

1/2.8" Ultra-compact USB2.0 Full HD Camera

WAT-08U2 (G3.6) (Color)

WAT-09U2 (G3.6) (B&W)

Operation Manual

Thank you for purchasing the "1/2.8" Compact USB2.0 Full HD Camera **WAT-08U2 (G3.6)** / **WAT-09U2 (G3.6)**" (referred to as the "product" or "camera" in this manual). This operation manual covers safety, functions, installation and the correct operating procedure for the camera. First, we ask you to read this operation manual thoroughly, then install and operate the product as advised. For future reference, we also advise safekeeping of this manual. If you do not understand the installation, operation or safety instructions expressed in this manual, please contact the distributor or dealer from where the camera was purchased. Not understanding the contents of the operation manual sufficiently may cause damage to the camera, personal belongings and/or result in injury. Watec is not responsible for any inconvenience or the attendant damages to the video and monitoring recording equipment caused by misuse, miss-operation or improper wiring of our equipment.

To Use This Product Safely

Watec cameras are designed to be used safely. If not used safely, it may lead to a physical accident caused by fire and electric shock. Therefore, please keep and read the "Cautions for safety" (P.2) for protection against accidents.

Guide to the Safety Symbols



"DANGER" indicates a compulsorily prohibition to prevent accidents.



"Warning" may lead to a serious accident such as death or injury caused by fire or electric shock.



"Caution" may incur injury and cause damage to peripheral objects in the immediate surroundings.

Cautions for Safety

Please read and understand the "Cautions for safety" below to ensure the correct use of the product.

DANGER

- **Do not disassemble and/or modify the camera.**
- **Do not operate the camera with wet hands.**

WARNING

- **Do not expose the camera to wetness or high moisture conditions.**

The camera is designed and approved for indoor use only. The camera is not water-resistant or waterproof. If the location of the camera is outdoors or in an outdoor like environment, we recommend that you use an outdoor camera housing.

- **Protect the camera from condensation.**

Keep the camera dry at all times during storage and operation.

- **Should the camera not work properly, unplug the power immediately.**

Check the camera according to the "Problems and Trouble shooting" (P.4) section.

CAUTION

- **Avoid the striking of hard objects or dropping the camera.**

The camera use high quality electrical parts and precision components and may inadvertently be damaged if not cared for properly.

- **Do not install the camera in a position subject to direct sunlight.**

Sunlight shining directly onto the camera lens can cause damage to the sensor.

- **Select a stable place for installation of the camera.**

Use an appropriately rated mount durable and strong for all installation position.

- **Do not move the camera with the cables connected.**

Before moving the camera, always remove the cable from the camera first.

- **Avoid using the camera near any strong electro-magnetic field.**

Avoid emission sources of electromagnetic waves when the camera is installed into main equipment.

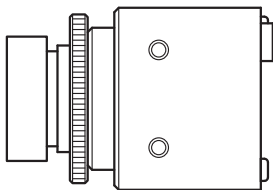
About Video Disturbances

- **Occurrence of video disturbance in specific settings**

The video disturbance occurs by raising the gain too high when the Frame Rate "30 fps", Output Size "1920x1080", Color Space/Compression "MJPG" or Frame Rate "60 fps", Output Size "1280x720", Color Space/Compression "MJPG". In this case, lower the Frame Rate or Output Size, or change the Color Space/Compress to the "YUY2" .

Contents

Referring to the illustration below, confirm all parts are present upon receipt of camera.

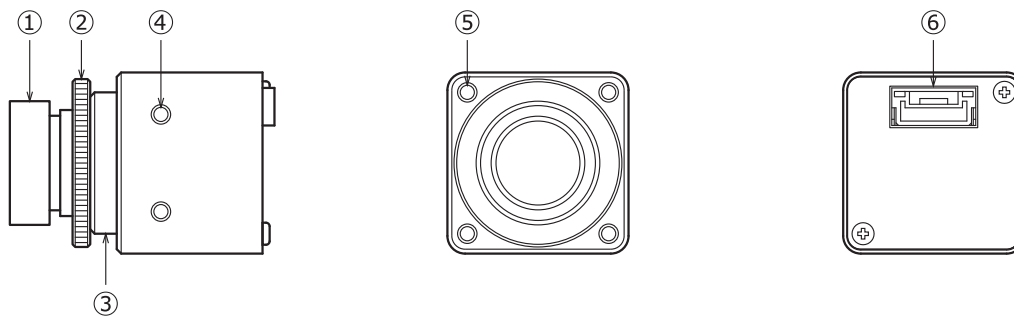


WAT-08U2 (G3.6) / WAT-09U2 (G3.6) (Camera)



USB Cable (1m)

Description of Parts



① **LENS** (Standard: M3620BC-12 (f3.6 F2.0))

Dirt, water or oil deposits on the image sensor will cause an unclear picture on the monitor.

