



# **AWT150C/AWT150CS/ AWT151C CCD Camera**

**USER MANUAL**  
**ISSUED OCTOBER 2018**

## **⚠ WARNING**

Failure to follow all instructions and safety precautions in this manual, in the vehicle and body manufacturers' manuals and on the safety decals attached to the vehicle, body and this product could result in serious injury or death to operators, service technicians or bystanders and/or damage to property.

DO NOT operate the vehicle or install this product before you READ and UNDERSTAND the vehicle Operation Manual, this manual and other applicable manufacturers' manuals, and all safety decals. This product must be installed by certified technicians/installers familiar with the vehicles on which they will be making the installation.



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## SAFETY PRECAUTIONS

### Federal Communications Commission (FCC) Statement

This Equipment has been tested and found to comply with the limits for a Class B digital device, 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.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

## NOTICE

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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 and,
  2. This device must accept any interference received, including interference that may cause undesired operation
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## PRODUCT DOCUMENTATION UPDATES

Thank you for purchasing our product. Please read this User Manual before using the product. All product documentation is subject to change without notice. Please go to [www.3rdeyecam.com](http://www.3rdeyecam.com) to get the most current documentation for your 3rd Eye products.



**USER MANUAL**  
**AWT150C/AWT150CS/AWT151C**

**AWT150C/AWT150CS/AWT151C**  
**CCD CAMERA**

**USER MANUAL**  
**ISSUED OCTOBER 2018**  
**3E-AWT150-UM-1018**

# USER MANUAL

## AWT150C/AWT150CS/AWT151C

### INFORMATION

NOTE: Before attempting to hook up and operate, please read this manual.

1. To reduce the risk of electronic shock, do not remove cover or back. No user serviceable parts are inside. Refer servicing to qualified service personnel.
2. Never point the camera toward the sun. The lens should never be directly exposed to the sun or to strong light as this may damage the pick-up device.
3. Handle this camera with care. Avoid severe shock or impact to the camera as it contains sensitive parts which can be damaged by improper handling.
4. The allowable temperature range for operation of this camera is between -20 to 65°C (-4 to 146°F)

# USER MANUAL

## AWT150C/AWT150CS/AWT151C

### FEATURES

The AWT150C is a heavy duty CCD color camera that delivers both high image quality and high durability no matter what the operating conditions are. Dual housing design keeps any moisture or water that may leak from the harness from getting inside the camera. Sturdy aluminum die-cast external housing ensures the durability of the camera body. This weatherproof back up color camera features built-in infrared LED's for increased light sensitivity and an integrated microphone so you can hear as well as see what is behind your vehicle.

The AWT150CS features the same design as our AWT150C with the added shutter capability. The front gate shutter prevents visibility from being obstructed by mud, grit, water, etc., ensuring you always have a clear view.

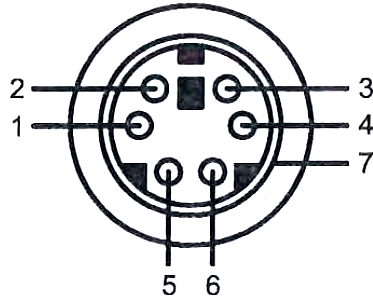
1. 1/3" Sony Super HAD color CCD sensor
2. Electronic auto iris control
3. AWB (Auto White Balance)
4. Back light compensation (BLC on)
5. IP 68 (AWT150C, AWT150CS)
6. IP 69K (AWT151C)
7. 10G shock/vibration
8. G-Force Rating: 30
9. Isolated Ground
10. Automatic heater
11. AWT150C-Mirror switch
12. AWT150CS-Electronic-operated shutter

