

Wireless Video Scope

BK5500W



Snap-on®

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General Safety Information

CAUTION:



Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS!

Work Area Safety

- **Keep your work area clean and well lit.** Cluttered benches and dark areas may cause accidents.



- **Do not operate electrical devices or the wireless video scope in explosive atmospheres, such as in the presence of flammable liquids, gases, or heavy dust.** Electrical devices or the wireless video scope can create sparks which may ignite the dust or fumes.
- **Do not use the wireless video scope around corrosive chemicals.**
- **Keep bystanders, children, and visitors away while operating the wireless video scope.** Do not let visitors contact the unit.

Personal Safety

- **Stay alert, watch what you are doing and use common sense.** Do not use the wireless video scope while tired or under the influence of drugs, alcohol, or medications. A moment of inattention while operating tools may result in serious personal injury.

- **Do not overreach.** Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.



- **Use safety equipment.** Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.
- **Use proper accessories.** Do not place this product on any unstable cart or surface. The product may fall causing serious injury to a person or serious damage to the product.
- **Prevent object and liquid entry.** Never spill liquid of any kind on the video display unit. Liquid increases the risk of electrical shock and damage to the product.
- **Do not use this device for personal or medical use/inspection in any way.**
- **The unit is not shock-resistant.** Do not use it as a hammer or drop it.

Battery Precautions

- **Remove the batteries when cleaning the unit.**
- **Remove the batteries before storing the unit for a long time.**
- **When necessary, REPLACE ALL BATTERIES in this unit with new ones.**
- **Use only the size and type of battery specified.**
- **Be sure to install the battery with the correct polarity as indicated in the battery compartment.**
- **Properly dispose of the battery. Exposure to high temperatures can**

cause the battery to explode, so do not dispose of in a fire. Place tape over the terminals to prevent direct contact with other objects. Some countries have regulations concerning battery disposal. Please follow all applicable regulations.

Wireless Video Scope Use and Care

- **Use the wireless video scope only as directed.** Do not operate the inspection unit unless the owner's manual has been read and proper training has been completed.
- **Do not immerse the handheld display unit or imager handle in water.** Store in a dry place. Such measures reduce the risk of electric shock and damage. The imager head and the cable are water resistant when the unit is fully assembled, but the video display unit is not.
- **Do not use the camera if condensation forms inside the lens.** Let the water evaporate before using again.
- **Do not use tool if ON/OFF switch is not properly working.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- **Store idle equipment out of the reach of children and other untrained persons.** Equipment is dangerous in the hands of untrained users.
- **Maintain the wireless video scope with care.** Properly maintained tools are less likely to cause injury.
- **If unit is dropped check for breakage of parts, and any other conditions that may affect the tool's operation.** If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- **Use only accessories that are recommended by the manufacturer for your tool.** Accessories that may be suitable for one tool may become hazardous when used on another tool.
- **Dry your hands before turning the unit ON or OFF and before replacing batteries.**
- **Protect against excessive heat.** The product should be situated away from heat sources such as radiators, heat registers, stoves or other products (including amplifiers) that produce heat. Do not use the unit near moving machinery or areas where the temperature will exceed 113°F.
- **Do not attempt to take any pieces of this unit apart unless directed to by this manual.**
- **Follow instructions for changing accessories.** Accidents are caused by poorly maintained equipment.
- **Provide proper cleaning.** Do not use acetone to clean the unit. Instead, use isopropanol.
- **Gently clean the LCD with a dry cloth.** Remove batteries before cleaning.
- **Stop using the unit if it starts smoking or emitting noxious fumes.**
- **Remove the batteries and refer servicing to qualified service personnel under any of the following conditions:**
 - If liquid has been spilled or objects have fallen into product;
 - If product does not operate normally by following the operating instructions;

- If the product has been dropped or damaged in any way;
- When the product exhibits a distinct change in performance.

