Please read all instructions carefully before using
• Please retain these instructions for future reference
• Tuff Cam contains a non-replaceable, rechargeable battery
• Do not attempt to remove the battery
• In the event of an electro-static discharge, your Tuff Cam 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’S 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 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 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.
Know Your Tuff Cam

- On/Off Button
- OK/Play Button
- Menu Button
- AV Out Socket
- Microphone
- Battery Status LED
**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/Play 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
- You can also press and hold the trigger button and Tuff Cam 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/Play 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

Using the Menu System

- 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 setup options, which are available in all modes
- Use the << and >> buttons to move around the menus
• Use the OK/Play 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 correction: -2.0 to +2.0
• White balance: Auto, Daylight, Cloudy, Tungsten, Fluorescent
• ISO: Auto, 100, 200
• Color: 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 setting menu

**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
• In MSDC mode, the PC or Mac will recognize the device as a USB mass storage device and it will appear as a removable drive in the file explorer window
• To select MSDC mode, move the slide switch to PLAY before connecting to the PC
Charging the Battery

• Tuff Cam 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 is fully charged, the Battery Status LED will change to solid red
Specifications

- Sensor: 5 Mpixel CMOS
- Display: 2 inch, 640 x 240 TFT
- Internal storage: 32 MB + 1GB SD Card (included)
- 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: 640 x 480 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 3.5 mm mono jack socket)
- USB 2.0 high-speed interface
- Self-timer (2s and 10s)
- Date & Time stamping (selectable)
Troubleshooting
Tuff Cam 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:

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

Thank you for purchasing GeoSafari® Tuff Cam. We’re certain that you and your students/children will enjoy the learning fun offered by this product.

Educational Insights® warrants each unit against factory defects in material and workmanship for one year from the date of purchase to the original purchaser only.

This warranty is invalid if the damage or defect is caused by accident, consumer abuse, or unauthorized alteration or repair.

If your GeoSafari® Tuff Cam fails to operate satisfactorily during the first year after purchase, return it postage prepaid to the address on page 15. Be sure to include the product, your name, address, phone number and/or e-mail, a copy of your sales receipt or invoice, and a brief description of the problem. If the unit is found to be defective within the first year, it will be repaired or replaced at no further cost to you.
Direct all returns to:
Educational Insights
Warranty Replacements
380 N. Fairway Drive
Vernon Hills, IL 60061

Customer Service:
(800) 995-4436 (U.S. & Canada) or
+44 (0)1553 762276 (U.K. & Europe)