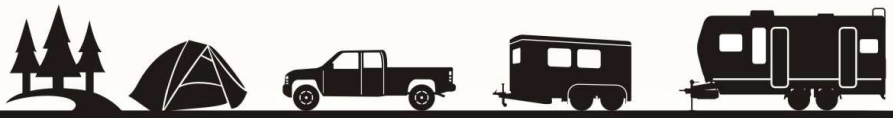
SWIFT HITCH®

More Than a Hitch Up Tool

User's Manual

Model: SH04

Portable WiFI Camera
With Infrared Night Vision
With Weather Proof
With Mobile Phone View
Outdoor/Indoor Multipurpose
Wide Range Working Voltage: DC 5V/12V



Please read carefully and thoroughly this manual before any attempt to operate this product and retain it for your future reference.

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INTRODUCTION

Thank you for purchasing this wireless camera kit. This product works at ISM-2.4GHz frequency band, which can be legally used worldwide without permission. We feel confident that you will be pleased with the quality and features of this product. The camera use CMOS sensor to capture the image and transmits the image to your smart phone by WiFi. It is digital transmission and is interference free.

The receiver can be any type of smart phone or pad with Android/iOS system.

Notice

Notice**:** This product may give interference to other wireless equipment that operates at 2.4GHz ISM band. Please turn it off if you want to operate other wireless equipment.

Product Assurance: This camera will emit electromagnetic waves, just like other wireless products,but its transmitting power is less than other wireless products such as mobile phones. The WiFi camera meets wireless frequency security standards and recommended indexes while working. These standards and indexes are certificated by academic organizations and represent the cogitative research of the scientific workers who continuously explore and annotate the involved fields. So we believe that our products are safe for our customers.

Warranty

This product has a one year limited warranty with an effective date of purchase. Refer to the troubleshooting guide at the end of this manual for help first and then contact customer support for further assistance. Please retain sales receipt for purchase verification. Any attempted disassemble of the product will void the warranty. Do not return defective product to the retailer.

Restrictions

1. DO NOT use this product to violate one's privacy. Monitoring one's activities without consent is illegal and this product is not designed and manufactured for such purposes;
2. DO NOT put this product near any medical equipment. Radio waves might potentially cause breakdown of electrical medical equipment. So this product should be placed at least 1 foot away from any heart pacemaker. Radio waves might potentially influence the heart pacemaker and lead to respiratory disturbance;
3. DO NOT use this product for any illegal activities. We are not be responsible for any consequences of illegal acts committed by the user.
4. It is recommended to fix the camera on the vehicle if using it on bumpy road or drive for long time. The screws of fixing camera base can be found inside the package of products.

Maintenance

1. Do not shake or strike the product;
2. Keep product away from heat sources such as electric heaters;
3. Do not use the camera near caustic chemicals;
4. Do not use the camera in the places which are enclosed by metal.
5. Please obey the local government's environment protection policy;
6. Please turn off the power when unused
7. Do not disassemble or repair the camera. Doing so might cause damages to the product and also VOID THE WARRANTY.

PRODUCT

Included Parts

This package comes with the following items. Please check whether they are all included in the packaging box, if one or some is missing, contact the retailer for replacement.

