

Aqua-Vu

UNDERWATER VIEWING SYSTEM

SCOUT OWNERS MANUAL



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Mail warranty card to: Nature Vision, Inc. 213 NW 4th Street Brainerd, MN 56401

Register For Your Limited Warranty

(Please Print)

Name _____

Street Address _____

City _____

Country _____

State/Zip Code _____

Date Of Purchase _____

How much did you pay for this product? \$ _____

Phone _____

Model _____

Where did you purchase this product? _____

ONE-YEAR LIMITED WARRANTY

Nature Vision, Inc. warrants this product to be free from defects in materials and workmanship for one year from the date of purchase. This warranty applies to customers who properly fill out, clip, and return the warranty card included on the back cover of this manual. Failure to complete and return the warranty card voids the warranty. Nature Vision, Inc. will, at its sole discretion and without charging the customer, repair or replace any components that fail in normal use. Failures due to abuse, misuse, or unauthorized alteration or repair, are not covered. (Cut camera cables are not covered.) The warranty is valid only for the original owner who purchases the unit from an authorized dealer.

HOW TO OBTAIN SERVICE

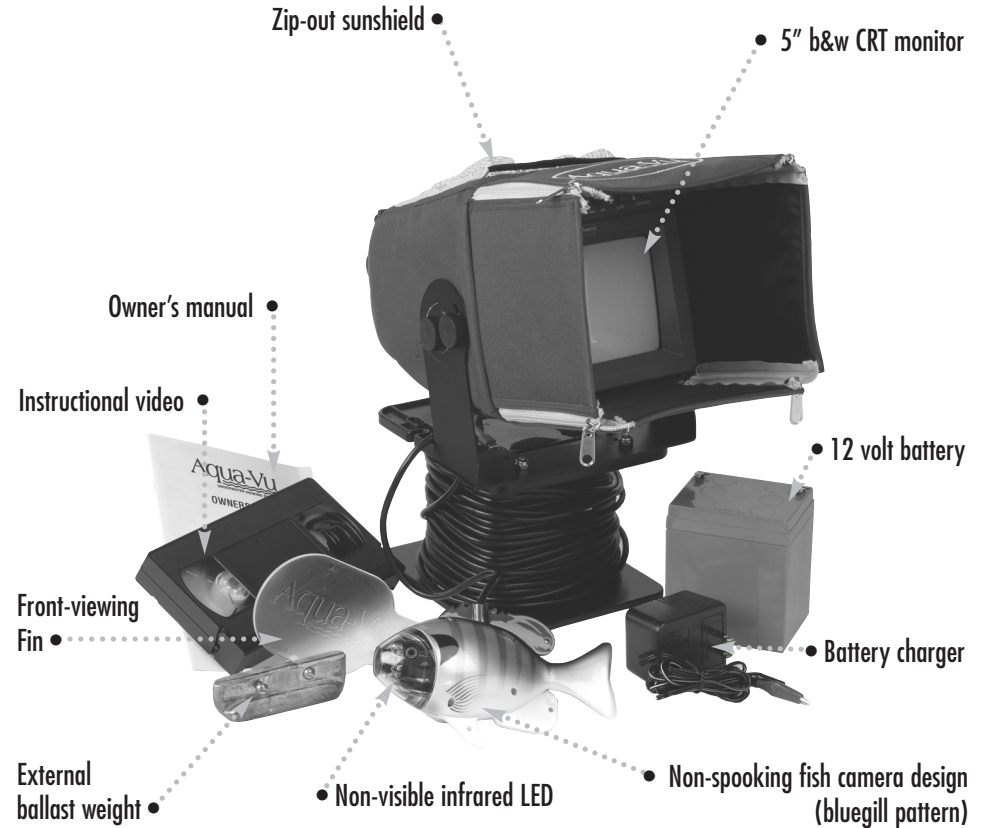
If you have a problem with your Aqua-Vu Scout within 30 days of purchase, you may return it to your retailer for replacement (subject to retailer's stock). After 30 days, please contact the factory toll-free at (866) 777-0733 for a return authorization number (RA#). No service returns will be accepted without this pre-return authorization, which must be clearly marked on the outside of the package.

