USER MANUAL

V50X Action Camera

AKASO®

FCC:
This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Changes or modifications not expressly approved by the party responsible for compliance 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.
The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

FCC ID: 2ASV5-V50X

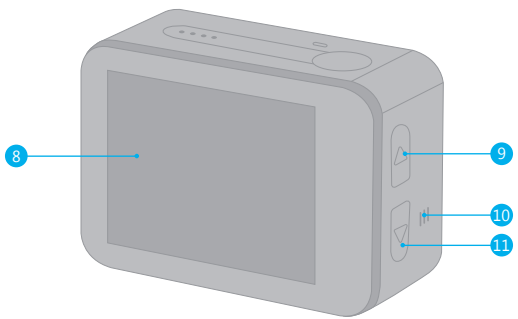
The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction"

IC Caution:
- English:
This device complies with Industry Canada licence-exempt RSS standard(s).
Operation is subject to the following two conditions:
(1) This device may not cause interference, and
(2) This device must accept any interference, including interference that may cause undesired operation of the device.
- French:
Le présentappareilestconforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitationestautorisée aux deux conditions suivantes:
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareildoit accepter tout brouillageradioélectriquesubi, mêmesi le brouillageest susceptible d'encompromettre le fonctionnement.

CONTENTS

Your V50X	1
Getting Started	3
Overview of Modes	4
Customizing Your V50X	9
Connecting To The RoadCam App	17
Offloading Your Content	17
Playing Back Your Content	19
Deleting Videos and Photos on Your V50X	19
Reformatting Your Micro SD Card	20
Maintenance Your Camera	20
Maximizing Battery Life	20
Battery Storage and Handling	20
Remote	21
Mounting Your Camera	22
Contact US	24

YOUR V50X



1. Shutter / Select Button
2. Indicator
3. Power / Mode Button
4. Micro SD Slot
5. Micro HDMI Port
6. Mini USB Port
7. Lens
8. Screen
9. Up Button
10. Speaker
11. Down Button
12. Battery Door

Note: Camera does not record sound when it is in the waterproof case.

GETTING STARTED

Welcome to your new V50X. To capture video and photos, you need a micro SD card (sold separately).

MICRO SD CARDS

Use brand name memory cards that meet these requirements:

- Micro SD, Micro SDHC, or Micro SDXC
- Class 10 or UHS-I rating
- Capacity up to 64GB 100MB/s (FAT32)

Note:

1. Please format the micro SD card first in this camera before using. To keep your micro SD card in good condition, reformat it on a regular basis. Reformatting erases all of your content, so be sure to offload your photos and videos first.
2. FAT32 format Micro SD card stops recording when the storage of each file is over 4GB and starts to record again on a new file.

POWERING ON + OFF

To Power On:

Press and hold Mode button for three seconds. The camera beeps while the camera status light is on. When information appears on the LCD display or the camera status screen, your camera is on.

To Power Off:

Press and hold the Mode button for three seconds. The camera beeps while the camera status light is off.

SWITCHING MODE:

To Switch Mode:

Press the Mode button after you turn on the camera, you can switch the mode.

To Exit Mode:

Press the Mode button to exit mode.

TURNING ON / OFF Wi-Fi

To turn on Wi-Fi:

Turn on camera, press and hold Up button for three seconds to turn on Wi-Fi.

To turn off Wi-Fi:

Press Up button to turn off Wi-Fi.

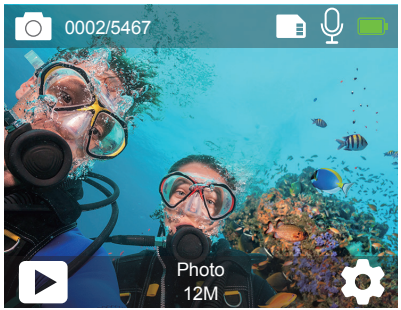
Note: Camera does not record sound when it is in the waterproof case.

OVERVIEW OF MODES

There are 9 modes: Photo, Self-Timer, Burst Photo, Time Lapse Photo, Video, Slow Motion, Time Lapse Video, Still Photo and Driving Mode.

