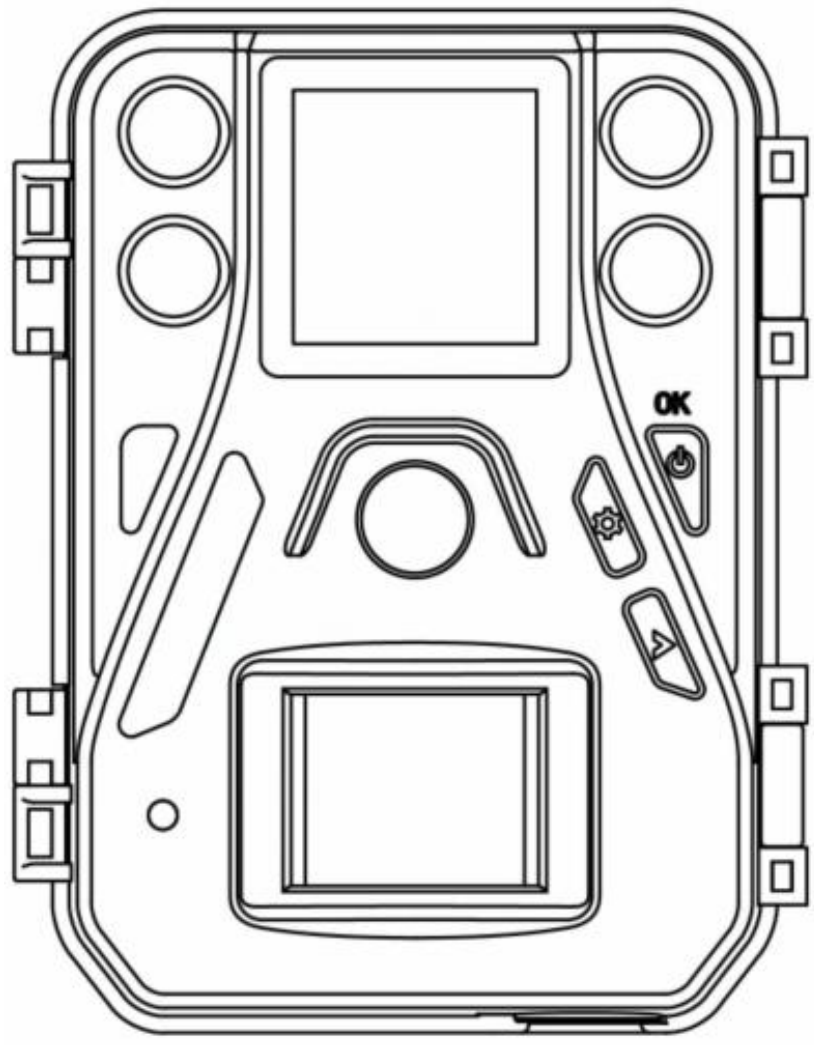
# Infrared Digital Scouting Camera
## *User Manual*
## SG520



