

PRISM Bluetooth[®] Action Camera

SENA www.sena.com User's Guide



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FCC Compliance Information

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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

(1) the device may not cause interference, and (2) the device must accept any interference, including interference that may cause undesired operation of this device.

IMPORTANT NOTE:

FCC RF Radiation Exposure Statement:

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body. This transmitter must not be colocated or operating in conjunction with any other antenna or transmitter.

NOTE: THE GRANTEE IS NOT RESPONSIBLE FOR ANY CHANGES OR MODIFICA TIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIA NCE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

"This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device."

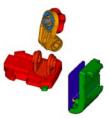
1. PACKAGE CONTENTS



Waterproof Housing



• Li-Ion Rechargeable Battery



- Helmet Clamp Kit
- QRM System for Motorcycles
- USB Power & Data Cable





• Lens Cap



Cigar Jack Charger



2. ACCESSORIES



3. GETTING STARTED

3.1. Opening and Closing the Back Door

1. Slide the small lock near the bottom of the back door to the left.



| 2. Slide the back door of the camera upwards and unhinge the back door. |
|---|
| 3. To close the back door of the camera, rotate the back door so that it is firmly against the camera. |
| 4. Slide the back door downwards so that the top portion locks into place. |
| 5. Slide the small lock near the bottom to the right to complete locking the back door on the camera. |
| 3.2. Memory Card (not included in the package)1. Insert a memory card into the SD card slot and push down until it clicks. |
| 2. To remove the card, push on the SD card until you hear a click. The card slot is spring loaded and the card will slide from the slot. |
| Note: The camera is compatible with Micro SD, SDHC or SDXC cards up to 32GB. We recommend Class 10 cards for recording HD video and system stability. |
| 3.3. Battery |
| 1. Insert the battery into the camera until it locks into place then close the back door of the camera. |
| 2. Remove the battery lock by placing your thumb in the indentation and sliding it to the right. Allow the battery to pop out. |



- 3. The battery icon displayed in the camera's LCD will flash when the battery drops below 10%. If recording is occurring when battery reaches 0%, the camera will save the file and power off.
- 4. To charge the battery, connect the camera to a computer or USB power supply (such as the wall charger or cigarette charger). The LCD shows solid red while the battery is charging, and it will turn off when the battery is fully charged.

Note:

You can use all the function of the camera while charging the battery.

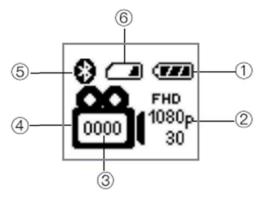
3.4. Powering On and Off

| Function | Button | Duration | LED | Camera LCD |
|----------------|---------------------------|----------|-------------------|------------|
| Power On | Shot Button + Mode Button | 1 sec | Last mode's color | Last mode |
| Power Off | Shot Button + Mode Button | 1 sec | Off | Off |
| Auto Power Off | | | Off | Off |

Note:

If you keep the camera not operated or in standby mode in 5 minutes, it automatically powers off.

3.5. Camera LCD Menu Screen



- 1. Battery life
- 2. Resolution / fps
- 3. Counter
- 4. Camera mode
- 5. Bluetooth
- 6. Memory

3.6. Voice Prompt



If you are paired with Bluetooth headset, you can be guided by voice prompts. The voice prompts will help you audibly understand which mode you are in and the operation you have performed while operating the camera. For the details of how to pair the camera with Bluetooth headset, please refer to the section, "10.3 Bluetooth Settings".

4. CAMERA MODES AND MENU SYSTEM

4.1. Button Operations

| Button | Press | Press and hold |
|-------------|---|--|
| Mode Button | Change camera mode, go to the next menu item during menu navigation | Enter *Quick Setting Exit Quick Setting |
| Shot Button | Perform video or photo shot or select the menu item | Take a photo shot during video recording |

Note:

4.2. Camera Modes

The camera has several modes. To cycle through the modes, press the Mode Button. The Camera modes are identified by the LED color.

| Icon | Mode | Application | LED Color |
|----------|-------------|---|-----------|
| UIDEO | Video | Record video | Red |
| SINGLE | Single Shot | Capture a single photo | Blue |
| BURST | Burst Shot | Capture up to 10 photos in one second | Green |
| | Timelapse | Capture a series of photos at timed intervals | Cyan |
| | *Playback | Playback video and photos. | ??? |
| * | Settings | Adjust camera settings | Yello |

^{*} Quick settings is a quick and easy way to enter the settings menu for each mode that you are currently in.



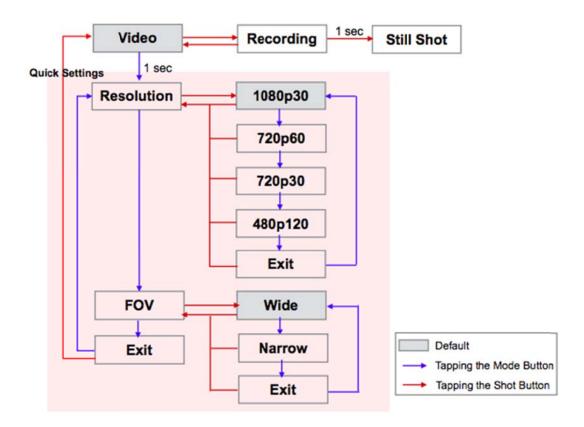
Note:

Playback mode appears only if camera is connected to a TV or Sena LCD Pack™ (optional accessory, sold separately).

5. VIDEO MODE

5.1. Video Mode Operations

| | Video Mode | |
|----------------------------------|---|-----------------------------|
| Start/Stop recording | Press Shot Button | |
| Take a still photo | Press and hold Shot Button | |
| Cycle to Single Shot Mode | Press Mode Button | |
| /ideo Quick Settngs Menu | Press and hold Mode Button | |
| | - Press Mode Button to cycle through Resolutions | Resolutions |
| | | 1080p 30fps |
| | | 720p 60fps |
| | - Press Shot Button to select resolution | 720p 30fps |
| | | 480p 120 fps |
| | | Exit to Quick Settings Menu |
| | - Press Mode Button to cycle through Narrow or Wide field of view | Field of View |
| | | Wide |
| - Press Shot Button to select Na | - Press Shot Button to select Narrow or Wide field of view | Narrow |
| | | Exit to Quick Settings Menu |
| | Exit to Video Mode | |



Note:



The camera automatically stops recording when the memory card is full or the battery is out of power. Your video will be saved before the camera powers off.