The customer is responsible for shipping costs associated with returning the unit to Nature Vision, Inc. Nature Vision, Inc. will pay for shipping the repaired unit back to the customer while the unit is still under one-year warranty. A shipping & handling charge will apply for service repairs made after the warranty period. After obtaining a Return Authorization Number, the unit should be securely packed and shipped "pre-paid freight" and insured to Nature Vision, Inc. at:

Nature Vision, Inc.
214 NW 4th Street
Brainerd, MN 56401
RA# _____

Canadian customers please return to:

Nature Vision, Inc.
C/O Unicity One Step
1260A Clarence Ave.
Winnipeg, MB R3T 1T2
RA# _____



ABOUT YOUR AQUA-VU SCOUT — with natural-looking Fish-Cam!

The Scout is a high-quality portable Aqua-Vu underwater viewing system featuring Nature Vision's new Fish-Cam, a camera that looks like a fish! This fish-friendly, horizontal-viewing camera reduces angler concerns about "spooking." And it features 12 invisible infrared lights to enhance the viewing of bottom and fish in low-light conditions.

The Scout is also user-friendly, with a 5-inch CRT (television-like) monitor, convenient carrying shuttle, and padded protective cover/sunshield.

Become an aquatic explorer without getting wet! From boat or pier, watch the underwater world on your Scout's monitor as you swim the Fish-Cam over the bottom landscape. Or, with camera lowered through a hole in the ice, see how approaching fish react to your bait!

However you employ your Scout —as a serious fishing tool on open-water or on ice; for observing and learning about nature; for watching small children or pets; or for security purposes — you will experience a fascinating new real-life "view!"

IN YOUR AQUA-VU SCOUT PACKAGE . . .

- 5" monitor (attaches to the Carrying Shuttle; tilts up and down for convenient viewing)
- Anti-spook Fish-Cam camera (Bluegill design) with 12 invisible internal infrared lights and 50-foot cable
- Plastic carrying shuttle (stores camera cable, holds 12v battery, and serves as monitor stand)
- Metal monitor bracket (for attaching monitor to carrying shuttle/monitor stand)
- Padded protective monitor cover/sunshield (weatherproofs the monitor)
- Nylon carrying strap (attaches to monitor bracket)
- Rechargeable 12-volt, 4.0 Ah battery and battery charger (battery and charger in same separate box)
- Parts bag — containing 4 large thumbscrews (for securing monitor to its metal bracket); 4 bolts and 4 nuts (for mounting monitor bracket on plastic carrying shuttle); and 1 power cord (for connecting battery to)
- Plastic Stabilizer Fin (attaches to Fish-Cam's tail; to keep camera forward-oriented while viewing from a moving boat)
- Ballast weights (attach to Fish-Cam's underside; for weighting camera down while viewing from a moving boat)
- Bolts and nuts for attaching ballast weights and stabilizer fin.

EASY ONE-TIME ASSEMBLY INSTRUCTIONS

You'll be viewing-ready in a few minutes! To assemble your Aqua-Vu Scout, you will follow simple one-time steps (each detailed below). Basically, you will secure the monitor bracket to the carrying shuttle; install the battery in the shuttle's battery compartment; attach the soft-pack protective cover/sunshield to the monitor; secure the covered monitor and the carrying strap to the monitor bracket; connect power cord and camera cable to the monitor; and wrap camera cable onto the carrying shuttle.

1. Unwrap all components.

2. Secure metal monitor bracket to the plastic carrying shuttle.

- A. Position the plastic shuttle with its rectangular center cavity (battery compartment) facing upward.
- B. Place the large U-shaped metal monitor bracket onto the shuttle, aligning the four holes of the bracket base with those at the rear/top of the shuttle. Make sure the bracket is facing forward (over the shuttle), with the cut-out section of the bracket base over the shuttle's open battery compartment.

