UNDERWATER CAMERA SYSTEM

INSTALLATION GUIDE & MANUAL

Read these instructions carefully before operating this device

Waterproof Color Video Camera

Contents

Warning and Precaution 1

Warning 1
Precaution 1

Introduction 1

7 inch TFT LCD color monitor 1
Camera 2
Remote control 4

DVR operation 5

Connection 9

Connection diagram 9
Charging connection diagram 10

Specifications 11

Troubl eshooting guide 12

Warning and Precaution

Warning

Please use the adapter together with the product only! We are not responsible for the problem caused any other adapter

Precaution

1. A good image is not available when camera just opposite to the sun, also for safety do not put the camera under the blazing sunshine for quite a long thime;
2. Put the camera at a appropriate position for a good image;
3. To keep it well-preserved,please wash the camera and cable by soap or warm water after using;
4. Warranty is not a available if the unit being opened.

Introduction

7 inch TFT LCD color monitor

Compliant (Model No.: 7- 7A- 7B- 7C- 7J- 7P- 7Q)

1.RECEIVING WINDOW
2.AV1/AV2 SWITCH
3.MIRROR BUTTON
4.4:3/16:9 SWITCH
5.MENU
6.MENU UP
7.MENU DOWN
8.POWER SWITCH

Camera

Model NO.: CE-430I

1. 20m ,30m, 50m cable optional (up to 300 meters is available)
2. white light IR light (optional)
3. video output
4. DC 12V input (female)
5. DC 12V input (male)

Model NO.: CE-430IA

1. 20m ,30m, 50m cable optional (up to 300 meters is available)
2. white light IR light (optional)
3. video output
4. DC 12V input (female)
5. DC 12V input (male)

Model NO.: CE-430IB

1. 20m ,30m, 50m cable optional (up to 300 meters is available)
2. white light IR light (optional)
3. video output
4. DC 12V input (female)
5. DC 12V input (male)

Model NO.: CE-430IC

1. 20m ,30m, 50m cable optional (up to 300 meters is available)
2. white light IR light (optional)
3. video output
4. DC 12V input (female)
5. DC 12V input (male)

Model NO.: CE-430AI

1. 20m ,30m, 50m cable optional (up to 300 meters is available)
2. white light IR light (optional)
3. video output
4. DC 12V input (female)
5. DC 12V input (male)

Model NO.: CE-430AP

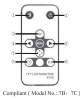
1. 20m ,30m, 50m cable optional (up to 300 meters is available)
2. white light IR light (optional)
3. video output
4. DC 12V input (female)
5. DC 12V input (male)

Model NO.: CE-430Q

1. 20m ,30m, 50m cable optional (up to 300 meters is available)
2. white light IR light (optional)
3. video output
4. DC 12V input (female)
5. DC 12V input (male)

Remote control

Compliant (Model No.: 7- 7A- 7J- 7P- 7Q)



1. Mute
2. Power
3. AV1/AV2 Switch
4. Adjustment Key+
5. Adjustment Key-
6. Menu
7. Mode Switch
8. Time
9. P.P mode

Compliant (Model No.: 7B- 7C)

1. Mute
2. Menu
3. Adjustment Key+
4. AV1/AV2 switch
5. Image display angle
6. Power
7. Adjustment Key-
8. Mode switch
9. Lamp switch
10. Electronic expension
11. Rotation speed
12. Manual-settings
13. Refresh
14. Manual rotation
15. Automatic rotation
16. LED light
17. Depth and temperature Left
18. Speed Right
19. OSD/Refresh
20. AUTO/MANU

DVR operation

1. This DVR funetion support SD card max to 16GB.
2. Funetions: manual camera, video; motion detection camera, video; motion detection ranges are: 1/16, 1/4 or full screen , Another timer recording funetion.
3. Format of Photo: JPEG, resolution 720x576;
4. Format of Video: AVI, QVGA(320x240), or DI(720X480);

Operation

Key	Function
^	Up/Volume up
v	Down/Volume down
<	Left/Fast forward
>	Right/Fast reverse
OK	OK/Record
MENU	Menu
P/P	Play/Pause/Delete files
STOP	Stop recording/Stop playback
ESC	ESC/Playback

Press the button "ON/OFF" to turn on the DVR funetion, press the button "ON/OFF" more than 5 seconds to shut off the DVR funetion.

Step 1: Press the Menu button to enter the setup menu, then press the Menu key's to "confirm". Other keys such as UP / DOWN / LEFT / RIGHT keep funetion themselves , please select "Exit" to exit DVR and press the "Menu" key to confirm exit .

Step 2: Some working times of the DVR can be set through selection of the various parts in the contents of a menu setting step by step.

