

# **SJCam SJ4000 WiFi Manual**

2015 December 13

Revision 1

## **GENERAL NOTES**

- When you open the camera package for the first time check the contents to make sure you have all the mounting hardware and accessories.
- Plastic film covers the camera display and lens. There is also plastic film on the inside and outside of the lens cover and both back cover doors of the clear housing. Remove plastic film before using the camera.
- Verify the authenticity of the camera by checking the security code under the scratch-off on the side of the package. Go to the SJCam official website at <http://www.sjcamhd.com/safe/> and enter the security code as directed to verify that you have an authentic SJCam.
- This manual is based on firmware version G20150408V02 dated 2015 April 8. Camera menus, settings or other operations might vary with other firmware versions.
- Notes are identified in parentheses () and are described at the end of each section.

## **EXTERNAL LIGHTS**

The following lights indicate the operation described and can occur in several combinations.

- **Blue light on:** camera is on
- **Red light on:** camera is connected to a charger
- **Amber light on:** camera is connected to a smart device via WiFi
- **Blue light flashing:** camera is recording video
- **Amber light flashing rapidly:** camera WiFi is turned on but not connected to a smart device
- **Amber light flashing:** camera is connected to WiFi while recording video
- **Red and amber lights on: WARNING – There is a serious problem with charging. Disconnect the charger immediately due to the risk of severe overheating.**

## **BUTTONS**

- **Power/Mode:** Press and release to turn on the camera. Press and release to change modes. Press and hold to turn off the camera.
- **OK:** Press to start or stop recording videos, take pictures, select menu items, or start or pause video playback.
- **Up and Down:** Press and release to navigate through menus and change letters and numbers in Setup. Press and hold to advance through several menu items in Setup. Press and hold to zoom in or out in Record or Camera modes. Press and release to fast forward or rewind videos during Playback. Press and release the Up button to connect to or disconnect from WiFi in Record or Camera modes.

# **MODES**

Press the Mode button to advance to next screen for each of the following four modes:

- **Record.** This is the first mode to appear after start screens or battery symbol screen.
- **Camera**
- **Playback**
- **Setup.** Press the Mode button to return to Record mode.

## **ON-SCREEN DISPLAY (OSD) ICONS**

### **BATTERY SYMBOL SCREEN**

- The battery charging symbol shows bars moving across a battery from left to right.
- When all bars are full and stop moving it means that the battery is fully charged -OR- that the camera is connected to the charger and is operating without a battery.

### **RECORD MODE ICONS**

Icons appear only when OSD Mode is turned On. If OSD Mode is turned Off then no icons appear on the display except as indicated below.

In standard Record Mode, icons across the top beginning at the top left corner-

- **Steady yellow circle and steady yellow numbers:** Record mode selected. The yellow numbers are the remaining video recording time based on recording settings and available memory -OR-

**Flashing circle alternating red and yellow and steady red numbers counting up from 00:00:00:** recording video showing the time for that segment. Yellow or red numbers shown in format HH:MM:SS.

- **White letters and numbers in a blue box:** video resolution and frames per second such as 1080P30
- **White arrow loop with number:** shows the Cyclic Record time segments.
- **Microphone:** audio recording is On
- OSD Mode turned off, **flashing circle only alternating red and yellow:** recording video

In Video Lapse Mode, icons across the top beginning at the top left corner -

- **Steady yellow clock face with a number:** Video Lapse mode with the selected time interval in seconds shown on the clock face -OR-

**Flashing red clock face with a number followed by steady red numbers 00:00:00:**

Recording in Video Lapse at the time interval in seconds shown on the clock face

- OSD Mode turned off, **flashing red clock face with a number only:** Recording in Video Lapse at the time interval in seconds shown on the clock face

All Other Record Mode icons clockwise beginning with the battery icon at the top right corner-

- **Battery icon:** indicates relative battery charge remaining -OR- uses a plug symbol within the battery icon to indicate that the battery is charging or that the camera is operating without a battery while connected to the charger.