5.2. Video Mode Settings

You can change the resolution setting at the video settings, and the frame rates are fixed along with certain resolutions. When you select 480P (120fps) 720P (60fps), you cannot take a still shot during video recording.

| | 1080P | |
|---------------|---------------------|--|
| Resolution | 720P | |
| | 480P | |
| | 30FPS (1080P, 720P) | |
| Frame Rate | 60FPS (720P) | |
| | 120FPS (480P) | |
| Field of View | Wide (137°) | |
| Field of View | Narrow (90°) | |

5.3. Video Recording Time

Below is a table of approximate video recording times to card size in specific mode.

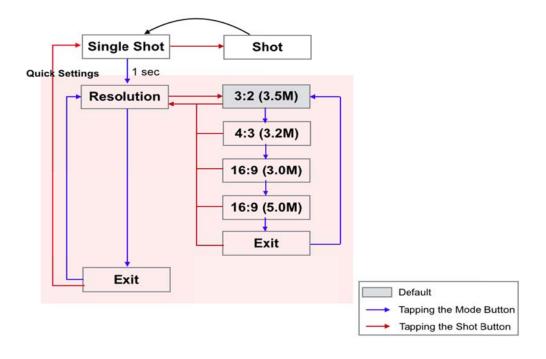
| | 1080P / 30FPS | 720P / 30FPS | 480P / 120FPS |
|------|---------------|--------------|---------------|
| 1GB | 9 min | 12 min | 15 min |
| 2GB | 18 min | 24 min | 30 min |
| 4GB | 36 min | 48 min | 1 h |
| 8GB | 1 h 12 min | 1 h 36 min | 2 h |
| 16GB | 2 h 24 min | 3 h 12 min | 4 h |
| 32GB | 4 h 48 min | 6 h 24 min | 8 h |



6. SINGLE SHOT MODE

6.1. Single Shot Mode Operations

| | Single Shot Mode | |
|---------------------------------|--|-----------------------------|
| Take a single photo shot | Press Shot Button | |
| Cycle to Burst Shot Mode | Press Mode Button | |
| Single Shot Quick Settings Menu | Press and hold Mode Button | |
| | - Press Mode Button to cycle through Resolutions | Resolutions |
| | | 3:2 (3.5M) |
| | | 4:3 (3.2M) |
| | - Press Shot Button to select resolution | 16:9 (3M) |
| | | 16:9 (5M) |
| | | Exit to Quick Settings Menu |
| | Exit to Single Shot Mode | |





6.2. Single Shot Mode Settings

You can change the photo resolution at the single shot settings, and the aspect of ratios are fixed along with the resolutions.

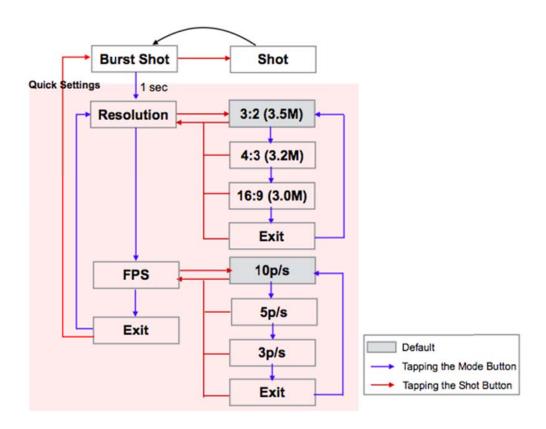
| Resolution | Aspect of Ratio | |
|------------|-----------------|--|
| 3MP | 3:2 | |
| 3.2MP | 4:3 | |
| 3.5MP | 16:9 | |
| 5MP | 16:9 | |

7. BURST SHOT MODE

7.1. Burst Shot Mode Operations

| | Burst Shot Mode | |
|--------------------------------|--|-----------------------------|
| Take a burst photo shot | Press Shot Button | |
| Cycle to Timelapse Mode | Press Mode Button | |
| Burst Shot Quick Settings Menu | Press and hold Mode Button | |
| | - Press Mode Button to cycle through Resolutions | Resolutions |
| | | 3:2 (3.5M) |
| | - Press Shot Button to select resolution | 4:3 (3.2M) |
| | | 16:9 (3.0M) |
| | | 16:9 (5.0M) |
| | | Exit to Quick Settings Menu |
| | - Press Mode Button to cycle through Frames per second | Frames per second |
| | | 10 p/s |
| | Proce Shot Button to coloct Fromos nor cocond | 5 p/s |
| | - Press Shot Button to select Frames per second | 3 p/s |
| | | Exit to Quick Settings Menu |
| | Exit to Burst Shot Mode | |





7.2. Burst Shot Mode Settings

You can change the photo resolution at the burst shot settings, and the aspect ratios are fixed along with the resolutions.

| Resolution | Aspect Ratio | |
|--------------|--------------|--|
| ЗМР | 3:2 | |
| 3.2MP | 4:3 | |
| 3.5MP | 16:9 | |
| Capture Rate | | |
| 10/s | | |
| 5/s | | |
| | | |
| 3/s | | |