For ice fishing, most camera users remove the open-water Ballast Weight and Stabilizing Fin.

FREQUENTLY ASKED QUESTIONS

How far can I see?

Naturally, the clearer the water, the farther you can see. As a general rule, in water the camera can see twice as far as the human eye — meaning that if you can see 3 feet down you will be able to see approximately 6 feet in front of the camera. But this is just a rule of thumb. Water bodies vary in water clarity and other characteristics. For anglers studying bottom structure, 2 feet of visibility is sufficient for underwater viewing.

When do I use the infrared lights?

The invisible infrared lights in your Aqua-Vu camera are designed for use in low-light conditions. Turn the lights on for enhanced visibility in low light.

How do I steer the camera?

For viewing in the direction of travel, use the front-viewing Stabilizer Fin. Slowly troll (less than 2 mph) or drift along the structure you intend to view. With fin attached, the camera will face the boat's direction of travel. (The opposite holds true when using a back-viewing fin which positions the camera for viewing in the direction opposite from the boat's travel. (The Back-viewing Fin is available from dealers or online at .)

Can I splice the camera cable to obtain more length?

No. Attempting to splice in additional cable violates the waterproof integrity of the camera and cable, voiding the warranty.

How fast can I troll with my camera?

It depends on depth, and also on the length of cable you have out, which determines water resistance or "drag." The deeper you go, with more cable out, the more drag there will be. That requires slower travel for good viewing. Generally, for best viewing, we recommend going less than 2 miles per hour. Remember, the slower you go, the more detail you will see.

Can I use my Aqua-Vu in saltwater?

Yes. All Aqua-Vu cameras are saltwater-rated, constructed with stainless steel hardware and materials that are impervious to corrosion.

Will my unit work in subfreezing conditions?

Aqua-Vu systems are designed to operate at temperatures ranging from minus-40 to 120 degrees F. Expect your battery life to decrease in cold conditions.

How wide is the camera's angle-of-view?

Your camera lens has a viewing angle of 92 degrees. At 4-1/2 feet in front of the camera you will be viewing an image approximately 6 feet wide.

Can I connect my Aqua-Vu to a larger monitor or to a hand-held camcorder?

Yes, For use in a permanent fish house, in a large boat with a built-in video system, or elsewhere, your Aqua-Vu can be hooked up to a larger external TV, VCR, or camcorder, provided it has a VIDEO-IN jack. (See information elsewhere in this manual.)

Is Aqua-Vu legal?

To our knowledge there are no restrictions that regulate the use of Aqua-Vu underwater viewing systems. Aqua-Vu is an approved pre-fishing tool in B.A.S.S. and P.W.T. events, and for other tournament trails across the country.

VIEWING TIPS — ON THE WATER

With the Aqua-Vu system assembled and set up, and with all connections made, begin viewing simply by turning the unit on. You will see a live picture of whatever the camera “sees” at a given moment — The inside of your boat? Nearby trees? Your fishing partner’s face?

Begin serious underwater viewing by lowering the camera to the bottom. Don’t worry! The camera won’t break if you bump a rock or suddenly “hit bottom.” Your viewing might be vertical — studying bottom and fish straight down from you, as from a pier or from an anchored boat. Or you might desire a broader view of an area’s bottom features and fish distribution. When viewing larger areas, anglers slowly move along in a boat, eyes glued to the monitor’s ever-changing picture of what the camera sees underwater.

In most waters, fish relate to bottom structure. So, while drifting or slow-trolling, you’ll need to guide the camera over the ups and downs of bottom contours. You will quickly learn how to “swim” the camera over bottom terrain. With cable in hand, simply raise or lower the camera, paying out more or less cable depending on depth and boat speed. As you move along, you should see on your monitor screen a continuous picture of the passing bottom and the fish-holding watery zone just above it.