- **Broadcast symbol:** only present while using WiFi. Flashing white indicates WiFi is on but not connected. Steady blue indicates WiFi is on and connected.
- **Time:** shows current time in 24-hour clock, HH:MM:SS. Time resets to 00:00:00 when the battery is replaced. Sometimes it resets to the current time when the camera is connected via WiFi to a smart device.
- **Date:** shows current date in YYYY-MM-DD. The date resets to default when the battery is replaced. Sometimes it resets to the current date when the camera is connected via WiFi to a smart device.
- **Octagon with letter F:** Motion Detection is On
- **Key symbol:** indicates the video is protected during Delete. **CAUTION: All videos and photos including protected videos are deleted when the memory card is formatted.**

*The following icons are described clockwise beginning in the top left corner.*

### CAMERA MODE ICONS

Icons appear only when OSD Mode is turned On. If OSD Mode is turned Off then no icons appear on the display.

- **Blue camera symbol:** Camera mode
- **Number and letter:** image size in megapixels (e.g., 3M).
- **Battery icon:** indicates relative battery charge remaining -OR- uses a plug symbol within the battery icon to indicate that the battery is charging or that the camera is operating without a battery while connected to the charger.
- **Broadcast symbol:** only present while using WiFi. Flashing white indicates WiFi on but not connected. Steady blue indicates WiFi on and connected.
- **Up to 6 digit number:** the number of photos you can take at the selected camera settings with the available remaining memory
- **Yellow clock face with a number:** Capture Mode with the selected time interval in seconds shown on the clock face -OR-
- **Red clock face with a number:** taking photos in Capture Mode at the time interval shown

### PLAYBACK MODE ICONS

Icons appear only when OSD Mode is turned On. If OSD Mode is turned Off then no icons appear on the display except as indicated below.

- **Blue arrow:** Playback mode -OR-
- **Red arrow:** playing back a video -OR-
- **Blue Pause:** video playback paused
- **Battery icon:** indicates relative battery charge remaining -OR- uses a plug symbol within the battery icon to indicate that the battery is charging or that the camera is operating without a battery while connected to the charger.
- **White letters and numbers:** video resolution such as 1080FHD for MOV files -OR-
- **White numbers:** image size such as 2048X1536 for JPG files
- **File name:** a string of letters and numbers across the bottom of the display as follows -  
For non-protected videos: YY\_MMDD\_hhmmss\_XXX.MOV  
For protected videos: MMDD\_hhmmss\_XXX\_EVE.MOV  
For photos: YY\_MMDD\_hhmmss\_XXX.JPG  
YY = year, MM = month, DD = day, hh = hour, mm = minute, ss = seconds, XXX = file sequence number, EVE = protected video, MOV = video and JPG = photo.

- **Key symbol:** indicates the selected video is protected
- OSD Mode turned Off, a **Start and Stop** icon appears at the bottom of the screen. The **red arrow** icon appears when the OK button is pressed to play back a video. The **blue pause** icon appears when the OK button is pressed to pause video playback.

## **BASIC CAMERA OPERATION**

*The following describes basic operation of the camera alone. For operation when connected to a smart device see **OPERATING CAMERA FROM A SMART DEVICE VIA WIFI** below.*

### **CHARGE BATTERY (1)**

- Plug the AC adapter into a household electrical outlet or plug a 12V adapter into a 12V vehicle outlet. Plug the USB x micro USB cable into the adapter and camera. The micro USB port is the upper cable connection on the side of the camera. It takes about 3 to 3-1/2 hours to fully charge a depleted battery.
- The red and blue external lights turn on and the battery charging symbol appears on the display. The red light shuts off when the battery is fully charged.

**- WARNING FOR USA OWNERS: The AC adapter is not listed by Underwriters Laboratory (UL). Therefore please carefully monitor the adapter and camera the first time you use them to be sure they don't overheat.**

### **INSERT OR REMOVE MEMORY CARD**

- Use a Class 10 microSD or microSDHC memory card up to 32GB.
- Insert the memory card into the memory card slot on the side of the camera with the metal contacts facing the camera lens. The slot is spring-loaded and the card should be pushed in until you hear a click.
- The memory card only fits one way. If it won't go in don't force it; turn it over and try again.
- To remove the memory card press it in until you hear it click. The spring mechanism pops out the card far enough to be pulled out.

