

User manual for BMS Ecocam 8 MkII camera



Applicable for:

- **BMS Ecocam 8 MkII (74708)**

NOTICES: PLEASE READ CAREFULLY BEFORE USE

- Use the document camera under the rated electric conditions.
- Do not place the document camera on any unstable surface. It may fall and cause injuries or damages.
- Do not place this device under direct sunlight or near heaters.
- Do not place this device near water.
- Keep the camera away from acid or alkali gas.
- Do not place this document camera in humid, dusty, windy or vibrant locations.
- The recommended operating environment is:
 - Temperature: 0 °C--45 °C(32 °F-113 °F)
 - Humidity: less than 75%
- Always unplug BEFORE cleaning the device. Use a damp soft-cloth for cleaning. Do not use volatile solvent.
- When this equipment functions abnormally, such as smoke, smell, noise, immediately unplug and call for professional assistance.
- Unplug the document camera when not in use.

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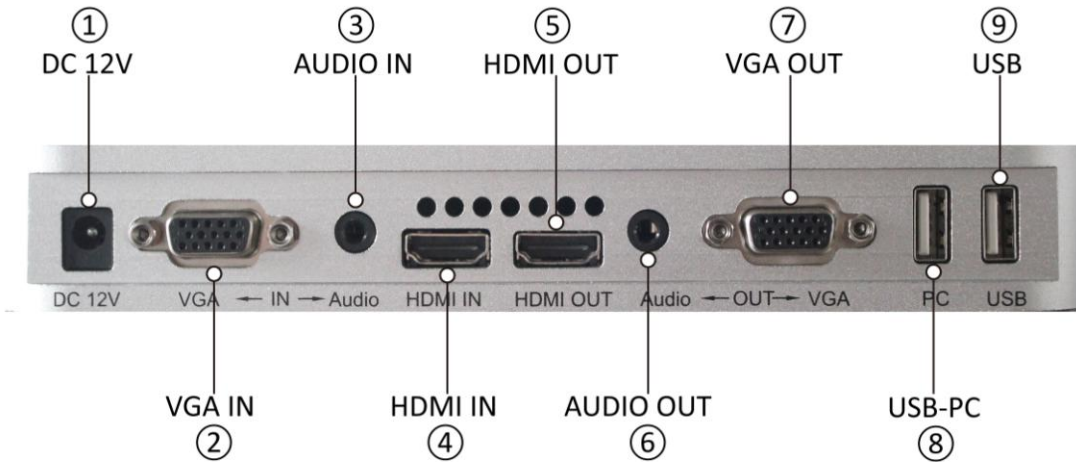
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PART NAME AND FUNCTIONS:

Appearance:

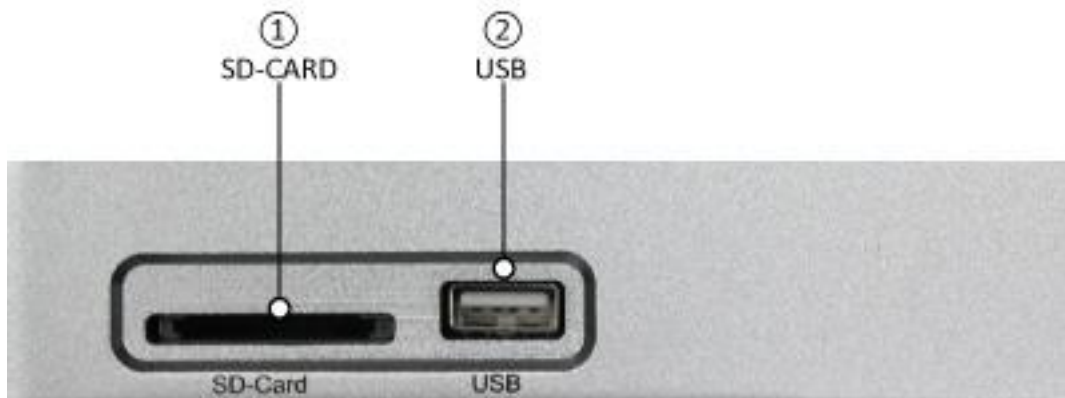


Rear Panel

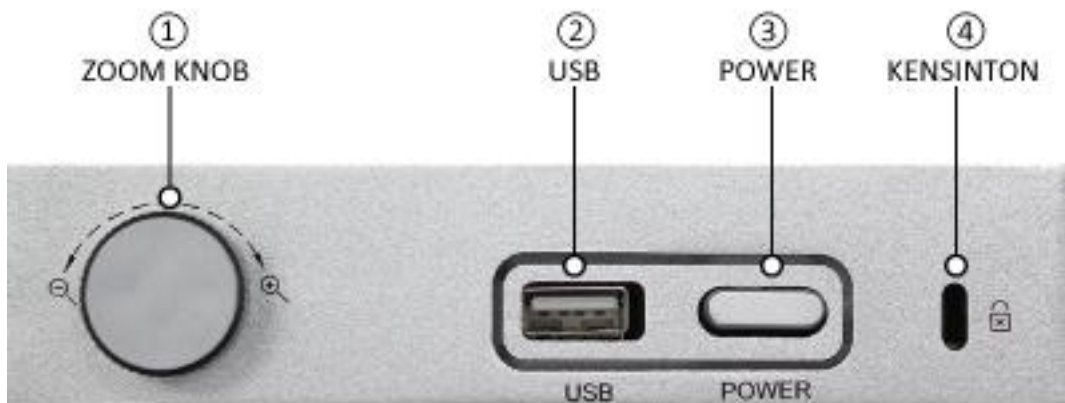


1. **DC12V**: power input
2. **VGA IN**: VGA input
3. **AUDIO IN**: audio input for VGA input
4. **HDMI IN**: HDMI input
5. **HDMI OUT**: HDMI output
6. **Audio OUT**: audio output for VGA output
7. **VGA OUT**: VGA output
8. **USB-PC**: USB connector, used to connect with PC.
9. **USB**: USB connector, used to connect with a wifi dongle.

Side Panel

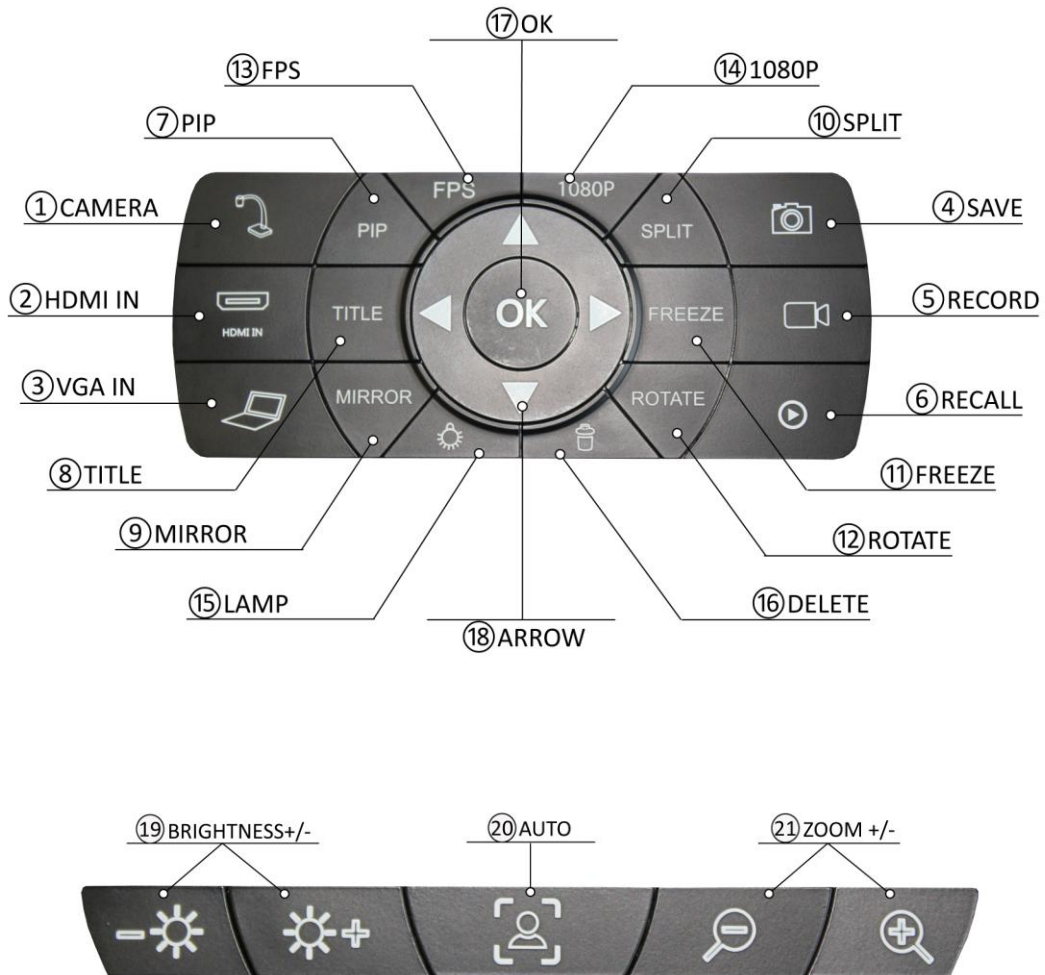


1. **SD-CARD**: SD card connector
2. **USB**: USB connector, used to connect USB mouse or USB memory sticker.



