

# ***Trail Camera User's Manual***

(for S378) V1.0

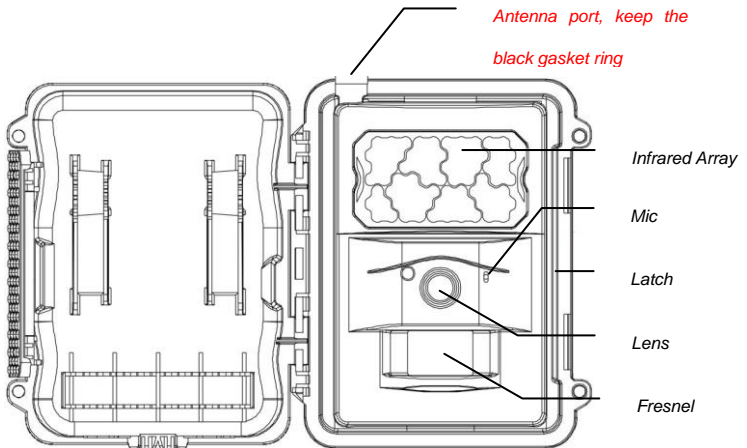


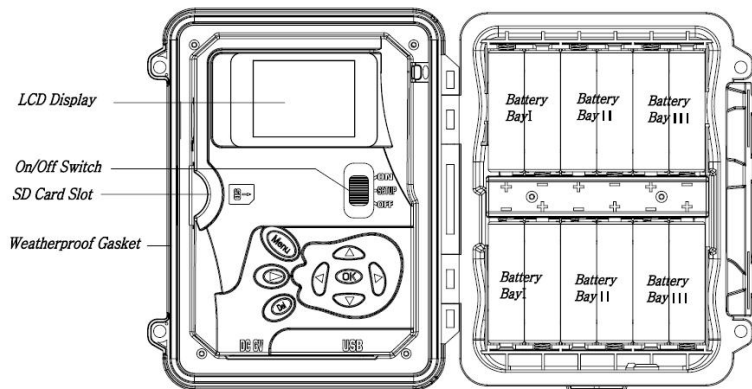
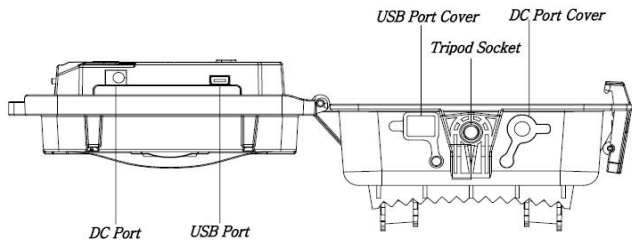
PLEASE READ CAREFULLY BEFORE USING CAMERA

## Package Contents


Mounting Strap	1	Trail Camera	1
Antenna(wireless camera only)	1	USB Cable	1
User's Manual	1		

## Camera Body and Ports






## Keys & Buttons

- **MENU**: Enter the program menu in preview mode
- **▲▼◀▶**: Move between the menu items and change the value
- **OK**:
  - Save parameter settings in menu mode
  - Play videos in playback mode
- Playback button : In live preview window, switch between playback and preview mode
- **DEL**: delete an image in playback mode, delete character when edit the phone number and email address or other settings.
- Use Shortcuts: In live preview window,
  - **▲** is the shortcut to choose **Video** mode, and
  - **▼** is the shortcut for the **Camera** mode
  - **OK** is for capture photos or record a video manually
- Mode (Power) Switch: OFF in the bottom. SETUP in the middle. ON in the top.



## Quick Start

1. Make sure the power switch is at **OFF** position. Load the batteries into the battery compartment according to the polarities indicated. Load a set of 12 (recommended), 8 or 4 (emergency, left 2 columns) AA batteries. Or connect **6V** external power supply to the camera by using the correct cable and external battery.

The following batteries can be used, make sure it is 1.5V AA.

- High-performance alkaline batteries
  - Lithium batteries
  - Rechargeable Ni-MH batteries
2. Insert a SD card (32GB or smaller). Open the camera and insert the SD card into the card slot. Refer to the card symbol on the case for proper orientation. The camera supports up to 32 GB SD card. Please note that the SD-card should not be locked.
  3. Insert a SIM card.
  4. Screw the antenna onto the antenna jack on the top of the camera. Make sure it's all the way in but **DO NOT** over tight it.
  5. Slide the power switch to the **SETUP** position. The camera will enter the live preview mode and start searching the network.
  6. Wait until the camera finds the network. If the wireless carrier is not found, you will need to go to the Advanced Wireless Setup section on Page 10. If the wireless carrier is found, please go to the next step.
  7. Press  button to enter into the menu, then press ◀ or ▶ buttons

to move between the tabs (submenu) which contains different group of items. Press the ▲ or ▼ buttons to activate the submenu and edit different items. Press ◀▶ to change the value. Press the OK button to save.

