



Please Read All Instructions Carefully Before Using

⚠ WARNING:
CHOKING HAZARD – Small parts.
Not for Children under 3 years.

User Guide

Version 1

- Please retain these instructions
- Tuff-Cam 2 contains a non-replaceable, rechargeable battery
- Do not attempt to remove the battery
- In the event of an electro-static discharge, your Tuff-Cam 2 may malfunction. In this case, please use a pen to operate the reset switch on the side to restore normal operation
- Warranty is void if the case is opened for any reason
- The warranty does not cover any data loss from the unit nor any consequential loss of information

FCC compliance

NOTE:

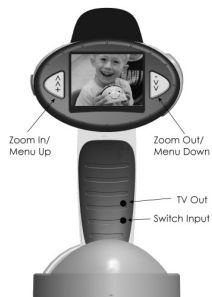
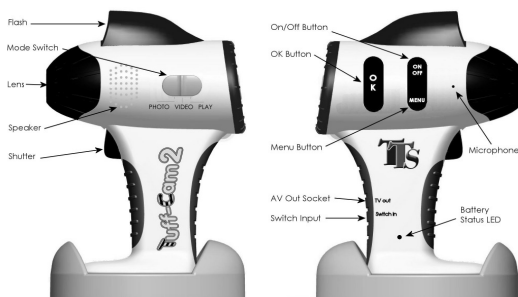
THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER AUTHORITY TO OPERATE THE EQUIPMENT

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a

residential installation. This equipment radiate radio frequency energy in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does 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 receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help



Taking a Photo

- Slide the Mode switch to PHOTO
- Turn ON the camera, by pressing the On/Off switch briefly
- Point the camera at the subject
- Press the trigger button to take the photo
- Pressing the OK button will cycle through the flash modes: Auto, Forced ON, Forced OFF
- Press the << or >> to zoom in or out of the photo

Taking a Video

- Slide the Mode switch to VIDEO
- Turn ON the camera, by pressing the On/Off switch briefly
- Point the camera at the subject
- Press the trigger button briefly to start the video
- Press << or >> to zoom in or out
- Press the trigger button again to finish the video

- NB. You can also press the On/Off button and Tuff-Cam 2 will take a video for the whole time that the button is pressed (memory permitting)

Displaying the Photos & Videos

- Slide the Mode switch to PLAY
- Turn ON the camera, by pressing the On/Off switch briefly
- The most recent Photo or Video taken will be displayed on the screen
- Use the >> and << buttons to move between images
- Press the OK button to play and pause videos

Switching ON and OFF

- To switch ON, press the On/Off button briefly
- To switch OFF, press and hold the On/Off button for 3 seconds

- There are different Menu options available for the different positions of the Mode switch; Play, Video and Photo
- Press the Menu button briefly to enter the appropriate Menu options for the selected Mode
- Press the Menu button once more to move the to Setup options, which are available in all Modes
- Use the << and >> buttons to move around the Menus
- Use the OK button to select a Menu item
- Some menus have multiple pages. If you use the << or >> buttons to move off the top or bottom of a page, the previous or next page is shown
- Press the Menu button once more to exit the Menu system

PHOTO Menu Options

- Size/Resolution: VGA up to 12 Mpixel
- Quality: Economy, Standard, Fine
- Scene mode: Auto, Sport, Night, Portrait, Landscape, Backlight

- EV/Exposure correct
- White balance: Auto, Daylight, Cloudy, Tungsten, Fluorescent
- ISO: Auto, 100, 200
- Colour: Standard, Vivid, Sepia, Monochrome
- Saturation: Normal, High, Low
- Sharpness: Normal, Hard, Soft
- Preview: On, Off
- Time stamp: Off, Date only, Date & Time
- Burst: On, Off

SETUP Menu Options

- Format: Yes, No
- Beep: On, Off
- Language: English, French, German, etc.
- Auto off: 1 min, 3 min, 5 min, Never
- System Reset: Yes, No
- Light frequency: 50Hz, 60Hz
- TV Out: NTSC, PAL

- Date Input: Date setti

VIDEO Menu Options

- Size/Resolution: VGA, QVGA
- EV/Exposure correction: -2.0 to +2.0
- White balance: Auto, Daylight, Cloudy, Tungsten, Fluorescent