1. **ZOOM KNOB**: Zoom in/zoom out knob
2. **USB**: USB connector, used to connect USB mouse or USB memory sticker.
3. **POWER**: Power button, power on or power off.
4. **KENSINGTON**: Kensington lock

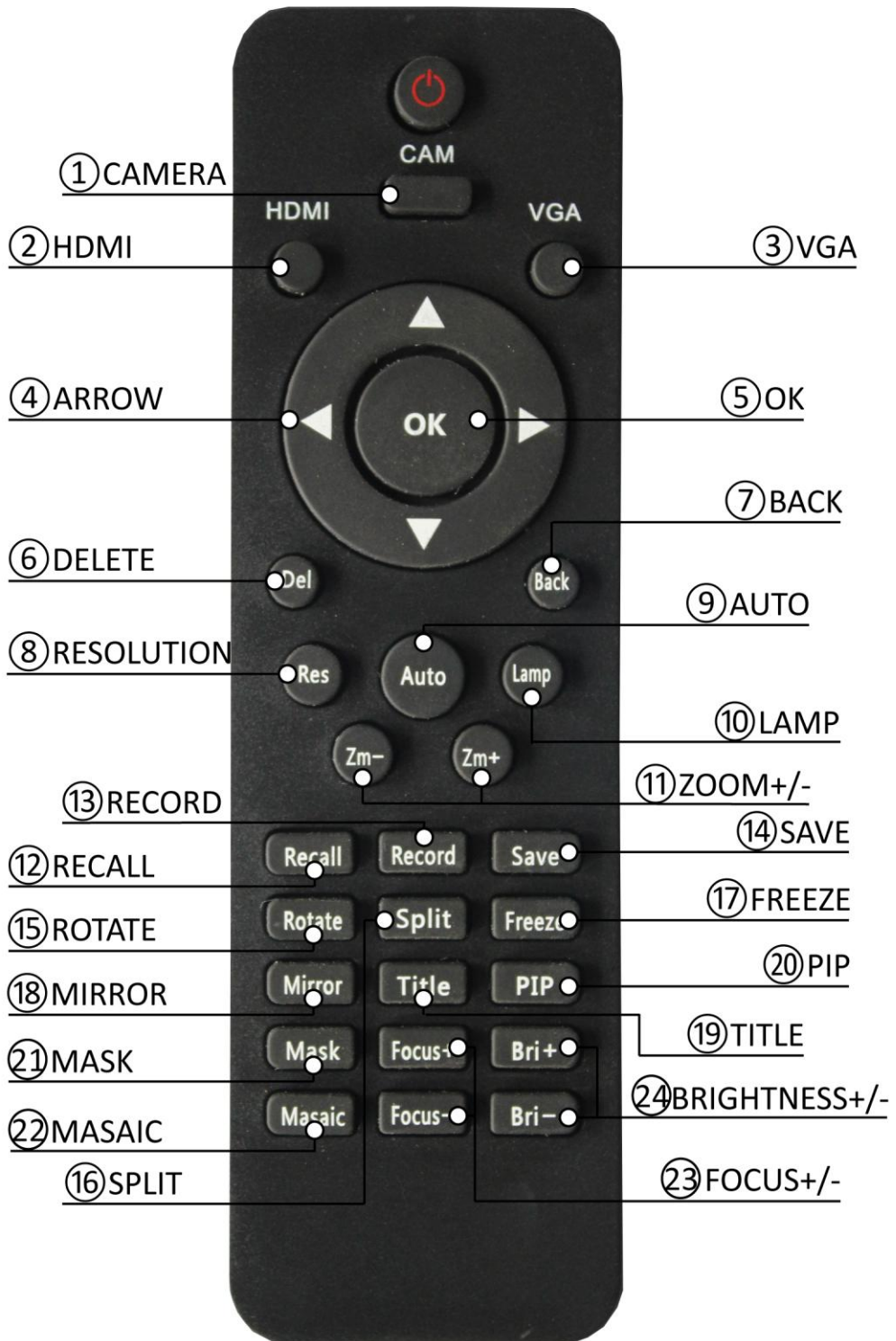
Control Panel:



1. **CAMERA:** To switch back to camera image.
2. **HDMI IN:** To switch to HDMI input.
3. **VGA IN:** To switch to PC input.
4. **SAVE:** Capture and save the image to Memory stick, SD card, or built-in memory. GS40 can detect when there is an external storage media and automatically save the images to SD card or USB memory stick. If there is no external storage connected, all captured image will be saved in the built-in memory.

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5. **RECORD:** To start/stop recording a video.
 6. **RECALL:** Image recall mode enabled, display the saved images and video clips.
 7. **PIP:** To enable the picture in picture mode.
 8. **TITLE:** To freeze the title area.
 9. **MIRROR:** To toggle horizontal mirror , vertical mirror and horizontal+vertical mirror.
 10. **SPLIT:** To get image split.
 11. **FREEZE:** To freeze the current on-screen image
 12. **ROTATE:** To rotate the image with 90° 180° and 270° .
 13. **FPS:** To adjust the frame rate.
To get return in image recall mode.
 14. **1080P:** To adjust the resolution.
 15. **LAMP:** To turn on/off the LED light.
 16. **DELETE:** Delete the selected images or video clips.
 17. **OK:** To confirm the selection.
 18. **ARROW:** To select the saved image when image recall mode is enabled.
 19. **BRIGHTNESS+/-:** To adjust the brightness of displaying image.
 20. **AUTO:** Adjust white balance and focus automatically.
 21. **ZOOM+/-:** Image zoom in and zoom out.