8. Navigate to the Wireless tab; scroll down to enter the submenu. Change the Send Mode to Instant. Leave the Send To on Phone mode if you are sending the MMS to a cell phone number. Or change to Email mode if you are sending to your email address. Scroll down to Phone or Email and input the phone number or email address of the recipient there.
9. Press **MENU** button to exit from the submenu. Press the MENU again to exit from setup menu and enter the live preview mode.
10. Press the OK button to capture image or record video manually.
11. At preview mode, press the playback button to playback. Use the ◀ or ▶ buttons to go through the images. Press ▲ or ▼ button to choose magnification times. Press OK and press ◀ or ▶, ▲ or ▼ to move the magnified area.
12. Press Playback button  to exit. Magnification mode.
13. While reviewing the image, press **DEL** button to delete the current image, or press **MENU** button to delete the current one or all the images.
14. Press Playback button  to exit the playback mode.
15. Place the camera at the target area and turn on the camera (slide the power switch to ON). The camera will take pictures or videos as programmed. The height from the ground for placing the camera should vary with the object size appropriately. In general, 3-6 feet is preferred.
16. Push the power switch to the OFF position to power off the camera. Please note that even in the OFF mode, the camera still consumes a

small amount of battery power. Therefore, please remove the batteries if the camera is not in use for an extended time.



### Menu Settings

Switch the camera to **SETUP** mode & press **MENU**. Press ▲▼◀▶ to select the desired value, And then press **OK** to save.

Setting Items		Description
Camera	<b>Mode</b>	Choose to take Photo / Video/Photo+Video
	<b>Photo Size</b>	Choose the image size, e.g. 3MP, 5MP, 8MP, 10MP or 12MP.
	<b>Photo Burst</b>	Choose the number of images taken after each trigger (1-10).
	<b>Burst Interval</b>	Choose the interval time length between the images taken in burst mode (Short 1/2/3s).
	<b>Video Size</b>	Choose the video resolution.
	<b>Video Length</b>	Set the video length to the desired duration.
	<b>Sound</b>	Enable or disable video sound recording.

Trigger	<b>Sensitivity</b>	Select between High,Normal,Low,and OFF.
	<b>Trigger Interval</b>	The sleeping time after each trigger.
	<b>Time Lapse</b>	Camera can be triggered by timer at a preset time interval. Please note that even in Time Lapse mode, the camera still can be triggered unless the Sensitivity set to off.

<b>Trigger</b>	<b>Start-Stop 1/2</b>	The camera can be set to operate only at specific time period. To enable this function select <b>ON</b> and press ok. The start-stop menu will then appear. This menu contains the settings for times to start and stop as well as the trigger interval and time lapse interval. The start-stop setting will override all other general camera settings. Since there are 2 periods available, make sure to not program times that overlap.
	<b>Work Day</b>	Enable or disable the PIR trigger and Time lapse trigger by day of the week.

<b>System</b>	<b>Set Clock</b>	Must choose right timezone and Save.
	<b>Camera ID</b>	Watermark in the left bottom corner, up to 5 digits.
	<b>GPS coordinate</b>	Could be written to exif info of photo.
	<b>Time Stamp</b>	ON /Off. Choose if the image stamp is to be shown or not.
	<b>Overwrite</b>	Cycle writing the SD card.
	<b>Beep</b>	Enable or disable key tone
	<b>LED indicator</b>	Enable or disable blinking of indicator.
	<b>FW Update</b>	Start to update FW and MCU once update files copied to SD card root directory.





<b>System</b>	<b>Format</b>	Format the SD card. This will erase all data on the SD card. This cannot be undone.
	<b>Default</b>	Restore all settings to factory default values.
	<b>Password</b>	This option allows a 6 digits password to be set, keep it in mind. Recommend to use.
	<b>Language</b>	Choose the menu language.
	<b>Information</b>	Show Module Number, HW/FW/MCU version and IMEI(wireless camera only).