If you have any questions regarding the service or repair of this machine, call or write the appropriate **repair center location** (see "Snap-on Service Center Locations" on page 14).

Technical questions can be directed to our toll free number at 1-877-762-7664 Monday through Friday 6:30 am to 5:00 pm Central Time (U.S. customers only).

Specific Safety Information

CAUTION:

Read this operator's manual carefully before using. Failure to understand and follow the contents of this manual may result in electrical shock, fire and/or severe personal injury.

FCC Compliance Statement

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

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.



WARNING! Changes or modifications not expressly approved by the party responsible

for compliance could void the user's authority to operate the equipment.

FCC Interference Statement

This equipment has been tested and found to comply with the limits for Class B digital devices, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Use of shielded cable is required to comply with Class B limits in Subpart B of Part 15 of the FCC rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

FCC Exposure Statement

This portable transmitter with its antenna complies with FCC/IC RF exposure limits for general population/uncontrolled exposure.

PAL/SECAM Statement


The video output port found on this device puts out a standard NTSC video signal, but does not output PAL or SECAM video signals, or video signals in any other format. If the video output of this device is connected directly to the input jack of a PAL or SECAM television or other PAL or SECAM audio-visual equipment, no image will be visible to the user.

based products. Exposure to petroleum-based substances will eventually degrade the imager head covering.

- **GENERAL USE:** Do not use anywhere the unit may come into exposure with hazardous chemicals, electrical charges or moving parts. Such situations may result in serious injury or death.

SAVE THESE INSTRUCTIONS!

Wireless Video Scope Safety

-  Do not place tool into anything or anywhere that may contain a live electrical charge.
- **FOR WALLS:** For inspecting inside walls, be sure to shut off the circuit breaker to the whole house before using the tool behind any of the walls.
- **FOR PIPES:** If you suspect a metal pipe could contain an electrical charge, have a qualified electrician check the pipe before using the tool. Ground circuits, in some cases, can be returned to cast iron pipes and cause them to be charged.
- **FOR AUTOMOBILES/HEAVY EQUIPMENT/MOTORSPORTS:** Be sure the automobile, heavy equipment or motorsport is not running during inspection. Metal and liquid under the hood may be hot. Always clean imager with mild detergent or solvent after exposure to any chemical, especially petroleum-

Description

The BK5550W wireless video scope displays live color video from an imaging sensor and lighting source connected to a flexible imager cable. It can be used to look into tight spots and beam back real-time video to a color LCD. Accessories (mirror and magnet) are included to attach to the imager head to provide application flexibility.

Specifications

Recommended Use

Indoor

Optimal Viewing Distance

1/2 in to 12 in (1.3 cm to 30.5 cm)

Power Supply

6 AA Alkaline cells

Estimated Battery Life

4.5 hours of continuous use

Weight

4.3 lbs (1.95 kg)

Dimensions

Display Unit:

Power Supply

3 AA Alkaline cells

Length

1.6 in (4.1 cm)

Width

5.4 in (13.7 cm)

Height

3.7 in (9.4 cm)

Resolution

320 x 240

Screen

2.7 in (6.9 cm) LCD

Imager Handle:

Power Supply

3 AA Alkaline cells

Length

2.25 in (5.7 cm)

Width

2.12 in (5.4 cm)

Height

5.4 in (13.7 cm)

Imager:

Length

36 in (0.9 m)

Optional Accessories lengths

72 in (1.8 m) and 120 in (3.05 m)

Wireless Reception Range

100 ft (30.4 m) (unobstructed line-of-sight distance)

Video-out port

3.5 mm TRS (Tip Ring Sleeve)

Video Signal

NTSC

Operating Environment:

Temperature

32 °F to 113 °F (0 °C to 45 °C)

Humidity

5 % to 95 % non-condensing (display unit)

Storage Temperature

-4 °F to 158 °F (-20 °C to 70 °C)

Water Resistance

Imager head and extensions up to 10 ft (3.05 m) water depth. (When assembled)

Standard Equipment

The wireless video scope comes with the following items, as shown:

1. Display Unit
2. Imager
3. Handle
4. Accessories
 - hanger hook
 - magnet strap
 - video-out cable
 - protective carrying case
5. Imager Accessories
 - mirror
 - magnet

System Components



Assembly

NOTICE: Be sure to read **Battery Precautions** (on page 4).