### **TURN CAMERA ON OR OFF**

- If the camera is not connected to an adapter then press the Mode button to turn on the camera. The first screen to appear is the SJCam logo followed by the SJ4000 start screen followed by the Record mode screen
- If the camera is connected to an adapter with or without a battery installed and the camera is off, press the Mode button to turn on the camera. The first screen to appear is the SJCam logo followed by the SJ4000 start screen followed by the battery charging screen. To advance to the Recording mode screen press the Mode button.
- Press and hold the Mode button to turn off the camera.
- If the camera is off and you then connect the camera to an adapter, with or without a battery the camera turns on automatically and the battery charging screen appears after the SJ4000 start screen. To advance to the Recording mode screen press the Mode button. When you disconnect the charger the camera turns off automatically.

- The camera also turns on automatically when you connect it to a computer using a USB cable. The dialog box for “Mass Storage” or “PC Camera” appears after the SJ4000 start screen. It turns off automatically when the cable is disconnected.
- Also see Car Mode below to set the camera to turn On and Off automatically.

### **RECORD VIDEO**

- Record mode is the first screen to appear on the display after start screens or the battery symbol screen when you turn on the camera. If you are not in Record mode, press the Mode button until the Record mode screen appears.
- Press the OK button to begin recording. The steady yellow circle icon changes to an alternating yellow and red flashing circle. The recording time appears at the top of the display in red numbers. Press the OK button to stop recording.
- Press the Mode button while recording to protect a video from accidental deletion. A key icon appears on the display.
- Press and hold Up button to zoom in up to 4x. Press and hold Down button to zoom out. (2)
- If you selected Video Lapse in the Setup menu then pressing the OK button begins time lapse recording.

### **PLAYBACK VIDEO**

- Press the Mode button until the Playback mode screen appears on the display. Press the Down button to advance to the next video or photo. Press and hold the Down button to advance through several videos or photos. An image of each video and photo will appear. Press the OK button for playback. The blue arrow icon changes to red. Press the OK button again to pause. A blue pause symbol replaces the red arrow. Press the Mode button to stop. Press the up button to go back to the previous video or photo.
- When playing back a video, press the Down button once to fast-forward (FF) at 2X speed, press again to FF at 4X, again to FF at 8X. Press the Up button during FF to decrease by one setting. Press the Up button once during playback to rewind at 2X speed, press again for 4X, again for 8X. Press the Down button to reduce rewind speed by one setting.
- Also see **TV-Out** in the **Setup Menu** section below for playback using an HDMI connection.

### **TAKE PHOTOGRAPHS**

- Press the Mode button until the Camera mode screen appears on the display.
- To take a photo, press the OK button.
- Press and hold Up button to zoom in up to 4x. Press and hold Down button to zoom out. (2)
- If you selected Capture Mode then pressing the OK button starts automatic shooting of photos at timed intervals.

### **VIEW PHOTOGRAPHS**

- Press the Mode button until the Playback mode screen appears on the display. Press the Down button to advance to the next photo. Press and hold the Down button to advance through several photos. An image of each photo and video will appear. Press the Up button to go back to the previous photo or video.
- Also see **TV-Out** in the **Setup Menu** section below to view photos using HDMI connection.

## **CAR MODE**

- Press the Mode button until the Setup menu appears. Navigate to Page 5 of the menu, select Car Mode then select On.
- Adjust any other settings on the Setup menu to your preference
- Plug the camera into a 12V adapter and plug the adapter into a 12V outlet in your vehicle. Car Mode works with or without a battery in the camera
- When you start your vehicle the camera turns on and starts recording video automatically. When you shut off your vehicle it stops recording and turns off automatically. You can also turn off the camera manually while recording.
- Camera and Playback modes are disabled while recording in Car Mode and no setting can be changed. Video Lapse is disabled during Car Mode even if it's turned On
- After the camera turns off you can turn it On manually and operate it as normal if there is a battery in the camera
- ***CAUTION: Be careful not to use a continuously powered 12V outlet when Car Mode is On because the camera will operate continuously whenever it's connected and might drain the vehicle battery.***

## **COPY FILES TO A COMPUTER**

- Connect the camera to computer using a micro USB x USB cable.
- The camera turns on automatically and a dialog box on the camera display asks if the camera is Mass Storage or a PC Camera. Highlight Mass Storage and press the OK button. A blue screen with the words Mass Storage appears on the camera.
- Alternative Method: Remove the memory card and insert it into a card reader connected to your computer.
- With either method follow the procedures you normally use to download videos and photos.
- Files are not automatically deleted when copied to a computer.