① Camera x1

② AC power charger x1

③ USB Charging cable x1

④ Power extension cable ×1

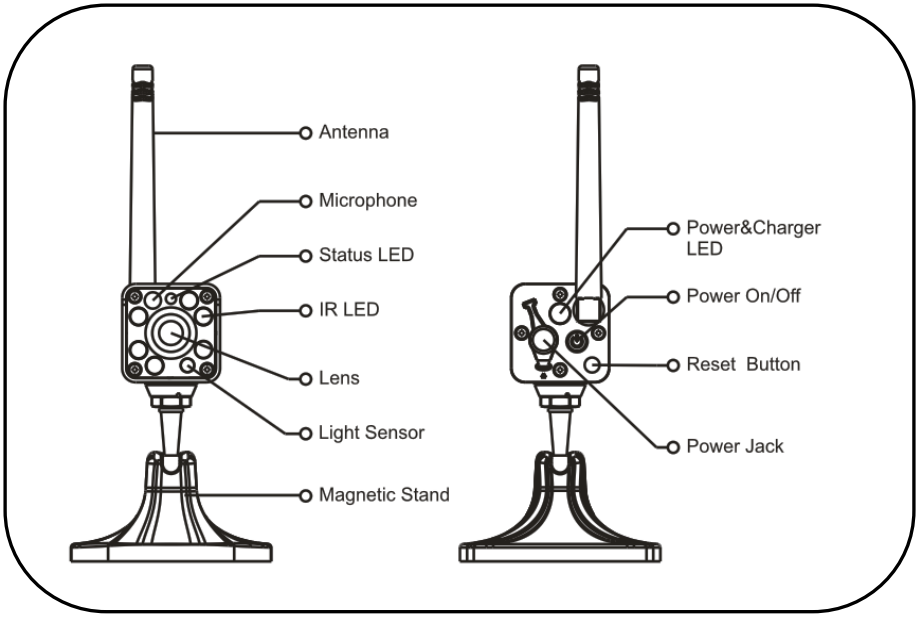
⑤ Magnet holder for phone x1

⑥ Screw set for camera x1

⑦ User manual x1

⑧ Quick installation guide x 1

Feature Locations

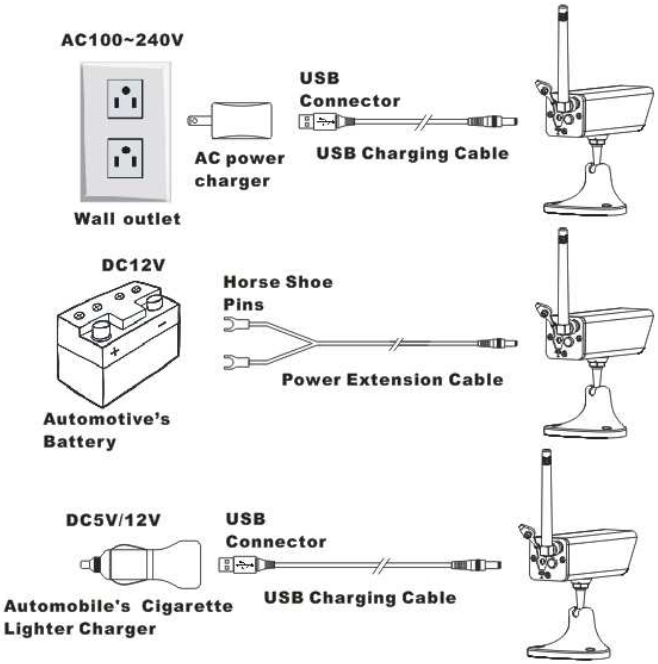


HOW TO USE

1. Charging the Camera

There are three ways to charge the camera before using it.

1) Charge the camera via AC adapter by connecting USB charging cable between AC adapter and camera. Wall outlet can have output of AC between 100~240V, adapter output is 5V DC to camera.
2) Charge the camera via automotive battery by connecting power extension cable between battery and camera. Power extension cable has two horse shoe pins for easy connection. Battery output is 12V DC.
3) Charge the camera with automotive cigarette lighter charging adapter which can have standard 5V DC output or 12V DC output. (Cigarette lighter charging adapter is not included)



When camera starts to take charge, LED indicator on camera back become red, full charge normally take 5 hours. Once camera is fully charged, LED indicator will go out.

2. Download Free APP: Swift WiFiCam

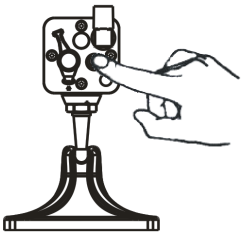
You can scan the QR code below to download APP.

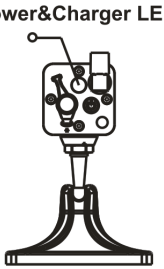
(Or search Swift WiFi Cam in Google Play for Android phone Or App Store for iPhone)

For iOS **For Android**

3. Power On Camera

Press the Power button to turn on the camera, Power LED(green) will be on,then you can use it.





Notes: If the battery is exhausted, please recharge it with the charging cable.

4. Link Camera

1) Go to WiFi setting menu of your smart phone, choose camera's wireless network ID:SWIFTCAM_xxxxxx" and there is no need to input password. (FIG-01)

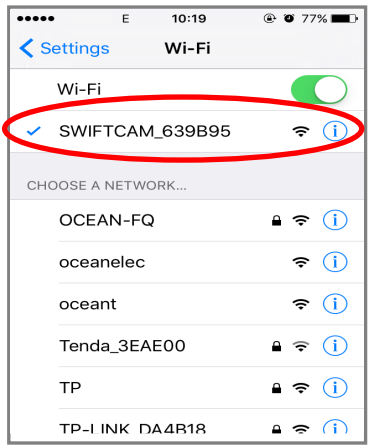


FIG-01

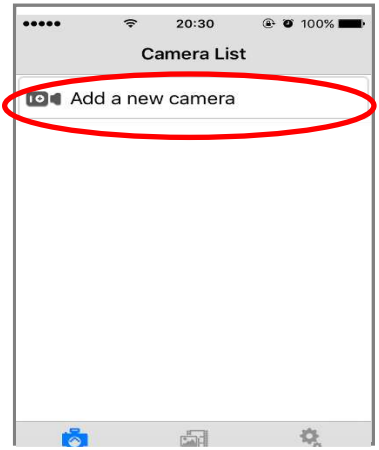


FIG-02

2) Run downloaded APP on smart phone
3) Tap on “Add a new camera” icon to add the camera (FIG-02).
4) Search camera by Taping on “Search in LAN“(FIG-03).

