

WAT-240F25/50

Operation Manual

This Operation Manual covers safety, camera functions, installation and the correct operating procedure for the WAT-240F25/50. First, we ask you to read this Operation Manual thoroughly, then install and operate the WAT-240F25/50 as advised. In addition, for future reference, we also advise safekeeping of this manual.

Please contact the distributor or dealer from which the WAT-240F25/50 was purchased, if you do not understand the installation, operation or safety instructions laid out in this manual. Not understanding the contents of the Operation Manual sufficiently may cause damage to the camera.

Guide to the Safety Symbols

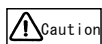
The definitions of the symbols used in this operation manual are:



When you do not adhere to or take notice of the "Danger" sign, it may lead to a serious accident such as death or injury caused by fire or electric shock.



When you do not adhere to or take notice of the "Warning" sign, it may cause severe damage such as a physical injury.



When you do not adhere to or take notice of the "Caution" sign, it may incur injury and cause damage to peripheral objects in the immediate surroundings.

Cautions for Safety

WAT-240F25/50 is designed to be used safely, however it may lead to a physical accident caused by fire and electric shock if not used correctly. Therefore, please keep and read the "Cautions for Safety" below for protection against accidents.



- Do not disassemble and/or modify the WAT-240F25/50.
- Do not operate the WAT-240F25/50 with wet hands.



- Use only the AD603-120/230 or equivalent power adaptor for the WAT-240F25/50.
The recommended voltage is DC+6V ± 10%
- Do not expose the WAT-240F25/50 to wetness or high moisture conditions.
The WAT-240F25/50 is designed and approved for indoor use only. The WAT-240F25/50 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 WAT-240F25/50 from condensation.
Keep the WAT-240F25/50 dry at all times during storage and operation.
- Should the camera not work properly, switch off the power immediately. Then check the camera according to the "Problems and Trouble Shooting" section.



- Avoid the striking of hard objects or dropping the WAT-240F25/50.
The WAT-240F25/50 uses high quality electrical parts and precision components.
- Do not connect any power supply directly to the video out terminal of the unit.
Do not connect the WAT-240F25/50 with any monitor using a video/power single transmission terminal. The WAT-240F25/50 is not designed for use with this type of equipment. We also advise you to read the operation manual of the monitor you plan to use before any connections are made.
- Do not install the WAT-240F25/50 in a position subject to direct sunlight.
Sunlight shining directly onto the WAT-240F25/50 lens can cause damage to the CCD.

- Select a flat and stable surface for the WAT-240F25/50.
- Do not move the WAT-240F25/50 with the cables connected.
Before moving the WAT-240F25/50 always remove the video cable and power cable from the rear of the camera first.
- Avoid using the WAT-240F25/50 near any strong electromagnetic field.
After installing into main equipment, if the WAT-240F25/50 is exposed to electromagnetic waves causing the monitored image to become distorted, we recommend the camera be shielded by appropriate protective casing.

Problems and Trouble Shooting

If any of the following problems occur when using the WAT-240F25/50,

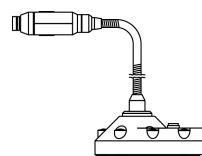
- An optimal picture cannot be obtained, after checking that all the cables and connections are correctly in place
- Smoke or any unusual odor emerges from the WAT-240F25/50.
- An object becomes embedded or a quantity of liquid seeps into the camera housing
- More than the recommended voltage or/and amperage has been applied to the WAT-240F25/50 by mistake
- Anything unusual occurring to any equipment connected to the WAT-240F25/50.

Disconnect the camera immediately according to the following procedures:

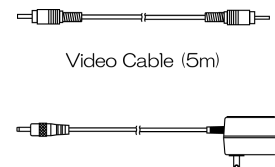
- ① Switch off the main power supply to the camera.
- ② Remove the power and video cables connected to the WAT-240F25/50.
- ③ Contact the distributor or dealer from which the WAT-240F25/50 was purchased.

Contents

Using the contents figures below, check to make sure all parts are present before use.