## **DELETE VIDEOS AND PHOTOS**

1. To delete selected videos and photos except protected videos, use one of the following two methods. (3)

- 1.1 a. In Playback mode navigate to a specific video or photo. Press and hold the Up button.  
b. A Delete dialog box appears with "Delete Current?", "Delete All?" or "Cancel".  
c. Select "Delete Current?". When prompted to "Erase This?" select "OK".
- 1.2 a. In Playback mode navigate to the specific video or photo you want to delete.  
b. Press the Mode button to advance to the Setup menu.  
c. Highlight Delete on page 6 of the Setup menu and press the OK button.  
d. A Delete dialog box appears with "Delete Current?" or "Delete All?"  
e. Highlight "Delete Current?" and press the OK button.  
f. When prompted to "Erase This?" highlight "OK" then press the OK button.

2. To delete all videos and photos except protected videos, use one of the following two methods. (4)

- 2.1 a. In Playback mode navigate to a specific video or photo. Press and hold the Up button.  
b. A Delete dialog box appears with "Delete Current?", "Delete All?" or "Cancel".  
c. Select "Delete All?". When prompted to "Erase All Images?" select "OK".

- 2.2 a. Press the Mode button until the Setup menu appears on the display.
- b. Highlight Delete on page 6 of the Setup menu and press the OK button.
- c. A Delete dialog box appears with "Delete Current?" or "Delete All?"
- d. Highlight "Delete All?" and press the OK button.
- e. When prompted to "Erase All Images?" highlight "OK" and press the OK button.

3. To delete all videos and photos including protected videos, use the following method.

- a. Press the Mode button until the Setup menu appears on the display.
- b. Highlight Format on page 6 of the Setup menu and press the OK button.
- c. In response to "All data will be deleted" highlight "OK" and press the OK button.

4. Alternative method: To delete some or all videos and photos including protected videos, remove the memory card and insert it into a memory card reader connected to your computer. Select and delete files as you would normally on your computer. You can also use your computer to format the card to delete all files.

### **UPDATE FIRMWARE**

- Format the microSD Card, unzip the firmware file.
- Copy the firmware file(s) (.bin) onto the root of the microSD Card
- Connect the camera with charger, the camera will be upgraded automatically
- After the firmware update is complete be sure to delete the files or you will be prompted to upgrade again.

### **USE HOUSING WITH WATERPROOF OR SLOTTED BACK DOOR (5)**

***WARNING: The waterproof back door looks nearly identical to the slotted back door. Be sure you're using the waterproof back door before immersing the housing in water.***

- To use the housing, insert the camera facing forward, close the back door and place the back edge of the latch along the top of the back door. Press the latch down and forward until you hear it click into place.
- To remove the camera, slide the tab on top of the latch in the direction indicated while lifting up on the front of the latch. The latch will loosen and the housing can be opened. Carefully tip the camera out of the housing.
- To change the back door, open it 90 degrees and push it back off the main housing at the hinge. To install a door press it onto the main housing at the hinge at a 90 degree angle.

### **NOTES FOR BASIC OPERATION**

1. *The camera can be operated without a battery if it is connected to an adapter.*
2. *The zoom is electronic, not optical. It operates by enlarging and cropping a recording or photo, not by adjusting lenses*
3. *If you attempt to delete a protected video a blue pop-up appears with the word "Protected!". A message then appear across the screen and you will not be able to change modes using the Mode button until you have played the video for a moment.*
4. *If you attempt to delete a protected video a blue pop-up appears with the word "Protected!".*
5. *Before placing the camera in the housing make sure you've installed an adequately charged battery and a memory card with sufficient remaining memory.*

# **SETUP MENU**

Press the Mode button until the Setup menu appears on the display. Use the Up and Down buttons to navigate the menu. Press the OK button to select a menu item. (1)

## **Page 1**

- **Resolution:** video resolution. Press the Up or Down buttons to see selections. Choose:

1080FHD 1920x1080

720P 1280x720 60fps (2)

720P 1280x720 30fps

WVGA 848x480

VGA 640x480

The default setting is 1080FHD 1920x1080.