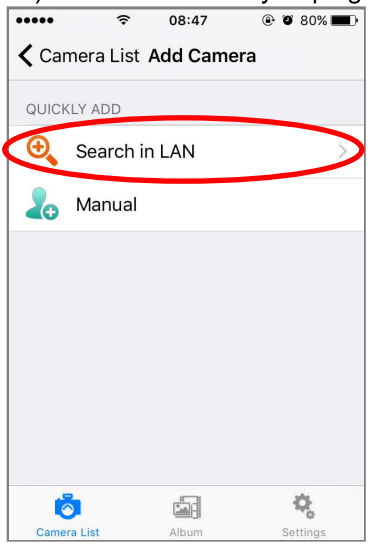


FIG-03

FIG-04

5) Camera will be found and displayed with ID code. (FIG-04)
6) Tap on the ID code and enter the camera setup page. You can edit your camera name here and then Tap on “Save “(You can leave password blank) (FIG-05), and you will see the “Camera List” page (FIG-06)

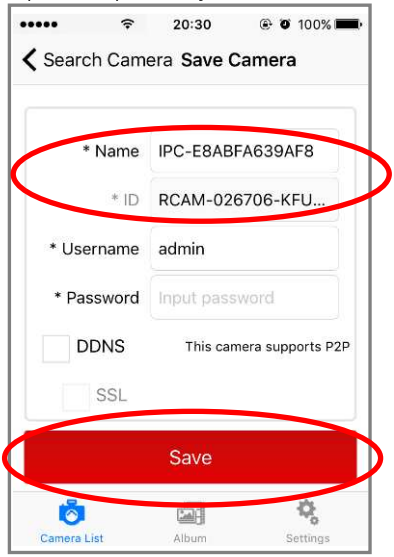


FIG-05

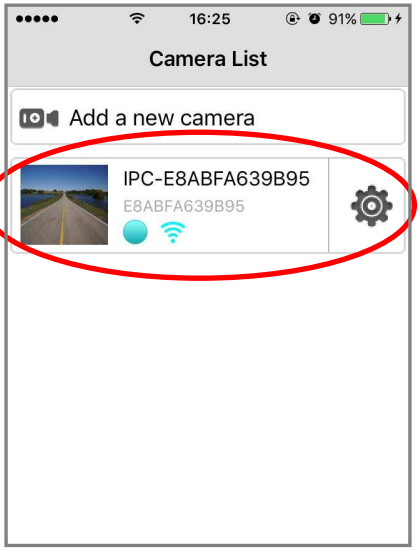


FIG-06

7) The camera which has a Bright Blue point icon shows that the camera has been connected to your smart phone.(FIG-06)
8) Tap on the camera which you want to see,(FIG-06), and you can start enjoying camera live video. (FIG-07)

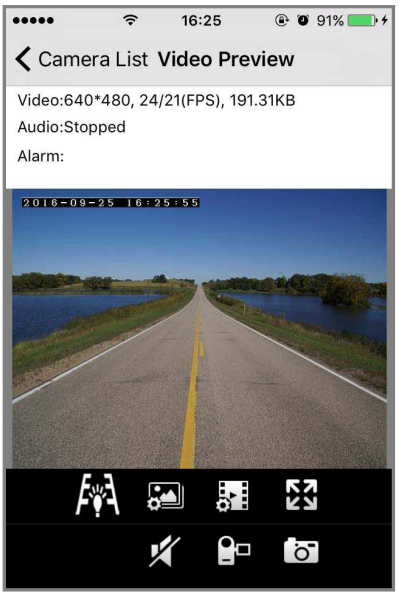


FIG-07

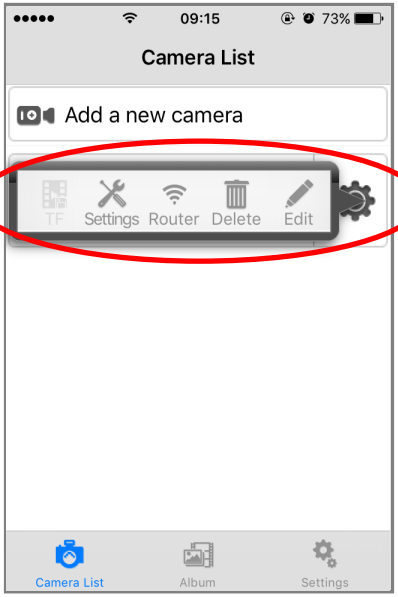


FIG-08

5. Mount Camera

9) Connect the antenna to the camera(FIG-09)
10) Mount the magnetic camera base on your tailgate, and then adjust it to a suitable angle (FIG-10)