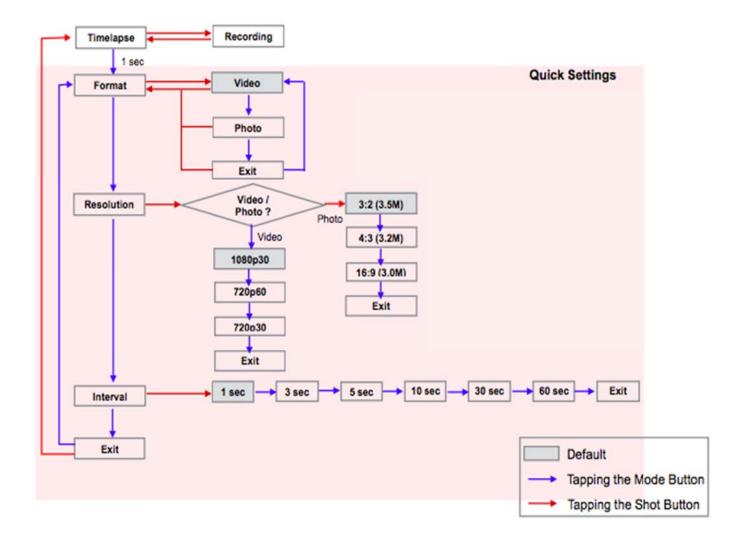




8.1. Timelapse Mode Operations

| | Timelapse Mode | |
|------------------------------|---|-----------------------------|
| Start/Stop recording | Press Shot Button | |
| Cycle to Playback Mode | | |
| if LCD Pack is attached) | Press Mode Button | |
| imelapse Quick Settings Menu | Press and hold Mode Button | |
| | - Press Mode Button to cycle through Format | Format |
| | | Video |
| | - Press Shot Button to select recording format | Photo |
| | | Exit to Quick Settings Menu |
| | - Press Mode Button to cycle through Resolution | Video Resolution |
| | | 1080p 30fps |
| | - Press Shot Button to select resolution. | 720p 60fps |
| | - Fress Shot Button to select resolution. | 720p 30fps |
| | | Exit to Quick Settings Menu |
| | - Press Mode Button to cycle through Photo Resolution | Photo Resolution |
| | | 3:2 (3.5M) |
| | - Press Shot Button to select frames per second | 4:3 (3.2M) |
| | - Fress offor button to select frames per second | 16:9 (3.0M) |
| | | Exit to Quick Settings Menu |
| | - Press Mode Button to cycle through time Interval | Interval |
| | | 1 sec |
| | - Press Shot Button to select time interval | 3 sec. |
| | | 5 sec. |
| | | 10 sec. |
| | | 30 sec. |
| | | 60 sec. |
| | | Exit to Quick Settings Menu |
| | Exit to Timelapse Mode | |







Timelapse Mode Settings

Timelapse mode takes a video (or a series of photos) at 1, 3, 5, 10, 30 or 60 second intervals.

| Туре | Resolution |
|---------------------------|----------------|
| Video | 1080P/30FPS |
| | 720P/60FPS |
| | 720P/30FPS |
| Photo | 3.5MP (3:2) |
| | 3.2MP (4:3) |
| | 3MP (16:9) |
| Sequence Interval (좌측 병합) | |
| Sequence Interval | (좌측 병합) |
| Sequence Interval | (좌측 병합) 1s |
| Sequence Interval | |
| Sequence Interval | 1s |
| Sequence Interval | 1s 3s |
| Sequence Interval | 1s 3s 5s |

9. PLAYBACK 🔼

Playback video and photos by connecting the camera to a TV (requires micro HDMI, composite or combo cable, sold separately). You can also playback video and photos on the Sena LCD Pack™(optional accessory, sold separately).

9.1. Videos and Photos (TV OUT, HDMI



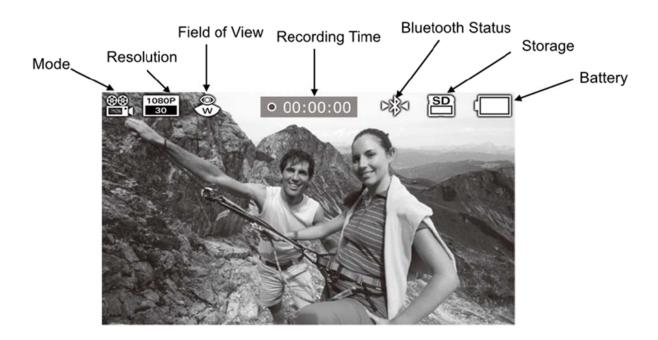
To browse videos and photos:

- 1. Plug the camera into a TV/HDTV with a micro HDMI cable, composite cable or combo cable (optional accessories).
- 2. Turn the camera on
- 3. On your camera, select Playback mode.
- 4. The camera shows thumbnail previews of all videos and photos on the SD card.



- 5. While in a thumbnail preview, use the Mode Button to cycle through the thumbnails. Press the Shot Button to view.
- 6. Use II and II to navigate backward and forward to see more media files on your memory card.
- 7. Depending on whether you are viewing videos or photos, different control options will appear. Use the Mode Button and the Shot Button to navigate.

| Playback Mode | |
|---------------------|-----------------------|
| Move Control Icon | Press the Mode Button |
| Select Control Icon | Press the Shot Button |
| Control Menu | Play |
| | Stop |
| | Navigate forward |
| | Navigate backward |
| | Trash |
| | Exit Playback |



Note:

Burst photos and timelapse files will display the first photo in the series. To view all photos in a series, use the Mode Button to select view and press the Shot Button.

9.2. Playback on Sena LCD Pack™ (sold separately)

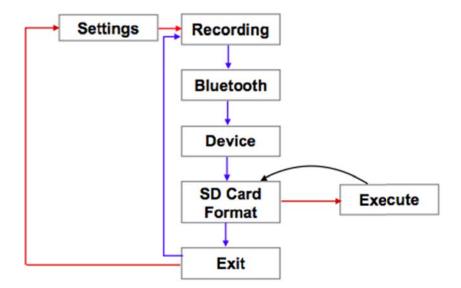
Playback using the Sena LCD Pack™ follows a similar process/procedure as described with a few slight variations. See the Sena LCD Pack™ User's Guide for more information.



10. CAMERA SETTINGS

10.1. Camera Settings Operations

| Settings | | |
|--------------------------|-------------------|-------------------------|
| Cycle through [Settings] | Press Mode Button | |
| Select [Settings] | Press Shot Button | |
| | Recording | |
| | Bluetooth | |
| | Device | |
| | | Confirm Format |
| | SD Card Format | (Mode button to cancel) |
| | Exit Settings | |
| | | |

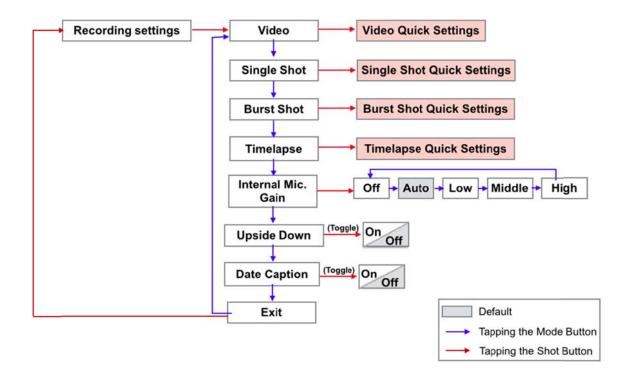


10.2. Recording Settings

In recording settings, video, single shot, burst shot and timelapse settings are the same as the quick settings at each mode.



