USER MANUAL

Contents

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When using the video camera, adhere to the following precautions:

1. Do not drop the camera, avoid hard impacts and vibrations. Usage without the waterproof housing affects your warranty!
2. Do not put the video camera close to an object that generates strong magnetic field, such as a magnet or a motor. Do not put the video camera close to an object that emits powerful radio waves, for example, an antenna. Strong magnetic field may cause faults on the video camera or damage the image / voice data.
3. Do not expose the video camera to high temperature or direct sunshine.
4. Do not put the memory card close to an object that generates strong magnetic field, such as a television set, a speaker, or a magnet. Do not put the memory card in a place where static electricity is easily generated.
5. Disconnect the power supply to stop recharging the battery immediately when over heat, smoke, or peculiar smell occurs during recharging.
6. Keep the video camera out of reach of children during recharging, because the power cable may cause asphyxia or electrical shock on children.
7. Store the video camera in a cool, dry, and dust-free place.

Preface

Thank you for purchasing the AEE HD digital mini camera. With this camera featured by mini size, integrated design, user-friendly interface, easy operations and hands-free photography, you can shoot high definition photos and videos anytime anywhere, and the dynamic motion photography allows you to share wonderful events with your family and friends.
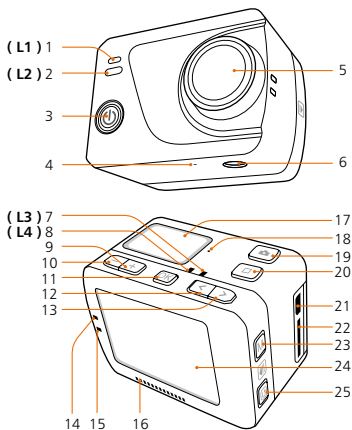
This Manual provides detailed information on how to install and use the camera, including instructions on use, precautions for operation and installation, and technical specifications. Please read this Manual carefully before using the camera and keep it for future reference.
This Manual is applicable to AEE camera S50 and S60+. Please note that the camera and accessories you have received may slightly vary with descriptions in this Manual due to technological innovation. If you have any question, please contact us.

Warranty

This product has been certified by certification bodies for compliance with related safety regulations and specifications issued by the federal communications commission (FCC) and council of Europe (CE).

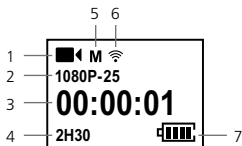Dispose of properly. Recycle it for a greener earth!

1. Charging status indicator
2. Recording status indicator
3. Video recording/Power key
4. Microphone
5. Lens
6. Tripod mount
7. Charging status indicator
8. Recording status indicator
9. Up key
10. Down key
11. OK key
12. Left arrow key
13. Right arrow key

14. Recording status indicator
15. Charging status indicator
16. Speaker
17. LCD segment display
18. Microphone
19. Shutter key
20. Stop key
21. USB interface
22. TF card slot
23. Menu key
24. TFT display
25. Playback key

1. Description of Indicators

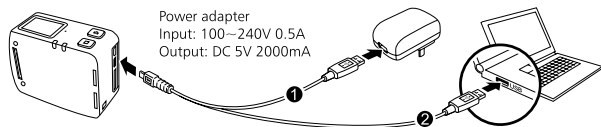| Position / Status	Green indicator	Red indicator	Blue indicator
	L1/L4	L2/L3	L2
Startup	/	Flash once and then Stay on	Flash once
Video recording	Flash slowly	/	/
Audio recording	Flash slowly	/	/
Photo shooting	Flash once	Stay on	/
Card full	Stay on	Stay on	/
Charging (switched off)	/	Flash slowly	/
Fully charged (switched off)	/	Stay on	/
Low-battery indicator	/	Flash fast for 5s and then auto power off	/
Data transmission	/	Stay on	Flash slowly
Wi-Fi on	/	Stay on	Flash slowly

2. LCD Segment Display

Video mode   Capture mode

	Icon	Functions
1	■◀	Working mode (Video recording)
	⬜	Working mode (Photo shooting)
2	1080P-25	Video resolution
	8M	Photo resolution
3	00:00:01	Recording timer
	100-0088	Number of recorded files
4	2H30	Remaining recordable time
	1888	Remaining shots
5	M	View angle
6	📶	Wi-Fi
7	🔋	Battery level

1. Charging

Start up the unit to check the battery power. If the battery level is low, charge it.
Use USB cable to charge video camera:

Power adapter
Input: 100~240V 0.5A
Output: DC 5V 2000mA

2. Insert and Remove The Memory Card

Though all TF cards above Class 10 can be used on video camera, high-speed card is recommended to perform high-definition shooting. When shooting during dynamic motion, brand SDHC cards are recommended for use in order to ensure smooth shooting.

