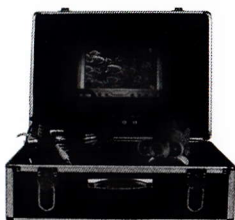


# UNDERWATER MONITOR SYSTEM

## INSTALLATION GUIDE & MANUAL

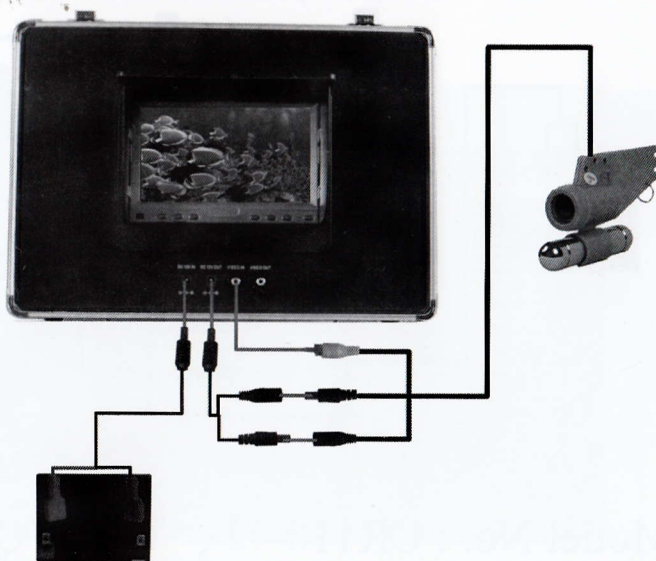


Read this manual carefully before operating  
Please recharge the battery before your first time use