| Settings-Recording Settings | | |
|------------------------------------|-------------------------|----------------------------|
| Cycle through [Recording Settings] | Press Mode Button | |
| Select [Recording Settings] | Press Shot Button | |
| | Video | Video Quick Settings Menu |
| | Single Shot | Single Shot Quick Settings |
| | Burst Shot | Burst Shot Quick Settings |
| | Time-lapse | Timelapse Quick Settings |
| | | Off |
| | Internal Mic. Gain | Auto |
| | | Low |
| | | Middle |
| | | High |
| | Upside Down | On |
| | Opside Down | Off |
| | Data Cantian | On |
| | Date Caption | Off |
| | Exit Recording Settings | |
| | | |





10.2.1. Internal Mic Gain



You can adjust the internal microphone gain of the camera. If the gain is high, then the camera will acquire more audio from the microphone of the camera.

| Factory Default | Auto |
|------------------|---|
| Level Adjustment | Press the Mode Button (Auto / low / middle / high / off) |
| Application | Press the Shot Button |

10.2.2. Upside Down



If you need to mount the camera upside down and still wish the files to appear upright, then you need to turn it on. This setting eliminates the need to flip your video or photos during editing.

| Factory Default | Off |
|---------------------|-----------------------|
| Off | Camera right side up |
| On | Camera upside down |
| Enable / Disable | Press the Shot Button |

10.2.3. Date Caption



You can record or hide date caption while video recording. Date caption is not recorded during the video recording of timelapse.

| Factory Default | Off |
|---------------------|-----------------------|
| Off | Hide date caption |
| On | Record date caption |
| Enable / Disable | Press the Shot Button |

10.3. Bluetooth Settings

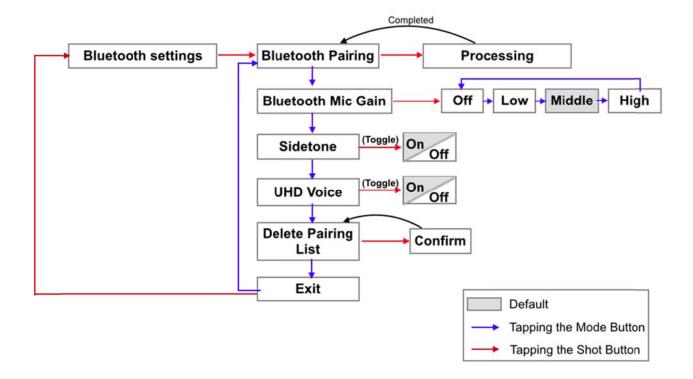


The Bluetooth settings can make the camera connect your Bluetooth headset to overlay Bluetooth audio with video. The camera supports full control and setting capability for Sena Bluetooth headsets, while it supports recording start/stop for non-Sena Bluetooth headsets.

| 00 | |
|----|--|
| 23 | |
| | |



| Settings-Bluetooth Settings | | |
|------------------------------------|--|-------------------------|
| Cycle through [Bluetooth Settings] | Press Mode Button | |
| Select [Bluetooth Settings] | Press Shot Button | |
| | Bluetooth Pairing | Pairing |
| | ************************************** | Off |
| | Bluetooth Mic. Gain | Low |
| | Bidetooth Mic. Gain | Middle |
| | | High |
| | Sidetone | On |
| | Sidetorie | Off |
| | UHD Voice | On |
| | OND VOICE | Off |
| | Delete Beinen Liet | Confirm |
| | Delete Pairing List | (Mode button to cancel) |
| | Exit Bluetooth Settings | |



10.3.1. Bluetooth Pairing

- 1. Enter the Bluetooth pairing in the Bluetooth settings.
- 2. Set your Bluetooth headset to pairing mode.
- 3. The pairing is completed.

10.3.2. Bluetooth Mic. Gain

You can adjust the Bluetooth microphone gain of the Bluetooth headsets or microphones. If the gain is high, then the camera will acquire more audio from the microphone of the Bluetooth headsets.



| Factory Default | middle |
|------------------|--|
| Level Adjustment | Press the Mode Button (middle / high / off / low) |
| Application | Press the Shot Button |

10.3.3. Sidetone SIDE ON



When using a Sena headset, sidetone is supported; If this feature is enabled, you can hear what you are speaking during video recording.

| Factory Default | On |
|---------------------|-----------------------|
| Enable / Disable | Press the Shot Button |

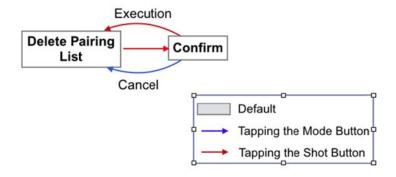
10.3.4. Ultra HD Voice Recording



| Factory Default | On |
|---------------------|---------------------------|
| Off | Normal voice recording |
| On | Ultra HD Voice Recording™ |
| Enable / Disable | Press the Shot Button |

Delete Pairing List

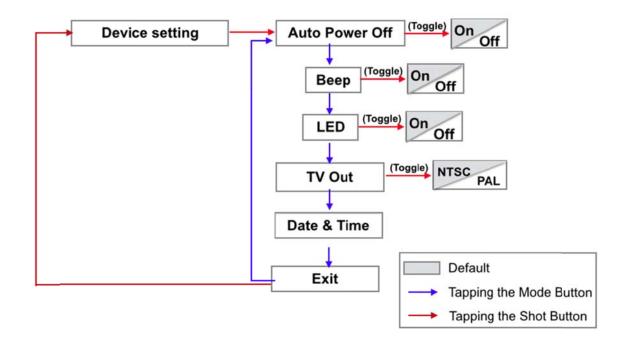
You may delete all Bluetooth pairing list of the camera. Then you lost all your pairing devices information.