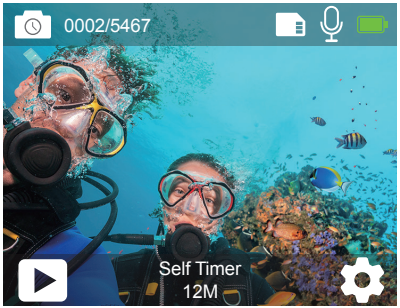
PHOTO MODE

In Photo mode, press Shutter button, the camera takes a photo.



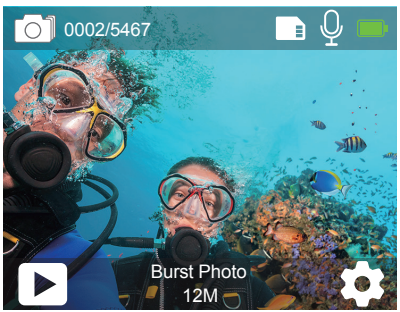
SELF-TIMER MODE

In Self-timer mode, press OK button, it takes a self-timer photo.



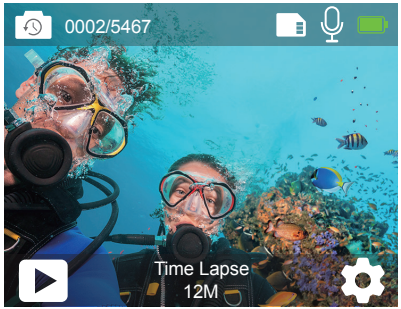
BURST PHOTO MODE

In Burst Photo mode, press Shutter button, the camera takes 3 photos per second, 5 photos per second or 10 photos per second.



TIME LAPSE PHOTO MODE

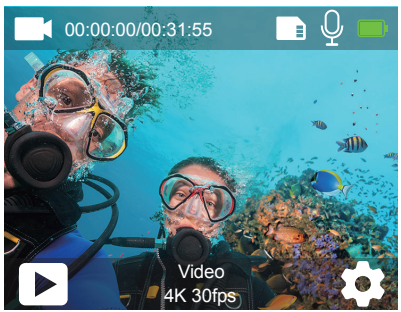
In Time Lapse Photo Mode, press Shutter button, the camera takes a serial of photos at 3s / 5s / 10s intervals.



VIDEO MODE

Video Mode is the default mode when you turn on the camera.

In Video Mode, press Shutter button, the camera starts recording video. Press Shutter button to stop recording video.



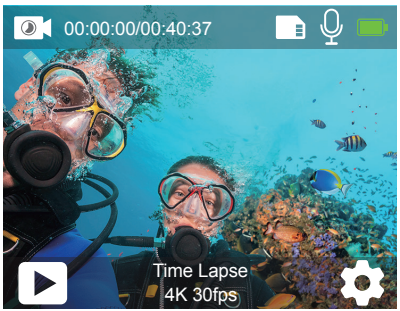
SLOW MOTION VIDEO MODE

In Slow Motion video mode, press Shutter button, the camera records slow motion video.

TIME LAPSE VIDEO MODE

In Time Lapse Video mode, press Shutter button, the camera records video from frames captured at specific intervals.

Time Lapse Video is captured without audio.



STILL PHOTO MODE

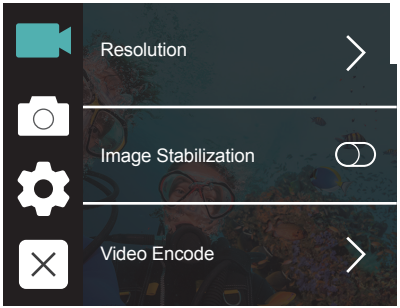
In Still Photo mode, the camera takes a photo every 3 Sec / 5 Sec / 10 Sec / 30 Sec automatically during video recording.

DRIVING MODE

In Driving Mode, you connect the camera with car cigarette lighter, the camera will turn on automatically if you start your car and will turn off if you stop your car.

CUSTOMIZING YOUR V50X

VIDEO SETTING



1. Resolution: 4K 30fps, 2.7K 30fps, 2K 60fps, 2K 30fps, 1080P 90fps, 1080P 60fps, 1080P 30fps, 720P 120fps, 720P 60fps, 720P 30fps
Default setting is 4K 30fps.