*   Insert the memory card
a.   Ensure that video camera is switched off.
b.   Insert TF card into the memory card slot in the arrow direction flatly to the end. A "click" can be heard to indicate the card has been well inserted.

*   Remove the memory card
Press the center of exposed part of TF card and TF card will pop up slightly. Then pull it out flatly.

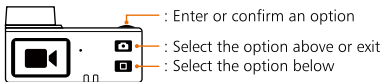❶ Before connecting the host to Wi-Fi or the remote control, please first insert the TF card.

3. Startup

Long press "Video Recording" key for 5s to turn on/off the camera. Once the camera is turned on, the red indicator will be turned on and the top screen will display the video recording information.

❶ When the camera is powered on, press and hold the Shutter button and Stop button at the same time to turn off the camera.

4. Operate without TFT Screen

When the camera is on, long press the Shutter button for 3s to enter the mode selection state. Function icons will be shown in full screen on the lattice LCD screen. The current function of each button is described below:

: Enter or confirm an option

: Select the option above or exit

: Select the option below
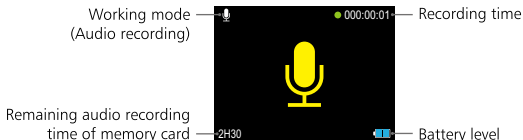
1. Basic Operations of Video Recording

a. Turn on video camera to enter recording standby mode;
b. Aim the lens to the subject and preview it in TFT display;
c. Press "Video recording" key once to start video recording;
-   The system will tick once to indicate the effective of video recording, TFT display is shown as below for video recording:

Working mode (video recording) —   — Time of video recording

Remaining video recording time of memory card
Resolution of video recording —   — Battery level / Visual angle

d. During video recording, press the "Stop" key once to stop video recording.
-   the system generates a tick tone twice ,indicating that the video recording operation stops recording, and the time counter stops.
-   The display will return to recording standby mode.

2. Basic Operations of audio record

a. Enter audio record mode and press "Video Recording" key to start audio recording.
-   The system will tick once to indicate the effective of video recording:

Working mode (Audio recording) —   — Recording time

Remaining audio recording time of memory card —   — Battery level

b. During audio recording, press the "Stop" key once to stop audio recording.
-   The system generates a tick tone twice, indicating that the video recording operation stops.
-   The display will return to recording standby mode.

* Exit audio record mode:
a. Press "M" key to enter the camera setting menu;
b. Press "< / >" key to select "   " and press "OK" key to confirm;
c. Press "< / >" key to select "   " mode and press "OK" key to confirm, video camera will return to recording standby mode.

3. Parameter Setting For Video Recording

Perform the following steps to set the parameters for video recording:
a. Press "M" key to enter the setting menu;
b. Press "+" / "-" key to select " ▣ ";
c. Press "<" / ">" key to move cursor to the sub-menu you want to configure, Press "OK" key to enter the sub-menu;
d. Press "<" / ">" key to select the parameters you want;
e. Press "OK" key to confirm;
f. Press "M" key again to exit the setting menu.

• **Execution Mode**
- Video recording (▣◀);
- Video-only Mode (♪): In this mode, you can record a video without voice;
- Voice recording (♪);
- Time Lapse Mode (◉): Time Lapse function can record one picture as a frame of the video according to the time interval you set. It doesn't need the post editing, and can easily make the continous evolution and movement. The available options are 1s, 2s, 5s, 10s and 30s;
- Auto Video Mode (↻): If this function is enabled, the system will auto start recording videos according to the countdown time you set. The available options are 5s, 10s, 20s;

• **Video resolution**
The optional resolutions for video recording are listed as below:

Resolutions	PAL System	NTSC System
1080P(16:9) 1920x1080	25fps, 50fps	30fps, 60fps
720P(16:9) 1280x720	50fps, 100fps	60fps, 120fps
WVGA(16:9) 848x480	100fps, 200fps	120fps, 240fps

Note: S50 do not support 1080P 50/60fps, 720P 100/200fps and WVGA 200/240fps.

• **View Angle**
Optional view angle: Wide, Medium, Narrow, Small.

