Replacement Shower Protector

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# Troubleshooting: TC 1 Deluxe

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### Mini DVR warning symbol explanations & solutions:

Warning displayed	Explanation	Solutions
Battery low symbol	The battery is low or completely out of charge.	Load a new battery or connect to a PC or USB Charger
No signal message	The TC 1 AV cable is not fully pushed into the Mini DVR.	Push in the connector fully.
	There is a fault with the TC 1 camera.	Purchase a replacement TC 1.
	A camera malfunction may have been caused temporarily.	Remove the battery from the Mini DVR, wait 10 seconds, then reinstall the battery and restart the Mini DVR.
No memory message	The Micro SD® card is not correctly inserted into the Mini DVR.	Re- insert the Micro SD® card.
	The Micro SD® card contacts are dirty.	Clean the card with a soft dry cloth.
	There Micro SD® card is full.	Insert a new card or transfer and delete data from the inserted card.
	There is a fault with the Micro SD® card.	Format the inserted card, or purchase a new card.

#### Possible TC 1 issues & solutions:

Problems	Possible causes	Solutions
Nothing happens when pressing the power button	The battery has run out.	Insert new battery or connect the Mini DVR to a charger.
	The battery is not loaded correctly.	Remove the Mini DVR back and re- insert the battery following the instructions on page 7.
Battery has run out quickly	Camera is used in extremely cold conditions.	Put the battery in your pocket or another warm place to heat it and then re-load the Mini DVR just before use.
	The battery is coming to the end of its useful life and need to be replaced.	Purchase a replacement battery.
Screen is not displaying English	A language other than English is selected in the language section of the settings menu.	Turn on Mini DVR, Press ESC, press fast forward 3 times and press OK, then press fast forward 6 times, then select English.

# Troubleshooting: TC 1 Deluxe 1 m Snake Camera

Problems	Possible causes	Solutions
Videos or images are not recording when the record / screen capture buttons are	The TC 1 is not correctly connected to the Mini DVR.	Push in the connector fully.
	The Micro SD® card is full.	Insert a new card or transfer data from the inserted card.
	The Micro SD® card contact area is soiled.	Clean the card with a soft dry cloth.
	The Micro SD® card is damaged.	Purchase a replacement Micro SD® card.
pressed	The Micro SD® card is not correctly inserted.	Re- insert the Micro SD® card.
	The battery has run out.	Load a new battery or connect to a charger.
	The USB cable is not correctly connected to the Mini DVR or the PC.	Push in both ends of the USB cable correctly.
The PC does not recognise the camera	The Micro SD® card is not correctly inserted.	Re- insert the Micro SD® card.
	The Micro SD® card contact area is soiled.	Clean the card with a soft dry cloth.
	The battery is not correctly inserted.	Remove the Mini DVR back and re- insert the battery following the instructions on page 7.
The images on the Mini DVR are blurry	The lens is dirty.	Refer to the cleaning section of the manual on page 15.
There is no image displayed when connecting to the TV	The camera is not correctly connected to the TV.	Push the connectors into the correct AV sockets of your TV. Refer to the TV operating manual for further information.
	The video output is not correctly set.	Follow the instructions on page 14 of the operating manual to correctly set the video output.
Nothing happens when pressing the buttons on the Mini DVR	A camera malfunction may have been caused temporarily.	Remove battery from Mini DVR, wait 10 seconds, then reinstall the battery and restart the Mini DVR.
	The battery have run out.	Insert new batteries or connect the Mini DVR to a charger.
	The blue LED is on but nothing works then the Mode Switch Key maybe in the "Q" postion.	Move the Mode Switch Key to "N" for normal mode.
The Mini DVR no longer functions	A camera malfunction may have been caused temporarily.	Remove the battey from the Mini DVR, wait 10 seconds, then rein- stall and restart the Mini DVR.

# Using the mini torch: TC 1 Deluxe

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Rubber Holder

Spare Rubber Holder

Mini Torch (USB Recharable)

#### Connecting the Mini Torch to the camera housing:

Slide torch into rubber holder. (See Fig.1,2 & 3)



#### Charging the Mini Torch:







System specification		
Model	TC 1 Deluxe Snake Camera.	
Storage Media	Micro SD® card (4 GB supplied), Mini DVR supports up to 32 GB.	
File Format	Still images: JPEG Video: AVI Audio: WAVE (microphone not currently available with TC 1)	
Number of Recorded Pixels	Up to 800 x 600 pixels.	
LCD Display	6.5 cm Liquid Crystal Display.	
Video details	800 x 600 pixels, up to 30 frames per second with date and time stamp.	
AV/ Out NTSC/ PAL Output.		
Digital Input / Output	Universal Serial Bus (USB) 2.0	
PC Requirements	Windows® Vista, 7 or 8.	
Power Supply	Removable, rechargeable 3.7 V 1800 mAh Li - Ion Battery.	
Battery Life Expectation	Recording time: approx 2.5 hrs Power-on time: approx 3 hrs Playback time: approx 3 hrs	
Operating Conditions	Temperature: 0°C to 35°C (no condensation).	
Mini DVR Dimensions	(W/H/D) 78.0 mm x 57.0 mm x 20.0 mm (not including accessories).	
TC 1 Snake camera Dimensions	TC 1 Lance + cable 1.5 m.	
Weight	Operating weight approx 250 g	

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