

BlueEyes[®]

iCam

Full HD Camera

Operation Manual

VER 2.1.18-B2143

2015/08/14

www.BlueEyes.tw



Operation manual

❑ BlueEyes iCam Full HD Camera

Thank you for using the product of BlueEyes Technology.

The manual will introduce the product of BlueEyes Technology. Please read the manual before you start using the product.

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1. Outline

1.1 Instruction

Most of the recording systems use traditional security camera, so the quality was very bad. The students have to look closely to see the words on the blackboard. This kind of camera is not suitable for education institute environment.

BlueEyes Technology develops the Full HD Camera especially for the education institute environment, and registered the trademark as iCam®. Now we have the third generation iCam. It not only reserves the high quality of shooting, but also upgrades the sound receiver. In order to enhance the characters on the whiteboards, digital boards, and projectors, iCam can detect the external environment automatically and make the characters clearer. Watching the iCam videos is like watching Blu-ray movies in the movie theaters.

1.2 Features

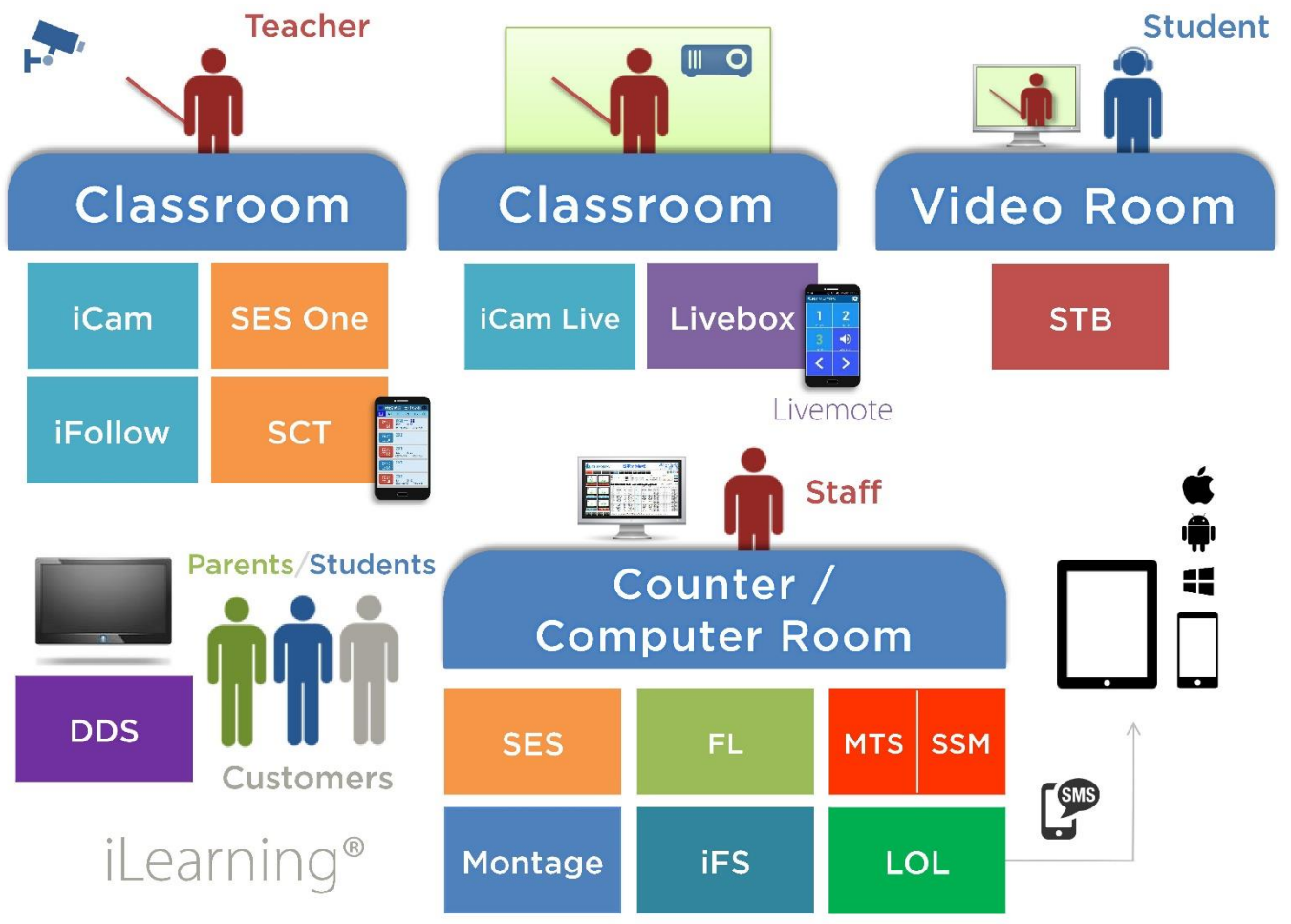
- The only camera designed for educational facilities – full HD camera for lecture recording
- Full HD 1080P. The quality is 24 times better than the traditional camera
- Designed for whiteboards, digital boards, projectors, and touch-panel TV, enhance sharpness of images.
- Recording indicator makes teachers easy to see if the recording is on.
- Full-time audio and video synchronization
- TAMRON mega-pixel compatible varifocal lenses
- SONY Exmor Back-illuminated sensor
- Texas Instruments DaVinci video processor (DSP)
- LED indicator
- Built-in microphone
- Built-in privacy masking feature
- Embedded watermark/ QR Code copyright protection
- Made in Taiwan
- Industrial grade. It can be operated for 24 hours without overheating.

Note: iCam is not normal network camera. It is Full HD camera designed for education institutes.

More information and features, please check official website of BlueEyes Technology:

http://www.blueeyes.com.tw/iLearning_iCam.php

1.3 Composition



2. Safety and precautions

- Please do not leave or install the device in damp, direct sunlight, hot or confined spaces.
- Do not put anything that would fall into the machine on top of the machine.
- Do not place the machine on an unstable place. It may fall down, resulting in an injury.
- Please use this machine in a place with good ventilation. Do not block the heat dissipation vents. Poor heat dissipation can lead to a rise internal temperatures and cause malfunctions
- Use dry rag to clean the machine. Do not use solvent.
- We will not be liable for any damage caused by the use of third party power supplies in this machine
- Never plug the machine into a power socket that is shared with other equipment (extension load/cord, 2- or 3-way adapter, etc.). This may result in fire or electrical shock or fire.
- Please do not disassemble, re-design or maintain the device by yourself.
- The processors and accessories all pass the safety test of CE and FCC.



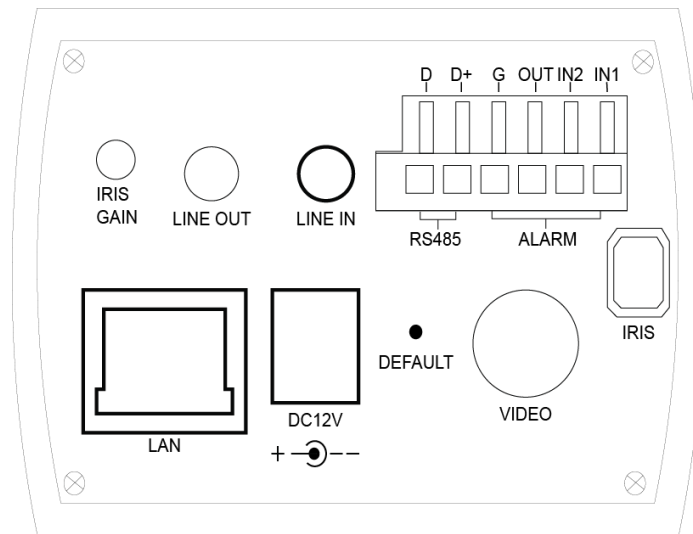
Please plug the cables of iCam when thundering to avoid lightning strikes. Lightning strike is natural disaster so it is not in our warranty.

<http://www.BlueEyes.com.tw/warranty.php>

3. Device Description

3.1 Back Panel

-- Back panel --



Back panel descriptions :

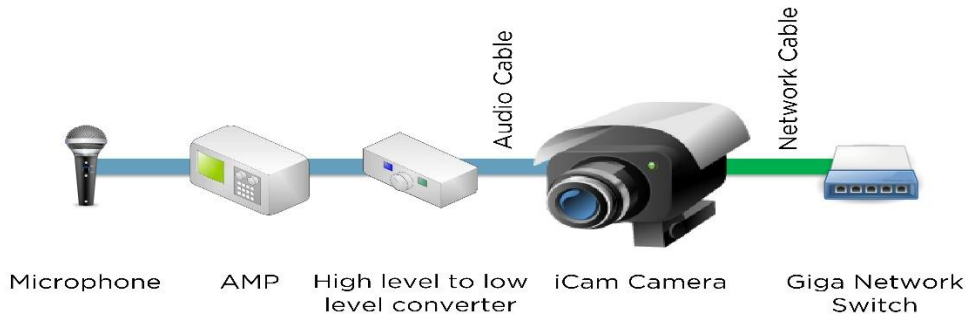
DC12V	DC12V power input.
LAN	Attach the provided RJ-45 cable and the port is auto-sensing and supports negotiations at 10/100 speeds.
VIDEO	Connect to video equipment, such as a monitor or projector.
LINE IN	Connect to an audio input source.



Do not test or connect the interface not commonly used. It may cause instability of the system.