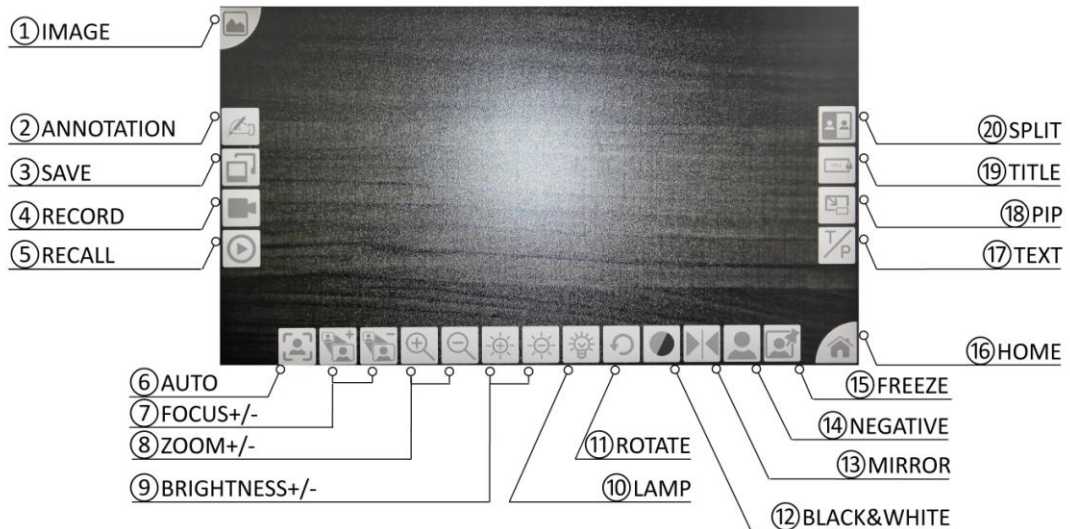
REMOTE CONTROL



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1. **CAMERA**: To switch back to camera image.
 2. **HDMI**: To switch to HDMI input.
 3. **VGA**: To switch to PC input.
 4. **ARROW**: To confirm the selection.
 5. **OK**: To select the saved image when image recall mode is enabled.
 6. **DELETE**: To delete the select image or video clip.
 7. **BACK**: Return to previous menu.
 8. **RESOLUTION**: To adjust the resolution.
 9. **AUTO**: To carry out auto focus and white balance.
 10. **LAMP**: To turn on/off the LED light.
 11. **ZOOM+/-**: Image zoom in and zoom out.
 12. **RECALL**: To enable the image recall mode, displaying saved images and video clips
 13. **RECORD**: To start/stop recording a video.
 14. **SAVE**: Capture and save the image to Memory stick, SD card, or built-in memory. GS40 can detect when there is an external storage media and automatically save the images to SD card or USB memory stick. If there is no external storage connected, all captured image will be saved in the built-in memory.
 15. **ROTATE**: To rotate the image with 90° 180° and 270°.
 16. **SPLIT**: To get image split.
 17. **FREEZE**: To freeze the current on-screen image.
 18. **MIRROR**: To toggle horizontal mirror , vertical mirror and horizontal+vertical mirror.
 19. **TITLE**: To freeze the title area.
 20. **PIP**: To enable the picture in picture mode.
 21. **MASK**: To enable the mask mode.
 22. **MASAIC**: To enable the masaic mode.
 23. **FOCUS+/-**: To adjust focus manually.
 24. **BRIGHTNESS+/-**: To adjust the brightness of displaying image.

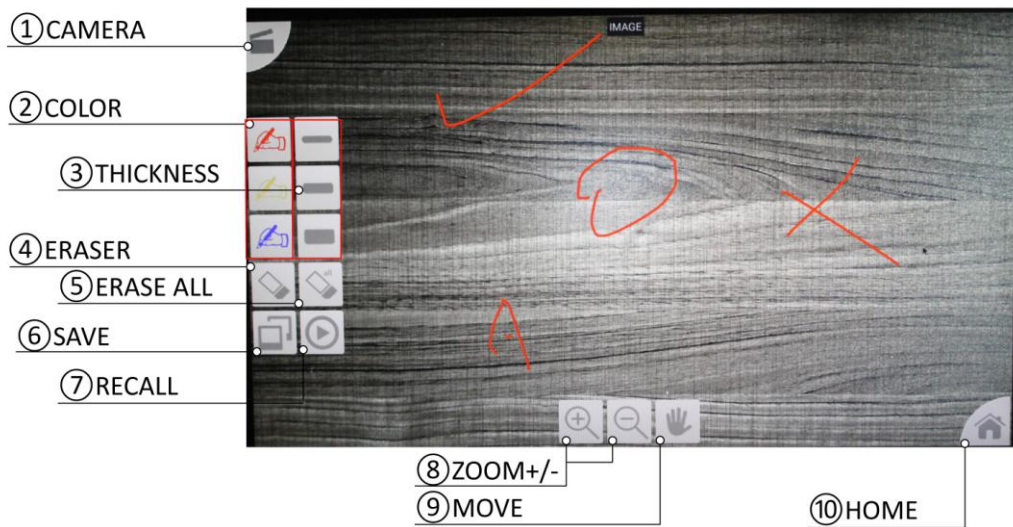
ON BOARD ANNOTATION AND CONTROL

GS40 allows on board annotation and control by connecting a USB mouse to it. We will see the following icons by clicking the left button on a mouse:



1. **IMAGE**: To freeze the current image, and annotation function activated.
2. **ANNOTATION**: To active the annotation function.
3. **SAVE**: To save the image
4. **RECORD**: To start/stop recording a video.
5. **RECALL**: To enable the image recall mode, displaying saved images and video clips
6. **AUTO**: To carry out auto focus and white balance.
7. **FOCUS+/-**: To adjust the focus manually.
8. **ZOOM+/-**: Image zoom in and zoom out.
9. **BRIGHTNESS+/-**: To adjust the brightness of displaying image.
10. **LAMP**: To turn on/off the LED light.
11. **ROTATE**: To rotate the image with 90° 180° and 270°.
12. **BLACK&WHITE**: To enable black & white mode.
13. **MIRROR**: To toggle horizontal mirror , vertical mirror and horizontal+vertical mirror.
14. **NEGATIVE**: To switch between positive and negative image.
15. **FREEZE**: To freeze the current on-screen image.
16. **HOME**: To go to system main page.
17. **TEXT**: To enable the text mode.
18. **PIP**: To enable the picture in picture mode.
19. **TITLE**: To freeze the title area.
20. **SPLIT**: To get image split.

Then click IMAGE or ANNOTATION icon to active the annotation function:

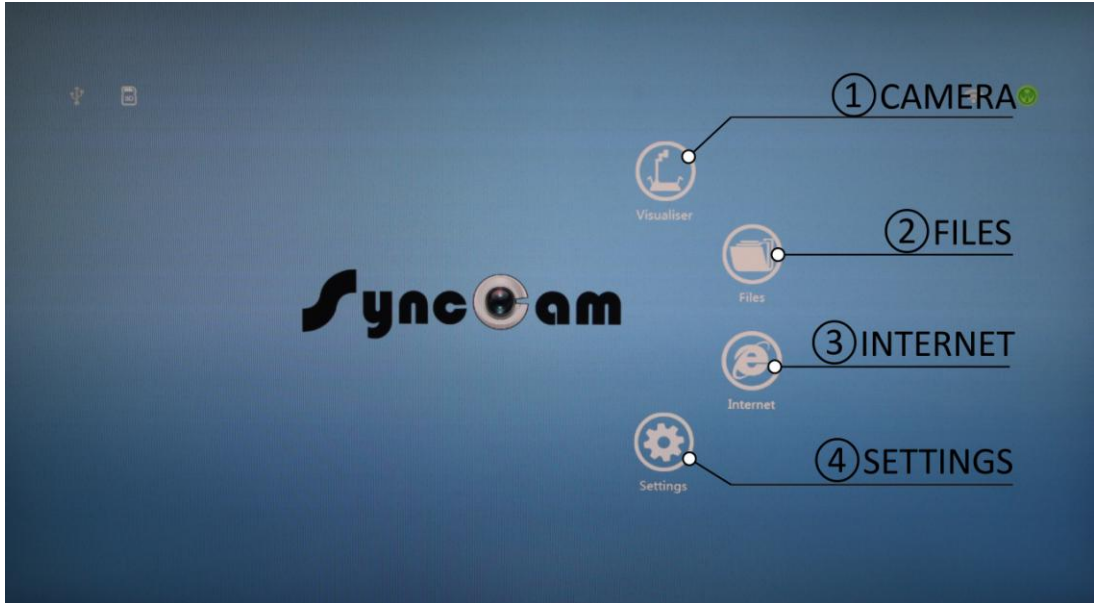


1. **CAMERA**: To go back to camera image.
2. **COLOR**: To change the color of the annotation.
3. **THICKNESS**: To change the thickness of the annotation
4. **ERASER**: To erase the annotation in selected area.
5. **ERASE ALL**: To delete all the annotation.
6. **SAVE**: To save the image.
7. **RECALL**: To recall the saved image, you can make annotation on the saved iamge.
8. **ZOOM+/-**: To zoom in/out the image.
9. **MOVE**: To move the image when zoom in.
10. **HOME**: To go to system main page.