1.Manual Capture
- 2. Master CH >>>>>>> 3.Photo 1 / Photo 3 / Movie / Movie Clip / EXIT
- EXIT

1.ato Capture
- 2. Auto Capture >>>>>>> 3.ON / OFF / EXIT
- EXIT >>>>>>> 3.Photo / Photo 3 / Movie 5 seconds / Movie 10 seconds / EXIT
- 2.PreRecord >>>>>>> 3.Movie 5 seconds / Movie 10 seconds / OFF / EXIT
- EXIT

1.Movetion Detect
- 2. Range >>>>>>> 3.1/2 / 1/4 / 1/16 / EXIT
- 2. Range >>>>>>> 3.1/2 / 1/4 / 1/16 / EXIT
- 2. Timeslot >>>>>>> 3.1 second / 3 second / 5 second / EXIT

- 2. Sensitivity >>>>>>> 3.Low / Middle / High / EXIT

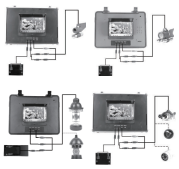
1.Advanced Setting
- 2.Photo Quality >>>>>>> 3.High / Standard / Low / EXIT
- 2. Movie Size >>>>>>> 3.QVGA / D1 / EXIT
- 2.PreRecord >>>>>>> 3.Movie 5 seconds / Movie 10 seconds / OFF / EXIT
- 2. File Overwrite >>>>>>> 3.ON / OFF / EXIT
- 2. TV output >>>>>>> 3.NTSC / PAL / EXIT
- 2. Format Card SD >>>>>>> 3.YES / NO
- 2.Beep >>>>>>> 3.ON / OFF / EXIT

- 2. Set to Deault >>>>>>> 3.YES / NO
- 2.Disk Info >>>>>>> 3.Free / Total / EXIT
- 2.FW Version >>>>>>> 3.Free / Total / EXIT

1. Set Time / Date
- 2.Set Time /Date >>>>>>> 3.YY/MM/DD / 00:00:00 / YY/MM/DD / EXIT
- 2. Photo TimeStamp >>>>>>> 3.ON / OFF / EXIT
- 2. Movie TimeStamp >>>>>>> 3.ON / OFF / EXIT

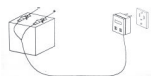
Connection

Connection diagram



The depth of field (distance the camera can see underwater) depends on the clarity of the water and available light at the depth the camera is used. In clear water, the depth of field can be many feet but in cloudy or muddy water the depth of field can be reduced to only a few inches due to particles suspended in the water.

Charging connection diagram



When the green LED light is on, disconnect the charger from the battery terminal and the wall outlet. If the green LED light does not come on after 10 to 12 hours of charging time or the green LED light comes on relatively soon after the charger is plugged in, this may indicate that the battery will not accept a full charge. If this occurs and else your camera run time is greatly diminished, you may need to replace with a new battery of equal specification.

If your viewing image appears cloudy, fuzzy or the screen begins to shrink, check your battery charge. One of the major symptoms of a dealer needs battery is the degrad ation of your viewing image.Recharging your battery or if the battery is unable to hold the charge,replace it with a new one of similar specification.

Tip: To preserve battery run time, please disconnect the battery cable when the system is not in use.

Specifications

Item	Model	Monitor	Camera
Screen size(diagonal)	7 inch	Image Sensor	1/3 inch CMOS
Aspect ratio(wide)	4:3/16:9	Resolution	420 TV Lines
Resolution	480 x 234 pixels	Pixels	440K Effective pixels
Color system	NTSC	Color system	NTSC
Audio	Mono	Electronic shutter	Auto
Power	12VDC	Minimum illumination	0.5Lux
Power consumption	250mA	Lens	3.6mm
Environment used	Indoor	Sync	Internal
Dimensions	6.7"W x 4.5"H x 1.2"D	Signal output	1.0Vp-p, 75ohm
Weight	0.5KG	Signal output jack	Phono connector
Item	Model	Power	Power Source
Power	12VDC	Current draw	250mA max
Battery	Optional	Battery	Optional
Audio	Mono	Audio	Mono
Video system	NTSC	Video system	NTSC
Sync	Ext	Sync	Ext
Minimum illumination	0.5Lux with 0.1Lux	Minimum illumination	0.5Lux
Lens	3.6mm	Lens	3.6mm
Sync	Internal	Sync	Internal
Signal input	1.0Vp-p, 75ohm	Signal output	1.0Vp-p, 75ohm
Signal input jack	Phono connector	Signal output jack	Phono connector
Audio	Mono	Audio	Mono
Speaker	1.5"	Video system	NTSC
Video system	NTSC	Sync	Ext
Sync	Ext	Minimum illumination	0.5Lux
Signal input	1.0Vp-p, 75ohm	Lens	3.6mm
Signal input jack	Phono connector	Sync	Internal
Audio	Mono	Signal output	1.0Vp-p, 75ohm
Speaker	1.5"	Signal output jack	Phono connector
		Audio	Mono
		Video system	NTSC

Troubl eshooting guide

SYMPTOM	CAUSE	ACTION
No picture & no sound	No power supplied to unit	Check power source
Blotch & unstable picture	Monitor/lens voltage)	Check voltage source for correct voltage
Black picture	Monitor	Check lens, if ok, check camera, if ok, check for black monitor power assembly for loose or broken wire connections, if all above is ok, replace monitor
White picture	Monitor	Check lens sensor cable, make sure all connection are mated properly If all connections are ok, replace camera
White picture	Camera	Replace camera
Blurred picture	Dust film, mist,water or fog on camera lens	Clean camera
Moisture in camera	Camera	Replace camera, if not ok put for maintenance service
Engine noise or static lines	Monitor	Check ground and DC 12V power supply, if not ok, if ok, replace monitor