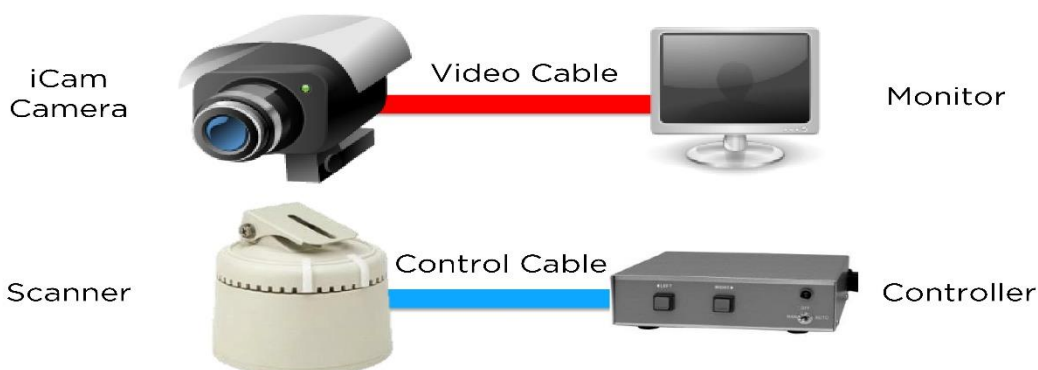
3.2 Fixed iCam camera

Fixed iCam camera diagram:



3.3 Scanning iCam camera

Scanning iCam camera diagram:



- The small monitor can suck on the direction controller. If you worry that it is not steady enough, you can stick directly on the monitor.
- There are two control buttons on the direction controller of the scanning iCam camera, and the left and right controller is for SES. If you worry that the students might drop it on the floor, you can stick it in the table with double-sided tape or silicone as some of the education institutes do.
- Use flexible wire for network cable, video cable and audio cable to avoid fixed screw loosening or interfaces dropping after long use.
- Put termination plug at the end of the left and right turn.
- After installing, you must rotate to the end and see the image simultaneously to

make sure the cables would not be pulled or the fixed screw of the camera would not loosen when rotating.

- Use [single tone]for audio cable

3.4 LED Indicator (Separately Sold)

LED indicator on iCam shines when recording, or iFollow technology appointed.

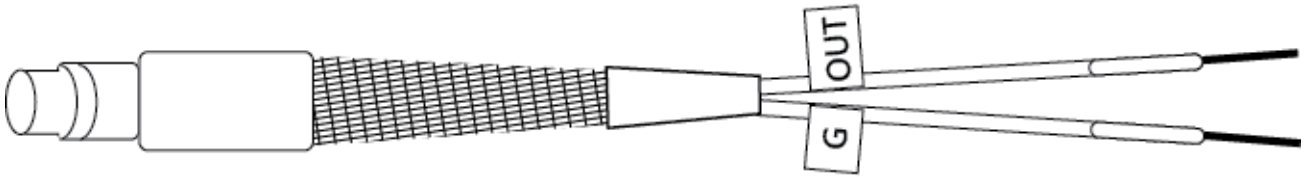


LED should go with SES lecture recording system. If you use SES Lite, the LED indicator would not work.

※ Appearance Picture

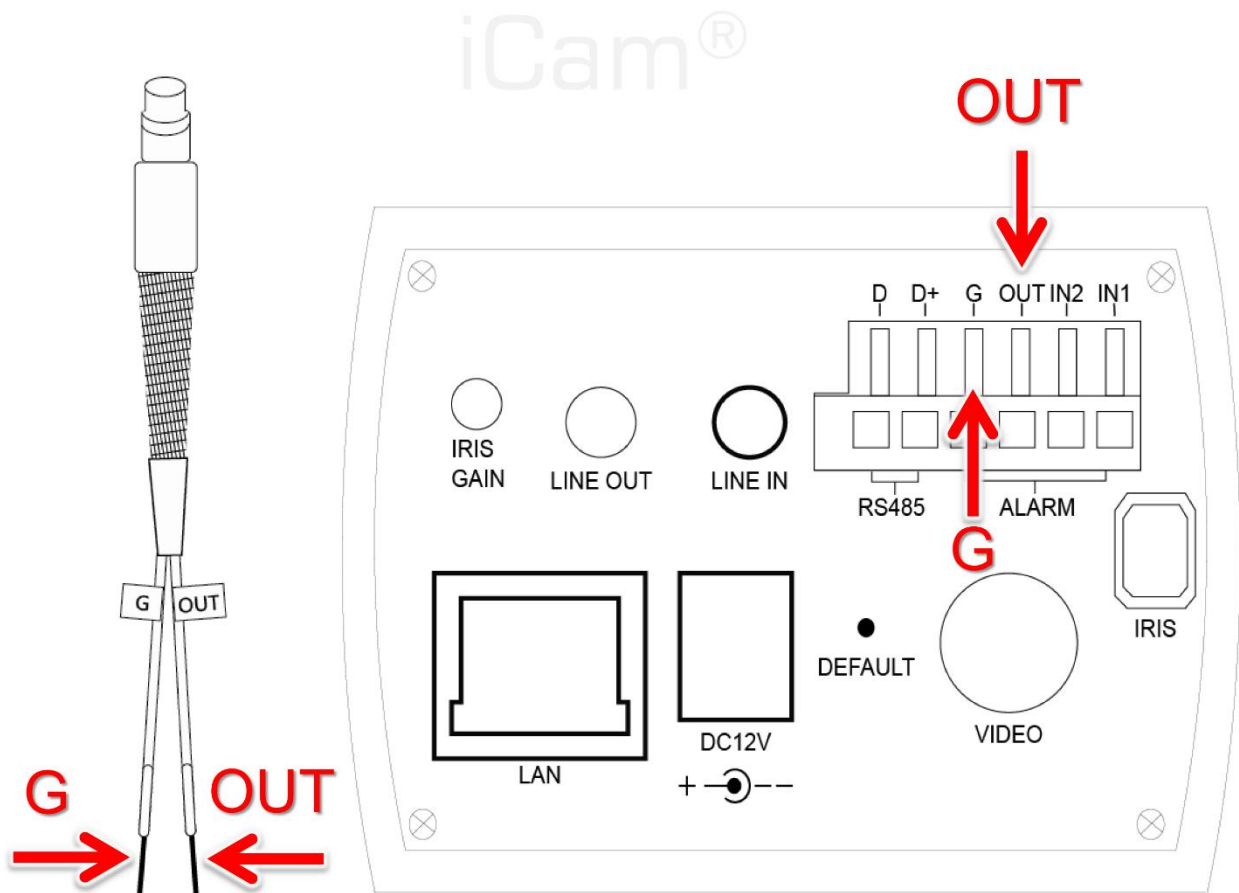


※ Diagram



※ Wiring Diagram

LED indicator has two cables: G and OUT. Plug the two cables in the corresponding point on the back panel.

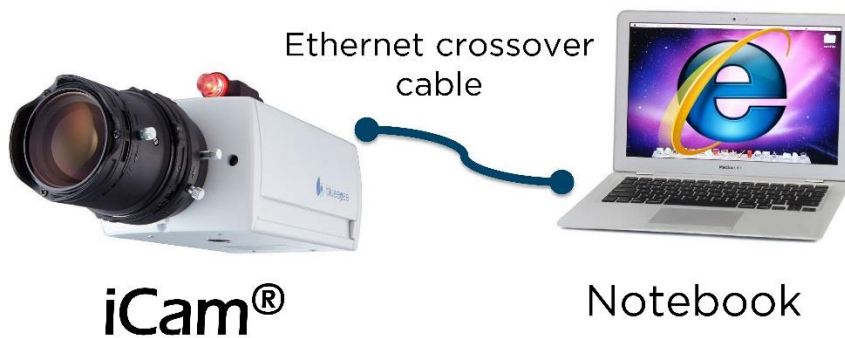




Plug the cable of LED indicator, press the tenon until inserting.

3.5 Live Video

Preparation Work



Follow these steps to see the live video:

1. Open Microsoft Internet Explorer(IE) browser
2. Type the following URL into the address bar of your web browser on your admin computer and press Enter.
http://ip_address/ (default IP address is set in the range of 192.168.1.171-176)
3. Enter account and password
4. Click LiveView to watch the video.



The operator username is sesuser. As a default, check the factory configured list. You can edit account name or password in setting. We recommend using Microsoft Internet Explorer version 10 or higher web browser.

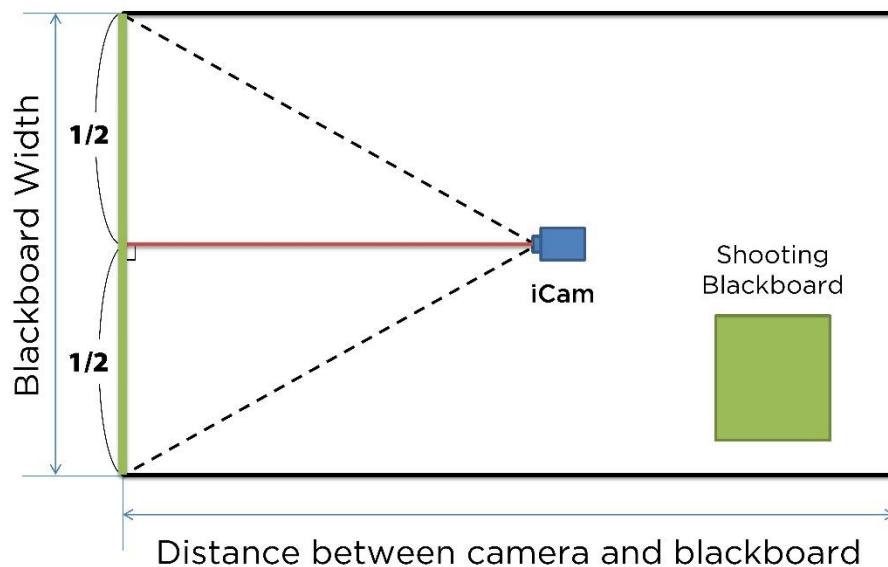
4. Location of camera

4.1 Location of camera

- The height of center blackboard is the best location.
- Higher than the students.
- Lower than the upper side of the blackboard
- Better install on the wall at the back of the classroom.