10.4. Device Setting

| | Settings-De | vice Settings | |
|-------------------------------|-------------------|-------------------------|--|
| cle through [Device Settings] | Press Mode Button | | |
| lect [Device Settings] | Press Shot Button | | |
| 7 | Auto Power Off | On | |
| | Auto Power Off | Off | |
| | Bass | On | |
| | Веер | Off | |
| | LED | On | |
| | LED | Off | |
| | T/Out | NTSC | |
| | TV Out | PAL | |
| | | Year | - Shot button to select Year and cycle through digits for year |
| | | rear | Mode button to cycle through numbers (1, 2, 3) |
| | | Month | - Shot button to select Month and cycle through digits for month |
| | | | Mode button to cycle through numbers (1, 2, 3) |
| | | Devi | - Shot button to select Day and cycle through digits for day |
| | Time Set | Day | Mode button to cycle through numbers (1, 2, 3) |
| | | Hour | - Shot button to select Hour and cycle through digits for hour |
| | | Hour | Mode button to cycle through numbers (1, 2, 3) |
| | | Minute | - Shot button to select Minute and cycle through digits for minute |
| | | Minute | Mode button to cycle through numbers (1, 2, 3) |
| | | Exit to Device Settings | |
| | Factory Reset | Confirm | |
| | ractory Reset | (Mode button to cancel) | |
| | Firmware Version | | |
| Exit Device Settings | | | |





10.4.1. Auto power off

The camera can be configured to automatically power off after a specific period of inactivity (when no videos or photos are being taken and no buttons have been pressed). This feature does not work while charging the camera.

| Factory Default | On |
|-----------------|-----------------------|
| Idle Time | 5 min |
| Application | Press the Shot Button |

10.4.2. Beep BEEP ON

You can turn off or on the beep sound of the camera during operations.

| Factory Default | On |
|---------------------|-----------------------|
| Enable / Disable | Press the Shot Button |

10.4.3. LED LED ON

You can turn off or on the status LED.

| Factory Default | On |
|---------------------|-----------------------|
| Enable / Disable | Press the Shot Button |

10.4.4. TV out (NTSC / PAL)



The NTSC and PAL settings govern video recording frame rate and playback when viewing video on TV/HDTV. Select NTSC when viewing a TV/HDTV in North America. Select PAL if viewing on a PAL TV/HDTV (most televisions outside of North America) or if viewing on a PAL TV/HDTV in any region.

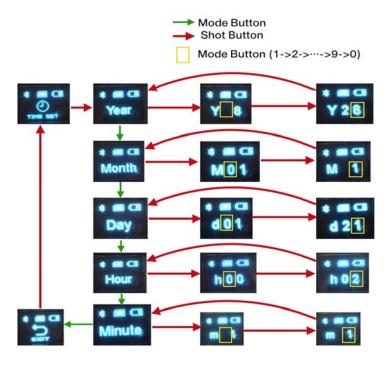
| Factory Default | NTSC |
|-----------------|---------------------------------------|
| Mode Adjustment | Press the Mode Button (NTSC / PAL) |
| Application | Press the Shot Button |



10.4.5. Time set

Set the camera clock to ensure video and photo files are saved with the correct date and time. Time can be set by Year, Month, Hour, and Minute,

To change Year/Month/Day/Time:



10.4.6. Factory Reset

It will clear all the settings to factory default.

FW VER. 10.4.7. Device info

You can see the current firmware version on your camera.

10.4.8. SD Card Formatting

11. Formatting will remove all files from a memory card. When using a new card for the first time, always format the memory card using the camera.



11. BLUETOOTH AUDIO RECORDING

With the use of Bluetooth headsets, the camera allows users to add their voice to the video on-the-fly using the Bluetooth Audio Recording[™] feature. Being able to narrate the video during recording not only provides users a whole new experience but also reduces the need for follow-up audio editing providing real-time audio experiences.

11.1. Settings of Bluetooth Audio Recording

There are several parameters that affect the overall performance of Bluetooth Audio Recording. Based on the understanding of how they are correlated, you need to set up the parameters accordingly.

| Parameter | | Value | Menu |
|-----------|---|-----------------------------------|--|
| | Amount of audio from camera microphone | Auto-Low-Mid-High-None | Settings → Recording Settings → Internal Mic Gain |
| | Amount of audio from microphone of Bluetooth headsets | Low-Mid-High-None | Settings → Bluetooth Settings → Bluetooth Mic Gain |
| | Audio recording mode of camera | UHD Voice/Normal/Noise Control | Settings → Bluetooth Settings → ? |

Factory Default setup is as follows.

Internal Mic Gain =Auto

Bluetooth Mic Gain =Middle

Ultra HD Voice Recording =On

Ultra HD Voice Recording[™] is provided for Sena Bluetooth headsets; it enables you to record your voice in CD-quality. It is available only when a single Sena headset is connected with the camera. It is not supported in conference intercom mode. When you are using a Sena headset, you may switch to Normal Mode pr Noise Control Mode according to your applications. If you use a non-Sena Bluetooth headset, Normal Voice Recording Mode is the only mode that you may use.



| Bluetooth | Internal Mic Gain | Bluetooth Mic Gain | Bluetooth Audio Mode | Application | |
|---------------------------------------|-----------------------|--|---|---|----------------|
| | None Low/Mid/Hi | Low/Mid/High Ultra HD Normal Noise Control | Ultra HD | - CD-quality Bluetooth voice recording without ambient sound | Single Voice & |
| | | | Normal | - Normal quality Bluetooth voice recording without ambient sound | |
| Sena Headsets Auto/Low/Mid/High | | | Noise Control | - Normal quality Bluetooth voice recording without ambient sound - Advanced Noise Control™ | |
| | Ultra HD | Ultra HD | - CD-quality Bluetooth voice recording with ambient sound | Intercom Recording | |
| | Auto/Low/Mid/High | | Normal | - Normal quality Bluetooth voice recording with ambient sound | |
| | Noise Control | - Normal quality Bluetooth voice recording with ambient sound - Advanced Noise Control™ | | | |
| | | None | (-1 | - Audio recording only from built-in microphone | |
| Non-Sena Headsets | None | Low/Mid/High | Normal | - Normal quality Bluetooth voice recording without ambient sound | Single Voice |
| | Auto/Low/Mid/High Lov | Low/Mid/High | INOTHIA | - Normal quality Bluetooth voice recording with ambient sound | Recording |
| | | None | - | - Audio recording only from built-in microphone | 1 |

11.2. Bluetooth Audio Recording with Sena Headsets

11.2.1. Bluetooth Pairing

To record your voice to the camera with Bluetooth headset, you should pair the camera with a Bluetooth headset (or microphone). This pairing operation is only required once for each Bluetooth headset. The camera will remain paired with the headsets after the first pairing process is completed and automatically connected to the paired headsets again within the connection range.

| Camera | Settings → Bluetooth Settings → Bluetooth Pairing |
|--------------|--|
| Sena Headset | Intercom Pairing (Jog Dial 5 sec or Center Button 5 sec) |
| Status LED | Camera: Bluetooth Pairing Completed? |
| (상단 셀 병합) | Headset: LED flashes blue. |

- 1. Perform Bluetooth pairing from the camera from the menu operation of Settings → Bluetooth → Bluetooth Pairing.
- 2. Enter into the intercom pairing mode of the headset. Then the headset is paired automatically with the camera. You do not need to press any buttons for pairing. For details on intercom pairing, refer to the user's guide of Sena headset.
- 3. When the headset LED flashes blue, the pairing is completed. Then you will hear the voice prompt saying "PRISM connected" from the connected Sena headset.