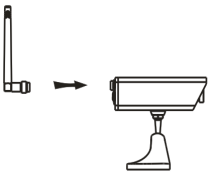


FIG-09

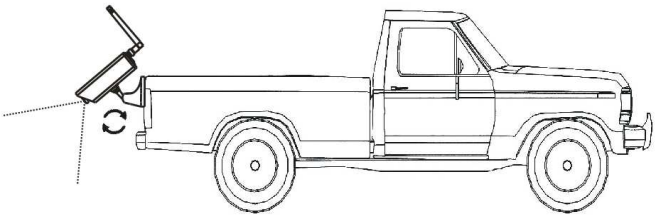
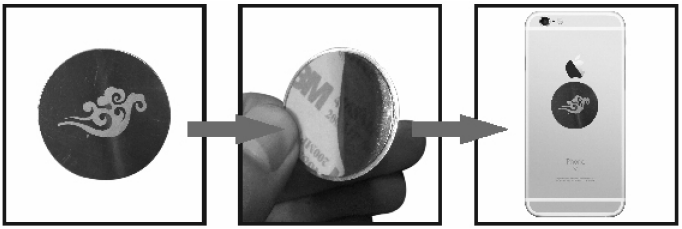


FIG-10

6. Mount Magnetic Holder for Smart Phone or Pad (Optional)

1) Stick universal metal plate onto phone back end

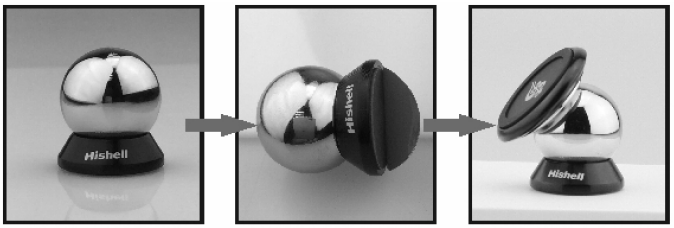


Take out the metal plate

Remove paper cover from plate

Stick plate on the back of the your phone case

2) Mount magnetic phone holder on dashboard



Take out the phone holder pedestal

Remove paper from pedestal

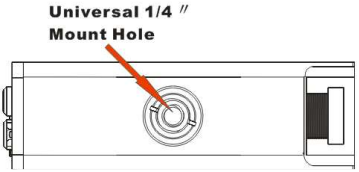
Stick pedstal on dashboard and adjust position.

3) View

MAIN FUNCTIONS OF CAMERA

1. Link your smart phone/pad's WiFi to camera's wireless network.
2. Support video and audio transmission.(Audio default is off)
3. Rechargeable battery can have run time up to 5 hours.
4. Low battery alert.
5. Night vision range reaches 10 feet.
6. Weather proof capability.
7. Magnetic base for easy attachment
8. Extendable antenna to bypass obstacle

9. Universal 1/4" mount hole to work with multiple accessories such as
10. J-hooks, extension pole, and Gopro racket



MAIN FUNCTIONS OF APP

1. Switch between STA(Station) Mode and AP(Access Point) Mode

1) Switch from AP mode to STA mode

If you have a wireless router around the place where the camera is installed, you can connect your camera to the WiFi network of this router, and then view the camera inside network.

This can extend the wireless transmission distance of the camera, as long as your smart phone connects to this router, you can see the video from your camera. If your router is connected to the internet, you can view the video on smart phone anywhere where have internet access.

① Enter the main menu of the camera list, Tap ⚙ icon of the camera which you want to set. You will see a setting menu pop up, Tap on "Router" on this pop up menu (FIG-11) . You will see a list of WiFI SSID nearby (FIG-12):

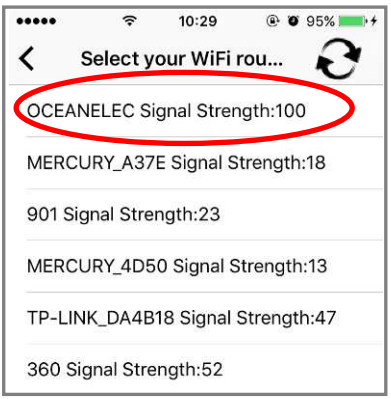
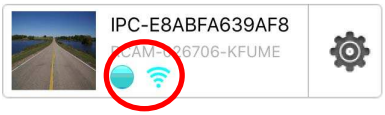