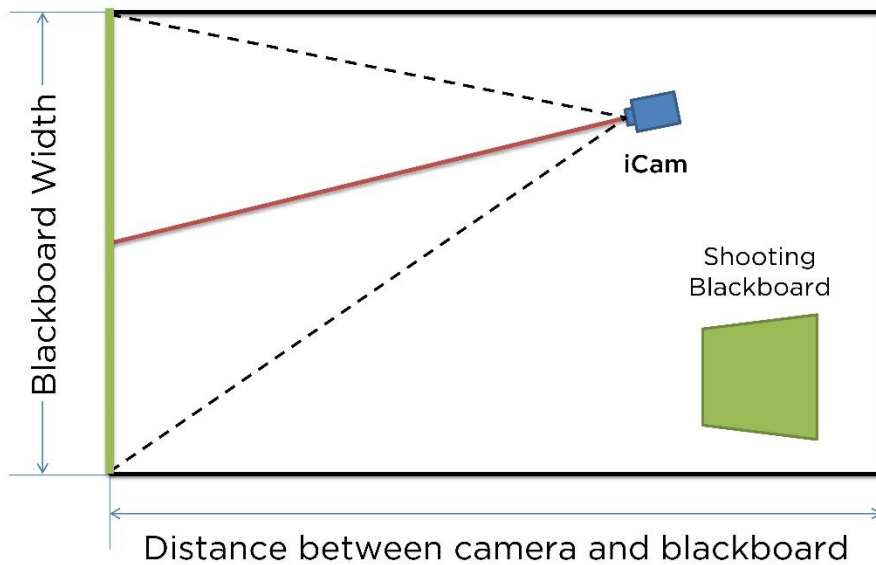
Viewport of the location of camera

The location of camera (Viewport)



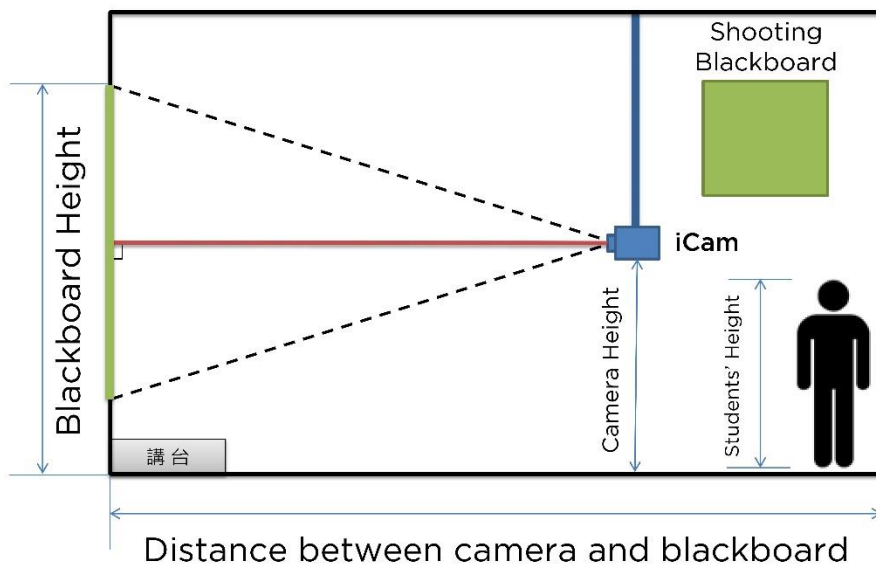
If you didn't install the camera at the location aimed the center of the blackboard, the blackboard would show as a trapezoid

Wrong location of camera (Viewport)



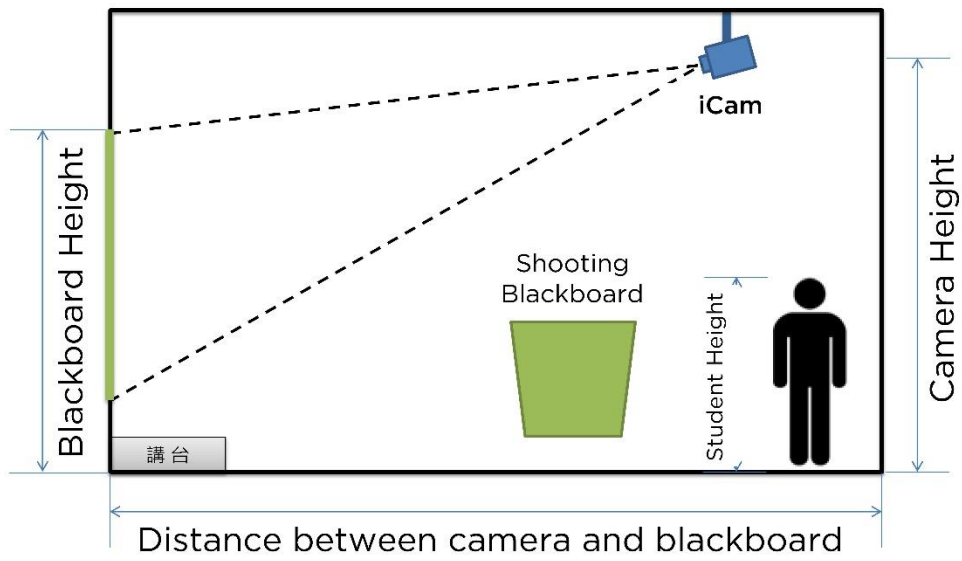
Elevation of the location of camera

The location of camera (Elevation)



If you install the camera too high, the blackboard would show as a trapezoid, the bottom is shorter than the upper side.

Wrong location of camera (Elevation)



5. Adjusting lenses

5.1 Lens of iCam



Please loosen the nuts on the lens before adjusting the lens. But please do not remove it or it may get lost.

The adjust order is

- A. Focus distance (W \leftrightarrow T)
- B. Focus (∞ \leftrightarrow N)
- C. IRIS (O \leftrightarrow C).

5.2 IRIS (O \leftrightarrow C)

- O = Open, C = Close
- IRIS controls the light amount, so the light has big influence to the shooting effect.
- The more the light come in, the better the shooting is.
- We advise you to turn the IRIS to maximum to get enough light.
- If you use digital board or projector, you can adjust the IRIS to maximum then close down gradually.
- The light should be the same as class time.
- Fasten the nut after adjusting.
- When adjusting the camera lens, try to arrange during the class because the light (fluorescent light or sunshine) would influence the shooting.
- If the education institute records class in the evening, it is better for you to adjust

lens in the evening.

- Steady light is very important for shooting.

5.3 Advices for classroom lighting improvement

- Use antidazzle lamp
- Add antidazzle division
- Use thick curtain to block sunlight. Turn on the light even it is daytime.

5.4 Zoom (W \leftrightarrow T)

- W = Wide(wide angle/close)
- T = Tele(distance angle/far)
- The tips for adjusting is to make the left and right sides of the shooting scene justify both sides of the board, but when using scanner module, make the up and down sides of the shooting scene justify up and down sides of the board.
- Fasten the nut after adjusting.

Blackboard Width < 4meters



Blackboard Width > 4meters



5.5 Focus ($\infty \leftrightarrow N$)

- ∞ =infinite, N=near-end
- The focus lock nut is close to the body, loosen it before adjusting.
- If you use digital board or projector, turn it on to adjust focus.
- The tips for adjusting is to write 【正】 in the center and four sides of the board.
- Adjust the focus to see the words clearly.
- Fasten the nut after adjusting.

6. Cleaning and Maintaining the Lens

- The lens is imported from Japan, it is very expensive.
- Do not touch the lens during construction.
- We would cover a dust cover on the lens, and please do not remove it until adjusting.
- If you find the lens have dust or fingerprint
 - Please blow the dust away with [lens blower] first
 - Then wipe the lens clockwise from center to the outer with [lens pen]
- Do not blow with mouth or wipe with tissue.

Cleaning and Maintaining the Lens




Do not remove the lens. This may make the lens stained with dust and fingerprint.