11.2.2. Bluetooth Connection

You can connect the camera with Sena headsets and transfer the conversations to the camera by establishing intercom

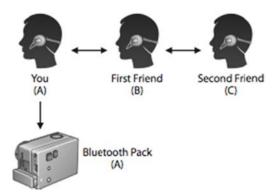
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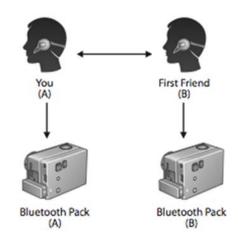
connections at the same time.

- 1. Turn on the paired Sena headset, and then the camera is automatically connected to the paired headsets. The audio channel between the camera and the Sena headset is open.
- 2. Start recording on the camera by appropriate button operation.

You can record intercom conversation among two or three intercom friends who use Sena headsets. For details on intercom conversation, refer to the user's guide of Sena headset.



camera Connection for intercom



Dual camera Connection for Sound Sharing

11.3. Bluetooth Audio Recording with Non-Sena Headsets

11.3.1. Bluetooth Pairing

| Camera | Settings → Bluetooth → Bluetooth Pairing |
|------------------|--|
| Non-Sena Headset | HFP Pairing |

1. Perform Bluetooth pairing from the camera from the menu operation of Settings \rightarrow Bluetooth \rightarrow Bluetooth Pairing.



- 2. Enter into the handsfree pairing mode of the non-Sena headset. For details on handsfree pairing, refer to the user's guide of the corresponding headset.
- 3. If the pairing is completed, you will hear the voice prompt saying "PRISM connected" from the connected corresponding headset.

Note:

If you cannot pair the non-Sena Bluetooth headset, delete all pairing list and pair the one again.

11.3.2. Bluetooth Connection

You can connect the camera with non-Sena headsets and transfer your voice to the camera.

- 1. Turn on the paired non-Sena headset, and then the camera is automatically connected to the headset. The audio channel between the camera and the non-Sena headset is open.
- 2. Start recording on the camera by appropriate button operation.

Note:

You can open or close the audio channel between the camera and the headset by pressing the Pairing Button once on the camera or making a phone call on the headset. Please refer to the headset user's guide for more information.

12. Bluetooth Remote Control

The camera can be handsfree by the remote control capability from Bluetooth headsets. The wireless remote control helps to use less energy and allows for more versatile control through the audio/video remote control profile (AVRCP) of Sena's Bluetooth products

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12.1. Remote Control by Sena Headsets

12.1.1. Jog Dial Type Products

| Туре | Button | Operation | |
|-------------|--------------|-----------------------|--|
| * Power On | Phone Button | Triple tap | |
| * Power Off | Phone Button | Triple tap | |
| Mode Change | Jog Dial | Rotate while pressing | |
| Menu Move | Jog Dial | Rotate while pressing | |
| Menu Select | Jog Dial | Rotate while pressing | |
| Video Start | Jog Dial | Press and hold for 1s | |



| Video Stop | Jog Dial | Press and hold for 1 s | |
|-----------------------------------|--------------|------------------------|--|
| Single Shot | Jog Dial | Press and hold for 1 s | |
| Burst Shot | Jog Dial | Press and hold for 1 s | |
| Tlmelapse (video) Start | Jog Dial | Press and hold for 1 s | |
| Timelapse (video) Stop | Jog Dial | Press and hold for 1 s | |
| Still Shot (video mode) | Phone Button | Тар | |
| Playback - Format Select | Phone Button | Тар | |
| Playback - Move Control Icon | Jog Dial | Press and hold for 1 s | |
| Playback - Select Control Icon | Jog Dial | Press and hold for 1 s | |

Note:

If you powered off the camera using camera button control, you can power on the camera only by using camera button. You cannot power on or off the camera using Bluetooth Remote Control.

12.1.2. Three-button Type Products

| Туре | Button | Operation |
|--------------------------|-------------------|------------------------|
| Power On | (-) Button | Press and hold for 3 s |
| Power Off | (-) Button | Press and hold for 3 s |
| Mode Change | (+) & (-) Buttons | Press and hold for 1 s |
| Menu Move | (+) button | Press and hold for 1 s |
| Menu Select | Center Button | Press and hold for 1 s |
| Video Start | Center Button | Press and hold for 1 s |
| Video Stop | Center Button | Press and hold for 1 s |
| Single Shot | Center Button | Press and hold for 1 s |
| Burst Shot | Center Button | Press and hold for 1 s |
| Tlmelapse (video) Start | Center Button | Press and hold for 1 s |
| Timelapse (video) Stop | Center Button | Press and hold for 1 s |
| Still Shot (video mode) | Center Button | Press and hold for 3 s |
| Playback - Format Select | Center Button | Press and hold for 3 s |



| Playback - Move Control Icon | Center Button | Press and hold for 1 s |
|--------------------------------|---------------|------------------------|
| Playback - Select Control Icon | Center Button | Press and hold for 1 s |

12.2. Remote Control by Non-Sena Headsets

| Туре | Operation | |
|-------------------------|------------------|--|
| Video Start | Dial (or redial) | |
| Video Stop | Ending a call | |
| Single Shot | Dial (or redial) | |
| Burst Shot | Dial (or redial) | |
| Tlmelapse (video) Start | Dial (or redial) | |
| Timelapse (video) Stop | Ending a call | |

13. CAMERA CONNECTION

Recorded video and photos can be copied to a computer using the micro-USB cable provided or—if your computer has an appropriate card reader—directly from the Micro SD card.

13.1. Connecting to a Windows PC by USB Cable

- 1. Connect the camera to your PC using the USB cable. The camera LCD will display a USB logo.
- 2. Your PC's operating system may be setup to open new devices automatically, if not, open My Computer. Your PC's operating system may be setup to open connected devices automatically, if not, open My Computer.
- 3. Your PC should recognize the camera as a removable device—look for PRISM card in the list of all devices and open.
- 4. Open the DCIM folder, inside you will find the 100MEDIA folder, which contains all the files saved on the memory card by the camera.! If there are a very large numbers of files, there will be multiple folders (100MEDIA, 101MEDIA, etc).
- 5. Copy the desired files to your PC.