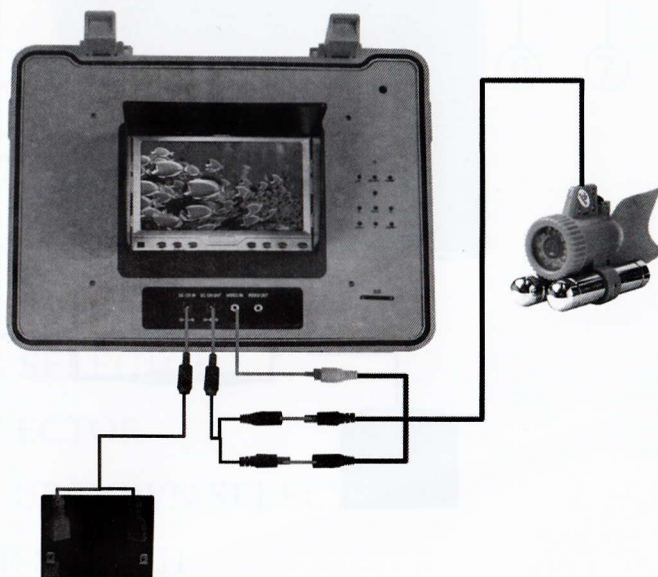
Waterproof color video Camera

# Connection method

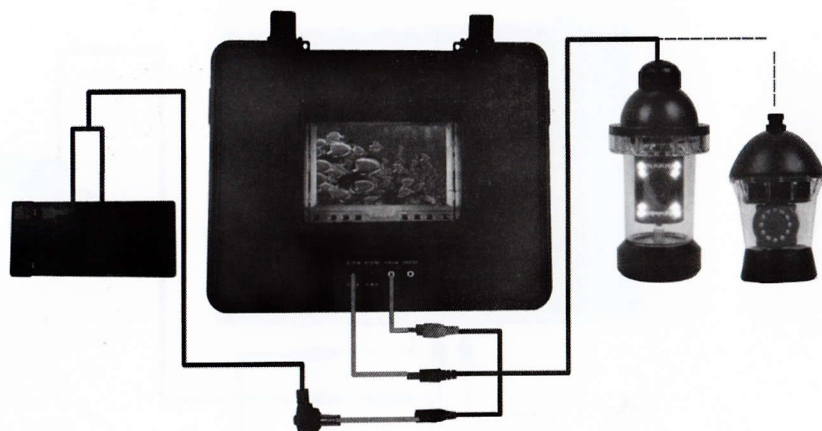
Model No. :CR110-7



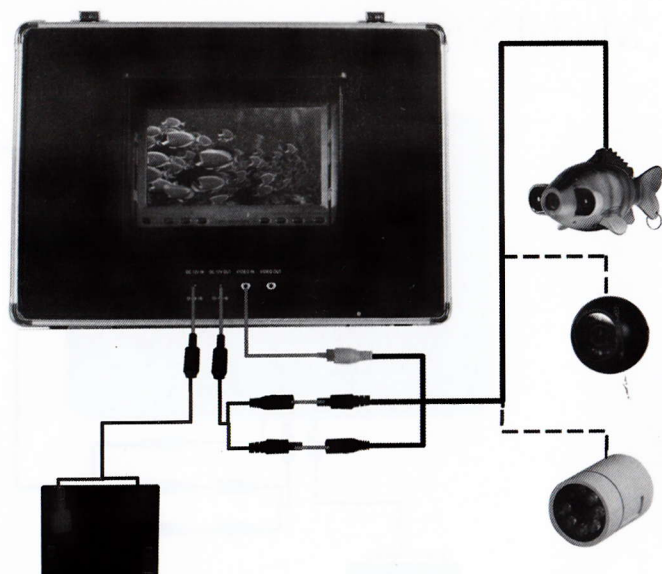
Model No. :CR110-7A



Model No. :CR110-7B、7C

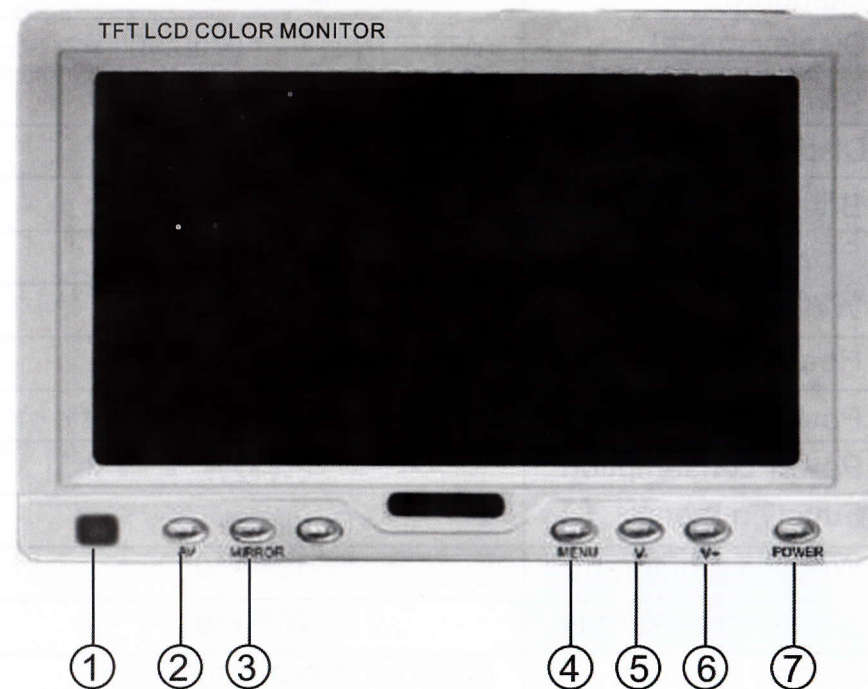


Model No. : CR110-7J、7P、7Q



7 inch TFT LCD color monitor

Compliant (Model No.: CR110-7、7A、7B、7C、7J、7P、7Q)



1. LED ON/OFF BOTTON
2. AV SELECTOR BOTTON
3. MENU
4. DOWN SELECTOR
5. UP SELECTOR
6. MENU UP/DOWN SELECTOR
7. POWER SWITCH