<b>Wireless</b> <small>(wireless camera only)</small>	<b>Send Mode</b>	Choose to send the photo or video clips instantly, or Daily report (send one picture at preset time, save others) or turn off sending. Both= Instant and Daily report.
	<b>Send Via</b>	Choose to send the image via MMS (MMS plan) or Internet (Data plan).
	<b>Send To</b>	Send the images to Phone, Email or Both.
	<b>Phone</b>	Input or revise the recipient Phone number.
	<b>Email</b>	Input or revise the recipient Email address.
	<b>Image From</b>	The text content of Image From will be included in MMS/Email subject
	<b>Setup Tool</b>	Download the Setup Tool to your SD card so you can set up the carrier's network parameters if they are not pre-programmed to the camera. It will also allow user to set up some advanced functions.

<b>Wireless</b> (wireless camera only)	<b>SMS Control</b>	Turning the SMS command function always on or every n hours. On mode will increase the power usage.
	<b>Copy Para</b>	Copy the current network parameter settings to the SD card.
	<b>Update Para</b>	If your wireless carrier's network parameters are not pre-programmed into the camera from the factory, you will need to use the Setup Tool to program in manually. After you use the Setup Tool, a MMSCFG.bin file will be generated and put on the SD card. You will need to run Update Para to write the settings to the camera.
	<b>Image Quality</b>	Choose the wireless picture quality.




### Playback Button (Viewing Photo or Video)

- Switch to **SETUP** mode.
- Press Playback button  to view the latest picture (or video).
- Press OK button to start playing the video clips.
- Press OK button to pause and press playback to quit playing.
- Press ◀ button to view the previous image and press ▶ button for the next.
- Press ▲ or ▼ button to choose magnification times. Press OK and and press ◀ or ▶, ▲ or ▼ to move the magnified area.
- Press the Playback button  playback button again to exit the playback mode.



### Delete Photo or Video

- Press Playback button  to view the image (or video) which to be deleted.
- Press **DEL** button.
- Press **LEFT** or **RIGHT** to select Yes to execute or No to Exit.
- Files can't be restored once deleted.

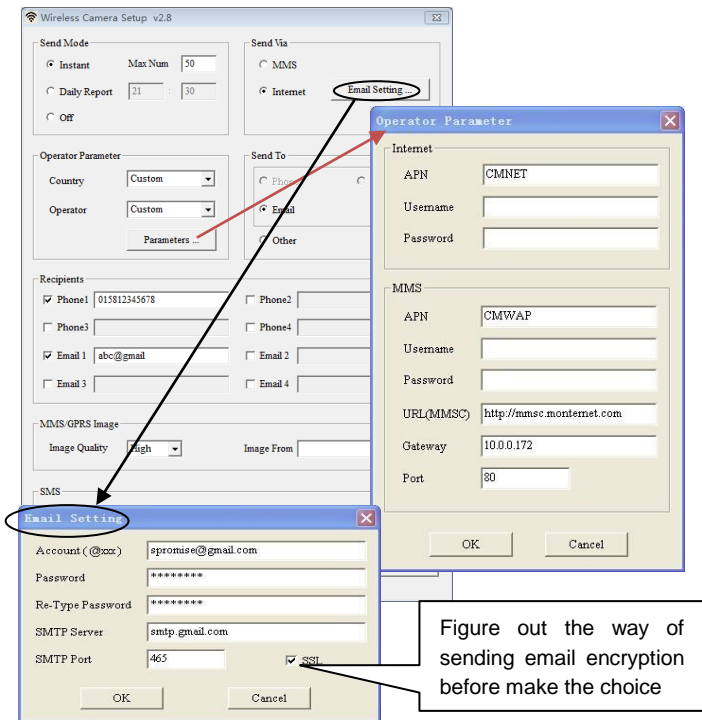
### **How to use the Setup Tool (wireless camera only)**

If your wireless carrier's network parameters are not pre-programmed into the camera from the factory, you will need to use the Setup Tool to program them into the camera manually.

1. Go to the camera Menu > Wireless > Setup Tool. Press enter, download the Setup Tool to your SD card from the camera menu.
2. Take the SD card out and read the SD card from your computer. The setup tool will only work on PC(windows). Run Setup.exe on your computer.
3. You will see the setup window as below.
4. Fill in the settings you prefer into the blank fields. These settings will overwrite the existing settings from the camera.
5. You can specify the Max sending images in a day(Max Num) (00:00:00-23:59:59), all the MMS/email sent at on mode would be included into this Max Num. Choose 0 means no limit.
6. Operator Parameters: Choose custom and fill in the parameters obtained from your wireless carrier if settings not preset; or choose country/operator if it is preset; choose auto/auto only when dealer confirms it is ready.
7. Email setting: Input the right SMTP server and port, choose SSL or non SSL type(default) email service type accordingly.
8. Wireless image quality, normal resolution=640\*480; high resolution=1280\*960,original photo sending only available on

3G/4G models.