- **TV Out:** Ignore this menu item. To view a live camera feed or view recordings or videos stored on the memory card using a TV or monitor with an HDMI connection, connect the camera to the TV via a micro HDMI x HDMI cable, turn on the TV and select the input for the HDMI connection. The camera automatically turns On the TV Out setting when connected and turns it Off when disconnected. Taking pictures and recording videos are disabled when connected via HDMI.

- **OSD Mode:** choose On or Off. When turned on, icons and on-screen data such as recording resolution, image size and others will appear on the camera display.

- **Video Lapse:** takes a series of photos at timed intervals while in Record mode. These can be played back as a time lapse video. Choose Off or 1, 2, 5, 10, 30 or 60 second intervals. The default setting is Off. (3)

- **Capture Mode:** takes a single photo or begins automatic shooting at timed intervals in Camera mode. Choose Single or 3, 5, 10 or 20 second intervals. The default is Single. (3)

- **Cyclic Record:** time length of file segments that a video recording is divided into. In Playback mode you can skip through segments. Select Off or 3, 5 or 10 minutes. The default setting is 3 minutes.

## **Page 2**

- **HDR:** High Dynamic Range. Select Off or On. The default Setting is Off.

- **Motion Detection:** when the camera detects movement it begins recording video. It stops recording after 10 seconds but starts again as soon as it detects motion. To turn on Motion Detection select On. Motion Detection range is about 5 centimeters (2 inches). The default setting is Off. (4)

- **Audio:** select Off or On. Audio is recorded along with video when On is selected. The default setting is On

- **Date Stamping:** select Off or On. The date and time appears on recordings and photos when On is selected. The default setting is On.

- **Image Size:** size of photographs. Select from 12M, 10M, 8M, 5M, 3M, 2MHD, VGA or 1.3M. The default Setting is 12M. (5)

- **Quality:** choose from Fine, Normal or Economy. The default setting is Normal. (6)

## **Page 3**

- **Sharpness:** choose from Strong, Normal or Soft. The default setting is Normal. (6)

- **White Balance:** choose Auto, Daylight, Cloudy, Tungsten or Fluorescent. The default setting is Auto.
- **Color:** choose from Color, B&W or Sepia. The default setting is Color.
- **ISO:** sensitivity to light. Lower numbers are less sensitive, higher numbers are more sensitive. Select Auto, 100, 200 or 400. The default setting is Auto. (6)
- **Exposure:** choose +2.0, +5/3, +4/3, +1.0, +2/3, +1/3, +0.0, -1/3, -2/3, -1.0, -4/3, -5/3, -2.0. Increasing exposure makes videos and images look lighter. Decreasing exposure makes videos and images look darker. The default setting is +0.0.
- **Anti-Shaking:** image stabilization. This helps to decrease the effects of unintended camera movements when recording video. The default setting is Off. (6)

#### Page 4

- **Language:** select among several languages for display and menus. Default is English (7)
- **Date/Time:** set the date and time to be used for Time Stamp. (8)
- **Auto Power Off:** amount of time before the camera automatically turns itself off. The camera will not automatically shut off while in Video Lapse or Capture Mode, if Motion Detection is turned On or while recording. Choose 3, 5 or 10 minutes or Off to shut off the camera manually. The default setting is 3 minutes.
- **Beep Sound:** turns beep sound On or Off when pressing camera buttons. Default is On.
- **TV Mode:** NTSC or PAL. This deals with frames-per-second, color encoding and other technical details for video recordings. The default setting is PAL. Choose NTSC in the US.
- **Screensavers:** the amount of time before the display goes dark while the camera remains on. Choose 30 seconds or 1, 3 or 5 minutes. Choose Off if you want the screen to stay on anytime the camera is on. The default setting is 1 minute.