② **M12 LENS FIXING RING**

Ring for fixing the lens.

③ **LENS MOUNT**

Mount for attaching a lens. (Miniature, M12)

④ **MOUNTING HOLES** (Screw Size: M2, Depth: 3mm)

Screw holes for fixing the camera.

There are two M2 screw holes on each side.

⑤ **MOUNTING HOLES** (Screw Size: M2, Depth: 3mm)

Screw holes for fixing the camera.

There are four M2 screw holes on the front of the camera.

⑥ **USB COMPATIBLE CONNECTOR**

This connector is used to connect the dedicated USB cable supplied with the camera.

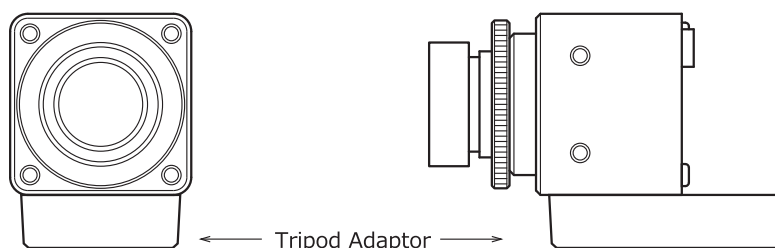
(Commercially available USB 2.0 cables cannot be used.)

Set-up and Operation

- 1) Connect "⑥USB COMPATIBLE CONNECTOR" on the camera to the USB2.0 host adapter on the PC using the supplied USB cable. Make sure the connector is fully inserted and the connector lock is working.
- 2) Start the software application and adjust the lens while viewing the image displayed.
- 3) When adjusting the lens focus, loosen the "②M12 LENS FIXING RING" and turn the lens left or right to adjust the focus while viewing the monitor image. After the adjustment is completed, fasten the lens fixing ring.
- 4) When detailed settings are required or an adequate image is not obtained, then set the functions with the software or app.
*Download the software, app and user's manual URL: https://watec.co.jp/English/e_download.html
- 5) When you finish using the camera and unplug the USB cable from the camera, make sure the lock is released by pressing the connector claw. Please note that pulling on the connector while the lock is in operation may cause damage.

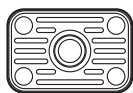
About Tripod Adaptor

If using the **B005** (Tripod adaptor), refer to the figure below and secure it to the camera using the M2 x 6mm screws (included).



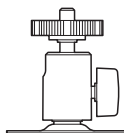
Options

Contact the distributor or dealer from which the camera was purchased.



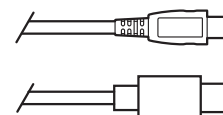
B005

Tripod adapter to fix the camera to the **MS50** (stand), a tripod, etc.



MS50

With the coupler structure, the camera can be adjusted to any desired angle.



Micro-B

Type-C

USB Cables

USB cables with a host connection other than Type-A are also available.

Problems and Trouble Shooting

Trouble Shooting:

Disconnect the camera immediately should any of the following occur:

- An optimal picture cannot be obtained, after checking that all the cables and connections are correctly in place
- Smoke or any unusual odor emerges from the camera
- An object becomes embedded or a quantity of liquid seeps into the camera housing
- More than the recommended voltage and/or amperage has been applied to the camera by mistake
- Anything unusual occurring to any equipment connected to the camera

Required Action:

- 1) Remove the USB cables connected to the peripheral equipments.
- 2) Contact the distributor or dealer from which the camera was purchased.

After-sales Service

Warranty

All Watec products before being shipped to our customers are tested and inspected to ensure that our products are not faulty and are of the highest quality as directed by our Watec Quality-control System. Watec camera have a 3-year warranty, and the board camera units and peripherals have a 1-year warranty, provided that the products have been operated in accordance with our operation manual and have not been altered in any way.

Note: The Watec 3-year warranty does not cover image sensor repair or replacement caused by white blemish phenomena. For more details about the white blemish, please refer to the "After-sales Service" on our website or catalog.

Repair Service

Watec makes it a policy to repair Watec products first hand with the appropriate charge in accordance with the detailed defect information supplied by you. All repairs in the Watec workshop are quickly and precisely dealt with and returned after the shortest repair period possible.

Contact information

Design and specifications are subject to change without notice. If for any reason the camera does not work properly, or if you have any questions regarding installation or operation, contact the distributor or dealer from which the camera was purchased.

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