- Image From content will be included in MMS/email subject so the user will know where the image comes from.
- SMS Status Response will allow the camera to send the user a response after it receives the user's SMS command.



## Technical Specifications

Picture Resolution	3MP/5MP/8MP/10MP/12MP
Video Resolution	1080p 30fps, 720p 30fps, WVGA (800*480 30fps) QVGA (320*240 30fps)
Trigger Time	0.6s
Lens	FOV (Field of View) = 62 °
Night Illumination	Infra Red or No Glow
Display Screen	2.0" LCD
Memory Card	up to 32GB
Trigger	Motion (PIR) / Timer (Time Lapse)/SMS retrieve
PIR Sensitivity	Adjustable (High/Normal/Low/Off)
Detection Range	Up to 25 meters
Flash Range	Up to 18 meters
Temperature	-20 - +60°C (Operation)    -30 - +70°C (Storage)
Trigger Interval	0s – 60 min
Time Lapse Interval	Up to 24hrs
Photo Burst	1–10
Video Length	1–30s
Power Supply	4xAA, 8xAA or 12AA (1.5v AA)/ External Power(6VDC)
Stand-by Current	< 0.12mA (SMS off); <2mA (SMS on)
Sound Recording	Available
Mounting	Tripod/Mounting Strap/Python lock
Weight	0.38kg
Dimensions	15.3x12.4x9.0 cm
Operation Humidity	5% - 90%

**SMS Command Code List(wireless camera only)**

Add Phone	*100#number#	Phone number added
Delete Phone	*101#number#	Phone number deleted
Add Email	*110#email#	Email added
Delete Email	*111#email#	Email deleted
Send Via MMS	*120#0#	Send via MMS
Send Via Internet	*120#1#	Send via Internet
Send To Phone	*130#0#	Send to phone
Send To Email	*130#1#	Send to email
Send To Both	*130#2#	Send to both
Send Mode Instant	*140#0#	Send instant photo
Daily Report	*140#1#	Send daily report at preset time
Send Mode Off	*140#2#	Send is off
Check Status	*160#	Signal status; Battery level; SD card status
Disable SMS	*170#	SMS control disabled
Reset the Max Sending Number per day	*180#	*180#0# //no limit *180#100# //reset to 100 *180# //clear the counter

Choose the wireless image size	*190#	*190#0# // choose 640*480 *190#1# // choose 1280*960 *190#2# // choose original photo
Camera Mode Photo	*200#0#	Set to photo mode
Camera Mode Video	*200#1#	Set to video mode
Photo+Video mode	*200#2#	Set to Photo+Video mode
Set PIR Level to High	*202#0#	PIR sensitivity high
Set PIR Level to Normal	*202#1#	PIR sensitivity normal
Set PIR Level to Low	*202#2#	PIR sensitivity low
Set PIR Level to Off	*202#3#	PIR sensitivity off
Retrieve photo or video clips	*500#	Available at instant mode. Equal to a normal motion trigger.
Format SD card	*204#	SD card was formatted
Set system time	*205#YYYYMMDDHHMMSS#	
Set PIR workday	*206#??????? # ?= "0" or "1", from Mon. to Sun.	*206#1001001# means PIR enabled on Monday, Tuesday and Sunday, disabled on other days.
Disable status response	*209#0#	No SMS alert info after SMS command executed
Enable status response	*209#1#	With SMS alert info.

## Notes

1. When install camera, it's better to put it somewhere 1.5m above the ground, good for night time image and less false trigger.
2. If you want to use the camera as a non wireless camera without SIM card, please make sure Send mode is off, SMS control is off.
3. When reaches the Max Num, Sending will be stopped; it would restart to send from the next day, or you can reset the Max Num by SMS command.
4. In the time stamp, M=motion trigger, T=time lapse trigger, S=\*500# trigger, E= manually trigger.
5. Make sure no air condition, chimney or other heat resources in the camera's field of view. Rising sun or sunset may trigger the PIR, pay attention to the camera orientation.
6. If wireless camera stops sending, please check the balance of SIM card or data plan condition. Check if signal is stable there.
7. When default the camera, all settings would be set to factory settings.
8. Video could be sent at camera mode(video) and send mode(instant), but make sure camera registered to high speed 3G/4G network. If video clip size larger than 10MB, sending would be stopped and changed to WVGA 10s from next trigger.
9. Highly recommend to test the network speed by send a picture manually in the field before finish the setup. If registered to 2G network, please don't try to send original photo or video clip.

### How to send a picture manually?

After network found at preview mode, with right wireless settings, camera mode=photo, send mode =instant; press OK, a picture would be taken first, then you can choose send this photo or not.