When viewing over soft bottom, make sure the camera is actually above the bottom and not plowing or “stirring up” the muck. Remember, if you can’t see bottom, raise or lower the camera to “look” for it. If your camera becomes snagged, maneuver the boat so the direction of pull is the same as it was when the camera became snagged. A little jiggling or light tugging will usually enable you to back the camera out of a snag. Avoid pulling the camera through heavy weed cover or thick brush.

With your Aqua-Vu, you will be fascinated and often surprised by the ever-changing view of underwater scenery: rocks, weeds, other bottom features — and fish!

(For more advice and viewing tips see Frequently Asked Questions in this manual.)

VIEWING TIPS — ON THE ICE

Your Aqua-Vu is an invaluable ice fishing tool — a giant leap beyond mysterious flashes and unidentified “fish” on a depthfinder. Aqua-Vu enables you to actually “see” the real picture!

Note these huge Aqua-Vu advantages:

- View bottom structure and distinguishing features — Observe weedlines and weed characteristics, sand versus muck, big rocks versus small rocks, and transitions from one bottom type to another. That’s a big help in precisely locating your fishing holes or your fish house!
- Sharpen your fishing techniques — Watch your bait and see how approaching fish react to it. Learn what baits, lures, colors, and jigging actions attract fish and trigger strikes.
- Identify fish as to species and size. Viewing actual fish with an Aqua-Vu camera solves mysteries about what depthfinder signals really show. This real picture helps with choices about fishing techniques. And knowing whether there are fish around aids in deciding to stay or to leave a spot.

When testing a new fishing location, you may bore two holes a few feet apart — one for your fishing line, the other for lowering your Aqua-Vu camera. You can also rig the camera in a down-viewing position for fishing and viewing in the same hole. Test-fish for a few minutes in different places. It’s possible to choose or eliminate potential fishing spots on the basis of “seeing” or not seeing fish while moving around and prospecting.

Aqua-Vu’s ICE-POD is an adjustable tripod that sets over the camera hole, holds camera cable, and is a handy accessory for easy adjustment of camera direction. Aqua-Vu’s MO-POD and MO-POD II are remote-controlled and motorized units, on tripods, for convenient “no hands” rotation of the camera. (Available from retailers or online at .)

C. Secure monitor bracket to the shuttle by inserting four bolts (from the top) through the four holes of the bracket base and the shuttle. Screw on the four nuts from underneath. Using a Phillips screwdriver and a 3/8-inch wrench, tighten each securely.

3. Install the battery. Place the battery into the battery compartment of the shuttle. (Position the battery with its terminals farthest from the bracket.) To secure the battery, rotate the two clear plastic battery-holding tabs (located on the shuttle, adjacent to the battery) until they are over the battery. (Find battery-charging information and other battery notes below.)

4. Install soft-pack protective cover/sunshield. Unfold the Scout’s padded fabric soft cover and fully unzip all zippers. With the yellow fishnet pouch facing upward, work the cover onto and around the monitor. Adjust the cover evenly around the monitor screen. (Openings on the sides of the protective cover provide access to the mounting and tilt-adjustment holes on monitor and bracket. An opening in the cover’s backside allows for camera connection and video-out use.)

FISHNET POUCH: When the padded cover/sunshield is properly positioned, the yellow fishnet pouch is on top of the monitor. The pouch holds the Fish-Cam camera when transporting or storing the Scout.

SUNSHIELD USE: For daylight viewing, pull all four flaps forward and zip together to create the sunshield.

PROTECTING MONITOR SCREEN: To protect monitor screen for transporting and storing the Scout, unzip the four sunshield flaps. Fold them against the monitor’s front, starting with the left flap, then the right flap, securing each with the velcro pads. Bring the lower flap up and the top flap down.

5. Secure the monitor and the carrying strap to monitor bracket.

A. Observe the screw holes (for the four large thumbscrews) on each side of the monitor. The rear (center) holes match bracket holes for securing monitor to bracket. (The forward holes match the bracket’s semi-circular slots for adjusting monitor tilt.)