7. Setting

7.1 Video Setting

1. You can change all video streaming related elements in Video Setting page, this page is separated into two parts as shown below. The upper half is streaming setting and bottom half is camera additional information. All function is explained as below:

Camera	<input type="text" value="iCam"/>	
Stream Type	<input type="text" value="Dual"/> ▾	
Codec	<input type="text" value="Dual H.264"/> ▾	
Resolution	<input type="text" value="H264:1080,H264:VGA"/> ▾	

Stream 1 **Stream 2**

Framerate	<input type="text" value="26"/> ▾	fps
Bit Rate	<input type="text" value="4000"/>	Kbps
Rate Control	<input type="text" value="CBR"/> ▾	
Max. Bit Rate	<input type="text" value="6000"/>	Kbps
GOP [2 - 40]	<input type="text" value="26"/>	
Overlay Setting		
Date	<input type="checkbox"/>	<input type="text" value="Bottom-Right"/> ▾ <input type="text" value="DD/MM/YYYY"/> ▾
Time	<input type="checkbox"/>	<input type="text" value="Bottom-Right"/> ▾ <input type="text" value="24Hrs"/> ▾
Text	<input type="checkbox"/>	<input type="text" value="Top-Right"/> ▾ Text <input type="text"/>
OSD Transparent	<input type="checkbox"/>	

Watermark	
Enable	<input type="checkbox"/>
Position	<input type="text" value="Bottom-Left"/> ▾
Mirror	<input type="text" value="OFF"/> ▾
Local Display Video	<input type="text" value="NTSC"/> ▾

Key Functions :

Camera (iCam)	Default is iCam. Specifies the name of the IP Camera.
Stream Type	Default is Dual. Specifies the dual streaming method used. Options include: Single and Dual.
Codec	Default is Dual H.264. Choose the video format from 「H.264+JPG」、 「MPEG+JPEG」、 「Dual H.264」、 「Dual MPEG4」、 「H264+MPEG4」
Resolution	Default is H264:1080,H264:VGA. This option allows the user to choose the video resolution of the camera: 「H264:720H264:QVGA」、 「H264:720,H264:CIF」、 「H264:720,H264:VGA」、 「H264:D1,H264:QVGA」、 「H264:1080,H264:QVGA」、 「H264:1080,H264:CIF」、 「H264:1080,H264:VGA」。
Image frames	Default is 26 fps. Click on the drop-down list to choose the frame rates of 1~30fps in all resolution.
Bit Rate	Default is 4000 kbps Type the required bit-rate for both MPEG4 Setting and H.264 Setting. Bit-rate values ranges between 64 and 10000 from stream1 and 64 to 8000 for stream2/stream3.
Rate Control	Default is CBR. Select the required option OFF: This will switched off the rate control and will encode the frame in constant QP mode for all MBs (Macro-Blocks). MPEG4 will be coded with QP = 4 H264 will be coded with QP = 28 VBR : Variable Bit rate. CBR : Constant Bit rate. This will have frame skips to maintain bit rate with specified VBV buffer. <i>Notice !! For Recording: CBR, For Live Video : VBR!!</i>
Max Bit Rate	Default is 6000 Kbps. Type the max bit-rate of the stream.
GOP	Default is 30. Set the GOP value.
Overlay Setting	Select Enable Date and Time check box to activate the function.
Watermark	Default is OFF. Select the required option: Top-Left, Top-Right, Bottom-Left Bottom-Right
Mirror	Default is OFF. Select the required option: HORIZONTAL、 VERTICAL and BOTH.
Local Display Video	Default is NTSC. Select one of the following options of the display device: 「NTSC」 and 「PAL」 .



iCam is set already. Do not edit the default unless you are trained and understand the way and the meanings of editing.

We recommend using Microsoft Internet Explorer version 10 or higher web browser.

7.2 Camera Setting


www.Blueeyes.com.tw

STATUS	SETTINGS	V2.1.16-02-B2143	root L
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Camera

Camera

Lighting Condition

Brightness [0 - 255]	<input type="text" value="128"/>	
Contrast [0 - 255]	<input type="text" value="128"/>	
Saturation [0 - 255]	<input type="text" value="128"/>	
Sharpness [0 - 255]	<input type="text" value="128"/>	

Back Light Compensation OFF ON

Backlight

Enable WDR

WDR Level [1 - 10]

Flicker Control

Whitebalance

Color Mode

Video Stabilization

Lens Distortion Correction

Image Sensor Mode

Auto IRIS

2A Setting

2A Mode

Exposure Settings

Dynamic <input checked="" type="radio"/>	Min. Shutter	<input type="text" value="1/1000"/>	sec
	Max. Shutter	<input type="text" value="1/30"/>	sec
	Max. Gain	<input type="text" value="100"/>	dB
Quality Priority Mode <input type="radio"/>	Max. Gain	<input type="text" value="24"/>	dB
Static <input type="radio"/>	Shutter	<input type="text" value="1/60"/>	sec
	Gain	<input type="text" value="6"/>	dB

Noise Filter

Spatial Filter[SNF] OFF ON

Temporal Filter[TNF] OFF ON

PTZ

Protocol

Device ID

Baud Rate

Speed

Min. Move Time sec

IR Setting

IR Cut Mode	Light Sensor Detect <input checked="" type="radio"/>	Day Time	<input type="text" value="6"/>	<input type="text" value="0"/>
	Schedule Mode <input type="radio"/>	Night Time	<input type="text" value="18"/>	<input type="text" value="0"/>

Privacy Mask

Enable

Key Functions :

Camera	Default is iCam Enter the name of IP Camera.
Brightness	Default is 128. Select the required brightness level that ranges from 1 to 255. . A brighter scene appears, if you choose higher level of brightness.
Contrast	Default is 128. Select the required range. The range available is between 1 to 255.
Saturation	Default is 128. Select the required saturation level that ranges from 1 to 255. A vivid scene appears, if you choose a higher level of saturation.
Sharpness	Default is 128. Select the required range of sharpness. The range available is between 1 to 255.
Back Light Compensation	Default is OFF. Select one of the following options to turn on/off the backlight function:
Back Light	Default is Mid. Select the required range. The range are set to Min, Mid and Max values based on user selection.
Enable WDR	Default is OFF. The Wide Dynamic Range (WDR) function
WDR Level	Default is 5. Select your options of the level between 1 and 10
Flicker Control	Default is 60Hz. Select one of the following options of the Flicker device NTSC/60Hz : This will compensate for 60Hz flicker and will put the display if selected to NTSC mode PAL/50Hz : This will compensate for 50Hz flicker and will put the display if selected to PAL mode
White balance	Default is Auto. Select your option from Auto、 Auto Normal、 sunny、 shadow、 Indoor、 Lamp。
Color Mode	Default is Day. Select your option from Auto, Day, and Night.
Video Stabilization	Default is OFF. Select one of the following options: ON/OFF
Lens Distortion Correction	Default is OFF. If you replace the lens, the image has found distortion, uneven and so on, you can modify the Select The Distortion Correction Parameter to calibration images.
Image Sensor Mode	Default is BINNING.

	Select the required option. BINNING : This enables enhance low-light performance SKIPPING : This helps in increasing capture rate. WINDOW : This is enabled to keep constant FOV for all modes/resolutions.
Auto IRIS	Default is OFF
2A Mode	Default is 「Auto exposure + Auto white balance」 Select the required option. The options available are: OFF、Auto exposure、Auto white balance。
Dynamic	Default is OFF Select the required option. The options available are: Min. shutter, Max. Shutter, Max. Gain.
Quality Priority Mode	Default is OFF The options available is Max.Gain。
Static	Default are On, Shutter 1/60 sec, Gain 6db <i>!! if image is too dark try increasing gain value !!</i>
Spatial Filter	Default is OFF
Temporal Filter	Default is OFF
Protocol	Default is OFF Select your option from OFF、PelcoP、PelcoD.
Device ID	Default is 1 Select your options between 0 and 1.
Baud Rate	Default is 9600 Select your option from 1200、2400、4800、9600、19200.
Speed	Default is 16 Select your options between 0 and 23.
Min Move Time	Default is 0 Select your options between 0 and 1.
Light Sensor Detect	Default is On
Schedule Mode	Default is OFF
Privacy	Default is OFF Blocking a specific area on the monitor for the protection of individual privacy.

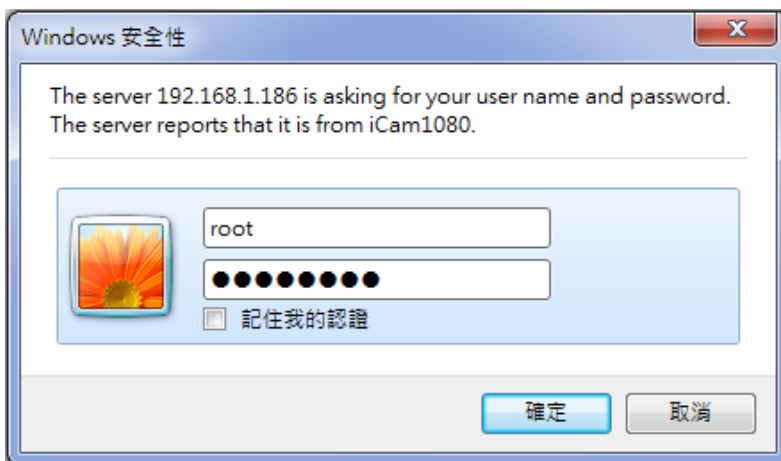


We recommend using Microsoft Internet Explorer version 10 or higher web browser.