To Install Batteries in either the Display Unit or the Imager Handle:

1. Open battery compartment cover by depressing tab and pulling door open. Insert three (3) new AA batteries into the proper slots. Proper battery orientation is indicated on the battery compartment.
2. Snap battery compartment cover back into place.

Installing Batteries



To connect the Imager to the Imager Handle:

1. Make sure the keyed ends are properly aligned.
2. Press imager connector firmly into the unit until the retaining ring is completely engaged.

If the keyed ends are not properly aligned, the connector will not be fully seated. Match up the arrows when inserting the imager. In this case, rotate the imager connector until the tabs are fully seated. The imager connector should only need to rotate a maximum of 180 degrees.

Connecting the Imager to the Imager Handle



Installing an Accessory

The two included accessories, (mirror and magnet) attach to the imager the same way.

To connect the mirror:

- Match up the Slot in the Mirror with the Alignment Pin on the Imager and push together to lock in place.

Installing Accessory-Mirror



Installing Accessory-Slot and Alignment Pin



Tool and Work Area Setup

⚠ CAUTION:

To prevent serious injury, proper setup of the tool and work area is required. The following procedures should be followed:

1. Review the **General Safety Information** (on page 4) of this manual.
2. Check work area for: adequate lighting, flammable liquids, vapors or dust that may ignite.
3. Follow tool set-up according to specific tool operator's manual.

Operating Instructions

- Do not use excessive force to insert or bend the imager.
- Do not use the wireless video scope to modify surroundings, clear pathways or clogged areas, or as anything other than an inspection device.
- The imager connector, handle and display unit are not water resistant. The imager head and its covering are water resistant, but are not acid-proof or fire proof. Petroleum-based products will ruin the imager's protective plastic covering over time. Avoid submersing the imager head into corrosive, oily places.

Using the Display Unit and Imager

To turn the Display Unit on:

1. Hold the viewer with the LCD screen facing you.
2. Depress power button to turn on.

Turning the Display Unit on



To turn the Handle on:

1. Verify that the channel switch located on the display unit and imager cable are on the same frequency number.
2. Push the ON/OFF switch away from you to turn on the imager handle.

Turning the Handle on



To adjust the brightness of the LED light:

- Press the arrow key with the (+) sign to increase the brightness and press the arrow key with the (-) sign to decrease the brightness.

Using the Imager LED's



Typical Applications

The **Snap-on Wireless Video Scope** is designed as a remote inspection device. Typical applications might include automotive inspection, cable routing, heavy equipment / boat / aircraft inspection, etc.

Automotive Inspection

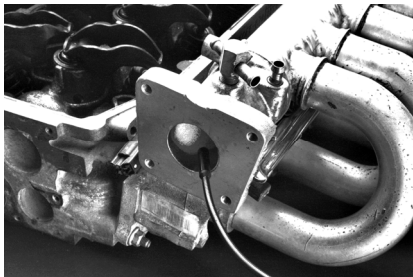


Instructions for the Video-out feature

To use the auxiliary video-out port on the BK5500W:

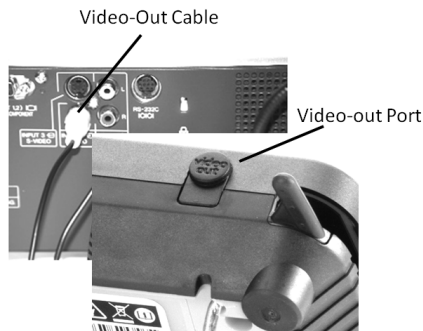
1. Remove the rubber protective cap from the video-out port on the top of the unit.
2. Find the auxiliary video cable that is provided in the case with the BK5500W.
3. Plug the male end of the 3.5 mm mini-plug into the video-out port.
4. Plug the RCA end of the video cable into the video input on the video monitor. This port is typically colored yellow.
5. Verify the video monitor is set to display the video from the designated video port.