�¥ : Wide   ﹀ : Medium   ﹀ : Narrow   ﹀ : Small

- **Bitrate**

  This unit provides two bit rate options: high " " and normal " ". (If high bit rate is selected, you will get clearer picture with increased file size).

- **Video Content Loop**

  You can activate or deactivate loop recording function. If ON, video file will be automatically stored in segment of 10 minutes; If OFF, video file will be stored in segment of 15 minutes.

- **180° Photo Rollover**

  When this function is activated, upright video file can be obtained when using video camera to shoot video upside down.
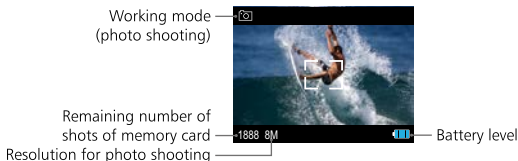
- **Display Time**

  You can choose to display or not display the video recording time at the bottom right corner of the photo.

- **Functions available under different video resolutions(O) :**

Function \ Resolution	1080P				720P				WVGA			
	25f	30f	50f	60f	50f	60f	100f	120f	100f	120f	200f	240f
Time Lapse	O	O	O	O	O	O	/	/	/	/	/	/
Auto Video	O	O	O	O	O	O	O	O	O	O	O	O
View Angle	O	O	/	/	/	/	/	/	/	/	/	/
Bitrate	O	O	O	O	O	O	O	O	O	O	O	O
Video Content Loop	O	O	O	O	O	O	O	O	O	O	O	O
180° Photo Rollover	O	O	O	O	/	/	/	/	/	/	/	/
Display Time	O	O	O	O	O	O	/	/	/	/	/	/

Photo Modes

1. Basic Operations of Photo Shooting

a. Turn on video camera to enter recording standby mode;
b. Cast the lens to the subject and preview it on the display;
c. Press the "Shutter" key once to switch the working mode to "photo modes";
d. Press the "Shutter" key again to shoot one photo.
- The system generates will click to indicate completion and the system will return to photo shooting standby mode;
- TFT display under photo shooting mode is shown as below:

Working mode
(photo shooting)

Remaining number of
shots of memory card

Resolution for photo shooting

Battery level

2. Parameter Settings for Photo Shooting

Perform the following steps to set the parameters for photo shooting:
a. Press "M" key to enter the setting menu;
b. Press "+" / "-" key to select " [ ] ";
c. Press "<" / ">" key to move blue cursor to the sub-menu you want to configure, Press "OK" key to enter the sub-menu;
d. Press "<" / ">" key to select the parameters you want;
e. Press "OK" key to confirm;
f. Press "M" key again to exit the setting menu.

• **Capture Mode**
- Single Shot Mode ([ ]): Take one photo when the photo shooting key is pressed;
- Fast Shot Mode ([ ]): video camera takes several photos within one second. three modes are available: 3 p/s, 6 p/s and 8 p/s (photo/second);
- Continuous Shooting Mode ([ ]): In this mode, you can shoot photos continuously as per the preset time interval until you press the "Stop" key. The available modes options are 0.5s, 1s, 2s, 3s, 5s, 10s, 20s;
- Self Timer Mode (♨): When the "Shutter" key is pressed once under recording standby mode, video camera will start countdown and take a photo at the set time. The available modes options are 3s, 5s, 10s.

- **Photo Resolution**

  Select the required resolution for shooting:
  S50: 5M/8M/12M.
  S60+: 8M/12M/16M".

- **Display Time**

  You can choose to display or not display the photo shooting time at the bottom right corner of the photo.

To set parameters, perform the following operations

a. Press "M" key to enter the camera setting menu;
b. Press "-" / "+" key to select " ";
c. Press "<" / ">" key to move blue cursor to the sub-menu you want to configure, Press "OK" key to confirm;

- **Warning Tone**
  Adjust the loudness or mute of buzzer. three modes are available: Off, Medium(50%) and Standard(100%).

- **Status Indicator**
  Activate or deactivate the status indicators.

- **On Screen Display**
  Display or hide the recording icons or information on the display screen.

- **Select Light Metering Mode**
  To achieve the best exposure effect, use central spot light metering mode when the central spot is bright while the surrounding environment is dark.

- **Auto To Standby**
  Video camera is set to automatically enter standby mode if no operation is (photo shooting, video recording or key operation) carried out in certain time. If any operation is carried out in the timing process, the timer will be reset. Under standby mode, press video recording key/shutter key/stop key to awaken video camera. The available modes options are Off, 2 minutes, 5 minutes and 10 minutes.