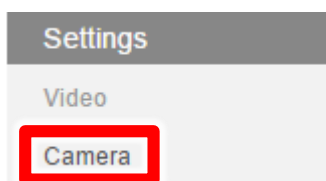
7.3 Privacy Mask Setting

In order to protect the privacy of the students in the front rolls who shown in the video, we develop the “Privacy Mask Setting.” You can choose an area where students’ faces appear, then the area you choose would not appear on the video. The steps of setting are as below:

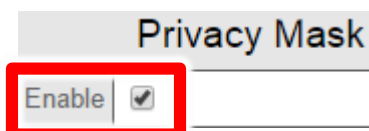
1. Login camera IP, and enter camera account and password



2. Click Camera in the Setting column



3. Select the checkbox to enable Privacy Mask



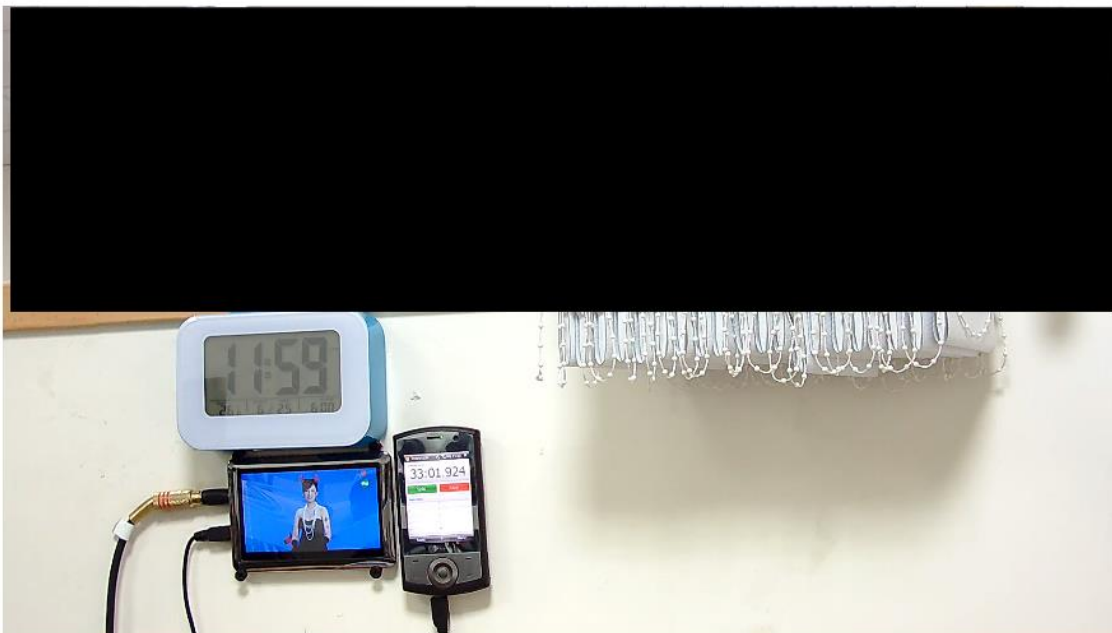
4. Place the rectangle over the area to cancel. You can set privacy masks only for one area while checking the image on the camera and privacy area is displayed in red color. If you want to cancel the area, you can click on the red area.



Accept Reset Default

5. You can watch the Live view to check the range of the privacy mask.

LIVE VIEW STATUS SETTINGS V2.1.18-02-B2143 root |





We recommend using Microsoft Internet Explorer version 10 or higher web browser, and do not join the "Compatibility View Settings"

7.4 Audio Setting

1. Enter "Audio" setting to adjust audio input and output. Click "Accept" to save the setting.

Audio

Enable Audio	<input checked="" type="checkbox"/>
Audio Mode	Both Mic & Speaker ▾

Audio Input

Audio Source	Line In ▾
Input Gain [0 - 100]	0
Alarm Level [0 - 100]	0

Audio Output

Output Volume [0 - 100]	0
-------------------------	---

Accept Reset Default

Key Functions :

Enable Audio	Default is ON. This will switch ON/OFF the audio in camera.
Audio Mode	Default is Both Mic & Speaker. You can change the audio mode in the Network camera in one of the following ways: Only Mic: Enables only audio capture in camera. Only Speaker: Enables only audio playback in camera. Both Mic & Speaker: Enables both audio playback & capture in camera.
Audio Source	Default is Line in. Then select MIC in or Line In.
Input Gain	Default is 0 Sets the input capture gain, values set from 1-100



We recommend using Microsoft Internet Explorer version 10 or higher web browser.

7.5 Network Setting

Follow the steps to adjust network setting and IP address. Click “Accept” to save the setting.

Network

IP	
DHCP <input type="radio"/>	Hostname <input style="width: 150px;" type="text"/>
	MTU <input style="width: 50px;" type="text" value="1500"/>
Static IP <input checked="" type="radio"/>	IP address <input style="width: 100px;" type="text" value="192.168.1.171"/>
	Subnet mask <input style="width: 100px;" type="text" value="255.255.255.0"/>
	Default Gateway IP <input style="width: 100px;" type="text" value="192.168.1.1"/>
	MTU <input style="width: 50px;" type="text" value="1500"/>
DNS Assignment	<input type="radio"/> Auto <input checked="" type="radio"/> Manual
Primary DNS Server	<input style="width: 100px;" type="text" value="168.95.1.1"/> <input style="width: 100px;" type="text"/> Secondary DNS Server

Accept
Reset
Default

Key Functions :

DHCP	If you have a DHCP server running on your network and would like a dynamic IP address to be updated to your camera automatically.
Static IP	Specifies the IP address of the camera. Options include: IP address, Subnet mask, Gateway and MTU.
DNS Assignment	Specifies the DNS server for your network.
Primary DNS Server	Network of preferred and alternate DNS server address.
Secondary DNS Server	Network of preferred and alternate DNS server address.
MAC	Camera MAC address
Detected MAC	Detected MAC address
Current MAC	Current MAC address



We recommend using Microsoft Internet Explorer version 10 or higher web browser.

7.6 Solving Color Cast when rotating

When iCam is set on the scanner module, it would rotate to follow the teacher. This kind of shooting may cause color cast. This is because the changes of light would make the White Balance over adjusted.


To solve this problem, please turn the AWB off.

Reference set point

Contrast: 220	High contrast can make students easier to recognize handwriting of different colors.
White balance: Lamp	When set as “Lamp”, it would have blue color cast and it may be slightly different what you see from naked eyes. Blue color cast improves the readability of the writing board.
2A Mode: Auto exposure	The default is Auto exposure+ AWB. Choose only Auto exposure is to turn the AWB off.
Electronic Shutter: Static, Gain 0dB	The electronic shutter is fixed on 1/60, close to common shooting. Shorten the time of shooting, like 1/120, to prevent after images. But you should have more light amount or it would have noise. Shutter time raise to 1/30 so the quality would be better. But it may have smear when moving.



When you change [Contrast], please uncheck [Enable WDR].


Lighting Condition		
Brightness [0 - 255]	<input type="text" value="128"/>	
Contrast [0 - 255]	<input type="text" value="128"/>	
Saturation [0 - 255]	<input type="text" value="128"/>	
Sharpness [0 - 255]	<input type="text" value="128"/>	
		
Back Light Compensation	<input checked="" type="radio"/> OFF <input type="radio"/> ON	
Backlight	<input type="text" value="Mid"/>	
Enable WDR	<input type="checkbox"/>	
WDR Level [1 - 10]	<input type="text" value="5"/>	
Flicker Control	<input type="text" value="60 Hz"/>	
Whitebalance	<input type="text" value="Auto"/>	
2A Setting		
2A Mode	<input type="text" value="Auto Exposure"/>	
Exposure Settings		
Dynamic <input type="radio"/>	Min. Shutter	<input type="text" value="1/100000"/> sec
	Max. Shutter	<input type="text" value="1/30"/> sec
Quality Priority Mode <input type="radio"/>	Max. Gain	<input type="text" value="100"/> dB
	Max. Gain	<input type="text" value="24"/> dB
Static <input checked="" type="radio"/>	Shutter	<input type="text" value="1/60"/> sec
	Gain	<input type="text" value="6"/> dB

8. Watermark

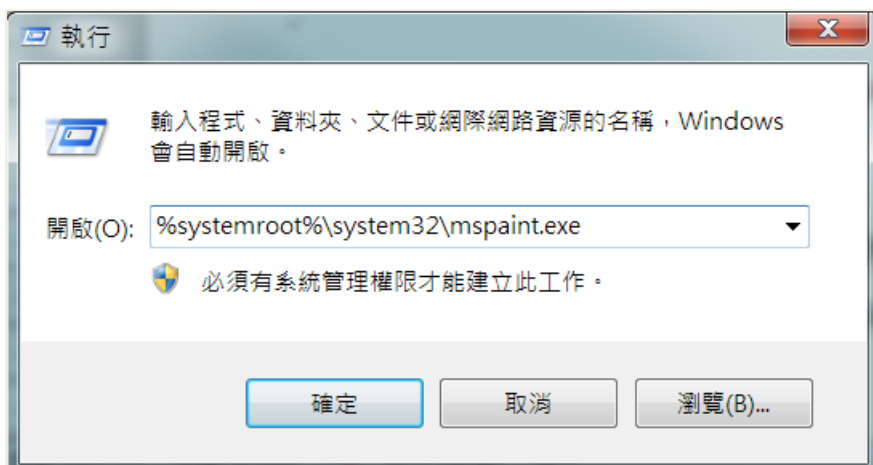
8.1 Trademark of education institute

Many education institutes want to mark their name on the videos. You can upload the trademark and name on iCam.

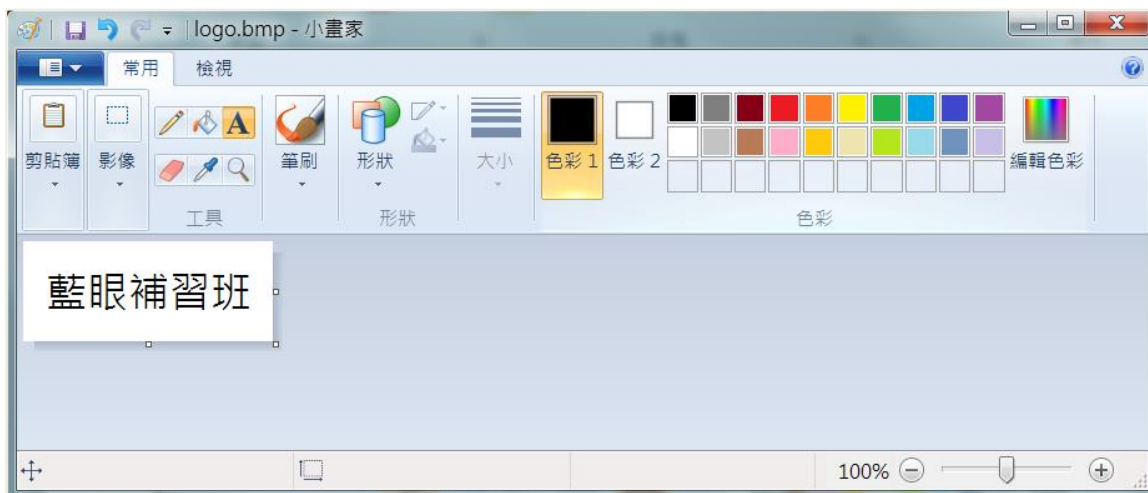
8.2 Making Trademark Picture

Click +R or [Start] → [implement] to open the implement window. Enter the instruction below to open Paint.