Cable Routing



Please review the **PAL/SECAM Statement** (on page 7).

Video-out port



Transportation and Storage

1. Avoid exposing the unit to continuous vibration or extreme hot and cold temperatures.
2. Always store the wireless video scope indoors in the case it came with.
3. Always remove the batteries if the unit will not be used for an extended period of time.

Maintenance Instructions

▲ CAUTION:

Make sure the batteries have been removed from the unit before performing maintenance.

The Snap-on wireless video scope has been designed to require little maintenance. However, in order to maintain its performance, you must always follow these guidelines:

1. Always handle the device with care. It is not shock-resistant and should not be banged or dropped. Treat it as you would any other sensitive optical device.
2. Always clean the imager head after use with mild detergent.
3. Use only isopropanol swabs to clean the connections.
4. Avoid rubbing too hard on the LCD. After use, wipe the display clean gently with a dry cloth.
5. Do not disassemble this device beyond what is shown in the manual. Doing so will void your warranty.

Additional Accessories

Magnet and Mirror attachments – BK5500-2

8.5 mm diameter Imager, 72 in long – BK5500-7

8.5 mm diameter Imager, 120 in long – BK5500-9

Ultra Violet Imager, 36 in long – BK5500-10

Dual View Imager, 36 in long – BK5500-12

5.5 mm diameter Imager, 36 in long – BK5500-13

Digital Video Capture Device (DVR) – BK5500-14

Snap-on Service Center Locations**⚠ CAUTION:**

If you have any questions regarding the service or repair of this machine, please call or write the most geographically convenient service center listed below:

Eastern Repair Center (USA) 6320 Flank Dr. Harrisburg, PA 17112 USA Toll Free # -USA only: (800) 848-5067 Telephone: (717) 652-7914 Fax: (717) 652-7123	Snap-on Tools (Australia) Pty Ltd. National Distribution Centre Unit 6/110 Station Road PO Box 663 Sven Hills, NSW 1730 Australia Telephone: (61) 2-9837-9100 Fax: (61) 2-9624-2578 e-mail: sota.webmasters@snapon.com
Northern Repair Center (USA) 3011 E. RT 176, Dock 8 Crystal Lake, IL 60014 USA Toll Free # – USA only: (877) 777-4412 Telephone: (815) 479-6850 Fax: (815) 479-6857	Snap-on Tools Singapore PTE, Ltd. 25 Tagore Lane #01-01 Singapore 787602 Telephone: +(65) 6451-5570 Fax: +(65) 6451-5574 e-mail: esale.sg@snapon.com Internet: http://snapon.com.sg
Western Repair Center (USA) 3602 Challenger Way Carson City, NV 89706-0753 USA Toll Free # – USA only: (888) 762-7972 Telephone: (775) 883-8585 Fax: (775) 883-8590	Snap-on Tools Japan, K.K. Snap-on, Bahco, and Cartec Also serving Taiwan and Micronesia (Distribution Center and Technical Repair Center) 2-1-6 Shinkiba, Koto-ku, Tokyo, 136-0082 JAPAN Telephone: +81 3 5534 1280 Fax: 81-5534-1284 e-mail: SOJ-INFO@snapon.co.jp OEM, National Accounts, GSA Distribution: +81-3-5534-1300 Industrial: +81-3-5534-1281 BAHCD: +81-3-5534-1301 Technical Repair Center: +81-3-5534-1289
UK Repair Centre Snap-on Tools, Ltd. Telford Way, Kettering Northants NN16 8UN, England Telephone: 01536 413855 Fax: 01536 410740	Snap-on Tools of Canada Repair Center 7403 48th St. S.E. Calgary, Alberta T2C 4H6 Toll Free #: (866) 824-0525 Telephone: (403) 720-4525 Fax: (403) 720-4524 e-mail: canadianquestions@snapon.com