FIG-11

FIG-12

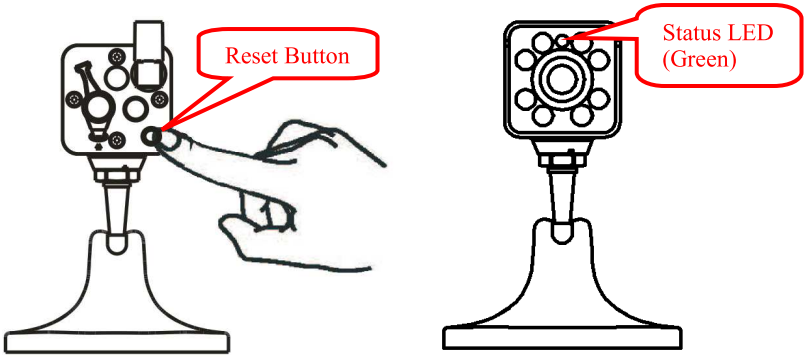
② Choose the WiFi SSID of your wireless router, input the correct password, Tap on "OK", (FIG-10). Your camera will be rebooted and shift to STA mode. The WiFi icon in bright blue will be displayed once camera connect to router:



If wrong password is input, you camera will not be able to establish valid WiFi connection with router and have to wait another 30 seconds to go back AP mode and then you need setup camera again with correct password to function in STA mode.

2) Switch from STA mode to AP mode

① Press reset button at the back and hold on it for 5 seconds.



② After seeing that status LED become constant green color, please release reset button.

③ Wait about 20 seconds to finish booting process until seeing status LED blinking slowly every one second, your camera is ready on AP mode and its WiFi Access Point can be found by smart phone.

Status indicating LED illustration

Status	Meaning
Constant On	Power on and is in booting process
Off	Camera is in STA mode and is connected to Router
Slow blinking every one second	Camera is in AP mode and does not need connecting to router
Fast blinking every half second	Camera is in STA mode, but has lost the connection to router

2. 2. Turn On/Off IR LED and Guide Line

Tap on icon on the viewing camera page to turn on IR LED and guide line of camera .

1) Guide line can be used as assistance for vehicle owner.

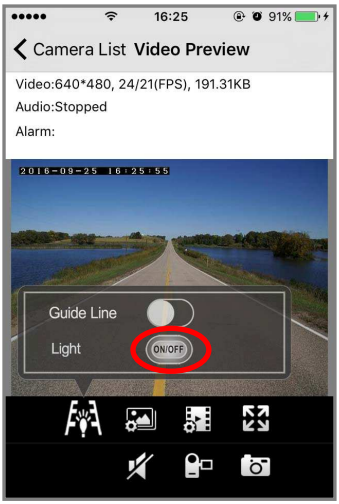


FIG-13

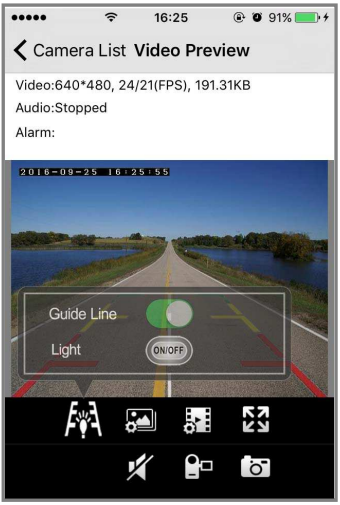


FIG-14

2) Camera IR light can be turned on/off via smart phone /pad (FIG13)

3. Video Parameter Setting

Tap on to set Video parameter (FIG-15):

1) Mirror and flip function：

You can mirror camera image when you sit in the cab and put your camera facing to the back end of your car/truck/RV to get video as normal direction). Video can also be turned upside down by tapping on ”Flip” button.

2) Image parameter setting:

You can adjust brightness, contrast, saturation, sharpness of camera for Comfortable viewing effect.

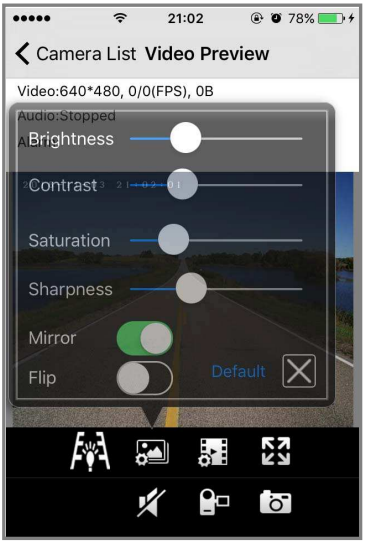


FIG-15

4. Video and Image Control

1) Video quality setting: You can change the video quality by choose your prefer quality level by tap icon :

Video Quality	iOS APP	Android APP
Smooth	Not available	Keep the video steam faster and fluent (less delay)
Standard	VGA 640x480	VGA 640x480

2) Take photo: You can take a picture directly by taping on and save it in local storage of smart phone.