2. Image Stabilization: ON / OFF
Default setting is OFF.

3. Video Encode: H.264, H.265
Default setting is H.264.
A video codec is an electronic circuit or software that compresses or decompresses digital video. It converts uncompressed video to a compressed format or vice versa.
According to multiple studies, HEVC, High Efficiency Video Coding (H.265) should deliver up to 50% better compression than H.264 in video on demand (VOD) applications, which means better quality at half the bit rate. In live encoding, which obviously has to be performed in real time, the initial expectations are a 35% bandwidth reduction at similar quality levels. Alternatively, HEVC can also enable larger resolution movies, whether 2K or 4K.
In addition, encoding existing SD and HD content with HEVC rather than H.264 will add to cost savings and/or the ability to stream higher quality video to lower bit rate connections.

4. Slow Motion: 1080P 90fps, 720P 120fps
Default setting is 1080P 90fps.
Slow motion is an effect in film-making whereby time appears to be slowed down.
Note: If you want to record slow motion video, please turn off Image Stabilization first.

5. Still Photo: 4K 30fps
Default setting is 4KP 30fps.

6. Still Photo Time: 3 Sec, 5 Sec, 10 Sec, 30 Sec
Default setting is 3 Sec.
In still photo mode, the camera takes a photo every 3 Sec/ 5 Sec/ 10 Sec/ 30 Sec automatically during video recording.

7. Time Lapse Interval: 0.2 Sec, 0.3 Sec, 0.5 Sec, 1 Sec, 2 Sec, 5 Sec, 10 Sec, 30 Sec, 1 Min
Default setting is 0.5 Sec.
Time Lapse Video creates video from frames captured at specific intervals. This option lets you capture a time lapse event and immediately view or share it as a video. Time Lapse Video is captured without audio.
Select 2 seconds means recording 2 seconds to get one frame per second.
For example: If you select 4K/30FPS and 2 seconds, you need to record 60 seconds, then you can get 1 second video for 4K/30FPS.

8. Loop Recording Time: Off, 3 Min., 5 Min, 7 Min
Default setting is OFF.
Using Loop Recording, you can continuously record video, but save only the moments that you want. For example, if you select a 5-minute interval, only the previous 5 minutes are saved when you press the Shutter button to stop recording. If you record for 5 minutes and do not press the Shutter button to stop recording and save, the camera records a new 5-minute interval by recording over your previous 5 minutes of footage. When the micro SD card is full, the new files will cover the old one if loop recording is on.

9. External Microphone: ON / OFF
Default setting is OFF.

10. Audio Record: ON/OFF
Default setting is ON.
Turn off Audio Record, the camera does not record sound when you record video.

11. Exposure Value: -2, -1.7, -1.5, -1.3, -1, -0.5, -0.3, 0, +0.3, +0.5, +1, +1.3, +1.5, +1.7, +2
Default setting is 0.
By default, your camera uses the entire image to determine the appropriate exposure level. However, Exposure lets you select an area that you want the camera to prioritize when determining exposure. This setting is particularly useful in shots where an important region might otherwise be over- or underexposed.
When you change this setting, the LCD display immediately shows you the effect on your image. If you change modes, the camera returns to using the entire scene to determine the correct level of exposure.

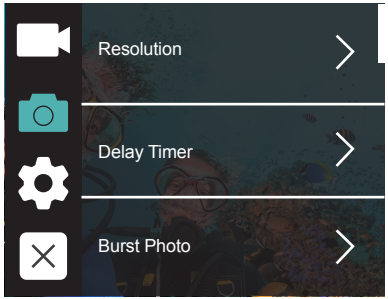
12. ISO: Auto, 100, 200, 400, 800
Default setting is Auto.
ISO determines the camera's sensitivity to light, and creates a trade-off between brightness and resulting image noise. Image noise refers to the degree of graininess in the image.
In low light, higher ISO values result in brighter images, but with greater image noise. Lower values result in lower image noise, but darker images. When you change this setting, the LCD display immediately shows you the effect on your image.

13. White Balance: Auto, Tungsten, Fluorescent, Daylight, Cloudy, Dawn
Default setting is Auto.
White Balance lets you adjust the color temperature of videos and photos to optimize for cool or warm lighting conditions. When you change this setting, the LCD display immediately shows you the effect on your image.

14. Meter: Center, Average, Spot
Default setting is Average.
In photography, the metering mode refers to the way in which a camera determines exposure. Cameras generally allow the user to select between center, average or spot metering modes. The different metering modes allow the user to select the most appropriate one for use in a variety of lighting conditions.