PLAY Menu Options

- Delete: Single, All, Selection
- Copy to Card: Single, All, Selection
- Slide show: 3 sec, 5 sec, 10 sec
- Protect: Single, All, Selection
- Thumbnail:
- Volume: 1 to 8

Connecting to a PC or Apple Mac

- There are two modes in which the Tuff-Cam 2 can connect to a PC: MSDC or PC-CAM

- In MSDC mode, the PC device as a USB mass storage device and it will appear as a removable drive in the file explorer window
- In PC-Cam mode, only MS Windows based computers are supported and the drivers (see below) must be installed first
- To select MSDC mode, move the slide switch to PLAY before connecting to the PC
- To select PC-Cam mode, move the slide switch to PHOTO or VIDEO before connecting to the PC

Charging the Battery

- Tuff-Cam 2 is supplied with a partially charged battery and can be used immediately without charging first
- The battery can be charged by connecting to any active USB port. This will take between 2 and 4 hours depending on the state of the battery
- While the battery is charging, the Battery Status LED will flash
- When Tuff-Cam 2 is fully charged, the Battery Status LED will change to solid Red

Installing Software

The included CD contains:

- Drivers for Microsoft Windows PC, which required in order to use Tuff-Cam **2** as a PC camera
- ULead Photo Explorer version 8.6 photo and video editing software
- Drivers for Windows 98(SE) to add USB removable disk type. This is required only for Windows 98 systems and allows the system to download data files directly from the Tuff-Cam **2**

If you wish to use Tuff-Cam **2** as a PC-Cam (Web Cam) or to use the ULead Photo Explorer software, then you will need to install the software from the CD.

NB: Install the drivers before connecting the Tuff-Cam **2** to the PC. Do not attempt to install the drivers automatically.

Insert the CD into a PC and the installation program should automatically begin. If it doesn't start automatically, then run the program **AUTORUN.EXE** found on the root of the CD.

If running a Windows 98(SE) computer, then first install the Windows 98(SE) MSDC Driver.

To operate the Tuff-Cam :
select “Install PC-Cam Dr.”

To install the ULead Photo Explorer 8.6 photo and video editing software, select “Install ULead Photo Explorer”

When all required software has been installed, press “Exit” to finish the installation.

Following installation of the drivers, connecting the Tuff-Cam 2 to the PC (in PC-Cam mode) will automatically start a mini-application “Image Download Utility”. You can use this to download images and videos to the PC, even if you are in PC-Cam mode.

Specifications

- Sensor: 5 Mpixel CMOS
- Display: 2 inch, 640 x 240 TFT
- Internal storage: 32 Mb
- Additional storage: SD Card slot supports up to 2GB
- Built-in Li-Ion battery: 3.7V, 2200mAh
- Battery life: 9 hours continuous video or over 2 years in standby
- Still Resolution up to 12 Mpixel by interpolation
- Video: 640x480 at 19 frames/sec
- 8x digital zoom on photo and video
- Audio and video playback
- TV-Out (PAL or NTSC) with AV cable provided
- Switch input (standard 3.5mm mono jack socket)
- USB 2.0 high-speed interface
- Self-timer (2s and 10s)
- Date & Time stamping (selectable)

Troubleshooting

- Tuff-Cam 2 is designed to work reliably and predictably in all normal conditions. However, it is possible that problems may occur. Please check the following before contacting technical support:

Problem	ESD causes unit to malfunction
Solution	Press reset button near LED for 5 secs
Problem	Files corrupt or buttons don't work
Solution	Format the drive in Windows (use the FAT format, not FAT32)
Problem	LCD screen is blank
Solution	Battery is discharged, plug into USB port to recharge
Problem	Tuff-Cam 2 fails to store images
Solution	Memory is full. Delete some files to free up memory or use a new SD card
Problem	LED light goes out in docking station
Solution	This indicates that the battery is fully charged

Support & Warranty

This product is provided with a one-year warranty for problems found during normal usage. Mistreating the Tuff-Cam 2 or opening the unit will invalidate this warranty. Any data stored on the unit and any consequential loss is not covered by this warranty. The battery is not user replaceable.

All out of warranty repairs will be subject to a replacement fee.

Please visit www.tts-group.co.uk for latest product information.

Email feedback@tts-group.co.uk for technical support.

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