

# **Operator's Manual**

# **SeeSnake** CSx)





Read this Operator's Man-ual carefully before using this tool. Failure to under-stand and follow the contents of this manual may result in electrical shock, fire, and/or serious per-sonal injury.









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<sup>\*</sup>Original Instructions - English

#### Introduction

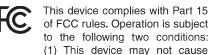
The warnings, cautions, and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors that cannot be built into this product, but must be supplied by the operator.

### **Regulatory Statements**



The EC Declaration of Conformity (890-011-320.10) will accompany this manual as a separate booklet when required.

Directive 2014/53/EU					
Radio	adio Operating Spectrum / Power				
Bluetooth Low Energy (BLE)	2400 – 2483.5 MHz	5 <b>.</b> 44 dBm			
Wi-Fi 802.11 b/g/n	2400 – 2483.5 MHz	15.43 dBm			
Wi-Fi 802.11 a/n/ac	5470 – 5725 MHz	18.65 dBm			



harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Contains Transmitter Modules: FCC ID: TFB-1004 / IC: 5969A-1004 and FCC ID: X8WBM832 / IC: 4100A-BM832

#### Safety Symbols

In this manual and on the product, safety symbols and signal words are used to communicate important safety information. This section is provided to improve understanding of these signal words and symbols.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

#### **A** DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

#### **WARNING**

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

#### **A** CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

#### NOTICE

NOTICE indicates information that relates to the protection of property.



This symbol means read the operator's manual carefully before using the equipment. The manual contains important information on the safe and proper operation of the equipment.



This symbol means always wear safety glasses with side shields or goggles when handling or using this equipment to reduce the risk of eye injury.



This symbol indicates the risk of electrical shock.



This symbol indicates the risk of fire.

# **General Safety Rules**

#### **WARNING**







Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electrical shock, fire, and/or serious injury.

#### **SAVE THESE INSTRUCTIONS!**

#### **Work Area Safety**

- Keep your work area clean and well lit.
   Cluttered or dark areas invite accidents.
- Do not operate equipment in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Equipment can create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating equipment. Distractions can cause you to lose control.
- Avoid traffic. Pay attention to moving vehicles when using on or near roadways.
   Wear high-visibility clothing or reflector vests.

# **Electrical Safety**

- Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges, and refrigerators.
   There is an increased risk of electrical shock if your body is earthed or grounded.
- Do not expose equipment to rain or wet conditions. Water entering equipment will increase the risk of electrical shock.
- Keep all electrical connections dry and off the ground. Touching equipment or plugs with wet hands can increase the risk of electrical shock.

 If operating equipment in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply. Use of a GFCI reduces the risk of electrical shock.

#### **Personal Safety**

- Stay alert, watch what you are doing, and use common sense when operating equipment. Do not use equipment while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating equipment may result in serious injury.
- Dress properly. Do not wear loose clothing or jewelry. Loose clothes, jewelry, and long hair can be caught in moving parts.
- Practice good hygiene. Use hot, soapy water to wash hands and other body parts exposed to drain contents after handling or using drain inspection equipment. To prevent contamination from toxic or infectious material, do not eat or smoke while operating or handling drain inspection equipment.
- Always use appropriate personal protective equipment when handling and using equipment in drains. Drains may contain chemicals, bacteria, and other substances that may be toxic, infectious, and cause burns or other issues. Appropriate personal protective equipment always includes safety glasses and may include a dust mask, hard hat, hearing protection, drain cleaning gloves or mitts, latex or rubber gloves, face shields, goggles, protective clothing, respirators, and steel toed, non-skid footwear.
- If using drain cleaning equipment and drain inspection equipment at the same time, wear RIDGID drain cleaning gloves. Never grasp the rotating drain cleaning cable with anything else, including other gloves or a rag which can become wrapped around the cable and cause hand injuries. Only wear latex or rubber gloves underneath RIDGID drain cleaner gloves. Do not use damaged drain cleaning gloves.