- **TV Output Format**
  This setting is designed to ensure that the frame rate of video recording matches with the playback format of on TV.

- **Language**
  Select the required language.

- **Date/Time**
  You can adjust the date and time, which are overlapped in the bottom-right corner of a video or shooting file during video recording or shooting.

- **Wi-Fi mode**
  Select "AP" and "STA" respectively when connecting the camera's Wi-Fi signal source to the mobile device and DRC12.

- **Format**
  This option allows all the files in the memory is cleared.

- **Recover Factory Setting**
  This option allows all the settings of the system to be restored to original factory settings.

1. Operating Procedure for Playback

a. Press the "playback" key to enter playback interface;
b. Press "Video recording" key to select the file type and press "OK" key to confirm;
   : View video files
   : View photo files
   : View all video/audio/photo files
c. Press "<" / ">" / "+" / "-" key to move the cursor to the thumbnail of the file you want
   to play back;
d. Press "OK" key to enter the playback interface and press "OK" key to play it.

- When playing video files, the functions of various keys are listed as below:

Key	Functions	Key	Functions
-	Decrease volume;	**+**	Increase volume;
<	Fast rewind;	**>**	Fast forward;
G	Press it to return to the file preview interface;	**OK**	Play/pause.

- When reviewing photos, the functions of various keys are listed as below:

Key	Functions	Key	Functions
-	Zoom out;	**+**	Zoom in;
	In zoom-in mode, when you press "**OK**", you can press "**-**" to move the photo downward;		In zoom-in mode, when you press "**OK**", you can press "**+**" to move the photo upward;
<	In zoom-in mode, when you press "**OK**", you can press "**<**" to move the photo rightward;	**>**	In zoom-in mode, when you press "**OK**", you can press "**>**" to move the photo leftward;
	When a photo is displayed in its actual size, press "**<**" to view the previous photo;		When a photo is displayed in its actual size, press "**>**" to view the next photo;
G	Press it to return to the file preview interface;	**OK**	When a photo is displayed in its actual size, press "**OK**" to rotate it;
			In zoom-in mode, when you press "**OK**", the " ↕ " icon will appear in the upper left corner, you can to move the photo;

- When playing audio files, the functions of various keys are listed as below:

Key	Functions	Key	Functions
-	Decrease volume;	**+**	Increase volume;
G	Press it to return to the file preview interface;	**OK**	Play/pause.

2. Delete Files

a. Under file playback or thumbnail preview mode, move the cursor to the file icon you want to delete;
b. Press "M" key to enter file operation mode and move the cursor to "Delete file";
c. Press "OK" key to confirm;
d. Move the cursor to "delete single"/"delete all" and press "OK" key to delete the file(s).
   : Delete single
   : Delete all

3. File Protection and Unlocking

a. Under file playback or thumbnail preview mode, move the cursor to the file icon you want to protection;
b. Press "M" key to enter file operation mode and move the cursor to "file protection";
c. Press "OK" key to confirm;
d. Select protection type and press "OK" to confirm:
   : Protect single
   : Protect all
   : Unlock single
   : Unlock all

❶ The protected files cannot be deleted. However, such files can be deleted by formatting.

4. Upload Audio/Video/Photo Files to PC

a. Use USB data cable to connect the camera to a PC;
b. Switch on video camera;
c. Click the "My Computer" icon on the desktop and find the "Removable Disc". If the camera is not detected, close "My Computer" window and reopen it after a while. The "removable disc" will be displayed;
d. Double click the "removable disc" icon;
e. Enter the "removable disc" and copy/move the file to the PC's hard disk.

❶ You can not record image or video files on the micro TF card inserted in the camera, from a PC (via USB cable).
❶ You can not delete image files or videos stored in the micro TF card, from the PC (via USB cable). You can only do it on the camera.
❶ You can not put a file from your PC to the micro TF card inserted in the camera (via USB cable).

After the Wi-Fi is enabled on the camera, you can connect a remote control or a mobile device with Wi-Fi function to the camera, so as to control the camera remotely.