MULTIMEDIA SYSTEM

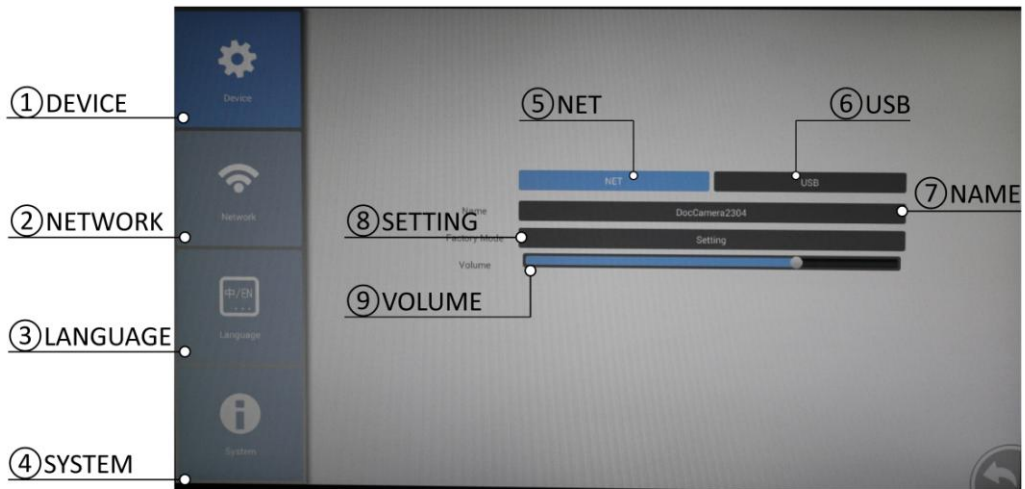
GS40 embedded a multimedia system, which allows you surf the internet, open files that in USB memory stick or SD card without PC.

Click the Home button by connect a USB mouse.



1. **CAMERA**: To get to the camera image
2. **FILES**: To open the files on board, USB Memory stick or SD card, it supports files in Word, PPT, EXCEL, JPG, MP3, MP4, AVI
3. **INTERNET**: To open the browser to surf internet.
4. **SETTINGS**: To change the setting of the system.

Click Settings to adjust the setting of the system.



1. **DEVICE**: choose Device, you can change the following setting:
 5. **NET**: To select NET to active wireless connection between GS40 and PCs, iPhones, Android phones or other tablets.
 6. **USB**: To select USB to active USB connection between GS40 and PCs.
 7. **NAME**: To change the name of the GS40
 8. **SETTING**: To enter to the factory settings, you can adjust the center point of camera, do focus curve if camera can not focus automatically, change the tone of the image(blue+/-, Red+/-).

The password to enter the factory setting is : 4321, please consult the dealer for professional assistance when enter the factory setting.

 - 9. **VOLUME**: To adjust the volume of the system.
2. **NETWORK**: To active and connect to a wifi signal
 3. **LANGUAGE**: To change the language.
 4. **SYSTEM**: To check the system information.

USB SOFTWARE

CONNECTION:

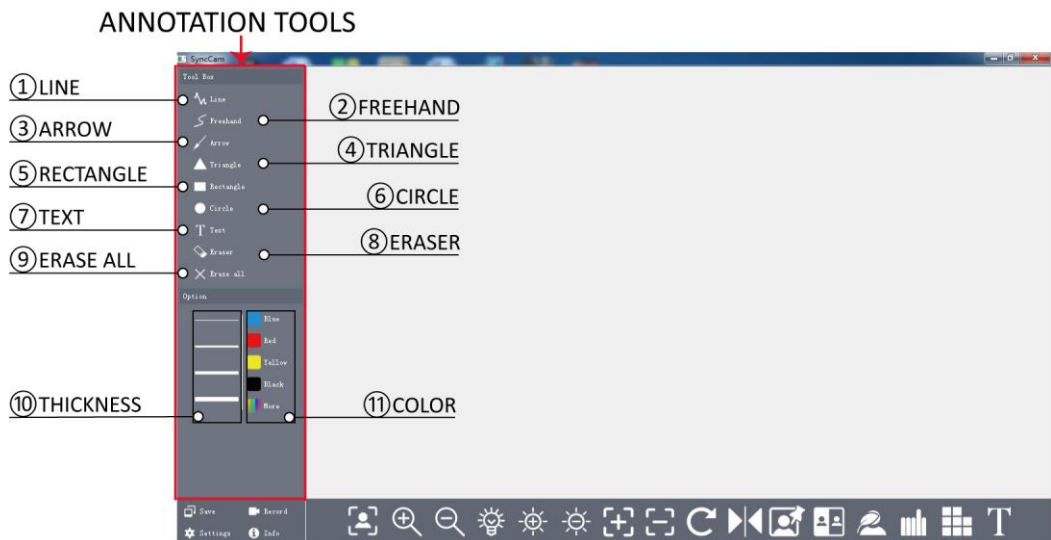
There 2 ways to connect the GS40 to the PC.

1. Use the provide USB cable to connect the GS40 and PC.
To select this method of connection, you have to choose “USB” in “DEVICE” of system setting.
2. Use Wifi function to connect the GS40 and PC(optional)
To select this method of connection, you have to choose”NET” in “DEVICE” of system settings.
 - 1) Connect the wifi dongle to the USB port
 - 2) Active the wifi function of GS80, select a nearby wifi signal and connect
 - 3) Connect the PC to the same wifi signal.