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#### **Equipment Use and Care**

- · Do not force equipment. Use the correct equipment for your application. The correct equipment does the job better and more safely.
- Do not use equipment if the power key does not turn it on and off when a compatible, charged battery pack is connected. Any equipment that cannot be controlled with the power key is dangerous and must be repaired.
- Store idle equipment out of the reach of children and do not allow persons unfamiliar with the equipment or these instructions to operate the equipment. Equipment can be dangerous in the hands of untrained users.
- Maintain equipment. Check for misalignment or binding of moving parts, missing parts, breakage of parts, and any other condition that may affect the equipment's operation. If damaged, have the equipment repaired before use. Many accidents are caused by poorly maintained equipment.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the equipment in unexpected situations.
- Use the equipment and accessories in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the equipment for operations different from those intended can result in a hazardous situation.
- Keep handles dry, clean, and free from oil and grease. Clean handles give better control of the equipment.

#### **Battery Use and Care**

- Use equipment only with specifically designed battery packs. Use of any other battery packs may create a risk of injury and/or fire.
- Recharge only with the charger specified by the manufacturer. A charger suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- · Do not cover charger while in use. Proper ventilation is required for correct operation. Covering charger while in use could result in fire.
- Use and store batteries and chargers in dry, appropriate temperature areas according to their documentation. Extreme temperatures and moisture can damage batteries and result in leakage, electrical shock, fire, or burns.
- Do not probe the battery with conductive objects. Shorting of battery terminals may cause sparks, burns, or electrical shock. When the battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or any other small metal object that can make a connection from one terminal to the other. Shorting the battery terminals may cause burns or a fire.
- Under abusive conditions, liquid may eject from battery; avoid contact. If contact occurs, flush with water. If liquid contacts eyes, seek medical help. Liquid ejected from the battery may cause irritation or burns.
- Properly dispose of batteries. Exposure to high temperatures can cause the batteries to explode; do not dispose of in a fire. Some countries have regulations concerning battery disposal. Follow all applicable regulations.

#### **Pre-Operation Inspection**

**WARNING** 



To reduce the risk of serious injury from electrical shock or other causes, and to prevent damage to your equipment, inspect all equipment and correct any problems before each use.

To inspect all equipment, follow these steps:

- 1. Power off your equipment.
- 2. Disconnect and inspect all cords, cables, and connectors for damage or modification.
- 3. Clean any dirt, oil, or other contamination from your equipment to ease inspection and to prevent it from slipping from your grip during transportation or use.
- 4. Inspect your equipment for any broken, worn, missing, misaligned, or binding parts, or any other condition which might prevent safe, normal operation.
- 5. Refer to the instructions for all other equipment to inspect and make sure it is in good, usable condition.

- 6. Check your work area for the follow-
  - · Adequate lighting.
  - · The presence of flammable liquids, vapors, or dust that may ignite. If present, do not work in area until sources have been identified and corrected. The equipment is not explosion proof. Electrical connections can cause sparks.
  - A clear, level, stable, and dry place for the operator. Do not use the equipment while standing in water.
- 7. Examine the job to be done and determine the correct equipment for the
- 8. Observe the work area and erect barriers as necessary to keep bystanders

# **Description**



The RIDGID® SeeSnake® CSx Via™\* is a flexible inspection solution for streaming, capturing, and sharing media using a mobile device. With its integrated Wi-Fi and Bluetooth, the CSx Via connects with an iOS™, Android™, or Windows-powered device to enable inspections with the SeeSnake HQx Live app or SeeSnake HQ software for Windows. The CSx Via is powered by an 18 V rechargeable battery.

The CSx Via is compatible with most RIDGID SeeSnake camera reels. The CSx Via Mount accessory is required for using the CSx Via with the SeeSnake Standard or Mini camera reels.

The RIDGID SeeSnake HQx Dock is designed to optimize inspection viewing when using HQx Live or HQ with a tablet. Use as a free-standing unit or mount onto any RIDGID SeeSnake Compact Series reel for fast, easy setup.



Specifications				
Weight (with cap)	0.38 kg [0.83 lb]			
Dimensions				
Length	149 mm [5.9 in]			
Depth	106 mm [4.2 in]			
Height	126 mm [5 in]			
Power Source	18 V Li-Ion or Lucid 18.5 V lithium polymer battery			
Connectivity				
Bluetooth	Bluetooth Low Energy (BLE)			
Wi-Fi	802.11 b/g/n 802.11 a/n/ac			
Operating Environ	ment			
Temperature	-10°C to 50°C [14°F to 122°F]			
Storage temperature	-20°C to 60°C [-4°F to 140°F]			
Relative humidity	5 to 95 percent			

\*Patent pending

#### **Components**



Transmitter Clip-On Terminal

#### Connector



Label

# **Operation**

#### Installation

Note: Refer to the CSx Via Mount instructions for installing the CSx Via onto the SeeSnake Standard or Mini camera reels.