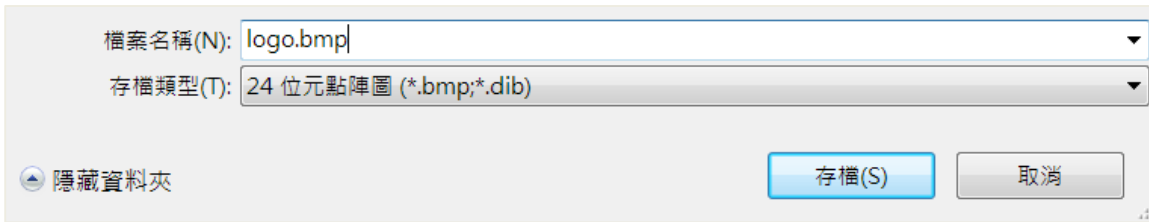
`%systemroot%\system32\mspaint.exe`



Make a trademark in Paint



Save as→BMP picture→File type **【24 bitmap】** ! Important !



8.3 Upload Watermark

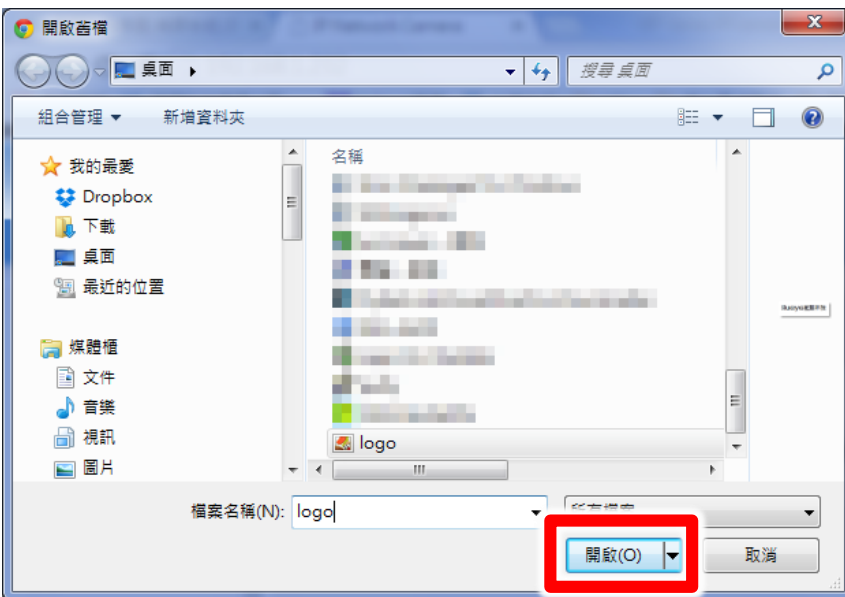
Use IE browser to connect to iCam1080 network management. Click [Watermark] in [Maintenance]. Here are the steps:

Step 1 :

Click **【Choose file】** to choose your watermark picture.



Then click [Open]



Step 2 :

Click **【Upload】** to upload the picture.

Watermark Upload

Watermark File 瀏覽... **Upload**

Step 3 :

It would show like this if it uploads successfully. You can see the watermark on the live video.

Watermark Upload

Upload Succeeded

Back

Step 4 :

You can choose which corner you want to put the watermark. Please choose the position of the watermark in Watermark **【Position】** .

Watermark	
Enable	<input checked="" type="checkbox"/>
Position	Top-Left ▼



You should check enable the watermark so the watermark would show on the monitor.

We recommend using Microsoft Internet Explorer version 10 or higher web browser.

8.4 Notices

- File name is BMP file
- 24 bitmap
- Length and width can be individually divisible by 4 (Pixels)
- Leave the white blank to avoid color confusion
- The minimum length and width is 100px
- Place it on bottom-left

9. QR code

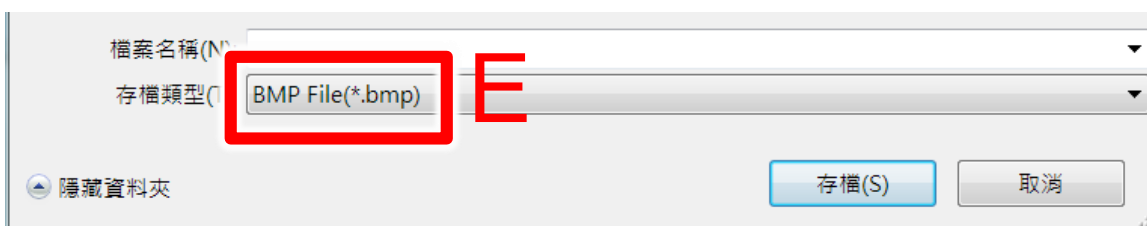
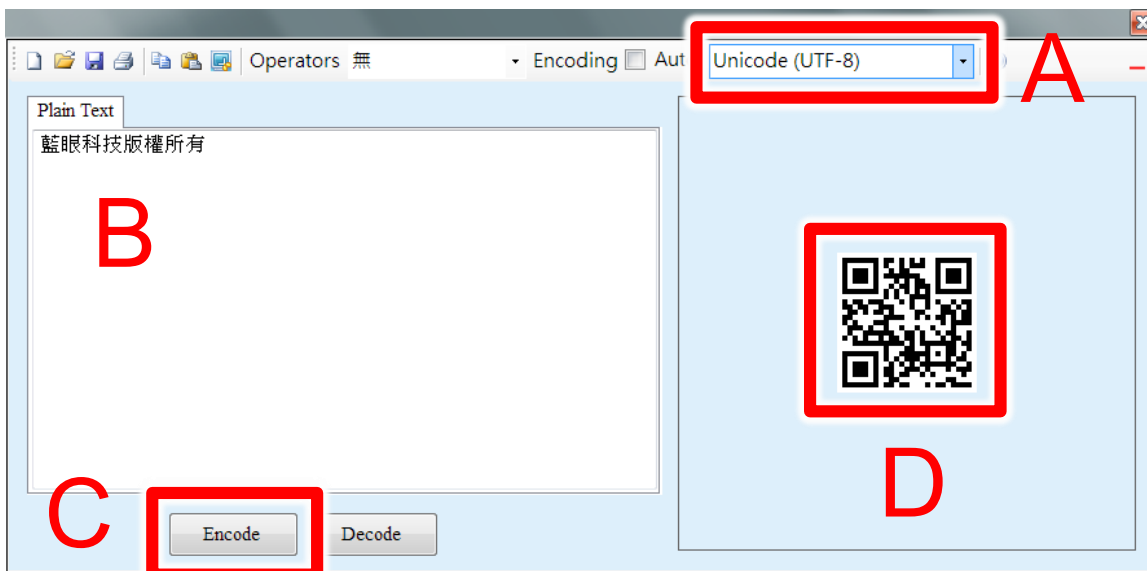
9.1 About QR code

QR code is the most common encoding. Some education institutes would make the official websites or video copyright website into QR code. Then print the QR code on the video.

9.2 Make QR code

Please download the QRcode Tool through the website below.

<http://www.blueeyes.com.tw/download/QRCode.zip>

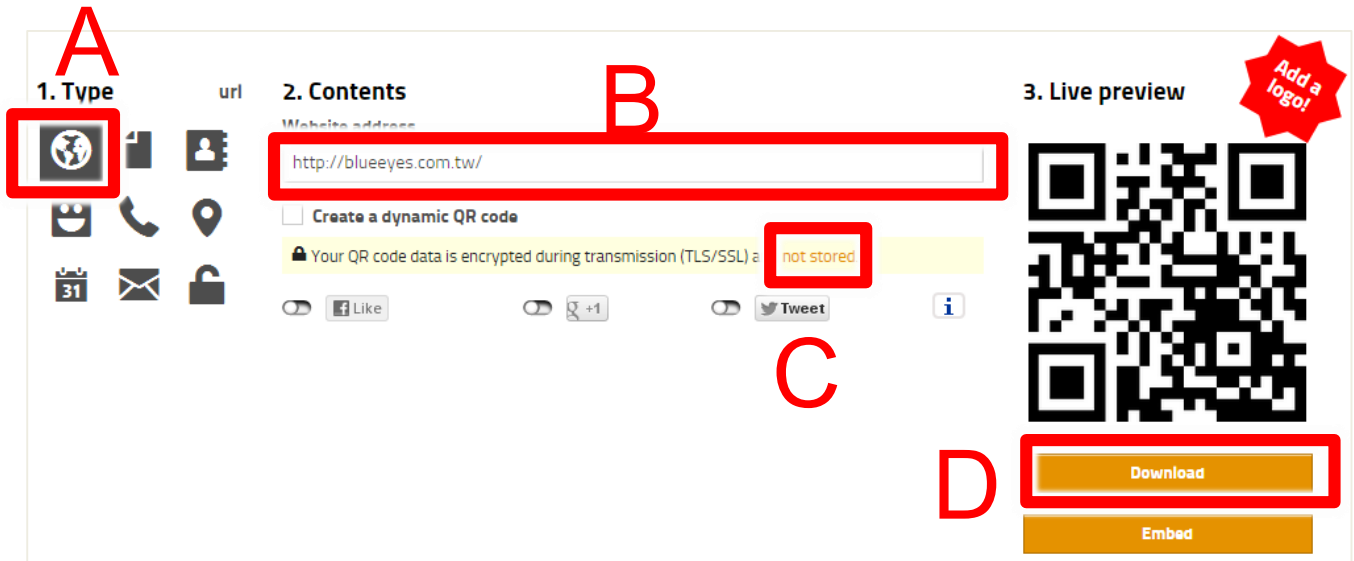


A	Please choose Unicode(UTF-8) to type in words.
B	Please type in the website or words you want to show after scanning QRcode.
C	Every time you enter words or websites, you have to click it again.
D	You can check with your cellphone to see if the QRcode is correct.