Troubleshooting

Symptom	Possible Reason	Solution
Display turns ON but does not show image.	Loose or dirty imager cable connections.	- Check Cable Connections, clean if required - Re-attach
	Imager head covered by debris.	Make sure imager head is not covered with debris.
	Channel selection switches on handle and viewer not tuned to same channel.	Check channel switch settings on handle and viewer – must set to same channel number
	Handle batteries have run out.	Check battery status light on power button of handle. If batteries are low or handle does not turn on, replace batteries.
Image contains excessive static or "snow," or the image appears and disappears erratically.	Battery power is low, causing transmitted signal to become weak.	Check battery status on imager handle and viewer unit.
	Too many obstacles or too much distance between viewer unit and imager handle.	Move handle and viewer unit closer to each other (less than 100 feet (30m) line-of sight), or remove obstacles that exist between the handle and the viewer.
	Loose or dirty imager cable connections.	- Check Cable Connections, clean if required - Re-attach
LEDs on imager head are dim at max brightness	Battery power is low.	Check battery status, and replace batteries if necessary.
Display switches between black and white	Battery power is low	Check battery status, and replace batteries if necessary.
Handle and/or viewer unit will not turn on.	Battery power is very low.	Replace batteries.

Replacement Accessory Parts Numbers

Imager Head – BK5500-1; Magnet and Mirror - BK5500-2; Protective Carrying Case - BK5500W-1

Warranty

Limited Two (2) Year Warranty

Snap-on Tools Company (the "Seller") warrants only to the original purchaser that under normal use, care and service, the Equipment (except as otherwise provided herein) shall be free from defects in material and workmanship for two years from the date of original invoice. SELLER'S OBLIGATIONS UNDER THIS WARRANTY ARE LIMITED SOLELY TO THE REPAIR OR, AT SELLER'S OPTION, REPLACEMENT OF EQUIPMENT OR PARTS WHICH TO SELLER'S SATISFACTION ARE DETERMINED TO BE DEFECTIVE AND WHICH ARE NECESSARY IN SELLER'S JUDGMENT, TO RETURN THIS EQUIPMENT TO GOOD OPERATING CONDITION. NO OTHER WARRANTIES, EXPRESS OR IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OR MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY AND ALL SUCH WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED. This warranty does not cover (and separate charges for parts, labor and related expenses shall apply to) any damage to, malfunctioning, in operability or improper operation of the Equipment caused by, resulting from or attributable to (A) abuse, misuse or tampering; (B) alteration, modification or adjustment of the Equipment by other than Seller's authorized representatives; (C) installation, repair or maintenance (other than specified operator maintenance) of the Equipment or related equipment, attachments, peripherals or optional features by other than Seller's authorized representatives; (D) improper or negligent use, application, operation, care, cleaning, storage or handling; (E) fire, water, wind, lightning or other natural causes; (F) adverse environmental conditions, including, without limitation, excessive heat, moisture, corrosive elements, or dust or other air contaminants, radio frequency interference, electric power failure, power line voltages beyond those specified for the Equipment, unusual physical, electrical or electromagnetic stress and/or other condition outside of Seller's environmental specifications; (G) use of Equipment in combination or connection with other equipment, attachments, supplies or consumables not manufactured or supplied by Seller; or (H) failure to comply with any applicable federal, state or local regulation, requirement or specification governing emission analyzers and related supplies or consumables. Repairs or replacements qualifying under this Warranty will be performed on regular business days during Seller's normal working hours within a reasonable time following purchaser's request. All requests for Warranty service must be made during the stated warranty period. This Warranty is non-transferable.

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FCC NOTIFICATION:

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