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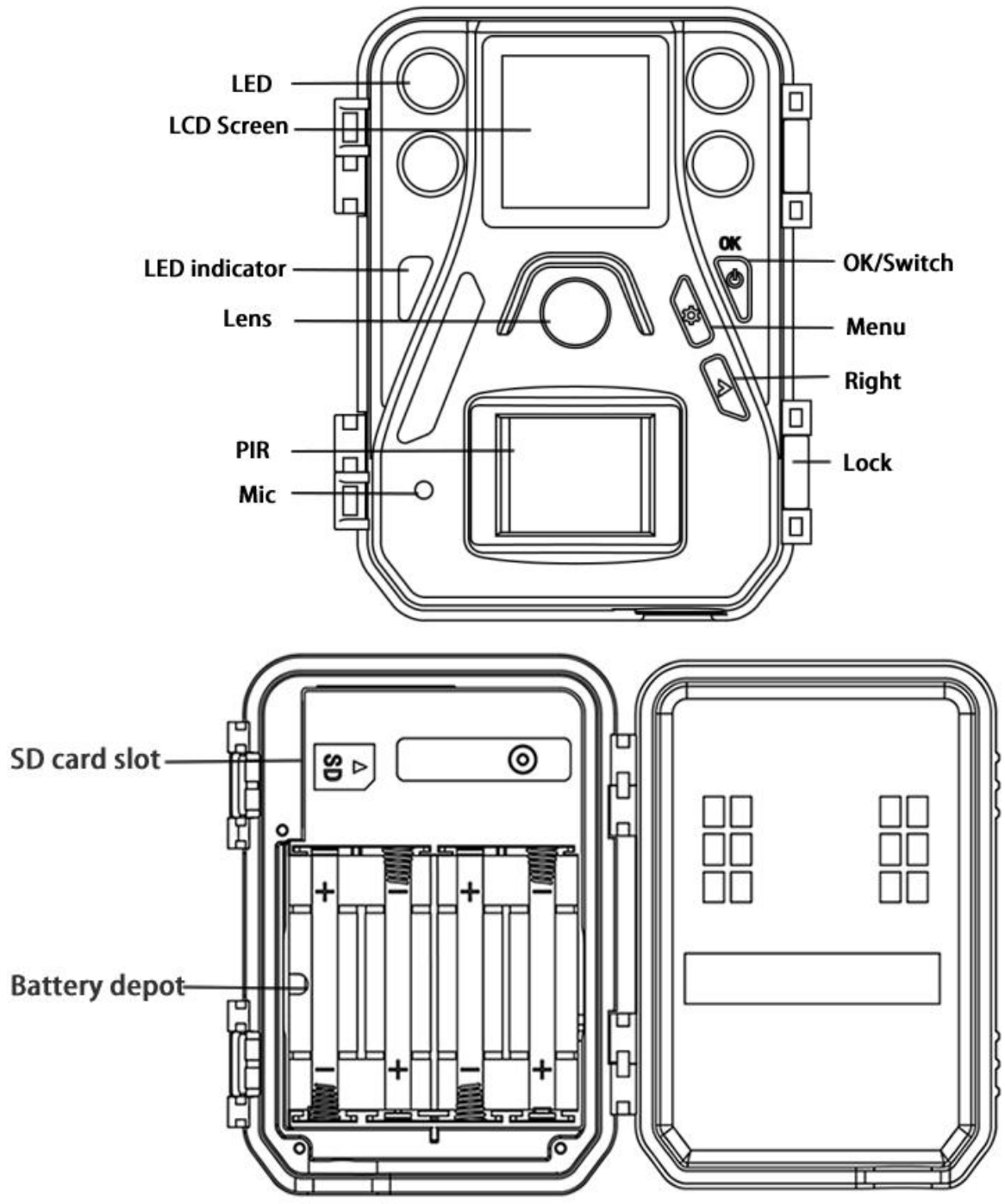
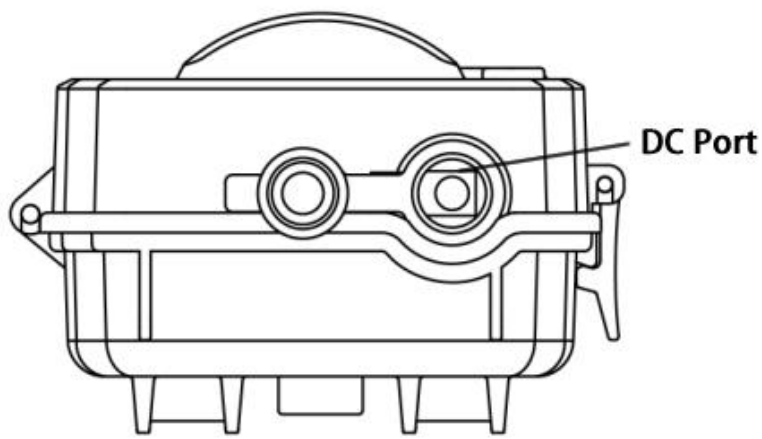
# 1.Getting Started





External AC/DC connector 4*1. 7mm

# 2 .Camera Operation

## 2.1 Batteries / Power Supply

The camera is powered by four AA batteries - high-density, high-performance, rechargeable alkaline or NiMH batteries are recommended. When the batteries are low, the camera will beep twice and automatically shut down.

A DC 6-Volt, 2 Amp external power supply adapter can also be used to power the camera (not included).

## 2.2 SD Card Information

To take full advantage of the latest technologies, we recommend Class 10 SD cards or better, which have fast transfer speeds and long durability for extensive shooting in the most extreme outdoor conditions. Secure Digital High Capacity (SDHC) PRO cards work with SDHC compatible devices only. Please check that your product is compatible with SDHC cards.

**Insert the SD card into the camera before turning on the camera**

This camera requires the use of a removable SD card and has no built-in internal memory. The camera will not function if the SD card is not properly inserted.