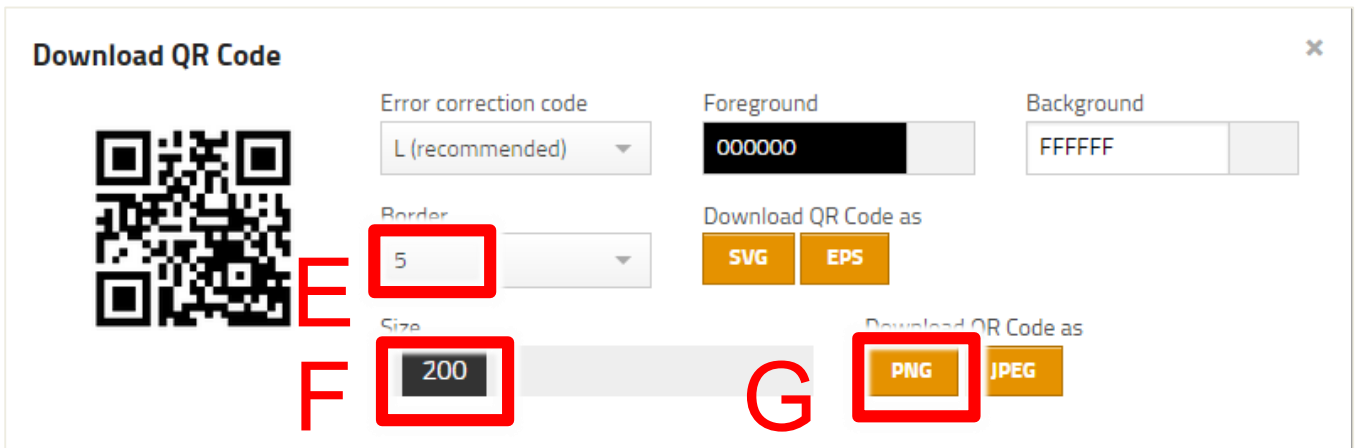
E	Save the file as BMP File(*.bmp)
---	----------------------------------

Or there are many websites to make free QRcode:

<http://goqr.me/>



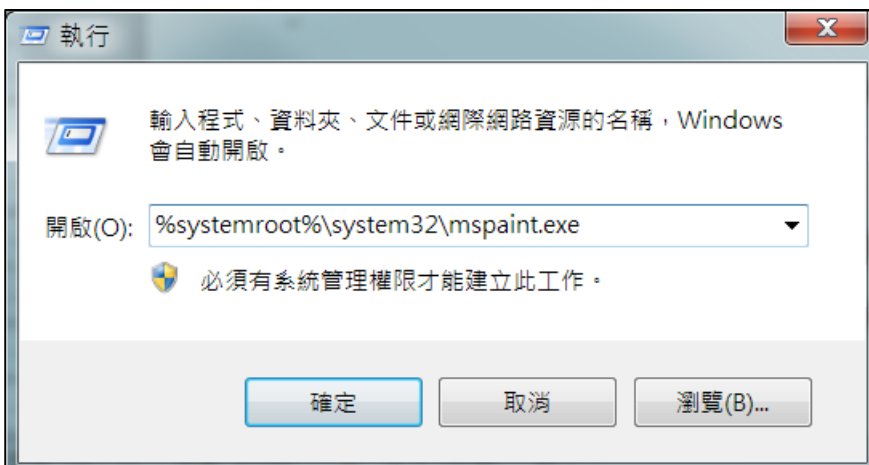
A	Select the URL page
B	Enter the website you want for QRcode.
C	Select 【not stored】
D	Click Download to download QRcode



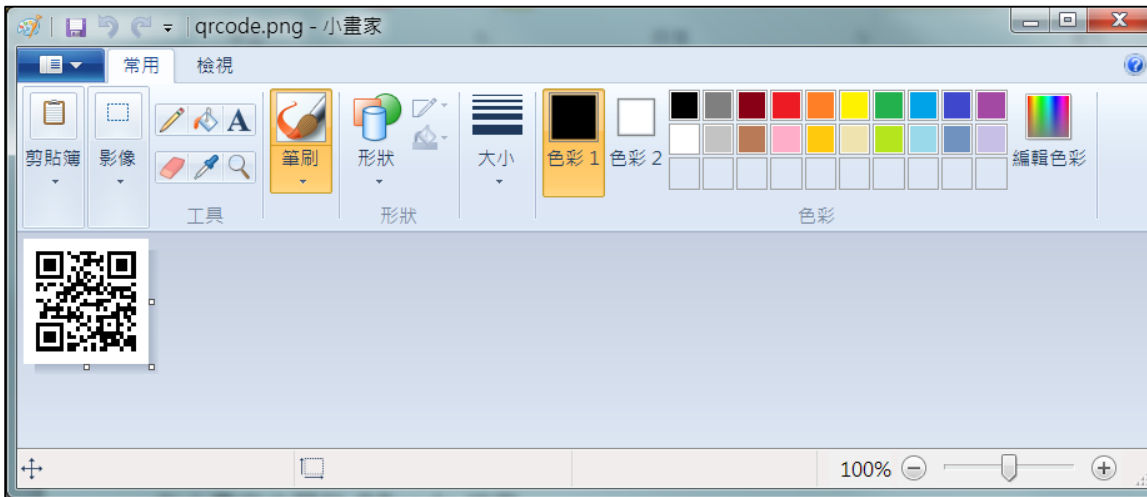
E	The white boarder of the QRcode is better to be 5px. It may be difficult to scan if the boarder is too thin or too thick.
F	The length and width of the QRcode should be divided by 4 or it would be out of shape. Choose 200px is better.
G	Download as PNG, but it has to be BMP file when uploading.

Click +R or [Start] → [implement] to open the implement window. Enter the instruction below to open Paint.

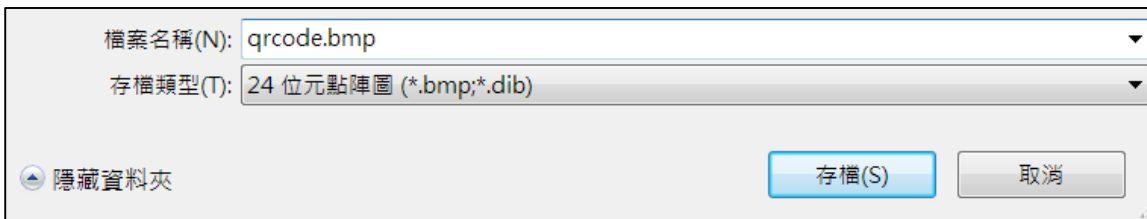
%systemroot%\system32\mspaint.exe



Open the QRcode file in Paint:



Save as→BMP picture→File type **【24 bitmap】** ! Important !



9.3 Upload QR code

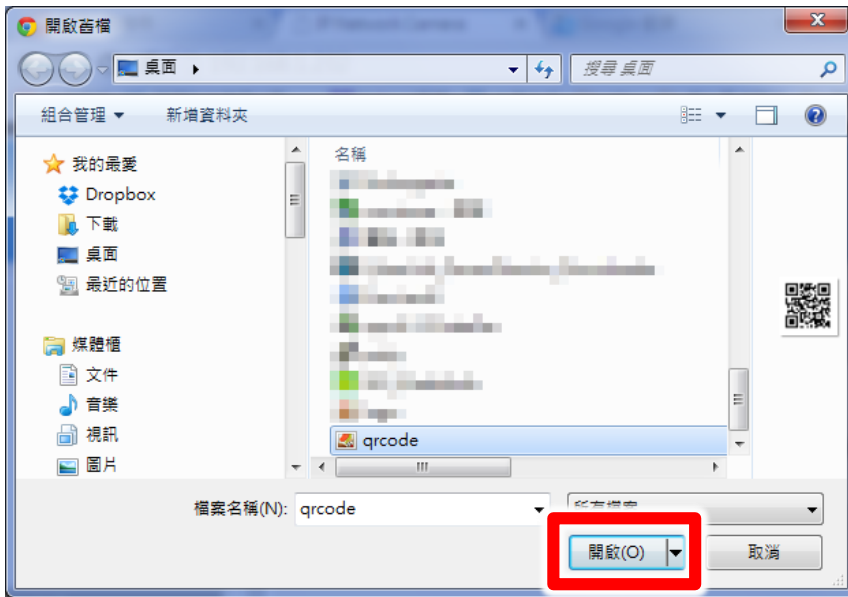
Use IE browser to connect to iCam1080 network management. Click [Watermark] in [Maintenance]. Here are the steps:

Step 1 :

Click **【Choose file】** to choose your QRcode.