# USER MANUAL

## AWT150C/AWT150CS/AWT151C

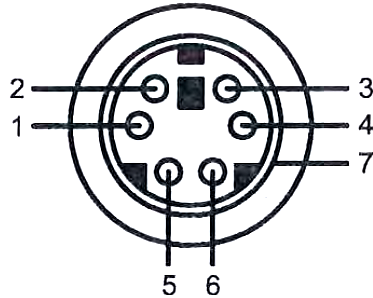
### CAMERA CABLE PIN FUNCTION

#### AWT150C



1. Video
2. GND (Option)
3. Audio
4. Power
5. GND
6. GND
7. Shield GND

#### AWT150C



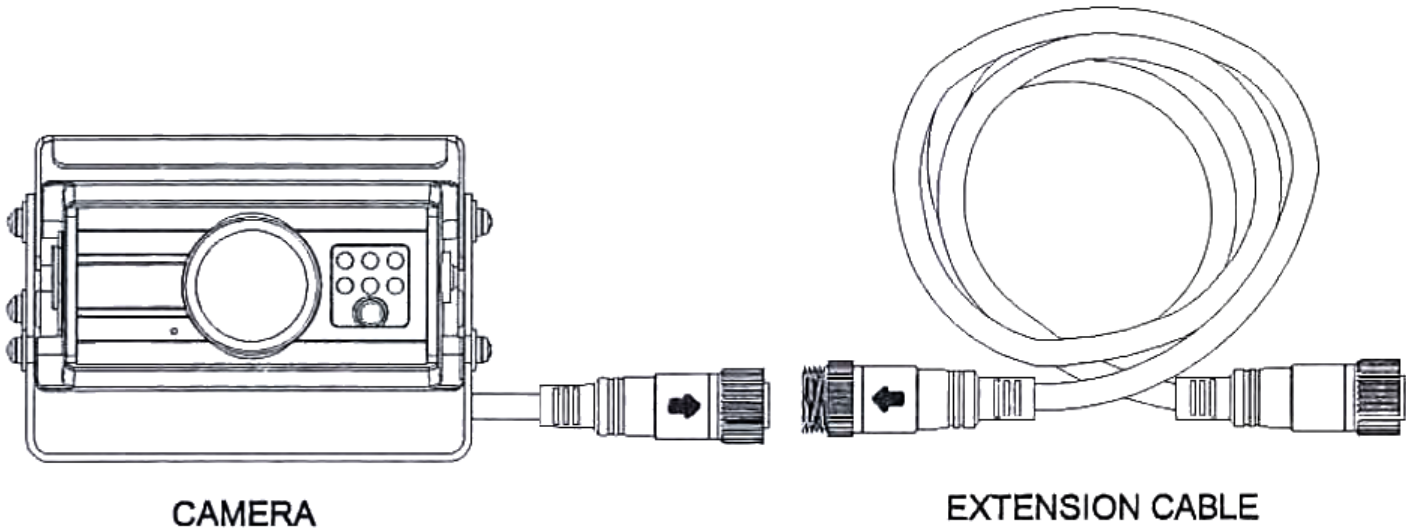
1. GND
2. Audio
3. Option
4. Video
5. Camera B+
6. ST B+
7. Can Shield GND



# USER MANUAL

## AWT150C/AWT150CS/AWT151C

### DIN PIN WATERPROOF ASSURANCE



**NOTE:** Wrap the whole cable connection from one end to another end with Weather-Sealer Strip (NOT SUPPLIED) to ensure adequate insulation against water.

# USER MANUAL

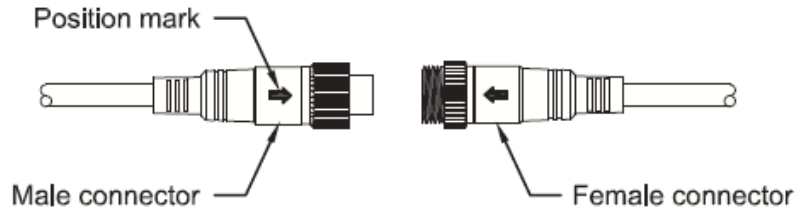
## AWT150C/AWT150CS/AWT151C

### HOW TO CONNECT THE CABLE

Follow the instructions below when connecting the cable and camera.

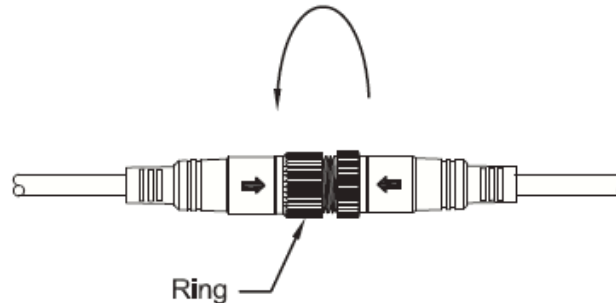
#### STEP 1:

Line up the position marks on the male connector and female connector as shown in image below.



#### STEP 2:

Rotate the ring on the male connector by hand as shown in image below.



#### STEP 3:

Then screw in securely to the threads on the female connector.