13.2. Connecting to a Mac by USB Cable

1. Connect the camera to your Mac using the USB cable. The camera LCD will display a USB logo.



- 2. Your Mac's operating system may be setup to open new devices automatically, if not, open a new Finder window. Your Mac's operating system may be setup to open connected devices automatically, if not, open a new Finder window.
- 3. Your Mac should recognize the camera as a removable device—look for PRISM card in the list of devices and open.
- 4. Open the DCIM folder—inside, you will find the 100MEDIA folder which contains all the files saved on the memory card by the camera! If there are a very large numbers of files, there will be multiple folders (100MEDIA, 101MEDIA, etc).
- 5. Copy the desired files to your Mac.

13.3. Connecting the Camera to a TV

- 1. Connect it to your TV using a Mini HDMI type combo cable (not included in the basic package).
- 2. You need to set up TV Out parameter in Device Settings when you hook it up with AV cable.

14. CAMERA HOUSING

To secure camera in housing:

- 1. Using an index finger, press down and slide the buckle release button to slide the latch forward. While pressing down on the buckle release button with an index finger, use the thumb to open the buckle.
- 2. Unhook the buckle from the case to open the backdoor.
- 3. Insert the camera into the waterproof housing.
- 4. Close the backdoor and hook the buckle into it. Press down on the latch firmly until the latch clicks shut.

(pictures)

To remove camera from housing:

- 1. Using an index finger, press down and slide the buckle release button to slide the latch forward. While pressing down on the buckle release button with an index finger, use the thumb to open the buckle.
- 2. Unhook the buckle from the case to open the backdoor.
- 3. Remove the camera from the housing.

(pictures)

Note:

- Before using the waterproof housing in a wet environment, ensure that it is completely sealed.
- Do not open the case where it would be exposed to dust or sand, and be sure to remove any foreign objects from any part of the case before closing the case. Failure to observe these precautions could result in damage to the



camera.

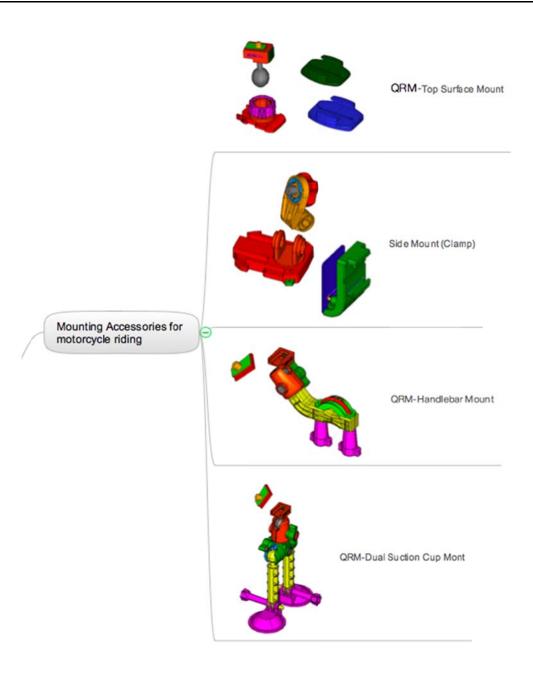
15. CAMERA MOUNTING

15.1. QRM™ (Quick Release Mount) System for Motorcycle

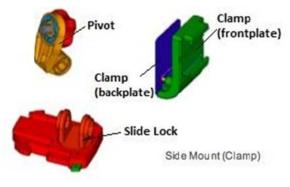
The Quick Release Mount™ System provide fast and secure ways to switch the camera mount system on the motorcycle. There are three different QRM types: Top Surface Mount, Handlebar Mount, and Dual Suction Cup Mount. Once you set up the system at a desired angle, you can then mount and release the camera without using any screws or bolts or changing the camera angle.

| Camera Mounting Syst | em | | |
|---|------------------------|--|--|
| QRM (Quick Release | Top Surface Mount | Top Surface Mount can be used on a flat surface such as a side case or a curved surface such as a helmet. | |
| Mount) for Motorcycles | Handlebar Mount | Handlebar Mount can be used on handlebar size between 7/8"- 1 1/2". | |
| ALLEN SE TO THE SECOND | Dual Suction Cup Mount | Dual Suction Cup Mount is best used on gas tank, windshield and case. | |
| | | Side Clamp Mount does not use QRM but it has a pivot arm for easy | |
| | | adjustment. | |
| Side Clamp Mount | | Side Clamp Mount is best used for side of the helmet. | |
| | | | |





15.2. Side Clamp Mount





The Side Clamp Mount enables you to mount the camera at the side of your helmet. You can adjust the camera angle by rotating the joints. When you are not recording, you may simply separate the slide lock from the clamp. This mount allows you to record in the driver's point of view.

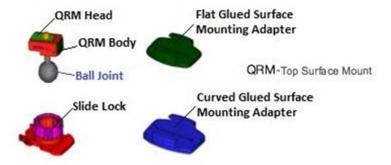
15.2.1. Side Clamp Mount Components

| Pivot | The pivot contains the standard 1/4" camera mount bolt on which you fasten the camera. |
|--------------|--|
| Slide Lock | The slide lock contains a 360' rotating joint. |
| Helmet Clamp | The helmet clamp can be installed at the side of the helmet. It takes in the slide lock. |

15.2.2. Side Clamp Mount Installation

- 1. Insert the backplate of the clamp unit between the internal padding and external shell of the helmet.
- 2. Bring the clamps together and tighten them using the two screws and the enclosed allen wrench.
- 3. Slide the slide lock into the clamp until you hear a click.
- 4. Adjust the camera angles of the slide lock and the pivot and lock them.
- 5. Mount the camera on the pivot using the 1/4" camera mount bolt.

15.3. QRM Top Surface Mount



The QRM Top Surface Mount enables you to mount your camera on a flat or curved surface such as windshield, gas tank and a helmet. You can adjust the camera angle by rotating the ball joint on the QRM Body. When you are not recording, you can simply separate the slide lock from the flat or curved glued surface mounting adapter.