#### Page 5

- **Frequency:** frequency of household electricity. Choose 50Hz or 60Hz. The default setting is 60Hz. Choose 60Hz in the US.
- **Rotate:** rotates your photos and videos 180 degrees. Use this if you need to mount the camera upside down. Choose On to rotate. The default setting is Off.
- **Car Mode:** choose On or Off. With Car Mode On the camera turns on automatically when it detects power while connected to a 12V adapter. The default setting is Off.
- **WIFI SSID:** name of camera WiFi network. (9)
- **WIFI Password:** initial factory setting is 12345678. Change to any combination of up to 8 letters and numbers or leave blank for no password.
- **License No Set:** camera name. To enter a name for your camera, press the Mode button to enter the submenu. Press and release the Mode button to go to each entry. Use Up and Down buttons to change the value of the entry then press the OK button to select. When complete, press and release the Mode button until "OK" is highlighted then press OK button.

#### Page 6

- **Delete:** delete all or selected images and videos except protected videos.
- **Format:** formats the memory card. Format a new card when you insert it into the camera for the first time. **CAUTION: All videos and photos including protected videos are deleted when you format the memory card.**
- **Default Setting:** returns camera settings to defaults. (9)
- **Version:** shows the model name, firmware version, date of firmware and company name.

### NOTES FOR SETUP MENU

1. Not all settings are retained after you turn off the camera. Check your settings when you turn the camera on again.
2. The 720p60 setting is a double frame rate, not a true 60fps.
3. Resets to default when the camera is turned off.
4. This feature is disabled during WiFi operation.
5. Images larger than 3M are resized by interpolation.
6. This setting can't be adjusted during WiFi operation.
7. The WiFi app is always in English.
8. When you remove and replace the battery the time resets to 00:00:00 and the date resets to default. Sometimes it resets to the current date and time when the camera is connected via WiFi to a smart device.
9. When you select Default Settings the WiFi network name resets to original factory name.

## OPERATING CAMERA FROM A SMART DEVICE VIA WIFI

### TO CONNECT TO SMART DEVICE VIA WiFi:

1. Turn on WiFi on the camera by pressing and releasing the Up button.
2. Turn on WiFi on the smart device. Select the connection to the camera if necessary.
3. After the smart device verifies the WiFi connection, open the SJCam application by touching CONNECT YOUR CAMERA.

### APP ICONS ON SMART DEVICE: (1)

*The following describes the application icons beginning in the top left corner and continuing clockwise with the device in landscape orientation.*

- **Resolution:** white letters and numbers such as “1080P” in Video mode -OR-
- Resolution/time interval:** video resolution and time interval in seconds in Timing Video mode such as “1080P/1S” -OR-
- Image size:** in megapixels. Number and letter such as “3M” in Taking Pictures mode -OR-
- Image size/time interval:** in megapixels and seconds. Number and letter/number and letter such as “3M/3S” in Time Take Pictures mode
- **Broadcast symbol:** indicates WiFi on and connected.
- **Battery:** relative battery charge remaining on camera or battery charging.
- **Blue circle and line:** camera power on
- **Red button:** in Video or Timing Video mode touch the red button to start or stop recording. In Taking Pictures or Time Take Pictures mode touch the red button to take photographs.
- **Wrench:** touch to open the Settings menu
- **Movie Camera:** Video mode -OR-
- Still Camera:** Taking Pictures mode -OR-
- Movie Camera with Clock Face:** Timing Video mode -OR-
- Still Camera with Clock Face:** Time Take Pictures mode
- **Up to 6 digit number in Camera mode only:** the number of photos you can take at the selected camera settings with the available remaining memory

- **4-leaf:** touch to open a list of files stored on the camera's memory card
- **Date stamp:** shows the date in YYYY/MM/DD and time in 24-hour clock

### **MODE SELECTION**

- Touch the Movie Camera, Still Camera, Movie Camera with Clock Face or Still Camera with Clock Face icons to show a dialog box with the following mode selection menu:

Touch **Video** for Record mode.