# USER MANUAL

## AWT150C/AWT150CS/AWT151C

### SPECIFICATIONS

<b>Electrical</b>	
Single Format	NTSC
Image Device	1/3" Sony Super HAD Color CCD
Picture Element	270,000 Pixels NTSC AWT150C &AWT150CS 520,000 Pixels NTSC AWT151C
Synchronization	Internal SYNC
Resolution	420 TV Lines AWT150C, AWT150CS 650 TV Lines AWT151C
S/N Ratio	More than 45dB
Video Out	75 Ohm 1Vp-p composite Signal
Audio Out	600 Ohm
IRIS	Electronic Auto IRIS System
Operating Voltage Range	9V-15V

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## AWT150C/AWT150CS/AWT151C

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### SPECIFICATIONS (CONTINUED)

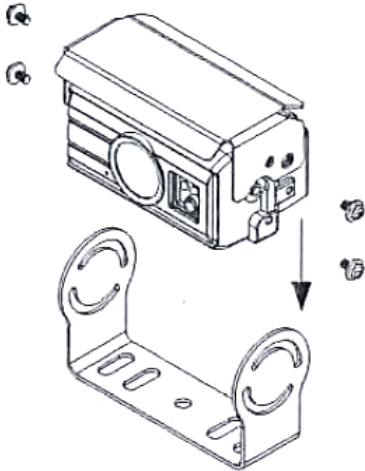
Optical	
Lens	F=2.0 H:120° V:90° Diagonal 150°
General	
Operating Temperature	-20°C - 65°C/-40° - 65°C (with Heat)
Accessories	
Supplied Accessories	Mounting Bracket & Screw Kits, Sun shield

# USER MANUAL

## AWT150C/AWT150CS/AWT151C

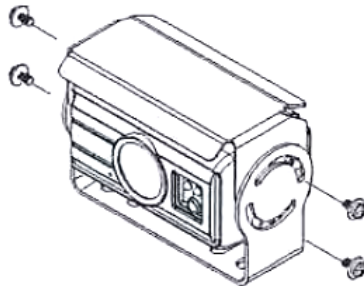
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### BRACKET INSTALLATION



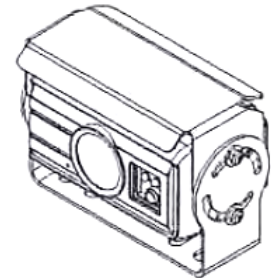
#### STEP 1

Confirm parts quantity.  
Hold the bracket and to  
aim at middle of screw hole.



#### STEP 2

To aim at middle of screw hole.  
then, make sure screws to aim at all  
holes each site has 2 screw holes.



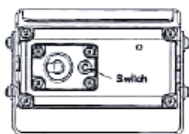
#### STEP 3

Make sure the screws are tight.  
Adjust protection cover and  
angle of bracket properly to  
your need.

# USER MANUAL

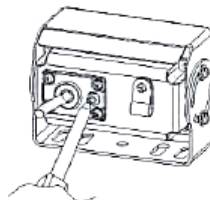
## AWT150C/AWT150CS/AWT151C

### MIRROR/NORMAL VIEW SWITCH



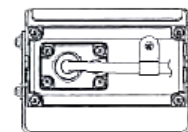
#### STEP 1

User can see the rubber button on the back of the camera, which enables the Mirror (M) or Normal (N) setting from the camera.



#### STEP 2

Use a screw driver and push the rubber button. Please confirm the selection from the switch whether it changed to Mirror or Normal via monitor.



#### STEP 3

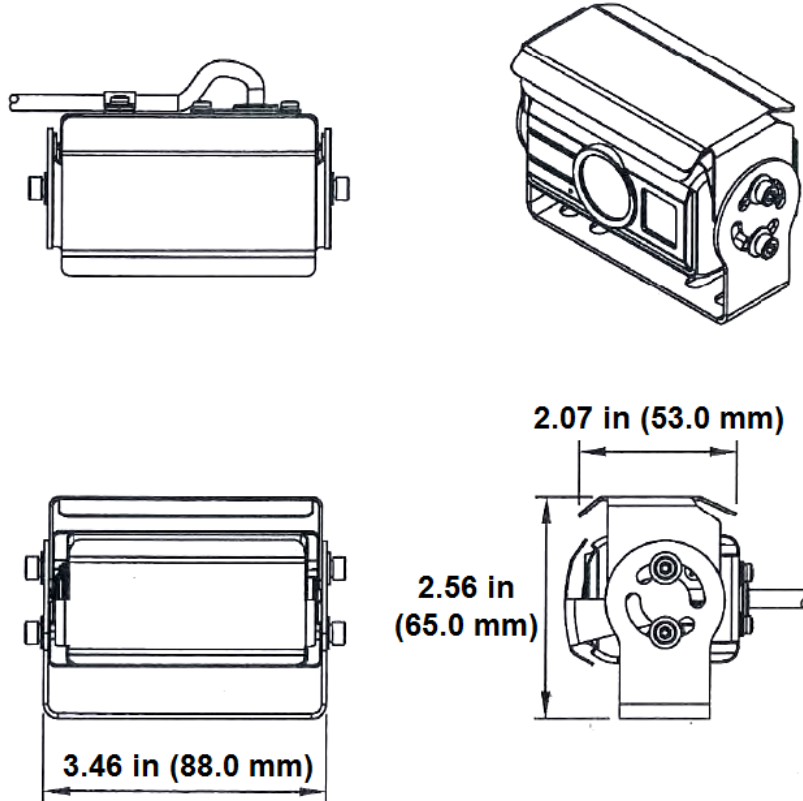
Please make sure that the image is on Mirror (M) or Normal (N) mode based on your need.