## Technical parameters

Display size	7"
Standard	PAL / NTSC
Display model	AT070TN01 V1 A070FW03 V2
Pixel	800*480
Display screen ((	65/65/40/65
Brightness	200 Above
Specifications (mm)	189*122*24
Weight (g)	425
Heavy video	1 Video input) 1 Video out
Power supply mode	12V Input / 12V out
Power consumption	6W+2W
Function menu	English/中文
Working temperature	-10~+50
Storage temperature	-20~+60
Display type	CCD/CMOS 600/ /700/ /800/
Power consumption	CCD/CMOS 2.5W
Standard	PAL/ NTSC (optional)
Visibility at night	5- 6
Lamp type	white light / IR light (optional)
Lens size	CCD/CMOS 3.6mm
Visual angle	CCD/CMOS 90°

## Camera

Model NO.: 1. 20m ,30m, 50m cable optional (up to 300 meters is available)

CR-006

2. white light /IR light (optional)
3. video output
4. DC 12V input (female)
5. DC 12V input (male)



Model NO.: 1. 20m ,30m, 50m cable optional (up to 300 meters is available)

CR-006A

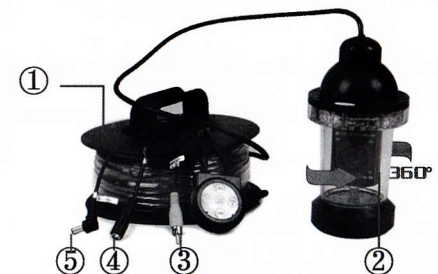
2. white light /IR light (optional)
3. video output
4. DC 12V input (female)
5. DC 12V input (male)



Model NO.: 1. 20m ,30m, 50m cable optional (up to 300 meters is available)

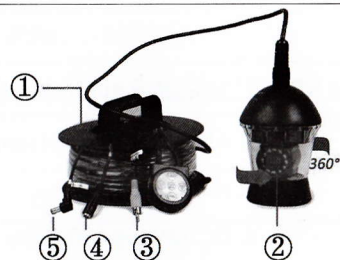
CR-006B

2. white light /IR light (optional)
3. video output
4. DC 12V input (female)
5. DC 12V input (male)



Model NO.: 1. 20m ,30m, 50m cable optional (up to 300 meters is available)  
CR-006C

2. white light /IR light (optional)
3. video output
4. DC 12V input (female)
5. DC 12V input (male)



Model NO.: 1. 20m ,30m, 50m cable optional (up to 300 meters is available)  
CR-006J

2. white light /IR light (optional)
3. video output
4. DC 12V input (female)
5. DC 12V input (male)



Model NO.: 1. 20m ,30m, 50m cable optional (up to 300 meters is available)  
CR-006P

2. white light /IR light (optional)
3. video output
4. DC 12V input (female)
5. DC 12V input (male)



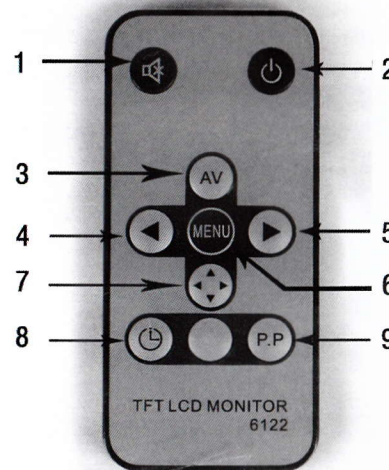
Model NO.: 1. 20m ,30m, 50m cable optional (up to 300 meters is available)  
CR-006Q

2. white light /IR light (optional)
3. video output
4. DC 12V input (female)
5. DC 12V input (male)