B. Slide the monitor between the bracket’s wings (sides), with the rear of the monitor over the battery terminals. Align a bracket hole with a monitor hole (the rear-most of the two holes on a monitor side). Then align one of the carrying strap’s holes (grommets) with bracket and monitor holes, with strap outside the bracket. Insert a thumbscrew and tighten. Do the same on the opposite side.

C. Insert a thumbscrew through one of the semi-circular bracket slots (for adjusting monitor tilt) and tighten. Do the same on the opposite side.

ADJUSTING MONITOR TILT: The bracket’s semi-circular slots allow tilt adjustment of the monitor. Loosen the thumbscrews to tilt monitor up or down. Tighten thumbscrews to retain preferred monitor tilt.

6. Connect battery and monitor. Plug the power cord connector (round metal plug) into monitor’s power jack (DC 12V IN). Then push connectors (at other end of the power cord) onto the battery terminals. **IMPORTANT:** Make sure the red (positive +) connector goes on the red (positive +) terminal of the battery.

7. Connect camera cable to monitor. Locate the left cable slot on the plastic carrying shuttle (near the monitor bracket’s base). With the cable connector and about 10 inches of cable extending upward from the slot, work the cable under the monitor and to the monitor’s backside. Plug cable connector into the camera jack (C2) on the upper-left rear of the monitor. Turn locking ring clockwise to secure connection. (Disconnect camera cable from monitor when transporting or storing the unit.)

STORING CAMERA CABLE. To store the camera’s 50-foot cable, wind all the cable onto the shuttle in a clockwise direction. Secure the camera end of the cable by inserting cable into the cable slot on right side of the shuttle. Then place the camera into the yellow fishnet pouch.

FRONT CONTROL BUTTONS

Your Aqua-Vu Scout has six control buttons on the monitor's front — located above the viewing screen. Use them to turn the Scout system on and off; to adjust image brightness and contrast; to turn on/off the camera's invisible infrared lights (LEDs); and to brighten or dim camera's LEDs.

ON/OFF — The push-on/push-off rectangular "POWER" button (at left) turns the Scout monitor and camera on and off. (After tuning on the Scout, the screen may take several seconds to come on. When lit, the red light above this button indicates power is on.)

BRIGHTNESS — The "BRI" knob (near center) controls image brightness. (Adjust according to your preference.)

CONTRAST — The "CONT." knob controls image contrast. (Adjust according to your preference.)

DIMMER — The "DIMMER" knob controls brightness of the camera's invisible infrared lights (LEDs). (Adjust according to light conditions.)

LED ON/OFF — The small rectangular push-on/push off "LED" button turns the camera's invisible infrared lights (LEDs) on and off. When lit, the green light above this button indicates that camera lights are on. (NOTE: Infrared lights are invisible to the human eye. If you want to "test" camera lights, place the camera in a dark area and watch the monitor. With camera lights on, you should be able to "see" in the dark.)

CAMERA — The small rectangular push-on/push off "LED" button (far right) controls the camera video-in. (Leave it in the C2 position.)

REAR PANEL CONTROLS/INPUTS

VIDEO-OUT — (For sending Scout video to another monitor) The VIDEO-OUT jack is for connecting your Aqua-Vu Scout to a handheld camcorder, or to an external monitor (including television), provided it accepts the NTSC video signal and has a "VIDEO-IN" jack. Obtain a patch cord with RCA (phono) plugs on each end. Plug one end of the cord into the "VIDEO-OUT" jack on the Scout; plug the other end into the "VIDEO-IN" jack on your camcorder, VCR, or television. Select CAMERA on slide switch located to the right of the VIDEO-IN jack.

VIDEO-IN — (For using the Scout monitor to receive video from another source.) To receive video from another source, first obtain a patch cord with RCA (phono) plugs on each end. Plug one end of the cord into the "VIDEO-IN" jack on the Scout; plug the other end into the "VIDEO-OUT" jack on your camcorder, VCR, or television. Select VCR on the slide switch located to the right of the VIDEO-IN jack.