Then click [Open]



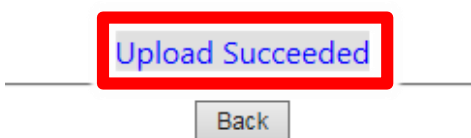
Step 2 :

Click **【Upload】** to upload the QRcode.



Step 3 :

It would show like this if it uploads successfully. You can see the QRcode on the live video.



Step 4 :

You can choose which corner you want to put the QRcode. Please choose the position of the watermark in Watermark **【Position】** .

Watermark	
Enable	<input checked="" type="checkbox"/>
Position	Top-Left ▾



You should check enable the watermark so the QRcode would show on the monitor.

We recommend using Microsoft Internet Explorer version 10 or higher web browser.

If you are an iPhone user, you can use Quick Scan App. If you are an Android user, you can use QR Droid App.

9.4 Notices

- File name is BMP file
- 24 bitmap
- Length and width can be individually divisible by 4 (Pixels)
- Leave the white blank to avoid color confusion
- The minimum length and width is 100px
- Place it on bottom-left

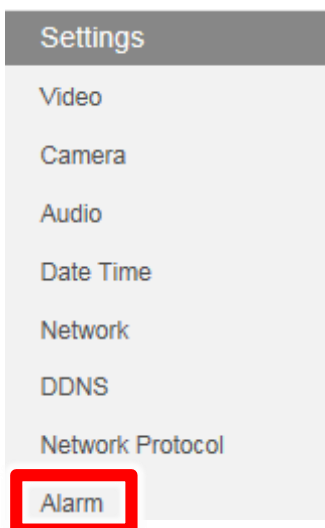
10. Motion detection of iFollow

10.1 Enable and set the motion detection

Step1: Open IE browser. Enter camera IP address, account and password.



Step 2: Click "Alarm" on the left side of "Setting"

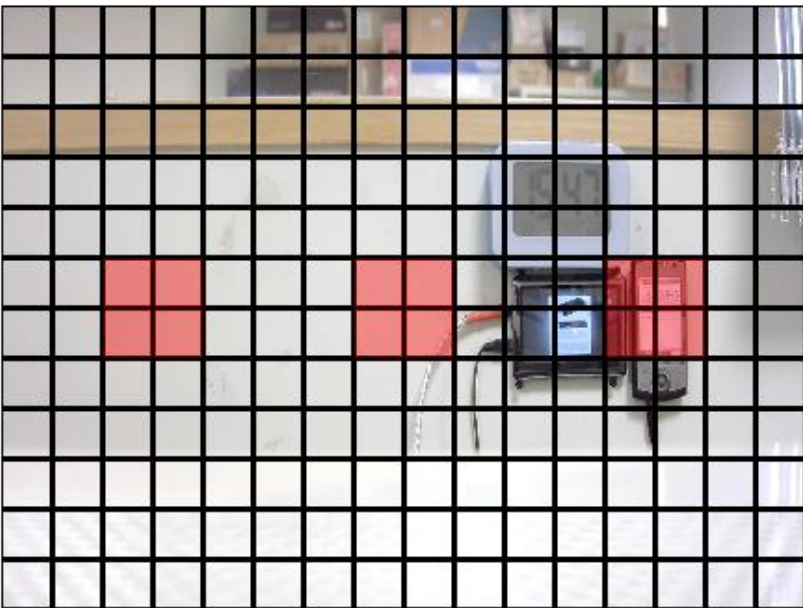


Step 3: Click enable "Motion detection"

Enable Alarm	<input checked="" type="checkbox"/>		
Motion Detection	<input type="checkbox"/>		
Face Detection	OFF <input type="button" value="v"/>		
Ethernet Lost	<input type="checkbox"/>		
Audio Alarm	<input type="checkbox"/>		
External Triggers	<input checked="" type="checkbox"/>		
Input	ON <input type="button" value="v"/>	Trigger Voltage	Low <input type="button" value="v"/>
Input	ON <input type="button" value="v"/>	Trigger Voltage	Low <input type="button" value="v"/>
Output	OFF <input type="button" value="v"/>	Trigger Voltage	High <input type="button" value="v"/>
Upload Via FTP	<input type="checkbox"/>		
Upload Via SMTP	<input type="checkbox"/>		

Step 4: Set these red boxes. The red boxes are the motion detection. Click the transparent boxes to make them become red boxes. Click the again to cancel

Motion Detection



Sensitivity MEDIUM

Customized Threshold 50



The detective position may be different according to the shooting environment. Contact us if you have any question: 04-22970977

Step 5: Click [Customized Threshold] as 100 and click OK to save.

Sensitivity <input checked="" type="radio"/>	MEDIUM ▼
Customized Threshold <input type="radio"/>	50



We recommend using Microsoft Internet Explorer version 10 or higher web browser.

10.2 Notices

- If the students come late or leave the seat, motion detection may misjudge teacher's position.
- If the board erasers come up to stage when lecturing, motion detection may misjudge teacher's position..

11. Q&A

Q1: Can the camera be on for 24 hours?

Ans. Yes.

iCam is industrial grade. It can be operated for 24 hours without overheating. Power consumption is very low and will not cause your tariff burden.

Q2: How to adjust if the image is blurred?

Ans. Please refer to the manual on Chapter 5.5 to adjust the lens focus.

Q3: Why the words on the board trembling?

Ans. These might be the reasons:

If iCam is installed on the wooden wall or calcium silicate, it may cause word trembling. iCam should be installed on the wall that is solid and not easy to shake. Wooden wall or calcium silicate would shake when opening and shutting the door or turning on the air conditioners.

1. It would happen the same thing when installed the iCam on the ceiling T grid. Use telescopic support and install it on the cement ceiling above the ceiling T grid.

Q4: How to clean the lens?

Ans. Please refer to the manual on Chapter 6 to see Cleaning and Maintaining the Lens.

Q5: How long does it take to start up the camera?

Ans. Normally it takes about 50 seconds, no longer than one minute.

Q6: Ripple shows when using projector or digital board

Ans. When you use early version of projector or digital board, you might find ripple on the video. That is because the light amount is not enough.

1. Adjust IRIS of iCam lens. Turn the IRIS to O (Open) to make more light come in.
2. Change the exposure mode to indoor, Gain as 0db. If you find that the scene is over-exposure, turn the IRIS to C (Close) to adjust the light amount until the words are clear.

Q7: The video file cut into one or several pieces

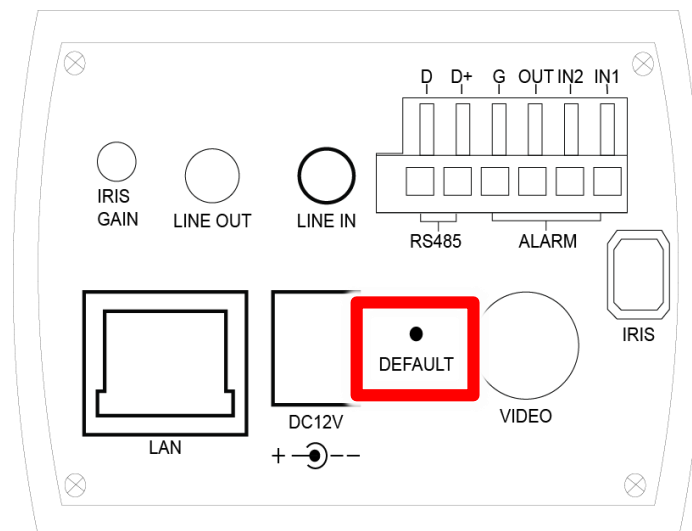
Ans. If you find that the recording of SES/SES Lite cut into one or several pieces, it might be the reasons below:

1. If you use scanner module, it might be network disconnect when rotating. We advise you to use the longer network cable and use better crystal RJ45 module plug.
2. If iCam/ SES/ SES Lite uses the same network segment as other computers, it may cause IP conflict. WE advise you change the network segment of other computers.
3. There are 8 wires in network cable. If one of them is broken, the internet would not be steady. Restart the network switch again would be better, and after long use, the network would become slower or disconnected. We advise you use lan tester to recheck the internet.

Q8: How to restore to default?

Ans. Method 1:

Use a paper clip to poke in the hole marked "Default" on the back of the camera for 6 seconds.



Method 2:

To reset the camera to default settings, go to the Settings > Maintenance > Profile web page. Click Restore Default Configurations and waiting for 60 seconds.

Restore Configurations	
<input checked="" type="radio"/> Upload Configuration File	<input type="text"/> 瀏覽...
<input type="radio"/> Restore Default Configurations	
<input type="checkbox"/> Keep Network Settings	Restore



We recommend using Microsoft Internet Explorer version 10 or higher web browser.

Q9: How to reduce background noise

Ans. There are many reasons why causes noise. You can ask for professional audio manufacturers for help. There are several ways to solve the problems:

《First way》 change electric suppliers

1. Change the power transformer to [voltage transformer]. (As the picture below)



2. Isolating transformer
3. Power strip
4. Stable voltage UPS

《Second way》 Improve the audio cable

Use Hi-Fi audio cable which is better to reduce noise and distortion.

《Third way》 Use high-impedance headphone

Circumaural headphones is more high-impedance than canalphone. High-impedance headphones can avoid noise but the sound would become smaller.

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<http://www.BlueEyes.com.tw>