First of all, please install the app " " provided by AEE on your mobile device. You can find and download "AEE App" from "Google Play" or "Apple Store", and then install it on your device.
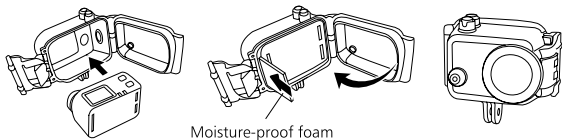
Enable and Connect Wi-Fi

a. Long press the "Stop" button for 3s to enable Wi-Fi. The blue Wi-Fi indicator will blink slowly, and the " 📶 " icon will appear on the lattice LCD screen. (Set the Wi-Fi mode of the camera to [AP].)

b. Run the App you have installed, enter the Wi-Fi control interface and click "Connect Wi-Fi" to enter the WLAN interface.

c. Find the Wi-Fi signal source named "AEE Magicam" and click "Connect" (default password: AEE12345).

d. After successful connection, the system will return to the control interface.

❗ In case of concurrent operations on the camera and the Wi-Fi device, the operation on the camera will be given higher priority.
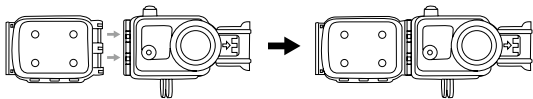
Water-proof Housing and Moisture-proof Foam

In order to avoid and reduce the dewing on the glass of the water-proof house, we suggest inputting the moistureproof cotton inside the water-proof case in big temperature range environment.

Follow these steps to load video camera into water-proof housing:

Moisture-proof foam

Follow these steps to assemble the waterproof housing rear case:

Precautions for the Waterproof Housing:

The waterproof housing is a precision component. When using the waterproof housing, adhere to the following precautions:

1. Do not randomly remove or change the O-ring, key, and lens cover. Otherwise, the waterproof performance deteriorates.
2. Do not put the waterproof housing in a place where corrosive gases are easily generated due to strong acid or alkali. Do not make the waterproof housing in contact with chemical or corrosive objects, such as strong acid or alkali.
3. Do not put the waterproof housing in a place where temperature is high (50°C) or low (-10°C) for a long time to avoid deformation.
4. Do not expose the video camera to sunshine for a long time to avoid deterioration of the waterproof performance.
5. Before use, ensure that the O-ring is intact, the seal is litter-free, the housing is fully sealed, and the buckle is tight.
6. After using the housing in sea water, wash it using fresh water, clean it, and dry it in a cool place.

Specifications

Description	Specifications
Visual angle	150°
Aperture	f/2.4
Digital zoom ratio	10X
Video recording format	MP4
Audio recording format	WAV
Photo format	JPG (JPEG)
WiFi-Distance/Mobil Device	100 Meter (Max.)
Water-resistant grade	IP68
Water-resistant depth	40 Meter
Storage medium	Up to 64GB external TF card
Standard battery capacity	1250mAh
Recharging duration	USB Cable: About 2.5 hours
Maximum video recording time	About 3.0 hours (Max.)
Maximum audio recording time	About 5.0 hours (Max.)
TFT Display	2.0" true color TFT display (16:9)
LED Dot-matrix screen	25 x 16mm FSTN (lattice screen)
Operating platform requirements	Operating system: Windows XP SP2 / Vista or above / Mac OS;
Storage temperature	-20℃ ～ 60℃
Operating temperature	-10℃ ～ 50℃
Dimension	L59 × W22 × H43mm
Unit weight	73g

❶ As our products undergo continuous development, the specifications are subject to change without prior notice.

Tips

1. When the unit is in used for long period, it is natural that its surface temperature will rise.
2. If you will not use the unit for long period, it is suggested that you charge it once every 6th month to maintain the performance of battery.
3. Use of digital zooming function during shooting will have slight impact on the image quality.
4. The visual angles under different modes will be slightly different.
5. To smoothly play a high-definition video file, it is suggested to use a PC or other professional device.
6. If you enable cyclic recording function for long period or frequently shoot/delete photos, the memory card may have data fragments so that you may not be able to store or shoot photos. Please back up the data to external storage medium and perform formatting operation to the memory card.
7. When the camera works in a high-temperature environment, the lattice screen may become black, which is a normal phenomenon and will not affect its function.
8. When the camera is used for a long time, the temperature of the metal parts near the lens may rise, which is a normal phenomenon; please do not touch the heated metal parts.
9. Hot plugging is not supported; in case of white screen, please restart the camera to return to normal.

Notice

When using the video camera, pay attention to the following notice information:
1. During continuous use, the body temperature of the video camera increases. This situation is normal.
2. If the video camera is not used for a long time, remove and maintain the battery properly, and recharge the battery every six months to ensure the battery performance.
3. During recording, enabling the digital zooming function may affect the image quality.
4. Shooting view angles are slightly different in different working modes of the video camera.
5. If a video file is large, a computer or a special-purpose player is preferred for smooth play.

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