

1/3" UNDER WATER CAMERA WITH LED LAMP

INSTRUCTION MANUAL

1. FEATURES:

- ⊙ SONY SuperHAD 1/3" Color CCD
- ⊙ High Sensitivity ; High Performance(Star Lighting Class)
- ⊙ Enhanced OSD Function to adjust the image (IR Remote controller)
- ⊙ Use Anode processed Surface
- ⊙ Fixed Board Lens 6mm
- ⊙ With 8 white Light LEDs, Switch to ON/OFF through IR Remote Controller
- ⊙ No reflection from glass
- ⊙ Power Source DC12V
- ⊙ Cable Length 20M
- ⊙ 3DNR
- ⊙ Digital WDR
- ⊙ Sense up * 256
- ⊙ Electronic P/T/Z
- ⊙ Under Water Up to 20 Meters

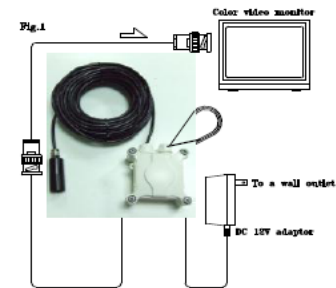
2. CAUTIONS:

- 1、 Before attempting to connect this product, please read this manual completely.
- 2、 Ensure the supply voltage is correct as specified for the particular variant of camera before operation.
- 3、 Never face the camera toward the sun directly.
- 4、 Do not attempt to service this unit yourself unless you are authorized to do so. Opening or removing cover may expose you to dangerous or other hazards. Refer all servicing to qualified personnel only.
- 5、 Do not disassemble the camera.
- 6、 Strongly suggest the current of power source adapter (DC:12V) using one ampere or above.

3. SYSTEM COMPONENTS:

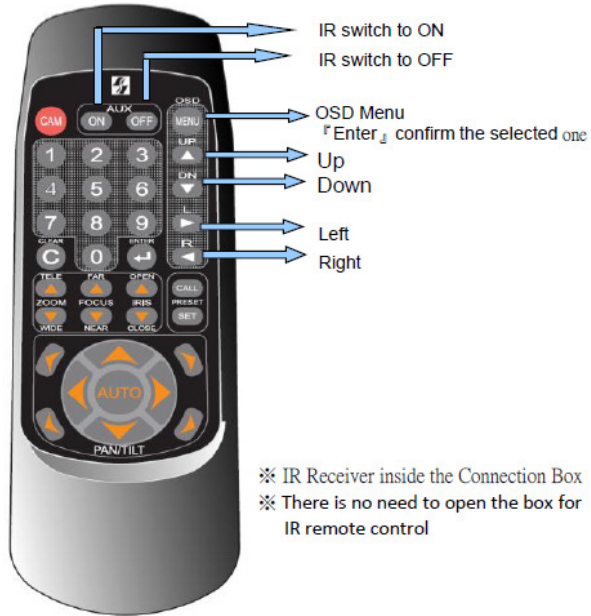
| | |
|---------------------------------------|---|
| Module Camera | 1 |
| Instruction manual | 1 |
| IR Remote Controller | 1 |
| Housing | 1 |
| coax--cable BNC & POWER connector---- | 1 |

4. SYSTEM CONNECTION:



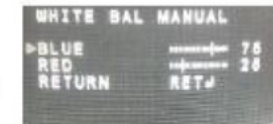
5. INSTALLATION INSTRUCTIONS:

- 1 · Connect the video output of the camera to a color monitor or other video device through a 75 Ω type coaxial cable with BNC connector at cable extension.
- 2 · Connect the DC +12V regulated power source to the DC12V power-in jack with 2 mm center +, outer plug.
- 3 · OSD Guidance :OSD Function settings through Remote Controller



OSD Menu refer to the next page for camera functions setting

6. OSD Menu: Camera Function Setting



```

SETUP
1. LENS VIDEO
2. EXPOSURE
3. WHITE BAL MANUAL
4. DAY NIGHT AUTO
5. 3DNR ON
6. SPECIAL
7. ADJUST
8. RESET
9. EXIT
  
```

```

DAY NIGHT AUTO
>DELAY 1
S-LEVEL 59
E-LEVEL 31
RETURN RET
  
```

```

SETUP
1. LENS VIDEO
2. EXPOSURE
3. WHITE BAL MANUAL
4. DAY NIGHT AUTO
5. 3DNR ON
6. SPECIAL
7. ADJUST
8. RESET
9. EXIT
  
```

```

3DNR
>LEVEL 50
RETURN RET
  
```

```

SETUP
1. LENS VIDEO
2. EXPOSURE
3. WHITE BAL MANUAL
4. DAY NIGHT AUTO
5. 3DNR ON
6. SPECIAL
7. ADJUST
8. RESET
9. EXIT
  
```

```

SPECIAL
1. CAM TITLE OFF
2. D-EFFECT
3. RS485
4. MOTION OFF
5. PRIVACY OFF
6. SYNC INT
7. LANGUAGE ENGLISH
8. RETURN
  
```

```

D-EFFECT
>FREEZE OFF
MIRROR OFF
D-ZOOM OFF
GAMMA 0.48
NEG. IMAGE OFF
RETURN RET
  
```

```

RS485
>CAM ID 1
ID DISPLAY OFF
BAUDRATE 9800
RETURN RET
  
```

```

SETUP
1. LENS VIDEO
2. EXPOSURE
3. WHITE BAL MANUAL
4. DAY NIGHT AUTO
5. 3DNR ON
6. SPECIAL
7. ADJUST
8. RESET
9. EXIT
  
```

```

ADJUST
>SHARPNESS 18
BLUE 22
RED 22
RETURN RET
  
```

```

SETUP
1. LENS VIDEO
2. EXPOSURE
3. WHITE BAL MANUAL
4. DAY NIGHT AUTO
5. 3DNR ON
6. SPECIAL
7. ADJUST
8. RESET
9. EXIT
  
```

```

RESET
>FACTORY RESET
RETURN RET
  
```

```

SETUP
1. LENS VIDEO
2. EXPOSURE
3. WHITE BAL MANUAL
4. DAY NIGHT AUTO
5. 3DNR ON
6. SPECIAL
7. ADJUST
8. RESET
9. EXIT
  
```

7. SPECIFICATION:

| | |
|--------------------------|--|
| Image Area | 4.9mm x 3.7mm |
| Pickup Elements | NTSC: 768(H)x494(V) Pixels SUPER HAD |
| Scanning System | 2:1 Interlace NTSC, V:60Hz, H:15.750kHz |
| Sync System | Internal |
| Video Output/Monitor Out | 1 Vpp Composite Output, 75ohms |
| Resolution | 540 TV Lines |
| Gamma Correction | 0.45 |
| Minimum Illumination | 0 Lux (F1.4 3200°K)/ LED activated |
| S/N Ratio | 50dB(AGC OFF) |
| Power Requirement | DC12V |
| Power Consumption | Day:140mA(max),Night:650mA(max) |
| Ambient | -10°C~50°C / 30~90%RH |
| Weights | Approx. 70g (Not include cable) |
| Dimensions | 70(D) x 30(Ø)mm |
| Shutter Control | NTSC: Auto: 1/60 to 1/100000 Sec. or OSD setting |
| Gain Control | Auto or OSD setting |
| Lens Spec. | Fixed IRIS Lens Relative F1.8 6mm |
| White Balance | TTL Auto or OSD setting |
| Aperture Compensation | Horizontal and Vertical |
| Backlight Compensation | Auto or OSD setting |
| LED Effective Distance | 5M |
| LED | White Light |