**Make sure the SD card is unlocked before inserting it into the camera**

The camera will operate properly with a locked SD card inserted, but the card will not be able to store captured images or videos taken by the camera.

**Do not remove the SD card while the camera is on**
Removing the SD card, while the camera is on, risks damaging the internal components of the camera.

**If you experience any problems with an inserted SD card**
Try reformatting the SD card, using the camera's main settings option.

## 2.3 Camera Modes

The different modes are accessed by pressing the OK button, marked on the camera:

**ON Mode**
To turn on the camera, press and hold the OK button, until the display screen activates. In this mode, you can customize the camera settings or play back pictures and videos the camera has taken on the LCD display. If the camera is left alone for more than 10 seconds, the camera will automatically switch to *Hunting Mode*, which is described below.

**Hunting Mode**
The camera will take pictures or videos when motion is detected and/or at specific time intervals, according to the

programmed settings. Hunting mode is automatically activated if the camera is turned on and left alone for 20 seconds. Before entering Hunting Mode, the front (red) LED light will continuously blink for approximately 10 seconds, and then turn off. This delay time allows you to adjust the camera's position before the camera becomes active if needed. To "wake" the camera and access the camera menu functions, press and hold the OK button, until the display becomes active.

**OFF Mode**

To turn off the camera when the display screen is active, press and hold the OK button until the screen powers off. The camera will still consume a small amount of battery power while in OFF mode, so it is recommended to remove the batteries if the camera will not be used for a long period of time.

## 2.4 Trigger Mode

PIR Triggering: The default setting is on, which means the camera is only active when motion is detected. If PIR sensitivity is set to OFF, the camera stops responding to motion.

Timer Triggering: The default setting is OFF, which means timer triggering is disabled. When the timer triggering interval is set to a non-zero value, the camera starts to work at a preset

interval. Users need to set the PIR sensitivity to OFF if they want the camera to work only at preset intervals.

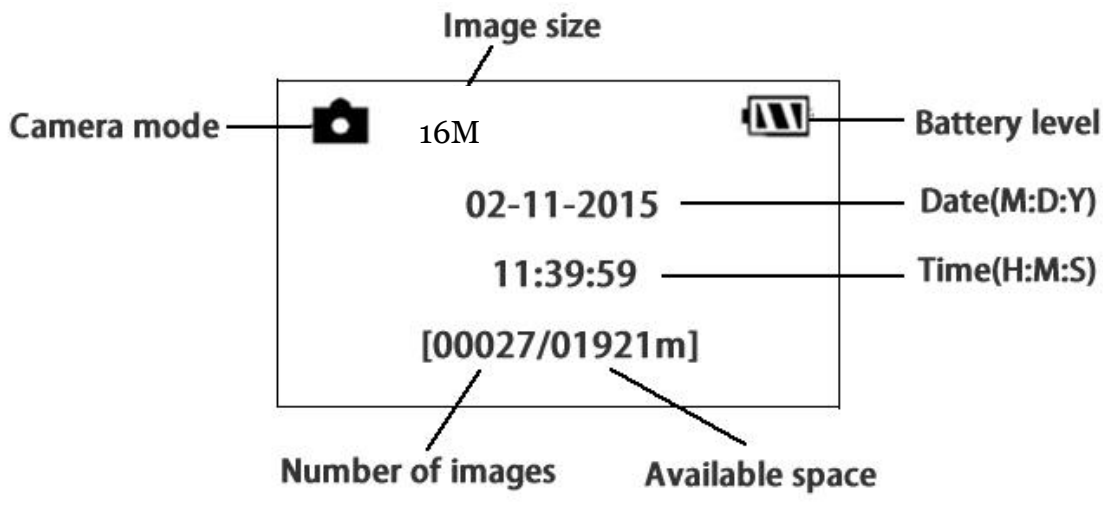
PIR and Timer Triggering: For both PIR triggering and Timer triggering, users need to set PIR sensitivity to low, normal, or high based on the external environment, and set the Timer interval to a desired non-zero value. The camera will capture pictures or videos in a preset time interval even if there is no motion detected; the camera will also capture pictures and videos if motion is detected.

# 3. Camera Setup Settings and Display

## 3.1 Settings Interface & Display

To update the camera settings, turn the camera on or place it in ON mode by pressing and holding down the OK button until the display screen activates.