15. Color: Natural, Black & White, Sepia
Default setting is Natural.

PHOTO SETTING



1. Resolution: 12M, 8M, 5M, 3M
Default setting is 12M.

2. Self-Timer: 1 Sec, 3 Sec, 5 Sec, 10 Sec, 30 Sec
Default setting is 3 Sec.
A Self Timer gives a delay between pressing the shutter release and the shutter's firing. It is most commonly used to let photographers to take a photo of themselves (often with family).

3. Burst Photo: 3shots / 1s, 5shots / 1s, 10shots / 1s
Default setting is 3shots / 1s.
Burst captures up to 30 photos in 8 seconds, so it is perfect for capturing fast-moving activities.

4. Time Lapse Photo: 3 Sec, 5 Sec, 10 Sec, 30 Sec, 1 Min
Default setting is 3 Sec.
Time Lapse Photo captures a series of photos at specified intervals. Use this mode to capture photos of any activity, then choose the best ones later.

5. Scene: Auto, Light Painting
Default setting is Auto.

6. Exposure Value: -2, -1.7, -1.5, -1.3, -1, -0.5, -0.3, 0, +0.3, +0.5, +1, +1.3, +1.5, +1.7, +2
Default setting is 0.
By default, your camera uses the entire image to determine the appropriate exposure level. However, Exposure lets you select an area that you want the camera to prioritize when determining exposure. This setting is particularly useful in shots where an important region might otherwise be over- or underexposed.
When you change this setting, the LCD display immediately shows you the effect on your image. If you change modes, the camera returns to using the entire scene to determine the correct level of exposure.

7. Exposure Time: Auto, 2 Sec, 5 Sec, 10 Sec, 30 Sec
Default setting is Auto.
The exposure time, respectively period of exposure means the time span for which the film of a traditional camera or a sensor of a modern digital camera is actually exposed to the light so as to record a picture.

8. ISO: Auto, 400, 800, 1600, 3200
Default setting is Auto.
ISO determines the camera's sensitivity to light, and creates a trade-off between brightness and resulting image noise. Image noise refers to the degree of graininess in the image.
In low light, higher ISO values result in brighter images, but with greater image noise. Lower values result in lower image noise, but darker images. When you change this setting, the LCD display immediately shows you the effect on your image.

9. White Balance: Auto, Tungsten, Fluorescent, Daylight, Cloudy, Dawn
Default setting is Auto.
White Balance lets you adjust the color temperature of videos and photos to optimize for cool or warm lighting conditions. When you change this setting, the LCD display immediately shows you the effect on your image.

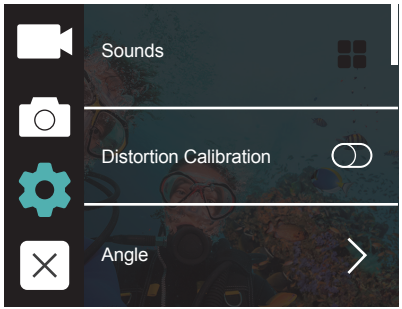
10. Meter: Center, Average, Spot
Default setting is Average.
In photography, the metering mode refers to the way in which a camera determines exposure. Cameras generally allow the user to select between center, average or spot metering modes. The different metering modes allow the user to select the most appropriate one for use in a variety of lighting conditions.

11. Sharpness: Strong, Normal, Soft
Default setting is Normal.
Sharpness controls the quality of details captured in your video footage or photos. When you change this setting, the touch display immediately shows you the effect on your image.

12. Color: Natural, Black & White, Sepia
Default setting is Natural.

13. Photo Quality: Fine, Normal, Economy
Default setting is Fine.

SYSTEM SETTING



1. Sounds: Volume, Key Tone, Touch Tone, Boot Tone
You can adjust the volume of the camera and turn on/off key tone, touch tone or boot tone.

2. Distortion Calibration: ON / OFF
Default setting is OFF.
Turn on Distortion Calibration, it can correct the image distortion.

3. Angle: 170°, 140°, 110°, 70°
Default setting is 170°.
The angle refers to how much of the scene (measured in degrees) can be captured through the camera lens. Super Wide angle captures the largest amount of the scene, while Narrow angle captures the least.