3) Record Video: You can record videos directly by taping on and save it in local storage of smart phone.

4) Audio function: You can open the camera voice by taping on

5) Zoom image: You can zoom to full screen of the image by taping and you can back to normal display by changing the smart photo orientation from horizontal to vertical. (Portrait orientation lock must be set to off in smart phone)

6) Video record playback and photo review:

You can playback the picture and video that you have taken and saved in local album of smart phone .

① Go back the camera list interface. Refer to FIG-16

② Tap on

and select the camera which you want to see. Then you can find the video or image files(FIG-16)

Note: Android APP icon is

③ Tap the files you want to see. Then you can see the video or photo.

④ You can share these video/photo to your friends on Facebook/Twitter

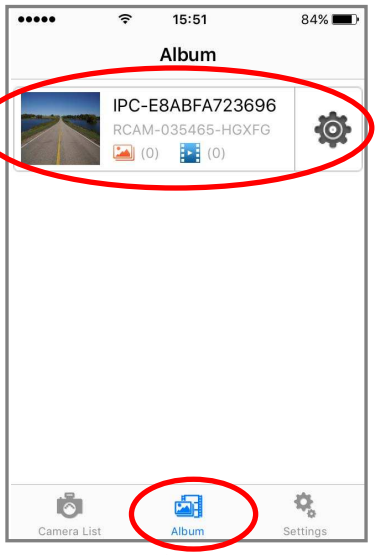
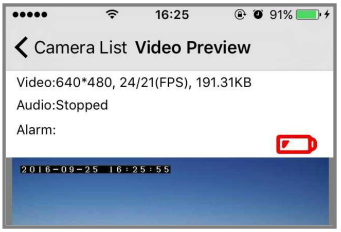


FIG-16

5. Low Battery Alarm

When camera battery runs low, you will see alert icon displaying on the screen, 30 minutes left before camera shut down.



ADVANCE FUNCTIONS OF APP

1. Push Notice: If the camera is connected to internet by router (STA mode), you can setup push notice function, and get a warning message when the alarm is triggered. Push notification function is setup as below:

1) Setup alarm trigger first: Enter the main menu of the camera list, tap icon, then tap “Setting” icon (FIG-17), then enter camera setting menu (FIG-18).

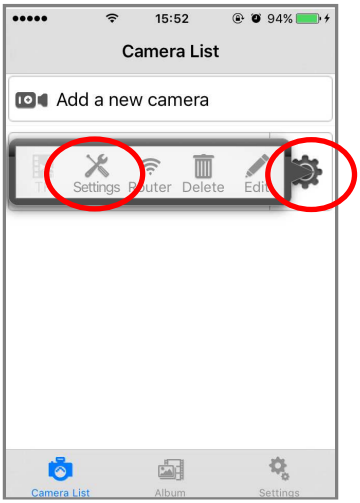


FIG-17

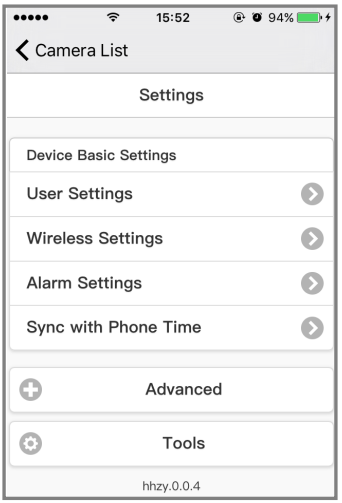


FIG-18

① Select and tap “Alarm setting” to enter into alarm setting memu. (FIG-19)

② Set “Enable Arm” button to “ON “ to enable alarm capability such as motion detection, camera missing etc..

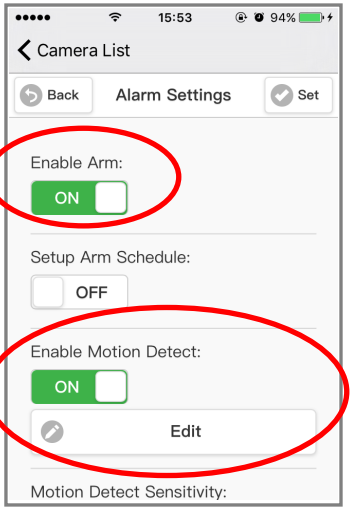


FIG-19

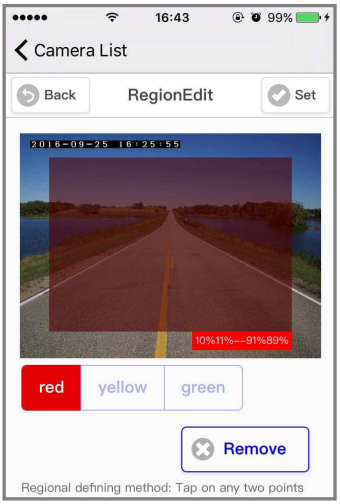
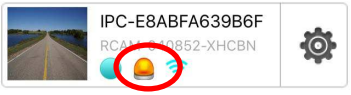


FIG-20

③ Set “ Enable Motion Detect” to “ON” and tap “Edit ”, you can set the motion detect area which you want. (FIG-20)



④ Tap on “Set” to complete alarm settings and back to the camera list. you can see the alarm icon as following when alarm had been triggered.