CAMERA/VCR — For normal viewing with your underwater camera, slide this selector switch left to CAMERA position. For VIDEO-OUT, also select CAMERA position. For VIDEO-IN, slide selector switch right to VCR position.

C2 — Camera cable plugs into this jack. (C1 is not applicable for the Scout.)

DC 12V IN — For plugging in the power cord that connects battery to the Scout. (See "Connect Battery and Monitor" in this manual.)

THE BATTERY. The Aqua-Vu Scout comes with a rechargeable 12-volt, 4-amp sealed and spill-proof battery (Aqua-Vu part SCT-BATT) designed to fit securely in the carrying shuttle. There is no need to add water or electrolyte. The battery has a one-way relief valve to release excessive gas pressure caused by improper charging.

BATTERY CARE. A fully charged battery can operate the Scout continuously for approximately 4 hours. For longer viewing time the unit may be powered by a larger external 12-volt battery. Follow these simple rules for prolonged battery life and efficient use of your Aqua-Vu underwater viewing system:

- Fully charge the battery as soon as possible after purchase. Charge battery for 8 to 12 hours before first use of the Scout.

- Recharging is recommended after every use. When not in use, recharge every six months.
- Store battery between 30 and 70 degrees F. Service life is shortened by temperatures above 85 degrees F and below 0 degrees F.
- Fasten battery securely in its compartment and minimize shock to the battery.
- Charge battery according to proper procedures. Continuous overcharging or under-charging is detrimental.

Battery charging guidelines:

BEFORE CHARGING — Always disconnect battery from unit before charging. Be sure to connect charger to battery properly — RED (+) to RED (+), and BLACK (+) to BLACK (+).

LOW VS FULLY CHARGED — The Aqua-Vu trickle charger (included with the Scout) will charge the battery from very low (10 volts) to fully charged in about 24 hours. A voltmeter helps determine charge in the battery. Immediately after charging, a voltmeter might read 14 volts or more. Peak performance often occurs at 13 to 13.5 volts. Without a voltmeter, a general rule is to charge the battery for a minimum of 12 hours or a maximum of 24 hours.

OVERCHARGING — The charger provided with the Scout is recommended for charging the battery. It will not overcharge the battery in most cases. Do not charge for more than 24 hours. Avoid using a charging system with more than a 2-amp output. At too-high charging rates, a battery progressively heats up and may be ruined in a few hours.

UNDERCHARGING — Batteries stored too long in discharged conditions accept current at far-below-normal rates during charging. A battery may accept an increasing amount of current until a normal level is reached. However, some discharged batteries never recover. And discharged batteries that freeze may be permanently damaged.

THE FUSE. An automotive-style 2 amp fuse is located on the power cord connecting the Scout viewing system to the battery. This fuse is designed to blow if the battery is improperly connected, or if a short occurs in the system. Always make sure connections are positive (+) to positive (+), and negative (-) to negative (-).

BALLAST WEIGHTS AND STABILIZING FIN

Underwater video cameras are commonly lowered into the water for vertical viewing — from winter fish houses, breakwaters, docks, and fishing piers, as well as from anchored boats and pontoons. But much open-water viewing by anglers is done while drifting or slow-trolling, or while dealing with stream current. In these "moving" situations, the camera is best controlled (held down to lessen "cable drag," and kept forward-oriented) by attaching Ballast Weights and Stabilizing Fin to the camera. Both are included with your Aqua-Vu Scout. NOTE: Ballast Weights and Stabilizing Fin are often removed for ice fishing and other vertical applications.

1. Attaching Ballast Weights — Line up holes in Ballast Weights with the predrilled hole in forward fin (on underside of your Fish-Cam camera). Bolt the weights to Fish Cam. (Plastic bolt included.)

2. Attaching Stabilizing Fin. Slide plastic Stabilizing Fin onto tail of Fish-Cam camera, lining up predrilled holes in Fish-Cam's fins with predrilled holes in Stabilizing Fin. Bolt the Stabilizing Fin to Fish-Cam. (Plastic bolts included.)