**NOTE:** This camera is fixed in Mirror mode for default. If it needs to be changed, please adjust it from your monitor.

# USER MANUAL

## AWT150C/AWT150CS/AWT151C

### DIMENSIONS



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# 3RD EYE WARRANTY

## 3RD EYE PRODUCTS LIMITED WARRANTY

3rd Eye warrants that the 3rd Eye Hardware and Software, as delivered by 3rd Eye to Client, will be free from defects in materials and workmanship in accordance to the terms and conditions specified herein. This warranty is a "parts replacement only" policy, and does not cover labor. Other limitations apply as provided below.

## TERMS & CONDITIONS

### DEFINITIONS

- 1.1 "Hardware" means cameras, monitors, Gateway and related peripheral hardware.
- 1.2 "Software" shall mean the Application or Embedded Software.
- 1.3 "Self-Service Client" shall mean any client that maintains their own equipment and is not under Service Agreement with 3rd Eye.

### WARRANTY PERIOD

- 2.1 Unless a separate written Agreement with 3rd Eye is provided, a 1 Year warranty from the original date of hardware installation or the original date of purchase, whichever occurs first shall apply. Troubleshooting, labor, travel time, freight and miscellaneous costs are not covered.
- 2.2 New replacement hardware covered under warranty shall be covered under warranty for the remaining period of the initial warranty term.
- 2.4 Refurbished hardware and hardware installed by the customer shall carry a 90-day replacement warranty from the original date of hardware installation or the original date of purchase, whichever occurs first shall apply.
- 2.5 Labor and workmanship provided by a certified 3rd Eye technician shall carry a 90-day replacement warranty from the original date of service.

### WARRANTY REIMBURSEMENT

- 3.1 To submit for warranty reimbursement, Client must notify 3rd Eye in writing by obtaining a 3rd Eye Return Material Authorization (RMA) number within the relevant Warranty Period. The authorized RMA the Client receives must be marked on the outside of the package returning the failed component and sent prepaid and packaged appropriately for safe shipment. The RMA number will serve as the warranty claim reference number. 3rd Eye will either repair or replace the defective component at its discretion. To request for an RMA number please complete the online RMA form found at [www.3rdEyecam.com](http://www.3rdEyecam.com) or call 866.804.2984.
- 3.2 If the failure analysis of the returned hardware determines the cause of failure was other than material or workmanship covered under the terms of this limited warranty, the CUSTOMER agrees to pay 3rd Eye Cam for the replacement hardware, labor and expenses.

### WARRANTY DISCLAIMER

- 4.1 This warranty shall become null, void, and not apply if Client fails to notify 3rd Eye in writing of such defects prior to the expiration of the Warranty Period, if the defect is not reproducible, or if the defect is caused by (a) customer damage, negligence, misuse, tampering, accident, fire, variation or interruption of electricity; (b) failure by Client to properly install, maintain, or use the 3rd Eye Hardware or the Third Party Hardware; (c) alterations made by anyone other than 3rd Eye to the 3rd Eye Hardware or the hardware and/or software that interfaces with the 3rd Eye Hardware after installation; (d) any attempt to service the 3rd Eye Hardware other than by 3rd Eye's service technicians or (e) any hardware, software or part not approved by or not supplied by 3rd Eye. 3rd Eye shall not be responsible for the safeguarding or retention of Client's or any third-party software, firmware, information or memory data contained in, stored on, or integrated with any 3rd Eye Hardware that is returned to 3rd Eye pursuant to any warranty provided under this Agreement.
- 4.2 3rd Eye hereby disclaims all warranties, express, implied, or statutory, including, without limitation, the warranties of merchantability, fitness for a particular purpose. 3rd Eye makes no claim that the software will work in combination with any hardware or software products provided by third parties, that the operation of the software will be uninterrupted or error-free, that all defects in the software can be corrected, or that any specific result or outcome will be achieved by utilizing the products or third-party hardware provided by 3rd Eye.



a **DOVER** company

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