Touch **Taking Pictures** for Camera mode.

Touch **Timing Video** for Video Lapse mode.

Touch **Time Take Pictures** for Capture mode.

### **SETTINGS MENU**

MOVIE - settings are for Video mode

- **Resolution:** Video resolution. Choose from the following:

1080FHD 1920x1080

720P 1280x720 60fps (2)

720P 1280x720 30fps

WVGA 848x480

VGA 640x480

The default setting is 1080FHD 1920X1080

- **Cyclic Record:** time length of file segments that a continuous video recording is divided into. In Playback mode you can skip through segments. Select Off or 3, 5 or 10 minutes. The default setting is 3 minutes.

- **WDR:** Wide Dynamic Range. Select Off or On. The default setting is Off.

- **Audio:** select Off or On. Audio is recorded along with video when On is selected. The default setting is On.

- **Date Stamp:** select Off or On. The date and time appear on recordings and photos when On is selected. The default setting is On.

VIDEO TIME LAPSE – setting is for Timing Video mode

- **Video Time Lapse Set:** takes photos automatically at timed intervals while in Record mode. Choose 1, 2, 5, 10, 30 or 60 second intervals. This is the same as Video Lapse in the camera Setup menu or Timing Video in the app Mode Selection menu. The default setting is 1 second. (3)

PHOTO – settings are for Taking Pictures mode

- **Image Size:** size of photographs. Select from 12M, 10M, 8M, 5M, 3M, 2MHD, VGA or 1.3M. The 14M setting does not function. The default setting is 12M. (4)

- **White Balance:** choose Auto, Daylight, Cloudy, Tungsten or Fluorescent. Default is Auto.

- **Exposure:** choose +2/3, +1/3, +0.0, -1/3, -2/3, -1.0, -4/3, -5/3, -2.0. Default Setting is +0.0.

PHOTO TIME LAPSE – setting is for Time Take Pictures mode

- **Capture Mode:** takes a single photo or begins automatic shooting at timed intervals in Camera mode. Choose 3, 5, 10 or 20 second intervals. This is the same as Capture Mode on the camera Setup menu or Time Take Pictures in the app Mode Selection menu. The default setting is 3 seconds.(3)

## SYSTEM

- **Frequency:** frequency of household electricity. Choose 50Hz or 60Hz. Default is 60Hz.
- **Return menu setting to defaults:** returns camera settings to default values. (5)
- **Format:** formats the memory card. Format a new card when you insert it into the camera for the first time. **CAUTION: All videos and photos including protected videos are deleted when you format the memory card.**
- **Auto Power Off:** amount of time before the camera automatically turns itself off. Camera does not automatically shut off when recording video or in Timing Video or Time Take Pictures modes. Choose 3, 5 or 10 minutes, Off to shut off the camera manually or Off Now to turn off the camera now. The default setting is 3 minutes.

## WiFi

- **WiFi Name:** name of camera WiFi network. (6)
- **Password:** initial factory setting is 12345678. Change to any combination of up to 8 letters and numbers or leave blank for no password.

## BASIC OPERATION FROM SMART DEVICE

- Make sure WiFi connection with camera has been established. If you can see a live view from the camera on your device then they are connected.

## TO RECORD VIDEOS OR TAKE PHOTOS

- To record videos, check the mode icon to be sure the Movie Camera icon is shown. If not then touch the icon shown to open the Mode Selection menu and touch Video. The main screen returns showing the Movie Camera icon. Touch the red button to begin recording.
- To record time lapse videos, check the mode icon to be sure the Movie Camera with Clock Face icon is shown. If not then touch the icon shown to open the mode Selection Menu and touch Timing Video. The main screen returns showing the Movie Camera with Clock Face icon. Touch the red button to begin recording time lapse video.
- To take photos, check the mode icon to be sure the Still Camera icon is shown. If not then touch the icon shown to open the Mode Selection menu and touch Taking Pictures. The main screen returns showing the Still Camera icon. Touch the red button to take a photo.
- To automatically take a series of photos at timed intervals, check the mode icon to be sure the Still Camera with Clock Face icon is shown. If not then touch the icon shown to open the Mode Selection menu and touch Time Take Pictures. The main screen returns showing the Still Camera with Clock Face icon. Touch the red button to begin taking photos.