⑤ Attention: “Setup Arm Schedule” function is NOT enabled for SH04.

2) Tap on the APP Settings icon and set the “Receive push notice” to ON(FIG-21).

3) Make sure the notification setting in your smart phone is set Swift WiFi Cam “Allow Notifications” to ON（FIG-22）

4) You will get a push notification as warning message when the alarm is triggered (FIG-23), Tap “OK” , you can view the alarm picture on your phone.

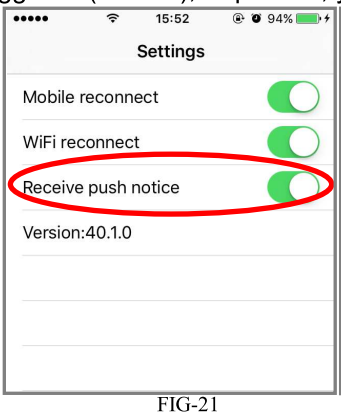


FIG-21

FIG-22

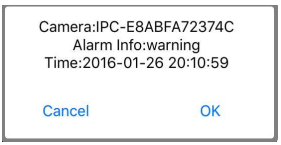


FIG-23

2. Mail Settings: Alert can also be sent out via email

1) Enable Open Alarm Mail in the setting.

2) Enter advance setting and then tap Mail Settings to setup mail details (FIG-25).

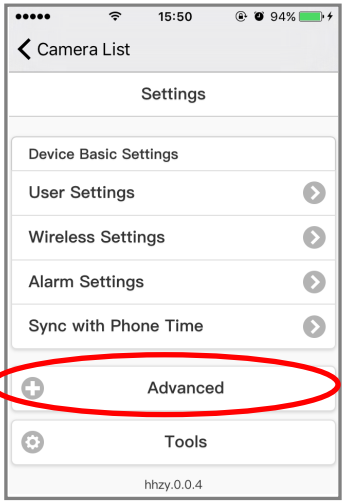


FIG-24

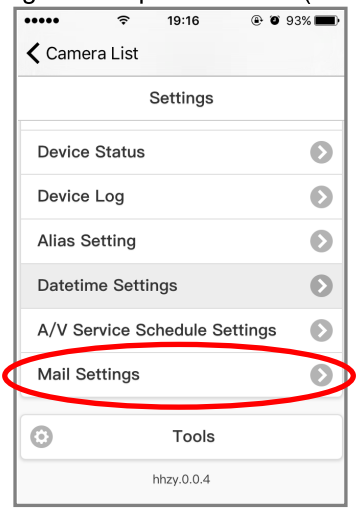


FIG-25

3) Fill in Sender and Receiver with corresponding email address, and then fill in sender's SMTP Sever, SMTP Use and SMTP Password, then tap on Set To finish the setting process. (FIG26,FIG27,FIG28)

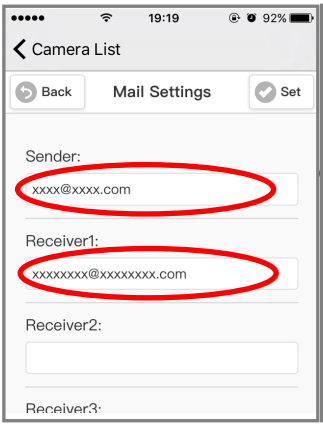


FIG-26

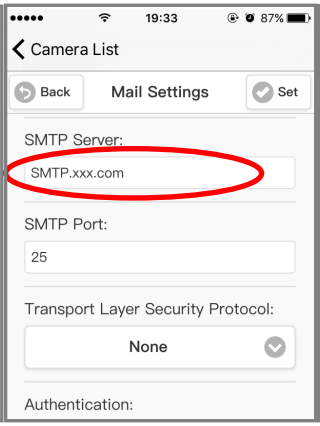


FIG-27

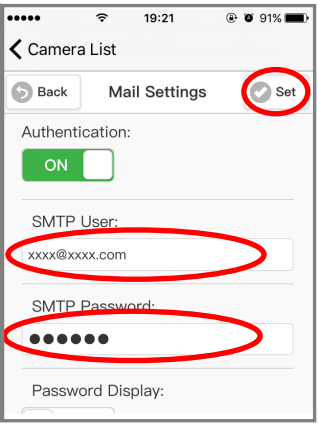


FIG-28

3. **User name and authorization setting**:

You can set the multiple user accounts for the camera, different user have different access right to control the camera. Alias of the camera could also be set here.