- 1. Remove the SeeSnake System Cable from the reel. Refer to your reel's Operator's Manual for instructions on removal.
- 2. Slide the battery into the CSx Via battery shoe.
- 3. Remove the shipping cap from the CSx Via connector.
- 4. Align the arrow on the connector with the unlock symbol  $oldsymbol{6}$  on the frame and insert the CSx Via into the slip-ring cavity.
- 5. Turn the CSx Via so that it locks into place 8.

#### NOTICE

Do not touch the contact pins inside the slip-ring dial. Stressing the contact pins can cause them to break.



#### Removal

To remove the CSx Via, turn it so that the arrow is aligned with the unlock symbol  $\boldsymbol{\delta}$ and pull straight out.

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#### **Performing an Inspection**

The CSx Via can be used to perform an inspection using HQx Live, available on iOS and Android devices, or SeeSnake HQ software for Windows devices.

To set up for an inspection, enable your device's Wi-Fi and Bluetooth, open the app, and connect to the CSx Via. Once connected, you can live stream inspection footage and capture, view, and share media.

Visit the HQx Live and HQ support pages on SeeSnake Support for additional instructions, including detailed connection instructions and media capturing and sharing.

Power on and off. Power Press to wake up while in Standby Mode.



Zero

Press and hold to set the system measurement to zero. Press to start and stop temporary segment measurements.



Sonde

Enable and disable the sonde.

#### **LED Behaviors**

The CSx Via uses its LEDs to communicate booting and Wi-Fi connectivity status.



Power and	Power and Booting LEDs		
Status	LED		
Booting	Both LEDs alternate flashing		
Restarting/ powering off	Both LEDs flash simultaneously		
Recovery mode: The CSx Via will refresh its firmware and restart in the event it does not power on	Both LEDs flash simultaneously		

Wi-Fi Connectivity LEDs		
Status	LED	
Wi-Fi booting	Wi-Fi LED flashes rapidly	
Wi-Fi ready	Wi-Fi LED flashes steadily	
Wi-Fi connected	Wi-Fi LED solid	

#### **Power States**

The CSx Via has three power states: on, off, and Standby Mode, a low power state that turns off the camera and its LEDs to conserve energy. The CSx Via enters Standby Mode after a period of inactivity, or when closing the app or exiting live view. To wake up the CSx Via from Standby Mode, press the Power key or open the app's live view.

The CSx Via beeps to communicate different power states.

Power State Sounds		
Power State	Sound	
Power on	Single beep	
Power off	Long beep	
Entering Standby Mode	Two beeps	
Wake up from Standby Mode	Single beep	

# Maintenance and **Support**

#### Support

For support and additional information about using your system, visit support. seesnake.com/csxvia.

#### **Transport and Storage**

Store and transport your system with the following in mind:

- · Store in a locked area out of the reach of children and people unfamiliar with its purpose.
- Store in a dry place to reduce risk of electrical shock.
- · Store away from heat sources such as radiators, heat registers, stoves, and other products (including amplifiers) that produce heat.
- Storage temperature should be -20°C to 60°C [-4°F to 140°F].
- · Do not expose to heavy shocks or impacts during transport.
- Remove the battery before shipping and before storing for extended periods of time.

#### Service and Repair

Improper service or repair can cause the CSx Via to be unsafe to operate.

Service and repair of the CSx Via must be performed at a RIDGID Independent Authorized Service Center. To maintain the safety of the unit, make sure a qualified repair person services your unit using only identical replacement parts. Discontinue using the CSx Via, remove the battery, and contact service personnel under any of the following conditions:

- If liquid has been spilled or objects have fallen into the equipment.
- If the equipment does not operate normally when operating instructions are followed.
- If the equipment has been dropped or damaged.
- If the equipment exhibits a distinct change in performance.

For information on your nearest RIDGID Independent Service Center or any service or repair questions:

• Contact your local RIDGID distributor.



EC Countries: Do not dispose of electrical equipment with household waste!

According to the European Guideline 2012/19/EU for Waste Electrical and Electronic Equipment and its implementation into national legislation, electrical equipment that is no longer usable must be collected separately and disposed of in an environmentally correct manner.

#### **Battery Disposal**

EC Countries: Defective or used batteries must be recycled according to the guideline 2006/66/EEC.