## COPYING AND DELETING FILES

- Touch the 4-leaf icon to open the file list showing video and photo files on the memory card. The list includes all files whether they were recorded via WiFi operation or not. Videos have a reel icon to the left of the file name. Photos have photo icon. See **File name** in CAMERA MODE ICONS under **ON-SCREEN DISPLAY (OSD) ICONS** above for file name descriptions.
- Touch the video or photo icons or the down arrow next to the file name to copy the file to your smart device. Photos download immediately and the word "Download" appears over the photo icon. Videos begin downloading and the percentage complete appears over the reel icon until "Download" appears indicating it's complete.
- Files copied from the camera to your smart device are not deleted from the camera.

- To delete files except protected videos from the camera, touch the trash can icon next to the file name. A dialog box appears with the word “delete”. Touch “OK” to delete or “Cancel” to keep the file. A “Sorry Failure!” box will appear if you attempt to delete a protected video.
- To delete all files including protected videos, select Format in the Settings menu.

#### TO VIEW PHOTOS AND VIDEOS ON YOUR SMART DEVICE

- Files are not stored directly on your smart device when recording videos or shooting photos via WiFi. They must be copied to the smart device as described above.
- Go to the app start screen where the arrow symbol is shown and touch the symbol.
- Thumbnails of the files appear and you can touch any of them to view them individually.
- You can also view the files as you normally would on your device.

#### NOTES FOR APP ICONS ON SMART DEVICE

1. Some smart device icons that aren't part of the app appear around the edge of the screen.
2. The 720p60 setting is double frame rate, not true 60fps.
3. This resets to the camera default setting when camera is turned off.
4. Images larger than 3M are resized by interpolation.
5. When selecting default settings the WiFi network name resets to the original factory name.
6. If you select Default Settings on the camera when not connected via WiFi, the WiFi network name resets to the original name.

#### GENERAL NOTES FOR OPERATING THE CAMERA FROM A SMART DEVICE VIA WIFI

- G1. The SJCam WiFi application must be installed on your smart device in order for WiFi to function. The app allows you to see the camera view in real time, record video, take still photographs, and change some camera settings.
- G2. After the WiFi connection has been established, all functions at the camera are disabled except taking photos and starting or stopping video recording.
- G3. The WiFi app is in English regardless of the language chosen in the camera Setup menu.
- G4. Zoom, Motion Detection and Protected Video functions are disabled during WiFi operation.
- G5. Adjustment of settings for Quality, Sharpness and ISO are disabled during WiFi operation.
- G6. Anti-Shaking can't be turned On or Off during WiFi operation.
- G7. The app has an On or Off setting for WDR (Wide Dynamic Range). The camera has an On or Off setting for HDR (High Dynamic Range). WDR and HDR are the same thing.
- G8. Files are not stored directly on your smart device when recording videos or shooting photos via WiFi. To view them on the smart device they must be copied to it.
- G9. Settings changed during Wi-Fi operation are retained by the camera after Wi-Fi is disconnected.
- G10. You can check the version of the app by touching the gears icon on the app start screen.
- G11. This **OPERATING CAMERA FROM A SMART DEVICE VIA WIFI** section describes WiFi operation with app Version 2.9.8 (422) using a Samsung Galaxy S4 smartphone. Menus, settings, operation, etc., might vary with other firmware versions or other Android or iOS smart devices.

## **GENERAL INFORMATION**

- The camera can record about 1-1/2 to 2 hours on a fully charged battery at 1080p30 with the display and WiFi off.
- Additional batteries and external single- and dual-battery chargers are available separately.
- To change the battery, open the battery compartment door on the bottom of the camera by sliding the tab and lifting up on the door. Remove the existing battery by pulling up on the battery strap. Install a freshly charged battery and push it all the way down into the compartment. Make sure the tab is up and the battery contacts line up with those in the bottom of the compartment. Replace the compartment door. For convenience, leave the battery tab sticking out when you replace the battery compartment door. This makes it easier to open.