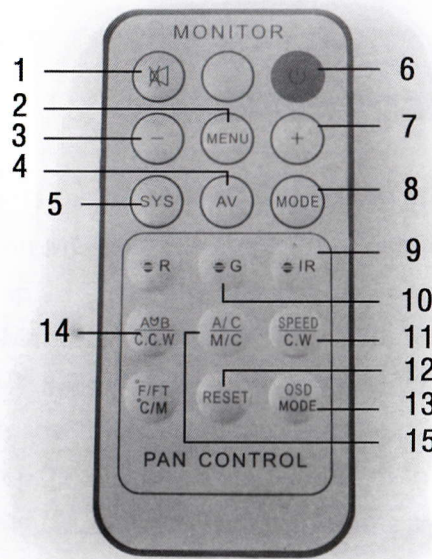
## Remote control

### 1 Compliant ( Model No.: CR110-7、 7A、 7J、 7P、 7Q )



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

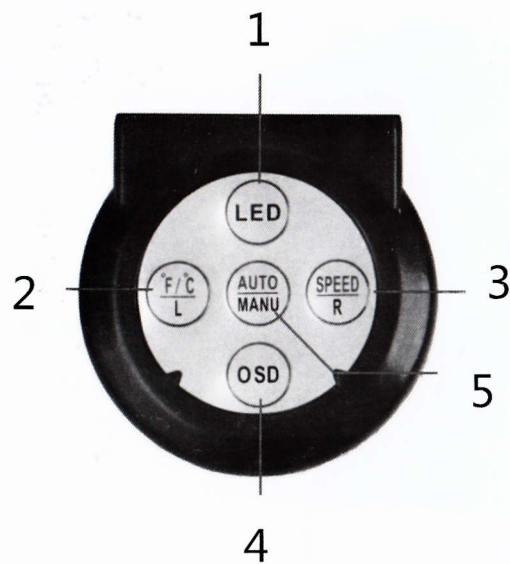
### 2 Compliant ( Model No.: CR110-7B、 7C )



1. Mute
2. Menu
3. -
4. AV1/AV2 switch
5. +
6. Power
7. +
8. Mode switch
9. Lamp switch
10. Rotating speed
11. Manual settings
12. Refresh
13. Manual rotation
14. Automatic rotation



## 2 Compliant ( Model No.: CR110-7B、 7C )



1. LED light
2. Depth and temperature / Left
3. Speed / Right
4. OSD / Refresh
5. AUTO MANU

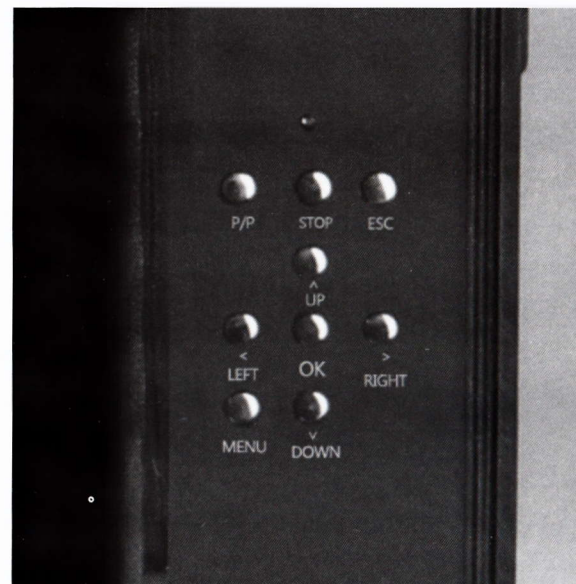
This DVR function support SD card max to 16GB;

Functions: manual camera, video; motion detection camera, video; motion detection ranges are: 1/ 16, 1 /4 or full screen .  
Another timer recording function.

Format of PhotoO JPEG, resolution 720x576;

Format of Video: AVI, QVGA(320x240), or DI(720X480);

Operation



a. Press the button MON/OFFN to turn on the DVR function, press the button MON/OFFN more than 5 seconds to shut off the DVR function.