4. Diving Mode: ON / OFF
Default setting is OFF.
Turn on Diving Mode, it can compensate for the lack of red light in underwater scenes. Diving Mode is designed to be used in tropical and blue water, optimized for use between 10 and 80 feet.

5. WDR: ON / OFF
Default setting is OFF.
Wide Dynamic Range (WDR) retains a greater level of detail in the dark and bright areas of an image. The result is a photo that is properly exposed for both of these extremes. This setting is especially useful for scenes that are backlist or that have large bright regions and a dark foreground. WDR is available in Video mode only.

6. Auto Power Off: Off, 1 Min, 3 Min, 5 Min, 10 Min
Default setting is OFF.
Powers off your V50X after a period of inactivity to save battery life.

7. Screen Saver: Off, 30 Sec, 1 Min, 3 Min
Default setting is 1 Min.
Turns off the display after a period of inactivity to save battery life. To turn on the display again, press any button on the camera.

8. Language: English / Français / Deutsch / Español / Italiano/ Português
Default setting is English.

9. Date Format: YYYY/MM/DD, MM/DD/YYYY, DD/MM/YYYY
Default setting is MM/DD/YYYY

10. Set Date: MM/DD/YYYY
You can set the date of the camera.

11. Set Time: HH/MM
You can set the time of the camera.

12. Date Stamp: Off, Date & Time, Date
Default setting is Date & Time.
If you select Date & Time, this camera adds Date & Time to the videos and photos you take.

13. Power Frequency: 50Hz, 60Hz
Default setting is 50Hz.

14. Format Card
To keep your micro SD card in good condition, reformat it on a regular basis. Reformatting erases all of your content, so be sure to offload your photos and videos first.
To reformat your card, please enter System Setting, then scroll through the options to locate and tap 'Format Card', then tap 'Confirm'.

15. Reset: Reset to factory? Cancel / Confirm
This option resets all settings to their default values.

16. About: Model / Version
You can check the model and version of your V50X.

CONNECTING TO THE ROADCAM APP

The Roadcam app lets you control your camera remotely using a smartphone or tablet. Features include full camera control, live preview, playback, download and sharing of content.

1. Download Roadcam app from Google Play or Apple Store.
2. Turn on the camera, press and hold up button for 3 seconds to turn on Wi-Fi.
3. Turn on Wi-Fi of your phone, connect to the Wi-Fi SSID: 'AKASO_V50X'.
4. Enter the password: 1234567890.
5. Open the app Roadcam. Tap 'Add Recorder'. You connect to the Roadcam app successfully.

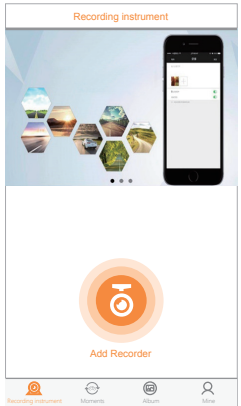
OFFLOADING YOUR CONTENT

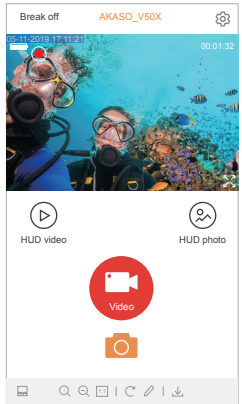
OFFLOADING YOUR CONTENT TO A COMPUTER

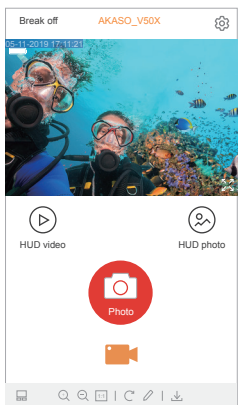
To play back your video and photos on a computer, you must first transfer these files to a computer. Transferring also frees up space on your micro SD card for new content.
To offload files to a computer using a card reader (sold separately) and your computer's file explorer, connect the card reader to the computer, then insert the micro SD card. You can then transfer files to your computer or delete selected files on your card. You can also offload files to a computer using a USB cable.