SOFTWARE:

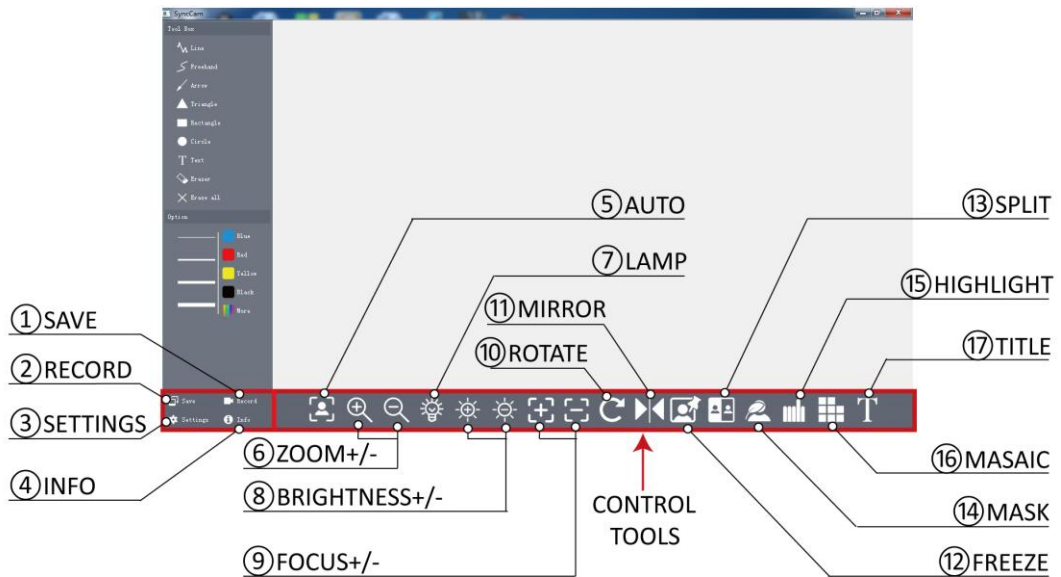
Install the provide software to the PC follow the procedures.

Double click “Synccam” to run the software, selecting the right models, then you can use the USB software.



1. **LINE:** To place a beeline into the image.
2. **FREEHAND:** To draw with mouse into the image.
3. **ARROW:** To place a arrow into the image.
4. **TRIANGLE:** To place a triangle into the image.
5. **RECTANGLE:** To place a rectangle into the image.
6. **CIRCLE:** To place a circle into the image.
7. **TEXT:** To add a typing text into the image.
8. **ERASER:** To erase the annotation that in select area.
9. **ERASE ALL:** To delete all the annotation.
10. **THICKNESS:** To select the thickness of annotation.

11. **COLOR**: To select the color of annotation.



1. **SAVE**: To save the image to PC.
2. **RECORD**: To record a video clip to PC.
3. **SETTINGS**: To change the settings of the image.
4. **INFO**: To check the version information of the software.
5. **AUTO**: To adjust white balance and focus automatically.
6. **ZOOM+/-**: Image zoom in and zoom out.
7. **LAMP**: To turn on/off the LED light.
8. **BRIGHTNESS+/-**: To adjust the brightness of displaying image.
9. **FOCUS+/-**: To adjust focus manually.
10. **ROTATE**: To rotate the image with 90° 180° and 270 °.
11. **MIRROR**: To toggle horizontal mirror , vertical mirror and horizontal+vertical mirror.
12. **FREEZE**: To freeze the current on-screen image.
13. **SPLIT**: To get image split.
14. **MASK**: To add a mask on the image.
15. **HIGHLIGHT**: To highlights the select area.
16. **MASAIC**: To get the mosaic image
17. **TITLE**: To freeze the title area.

MOBILE SOFTWARE:

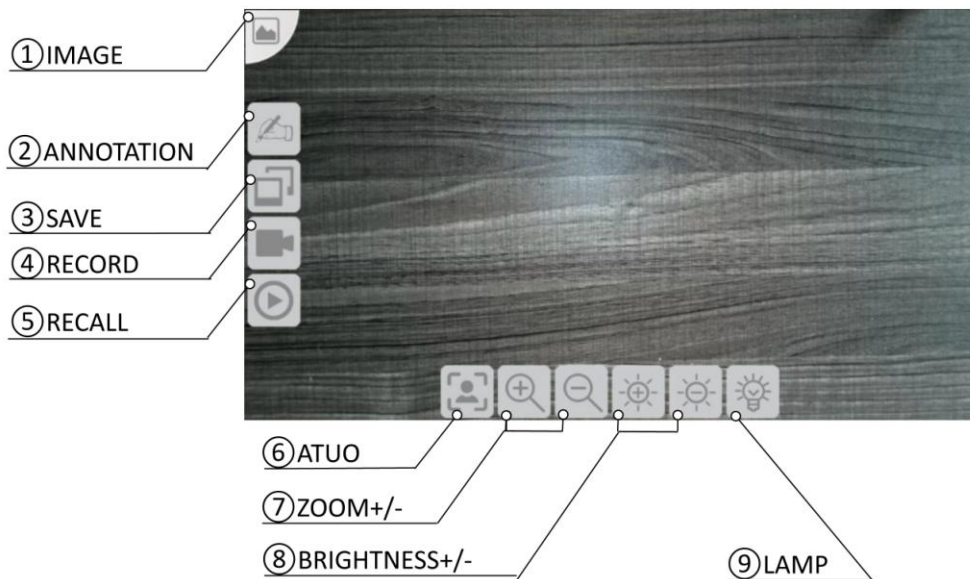
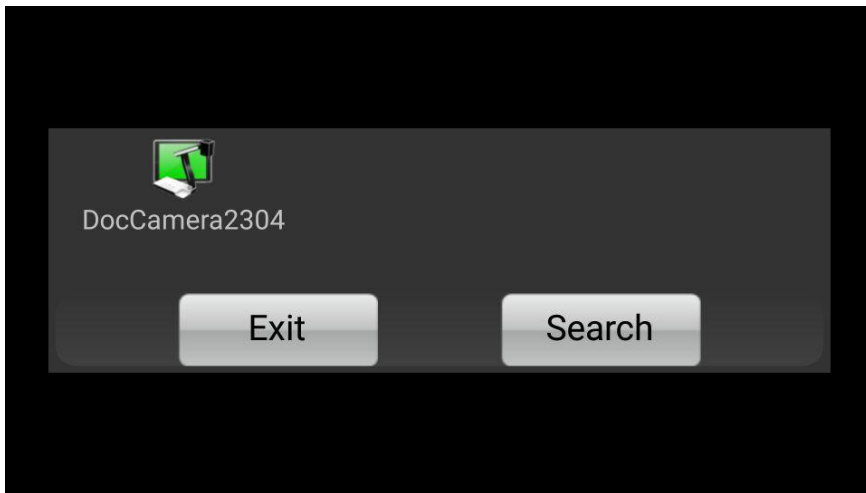
GS40 gets an optional configuration, wifi function.