When the camera is in ON Mode, the screen will activate and display the following:



## 3.2 Manual Image / Video Capturing

Place the camera in ON mode and press ▸ to manually capture photos or record video. Press ▸ once to take a picture, when the CAMERA MODE option is Photo. When the CAMERA MODE option is Video, press ▸ to start recording and press ▸ again to stop recording.

## 3.3 Manage Images and/or Videos

Place the camera in ON mode and press the OK button to view images or videos.

The latest image or video will be shown on the LCD screen. When the display screen is active, press the OK button to cycle through the pictures and videos taken.

NOTE: Videos cannot be viewed directly through the camera.

## 3.4 Camera Setup Options

To view the camera settings menu, press and hold the OK button until the display screen activates, then press MENU button. Press the OK button to scroll through the different camera options and use the ▸ button to change the option settings.

After changing EACH setting in the Setup menu, you must

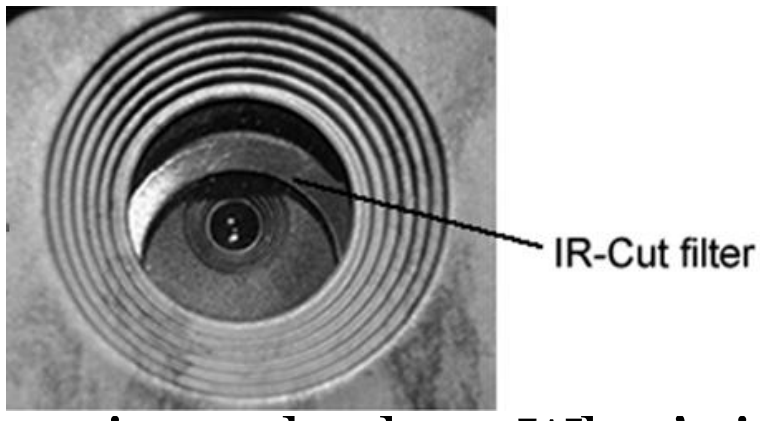
press OK or the camera will retain the previous setting.

| Main Menu | Description |
|---|---|
| **Language** | Choose language you need. It supports six languages: English, Swedish Finnish, German, French，Spanish, Czech Swedish.<br>**Default: English** |
| **Camera Mode** | There are three camera modes: Photo, Video and Pic+Video.<br>**Default: Photo** |
| **Set Clock** | Set the camera's date and time. You can change the date and time of the device by setting this parameter when necessary, e.g., after every battery change. The date format is month/day/year; the time format is hour: minute: second. |
| **Photo Size** | Choose the image size: 5MP, 10MP or 16MP.<br>**Default: 16MP** |
| **Photo Burst** | Choose the number of continuous photos taken after the camera is triggered.<br>**Default: 1** |
| **Video Size** | Choose the video size: 1920x1080 , 1280x720 or 640x480.<br>**Default: 1920x1080** |
| **Video Length** | Choose the duration of video recordings. It has three values: 10s, 30s, and 60s.<br>**Default: 10s** |
| **Time Lapse** | If time lapse is on, the camera will capture images or videos at a preset time interval regardless of whether motion is detected. The default setting is off, which means the timer function is disabled. Changing this parameter to a non-zero value turns on Time Lapse |

| | |
|---|---|
| | mode, and the camera will take photos at the given time interval. NOTE: If the PIR Trigger is set to off, then Time Lapse can't be set to off.<br>**Default: OFF** |
| **PIR Trigger** | Choose the sensitivity of PIR. The higher the sensitivity, the more easily the motion sensor will be triggered. It is recommended to use Normal mode. The sensitivity of the PIR is dependent on the temperature. A higher temperature leads to lower sensitivity.<br>**Default: Normal** |
| **PIR Interval** | This parameter means how long the PIR sensor will be inactive after it is triggered in hunting mode. During this time the PIR of the device will not react to any motion.<br>**Default: 10 Sec** |
| **Recycle Storage** | In hunting mode, when the SD card is full, the first images or videos will be replaced by new pictures or videos, so you don't need to retrieve your memory card manually. But in SETUP mode, the SD card can't recycle storage.<br>**Default: On** |
| **Format SD** | Deletes all images and videos in the SD card. Make sure you have made a backup of important data before selecting this option. |
| **Version** | Contains version information. |
| **Default Settings** | Restore all camera settings to default values. |