15.3.1. QRM Top Surface Mount Components

| QRM | The QRM head contains the standard 1/4" camera mount bolt on which you fasten the camera. The QRM body combines with the QRM head. |
|-----|--|
|-----|--|

| 20 | |
|----|--|
| 38 | |
| | |

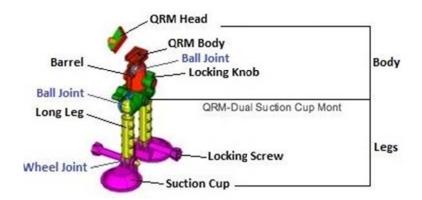


| Slide Lock for QRM | The slide lock can take in and lock the rotating ball joint. |
|--|--|
| Flat Glued Surface Mounting Adapter | The mounting adapter can be glued on a flat surface. |
| Curved Glued Surface Mounting Adapter | The mounting adapter can be glued on a curved surface. |

15.3.2. QRM Top Surface Mount Installation

- 1. Choose the surface that you like to mount the camera on, and select a suitable glued surface mounting adapter (flat or curved).
- 2. Peel off the back sticker of the mounting adapter and carefully attach it on the surface.
- 3. Slide the slide lock into the mounting adapter until you hear a click.
- 4. Adjust the camera angle by rotating the ball joint and lock it.
- 5. Mount the camera on the QRM head using the 1/4" camera mount bolt.

15.4. QRM Dual Suction Cup Mount



The QRM Dual Suction Cup Mount enables you to mount the camera on surfaces that require some height for recording such as windshield, gas tank, and trunk. You can adjust the camera angle by rotating the wheel joints or the ball joints on the legs. When you are not recording, you can simply separate the suction cups from the surface, or take out the QRM head from the QRM body.

15.4.1. QRM Dual Suction Cup Mount Components

| QRM | The QRM head contains the standard 1/4" camera mount bolt on which you fasten the camera. The QRM body combines with the QRM head. |
|----------------|--|
| Locking Screws | |
| | |

| 30 | |
|----|--|
| 33 | |



| Locking Knobs | |
|---------------|--|
| Suction Cups | The suction cups can be locked into position by pulling the lever. |
| Long Legs | These legs are used for dual suction. |
| Short Leg | This leg is used for single suction depending on the camera angle. |

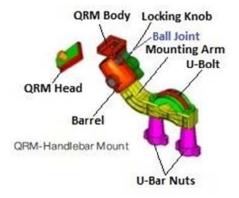
15.4.2. QRM Dual Suction Cup Mount Installation

- 1. Locate a proper surface to attach the mount, clean the surface location with a moistened towel, and allow to dry thoroughly.
- 2. Adjust the leg angles by rotating the wheel joints and the ball joints of the legs.
- 3. Once the leg angle is set, place the suction cups on the surface.
- 4. Pull the levers on the suction cups to secure suction.
- 5. Adjust the camera angles by rotating the barrel and the ball joint on the body, and lock them.
- 6. Mount the camera on the QRM head using the 1/4" camera mount bolt.

16.4.3. QRM Single Suction Cup Mount Installation

- 1. Locate a proper surface to attach the mount, clean the surface location with a moistened towel, and allow to dry thoroughly.
- 2. Detach the body from the legs.
- 3. Attach the short leg on one of the long legs.
- 4. Adjust the leg angles by rotating the wheel joint and the ball joint of the leg.
- 5. Place the suction cup on the surface and pull the lever to secure suction.
- 6. Adjust the camera angles by rotating the barrel and the ball joint of the body and lock them.
- 7. Mount the camera on the QRM head using the 1/4" camera mount bolt.

15.5. QRM Handlebar Mounting



The QRM Handlebar Mounting enables you to mount the camera on your motorcycle's handlebar (between 7/8" and 1



1/2" diameter). You can choose the directions of the mounting arm and the U-bolt to best fit the mount on your handlebar. When you are not recording, you can simply separate the QRM head from the QRM body.

15.5.1. QRM Handlebar Mounting Components

| QRM | QRM head contains the standard 1/4" camera mount bolt on which you fasten the camera. QRM body combines with the QRM head. | | |
|--------------|--|--|--|
| U-Bolt | The U-bolt can be installed either upwards or downwards. | | |
| U-Bar Nuts | The U-bar nuts tighten the mounting arm and the U-bolt together. | | |
| Locking Knob | Locks the barrel at the adjusted angle. | | |
| Mounting Arm | The mounting arm can be installed either upwards or downwards and either forwards or backwards. | | |

15.5.2. QRM Handlebar Mounting Installation

- 1. Choose the position of the handlebar you want to mount the camera on.
- 2. Choose the direction of the U-bolt and the mounting arm.
- 3. Pile them together and tighten them using the U-bolt nuts.
- 4. Adjust the camera angle by rotating the barrel and the ball joint and lock them.
- 5. Mount the camera on the QRM head using the 1/4" camera mount bolt.

16. CAMERA SOFTWARE

16.1. PRISM Device Manager

PRISM Device Manager allows you to upgrade firmwares and configure settings directly from your PC. It is available for both Windows and Mac. For more information and download, please visit www.sena.com.

16.2. PRISM Smartphone App

PRISM Smartphone App allows you to configure settings and view user manual and quick reference directly from your mobile phone. It is available for both Android and IOS. For more information, please visit www.sena.com.

| 4.4 | |
|------|--|
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17. CAMERA SPECIFICATIONS

General

- Record time: 2 hours
- Working distance (Sena headsets): up to 100 meters (110 yards) in open terrain
- Operating temperature: -10°C ~ 55°C (14°F ~ 131°F)
- Dimensions (main module): 59.0mm x 43.0mm x 21.0mm (2.3 in x 1.75 in x 0.8 in)

Bluetooth

- Profile: Headset Profile, Hands-Free Profile (HFP)
- Bluetooth 4.0

Audio

- Internal microphone
- Wind noise reductions

Optical

- Field of view: 137 degrees
- 3.5M pixel CMOS
- Aperture f/2.0

Video mode

- Resolution
 - o 1080p 30fps
 - o 720p 30 / 60fps
 - o 480p 120fps

Photo mode

- Resolution
 - o 3:2 3.5M



- o 4:3 5M
- o 4:3 3.2M
- o 16:9 3M
- Burst shot
 - o 10 / 5 / 3 pic per sec

Time lapse mode

- Photo & Video
 - o pic per 1 / 3 / 5 / 10 / 30 /60 sec

TV-out

Micro HDMI

Battery

- Charging time: 3.5 hours
- 1100mAh
- Type: Lithium ion battery

Certificates

• CE, FCC, IC