1) Enter the main menu of the camera list, Tap icon, then Tap “Setting” icon (FIG-17), then enter camera setting menu.

2）Tap “ User Settings”, then you can set the user information(FIG-29).

3）Alias setting: Enter “Advanced” menu, select and Tap “Alias Setting”, you can set camera alias.(FIG-30)

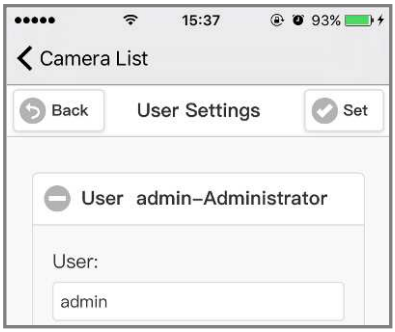


FIG-29

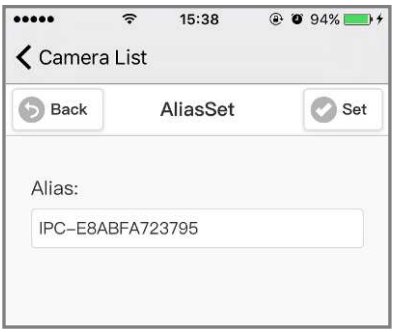


FIG-30

SPECIFICATIONS

Item	Description	Specification/Parameter
Wireless	Working Mode	P2P/AP/STA
	Transmission standard/Protocol	WiFI-------IEEE 802.11B/G/N CSMA/CA ACK
	Modulation Mode	OFDM/DBPSK/DQPSK/CCK
	Transmission Distance	50m(open area site)
	Receiving Sensitivity	-85dBm@11M
	Transmission Power	17dBm (Max.)
	Antenna	2dBi /External
Video	Imaging Sensor	1/6.5″CMOS
	Total Pixels(Max)	648x488
	Resolution	640x480/320x240
	Compression Mode	MJPEG
	Frame Rate	25bps/QVGA; 15bps/VGA
	View Angle	60°
	Minimum Illumination	2.0Lux/F2.0 & 0Lux (IR ON)
Power	Power Supply Input	DC+5V/DC+12V
	Battery Type	Li- battery 3.7V/1800mAH
	Consumption Current	240mA (IR & white LED off)
	Charge Time	Up to 5 hours (Power off)
	Working Time	5hours(IR OFF)/3 hours(IR ON)
Night Vision	LED Quantity	IRLED 6pcs
	IR LED Light Range	3m /60°
Others	Waterproof Level	IP65
	Magnet base	3.2kg （Vertical）attaching strength
	Weight	156g
	Outline Dimension	28 x 90 x 28 mm(W × H × T)
	Store temperature	-40℃~85℃ / -40℉~185℉
	Operation temperature	-10℃~50℃ / 14℉~122℉
	Operation humidity	0%～90%

1. Actual transmission range may vary according to weather, location or building construction.
2. All the specifications are subject to minor change without prior notice.

TROUBLESHOOTING

If you experience the operation problems, please check and try the following yourself before claiming that it is the defective product or consulting the experienced technician.

Abnormal Phenomena	Possible Reasons/Solutions
Can not find camera WiFi	1. Check Whether the camera is power on 2. Check the distance & blocks. 3. Check if there is other stronger WiFi. Signals nearby to beat over yours. 4. Camera was connected to a router before and s in STA mode. You need reset camera back to AP mode to see its WiFi signal
Disconnect with camera	1. Check the distance & blocks 2. Check battery of camera to ensure it is on 3. Check if connected router is working
Low frame rate video	1. Interference from other source 2. Check the distance & blocks 3. Check the video quality setting

Thank you for using the Swift Hitch Cam

Phone: 617-600-8282
Email: swifthitch@sun-tronics.com
Add: 200 Centreport drive suite 365, Greensboro NC 27409 USA

APPROVAL INFORMATION

All our products meet the requirements of approval FCC and CE, and are granted the FCC/CE certification. They are authorized to bear FCC/CE mark.

FCC/CE

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 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 relocated the receiving antenna.
-Increase the separation between the equipment and the receiver.
-Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions.

(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 and modification not expressly approved by the manufacturer or registrant of this equipment under Federal Communications Commissions rules.

This product is CE-certified which means that it fulfills all established rules and demands for usage within the EU. The CE-certification further implies that the radiation level is below the established radiation levels stated in the EMC directive 89/336/EEC and R&TTE directive (1999/5/EC)