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 function themselves . please select "Exit" to exit DVR and press the "Menu" key to confirm exit .

Step 2: Some working status 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

EXIT

>>>>>> 3.Photo 1

Photo 3

Movie

Movie Chip

EXIT

1.uto Capture

2.Auto Capture

EXIT

>>>>>> 3.ON

OFF

EXIT

2. Master CH

EXIT

>>>>>> 3.Photo

Photo 3

Movie 5 seconds

Movie 10 seconds

EXIT

2.PrePecord

EXIT

>>>>>> 3.Movie 5 seconds

Movie 10 seconds

OFF

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

DI

EXIT

2.PrePecord

EXIT

>>>>>> 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  
EXIT Total

-----  
2.FW Version >>>>>> 3.Free  
EXIT Total

=====

1. Set Time / Date

2.Set Time /Date >>>>>> 3.YY/MM/DD  
EXIT 00:00:00  
YY/MM/DD

-----  
2. Photo TimeStamp >>>>>> 3.ON  
OFF  
EXIT

-----  
2. Movie TimeStamp >>>>>> 3.ON  
OFF  
EXIT



## Operation

1. Read the instruction manual completely before operating this unit.
2. Open the lock of the plastic case carefully.
3. Place the rechargeable battery, and then connect the connector (for the battery charging only) and the battery. The red power cable and black ground cable should connect to red terminal and black terminal of the battery respectively.
4. Open the sunshade of the monitor; connect the cables between the battery and the monitor as above.
5. Connect the camera cables (as point 3).
6. Make sure all the cables be connected correctly, then press the POWER button of the monitor, you will get the picture.
7. According to your need, you can use the camera in different place.
8. For the convenience of the recharging, a leading line is equipped besides the back cover, and then it is no need to get the battery out when recharging is needed, and you just need connect the adaptor and the leading line together.
9. By adjusting the brightness, contrast, color, chroma on the monitor button or the remote control, you will get the perfect picture.
10. Please recharge the battery regularly; even you haven't use for a long time. To assure the battery can be used a longer time, please keep the battery having power in any time.

## Important Information

### Connecting Your Underwater Camera

1. The camera must not be located to look directly into the sun or any other bright light source as this will not only result in a poor image, but will eventually damage the electronics of the camera.
2. Areas with a high degree of contrast in the light levels require careful positioning of the camera to obtain the best image.
3. The best viewing angle is achieved by placing the camera in a position where it is looking down on the subject.
4. Additional lighting may be required if water quality is poor, or in low light conditions.
5. Always wash the camera in warm water and soap after use, to remove salt and other corrosive agents.
6. Always use appropriate water safety precautions when operating the Underwater Camera, and ensure appropriate level of supervision of children when near water.

### Please Read The Following Manual Details Before Using

- \* Pay attention to damp proof for the high resolution.
- \* Don't break the LCD screen surface, and clean the surface by soft cloth if the screen is dirty.
- \* Don't dismantle the unit by unprofessional.
- \* Push the unit L/R switch if find the letter reverse.
- \* Install the bottom side of the outer shell or inner side chamfer by customer's self-selection in accordance with bed frame.

## TROUBLESHOOTING GUIDE

SYMPTOM	CAUSE	ACTION
Rolling picture	Monitor(horizontal control)	Replace monitor
Shrunk & unstable picture	Monitor(low voltage)	Check voltage source for proper voltage
Black picture	Monitor	Check fuses, if ok, check voltage source for DC12V, or check monitor power assembly for loose or broken wires or connector.... if above is ok, replace camera
White picture	Monitor	Check main system cable, make sure all connectors are mated properly. If ok, replace camera
White picture	Camera	Replace camera
Blurred picture	Road film, mud,water or Ice on camera lens	Clean camera
Moisture in camera	Camera	Replace camera, if not ok, ask for maintenance service
Engine noise or static lines	Monitor	Check ground and DC 12V source for solid connection. If not ok, call tech support for assistance