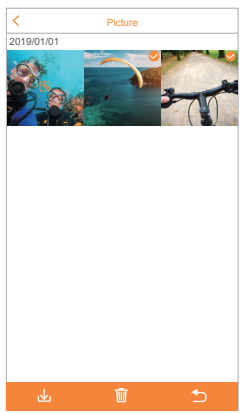
OFFLOADING YOUR CONTENT TO SMARTPHONE OR TABLET

1. Connect to the Roadcam app.
2. Open the Roadcam app. Tap '**Add Recorder**'. Then tap the icon at the middle of the screen.
3. Tap '**HD Photo**' icon.
4. Tap any file for 3 seconds. Then you can select many files.
5. Tap . You download the files successfully to your phone.









PLAYING BACK YOUR CONTENT

You can playback your content on the camera's LCD display, your computer, TV, or smartphone / tablet.

You can also playback content by inserting the micro SD card directly into a device, such as a computer or compatible TV. With this method, playback resolution depends on the resolution of the device and its ability to playback that resolution.

VIEWING VIDEOS AND PHOTOS ON YOUR V50X

1. Press and hold down button for 3 seconds or tap file icon to enter Playback mode. If your micro SD card contains a lot of content, it might take a minute for it to load.
2. Tap any video or photo file.
3. Tap Forward or Backward icon to playback video or photo files.

DELETING VIDEOS AND PHOTOS ON YOUR V50X

Delete videos and photos with touch screen:

1. Tap file icon 🗑 to enter playback mode. If your micro SD card contains a lot of content, it might take a minute for it to load.
2. Tap 🗑 and tap the video or photo file you want to delete.
3. Tap 🗑, the screen shows "Are you sure delete files? Cancel / Confirm".
4. Tap 'Confirm'. The selected file will be deleted.

Delete videos and photos with buttons:

1. Press and hold down button for 3 seconds to enter playback mode. If your micro SD card contains a lot of content, it might take a minute for it to load.
2. Press down button several times to locate the file you want to delete. Press shutter button. Then press and hold shutter button for 3 seconds. The screen shows "Are you sure delete files? Cancel / Confirm"
3. Press down button then shutter button. The selected file will be deleted.

REFORMATTING YOUR MICROSD CARD

To keep your micro SD card in good condition, reformat it on a regular basis. Reformatting erases all of your content, so be sure to offload your photos and videos first.

1. Turn on V50X.
2. Enter System Setting.
3. Scroll through the screen to locate and tap '**Format Card**', then tap '**Confirm**'.
4. Tap '**Confirm**'. Then you format your micro SD card successfully.

MAINTENANCE YOUR CAMERA

Follow these guidelines to get the best performance from your camera:

1. For best audio performance, shake the camera or blow on the mic to remove debris from the microphone holes.
2. To clean the lens, wipe it with a soft, lint-free cloth. Do not insert foreign objects around the lens.
3. Don't touch the lens with fingers.
4. Keep the camera away from drops and bumps, which may cause damage to the parts inside.
5. Keep the camera away from high temperature and strong sunshine to avoid being damaged.

MAXIMIZING BATTERY LIFE

If the battery reaches 0% while recording, the camera saves the file and powers off.

To maximize battery life, follow these guidelines when possible:

- Turn off Wireless Connections.
- Capture video at lower frame rates and resolutions.
- Use Screen Saver setting.

BATTERY STORAGE AND HANDLING

The camera contains sensitive components, including the battery. Avoid exposing your camera to very cold or very hot temperatures. Low or high temperature conditions may temporarily shorten the battery life or cause the camera to temporarily stop working properly. Avoid dramatic changes in temperature or humidity when using the camera, as condensation may form on or within the camera.

Do not dry the camera or battery with an external heat source such as a microwave oven or hair dryer. Damage to the camera or battery caused by contact with liquid inside the camera is not covered under the warranty.

Do not store your battery with metal objects, such as coins, keys or necklaces. If the battery terminals come in contact with metal objects, this may cause a fire.

Do not make any unauthorized alterations to the camera. Doing so may compromise safety, regulatory compliance, performance, and may void the warranty.

WARNING: Do not drop, disassemble, open, crush, bend, deform, puncture, shred, microwave, incinerate or paint the camera or battery. Do not insert foreign objects into the battery opening on the camera. Do not use the camera or the battery if it has been damaged-for example, if cracked, punctured or harmed by water. Disassembling or puncturing the battery can cause an explosion or fire.

CONTACT US

For any inquiries, issues or comments concerining our products, please send E-mail to the address below or call us. We will respond as soon as possible.

E-mail: cs@akasotech.com