# 4 .Troubleshooting

1. There is something in front of the camera lens. Is the camera broken?



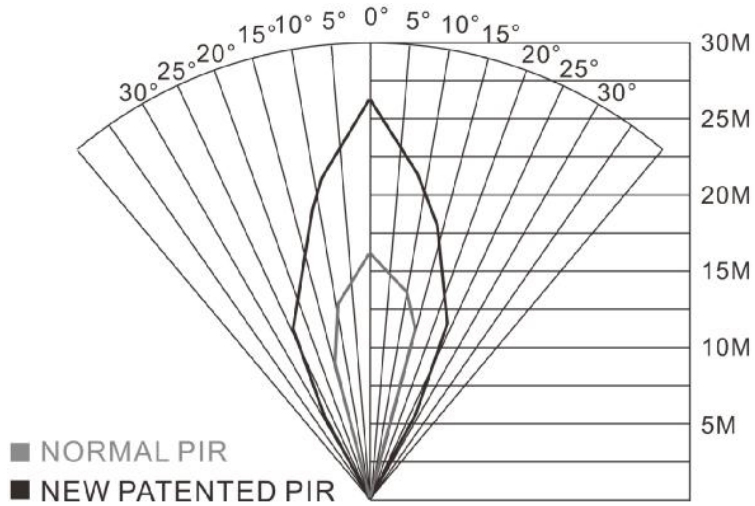

A: The camera is not broken. What's in front of the lens is called an IR-cut filter. When the camera is powered on, the IR-cut will be reset and cover the lens. Only when the camera is powered off, will the IR-cut be at a random place.

2. The camera is not working anymore.
A: Most likely, no SD card has been inserted in the camera when it is turned on. Please make sure a working SD card has been inserted in the camera before it is turned on.

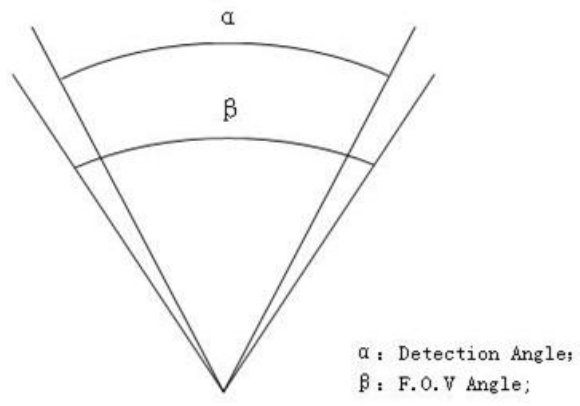
3. The display screen suddenly turned black.
A: If the camera is left alone once turned on, after a brief period of time, the camera will activate the On/Hunting mode. Press and hold down the OK button until the screen activates, if you wish to access the TEST/SETUP mode on the camera.

# 5. PIR Detection Zone

This camera uses a new PIR design, which is patented. The new PIR's detection range can reach 85ft in good environments. The following picture compares the detection zones of a normal PIR and the new PIR.




The PIR detection angle (α) is just smaller than the field of view (FOV) angle (β). The advantage of this design is that it can reduce the empty picture rate and capture most, if not all, motions.



# 6.Technical Specifications

| | |
|---|---|
| Image Sensor | 5MP CMOS Sensor<br>10MP, 16MP Interpolation |
| Lens | F/NO=2.2<br>FOV(Field of View)=55° |
| PIR detection range | 85ft |
| Display Screen of Remote Control | 1.44" LCD |
| Memory Card | Up to 32 GB |
| Image Resolution | 16MP=4896×3264<br>10MP = 3648 ×2736<br>5MP = 2560×1920 |
| Video Resolution | 1920×1080(20fps)<br>1280x720<br>640×480 |
| PIR Sensitivity | Adjustable (High/Normal/Low) |
| Trigger Time | <0.7s |
| Weight | 180g(without battery) |
| Operation/Storage Tem. | -20 - +60°C / -30 - +70°C |
| Power Supply | 4×AA |
| Sound Recording | Available |
| Mounting | Rope/Belt/Python lock |
| Dimensions | 107 x76 x40 mm |
| Operation Humidity | 5% - 90% |
| Security Authentication | FCC, CE, RoHS |

# 7. Parts List

| Part Name | Quantity |
|---|---|
| Camera | One |
| Belt | One |
| User Manual | One |
| Warranty Card | One |

For more details about our product or software, please visit our website(s) at: http://www.bolymedia.com/index/Support or https://bolyinc.com