By carrying wifi function, GS40 could connect to laptops, iPhones, Android phones or other tablets wirelessly.

You have to choose "NET" in "DEVICE" of system settings first.

- 1) Active the wifi function of GS40, select a nearby wifi signal and connect
- 2) Connect the mobile device to the same wifi signal.

Then run the "Synccam" software on the mobile device, press the document camera icon to active.



SPECIFICATIONS:

Model	GS40
Total pixel	8 Megapixel
Sensor	1/4" CMOS
Zoom	10x michanic, 10x digital
Shooting area	A3
Focus	Auto/manual
Output signal	720P/1080P
Resolution(horizontal)	≥900 TV lines
Image capture	Yes(image memory: 1000 pictures)
Video recording	One touch on board recroding
OSD	Yes
White balance	Auto/manual
Image effect	Mirror, Rotation, Split, Freeze, Black and White, Negative, PIP, Title, Highlight, Mask, Mosaic
Anotation	On board anotation
Internal memory	4G
External memory	USB disk, SD card(up to 32G)
Plug&Play(USB/SD)	Word, PPT, EXCEL, JPG, MP3, MP4, AVI
Wifi connection	Optional
Remote control	Yes
USB 2.0	Host×2, Slave×1
Inputs	VGA×2,HDMI×1,AV×1 Audio×3
Outputs	VGA×2,HDMI×1,VIDEO×1 Audio×1
Lighting system	Arm Light×1
Kensington lock	Yes
Dimensions	44×34×21 cm
Weight	2KG
Power supply	12V DC power adapter

TROUBLE-SHOOTING:

Symptoms	Possible causes/counter-measures
No image	<ol style="list-style-type: none">1. Power cord is not properly connected.2. VGA/HDMI cables are not properly connected.3. Power switch is not turned on.
Upper light not on	<ol style="list-style-type: none">1. The filament is broken. Change the bulb.2. The lamp is not fully plugged in its holder:
Image bending	<ol style="list-style-type: none">1. Camera not in right position, adjust the camera.2. Distortion of LCD display, press the “Auto adjust” of the LCD.
Out of focus or blurring image	<ol style="list-style-type: none">1. The object is too close to the lens.2. Focus is not on the point of interest. Try pressing ZOOM- to change it.3. Auto-focus is not on: press AUTO again.4. Fog on the lens in damp climate. It will disappear gradually when the equipment warms up.

PACKING LIST AND ACCESSORIES:

Item	Quantity	Item	Quantity
Power adaptor	1	USB cable	1
VGA cable	1	HDMI cable	1
Remote control	1	CD(user manual, software)	1

Care & Maintenance:

Store the camera in a dust free area or the optional case you can purchase at your dealer.

It is recommended to never expose the camera to extreme weather conditions. Using or storing the Ecocam camera is best in a temperature of 0° - 45° degrees Celsius. The humidity should be less than 75%.

Always keep the optical parts clean. In case there is dirt on the lens surface, use distilled water to moisten and soft cloth to clean the lens surface. Be very careful and make sure to avoid scratches on a lens surface. Cleaning can also be done using an alcohol solution or an optical cleaning solution. Ventilate the room. Do not soak the lens in (cleaning) liquid.

To clean painted parts, use also a slightly moistened soft cloth. Never use an organic solvent. Use a mild detergent, like soft hand soap.



Environment protection first!

Your appliance contains valuable materials which can be recovered or recycled.

Leave it at a local civic waste collection point

It is within our company policy to develop continuously. Breukhoven b.v. reserves the right to change design and specifications without further notice.

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