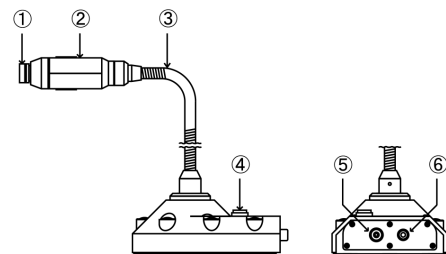
WAT-240F25/50



Video Cable (5m)

AC Adaptor (AD603-120/230)

Description of Parts



① LENS

A standard lens or a specified lens.

② CAMERA HEAD

The imaging angle on the monitor can be easily changed.

③ ADJUSTABLE FLEXIBLE ARM

The camera angle can be adjusted.

④ ON/OFF SWITCH

The switch for turning on/off of the camera.

⑤ POWER IN

The terminal designed for connection with the DC-plug of the power adaptor.

⑥ VIDEO OUT

The terminal for composite video signal output.

Power Supply

If any other power adaptor besides the AD603-120/230 is used, please use a stabilized power adaptor designed for DC+6V±10%, with a current capacity of more than 300mA. Use the optional DC plug if the shape or polarity of the DC plug of the power adaptor to be used is not compatible with the camera.

Set-up and Operation

- 1) Ensure that the power to the WAT-240F25/50 and the peripheral equipment is turned off before making any connections.
- 2) Connect ⑥VIDEO OUT on the WAT-240F25/50 with input terminal of the monitor or peripheral equipment, using attached video cable.
- 3) Connect a DC plug of attached AC adaptor(AD603-120/230) with ⑤POWER IN.
- 4) Push the ④ON/OFF SWITCH and turn on the power to the WAT-240F25/50.
(The LED ON/OFF SWITCH will be illuminated when the camera is on.)
- 5) Adjust the camera angle with the flexible-arm.
- 6) Adjust the focus by turning the lens clockwise or counterclockwise while looking at the monitor.
- 7) Adjust the imaging angle on the monitor by turning the camera head clockwise or counterclockwise.

Specifications

Model	WAT-240F25	WAT-240F50
Number of Total Pixels	811(H) × 507(V)	
Number of Effective Pixels	768(H) × 494(V)	
Unit Cell Size	4.9 μm(H) × 5.6 μm(V)	
Electronic Iris	1/60-1/100000 sec.	

Model	WAT-240F25	WAT-240F50
Number of Total Pixels	795(H) × 595(V)	
Number of Effective Pixels	752(H) × 582(V)	
Unit Cell Size	5.0 μm(H) × 4.7 μm(V)	
Electronic Iris	1/50-1/100000 sec.	

Model	WAT-240F25	WAT-240F50
Pick-up Element	1/4 inch interline transfer CCD image sensor	
Imaging system	Ye, Cy, Mg, and G complementary color mosaic filters on chip	
Sync. System	Internal	
Scanning System	2:1 interlace	
Video Output	Composite video, 1.0 V(p-p) 75 Ω (Unbalanced)	
Resolution (H)	More than 450TVL (Center)	
Minimum illumination	6.0 lx. F5.0	
S/N	More than 50dB (AGC=6dB, γ=1.0)	
White Balance	ATW	
AGC	6-30dB	
Gamma Characteristics	γ ≒ 0.45	
Power Supply	DC+6V±10%	
Power Consumption	1.05W (175mA)	
Operating Temperature	-10 - +40°C (Without condensation)	
Operating Humidity	Less than 95%RH	
Storage Temperature	-30 - +70°C (Without condensation)	
Storage Humidity	Less than 95%RH	
Lens Mount	M13 P=1.0	
Size	φ 23 × 90.5(Camera)+260(Arm)+63(Stand) mm (F25) φ 23 × 90.5(Camera)+486(Arm)+69(Stand) mm (F50)	
Weight	Approx. 550g	Approx. 610g

- Design and specification are subject to change without notice.
- Watec is not responsible for any inconvenience or the attendant damages to the video and monitoring recording equipment caused by misuse, mis-operation or improper wiring of our equipment.
- If for any reason the WAT-240F25/50 does not work properly, or if you have any questions regarding installation or operation, please contact the distributor or dealer from which it was purchased.

Contact information

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