FOXEER

MONSTER MICRO PRO

MONSTER

MONSTER MINI PRO

WARNING: Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury.
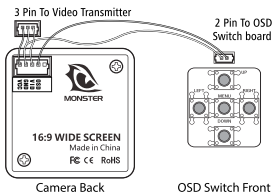
⚠️ *Age Recommendation: Not for children under 14 years. This is not a toy.*

NOTICE: This product is only intended for use with unmanned, hobby-grade, remote-controlled vehicles and aircraft. FOXEER disclaims all liability outside of the intended purpose and will not provide warranty service related thereto.

SUPPORT: Visit www.foxeer.com to get more information.

CAMERA-OSD SWITCH CONNECTION

3 Pin To Video Transmitter

2 Pin To OSD Switch board

5 Pin Harness
VCC   DC 5-40V In (Red)
GND   Ground WIre(Black)
VID   VIdeo out(Yellow)
OSD   OSD (White)

MONSTER

16:9 WIDE SCREEN
Made in China
FC CE RoHS

Camera Back   OSD Switch Front

CAUTION: If you are using ESC's with active braking, we recommend powering the camera system through a BEC or voltage regulator.

CAMERA-VIDEO TRANSMITTER CONNECTION

To connect the camera directly to the video transmitter, plug the 3 pin wiring harness from the video transmitter into the camera.

1. EXPOSURE

Move the cursor to "EXPOSURE", press the LEFT/RIGHT button to select "STD" or "BLC" mode.

1. STD
Press the MENU to set camera brightness. It has "LOW", "MIDDLE", "HIGH" three modes for choice.

```
◎ EXPOSURE        STD↵
   SHUTTER MODE   AUTO↵
   AGC              ↵
   AWB            ATW1
   IMAGE ADJ        ↵
PREV↵ NEXT↵ SAVE↵ EXIT↵
```

2. BLC
Press the MENU to set camera intensity. It has "LOW", "MIDDLE", "HIGH" three modes for choice.

```
STD
◎ BRIGHTNESS      LOW
              RETURN↵
```

```
BLC
◎ INTENSITY       LOW
              RETURN↵
```

2. SHUTTER MODE

Move the cursor to "SHUTTER MODE", press the LEFT/RIGHT to select "AUTO" or "MANUAL". Camera normally works on "AUTO" mode.

MANUAL
"SHUTTER SPEED" can select from 1/25 (PAL) 1/30(NTSC) to 1/100000.

```
   EXPOSURE       STD↵
◎ SHUTTER MODE   AUTO↵
   AGC              ↵
   AWB            ATW1
   IMAGE ADJ
PREV↵ NEXT↵ SAVE↵ EXIT↵
```

```
SHUTTER MODE
◎ SHUTTER SPEED  1/25
              RETURN↵
```

3. AGC

"AGC" can adjust the peak value, the bigger value, the brighter image,cause bigger noise, there are "ON" or "OFF" optional by LEFT/RIGHT according to actual needs.

```
   EXPOSURE       STD↵
   SHUTTER MODE   AUTO↵
◎ AGC              ↵
   AWB            ATW1
   IMAGE ADJ
PREV↵ NEXT↵ SAVE↵ EXIT↵
```

```
AGC
◎ MODE            NO
   INTENSITY      LOW
              RETURN↵
```

4. AWB

It can restore the authenticity of the color when it is aected by the temperature change. The user can choose dierent white balance mode accordingly, "ATW1", "USER" "PUSH".

```
   EXPOSURE       STD↵
   SHUTTER MODE   AUTO↵
   AGC              ↵
◎ AWB            ATW1
   IMAGE ADJ        ↵
PREV↵ NEXT↵ SAVE↵ EXIT↵
```

5. IMAGE ADJ

When the IMAGE is displayed on screen, it allows you to do settings of image function and details.

- "SHARPNESS" is used to adjust overall image sharpness, can set from 0-100, the higher value, the sharper image.

- "HDNR" is used to adjust overall image noise, which can set from 0-100.

- "CONTARST" is the area ratio of the brightest screen and darkest areas, it can set from 0-100.

- "SATURATION" is used to adjust bright degree of color. It can set from 0-100, the higher value, the deeper image color.

- "R GAIN"can adjust the value to change color.

```
   EXPOSURE       STD↵
   SHUTTER MODE   AUTO↵
   AGC              ↵
   AWB            ATW1
◎ IMAGE ADJ        ↵
PREV↵ NEXT↵ SAVE↵ EXIT↵
```

```
IMAGE ADJ
   SHARPNESS      70/100
   HDNR           80/100
   CONTRAST       54/100
   SATURATION     56/100
   R GAIN         44/100
NEXT↵         RETURN↵
```

PRESS "NEXT" to enter next page.

- This page have two options, "G GAIN", "B GAIN".
- The user can adjust the value to change color, also can set different color value according to camera environment.

```
IMAGE ADJ

  G GAIN       50/100
  B HAIN       42/100

NEXT⤶           RETURN⤶
```

6. DAYNIGHT

Return to main page, press "NEXT" button to enter next page.

"DAYNIGHT" has four modes, "EXT", "COLOR", "BW", "AUTO GEN". It is synchronous with infrared lamp's opening and closing time.

```
◎ DAYNIGHT      EXT⤶
  SYSTEM          ⤶
  BAD PIXEL       ⤶
  PRIVACY MASK    ⤶
  HLC             ⤶

PREV⤶ NEXT⤶ SAVE⤶ EXIT⤶
```

"EXT" mode can choose from 0/100 to 100/100. In "COLOR" mode, image will always be color. In "BW" mode, image will always be black and white. "AUTO GEN" can control the camera output color or black and white image according to the strength of the light, can set daynight delay as picture below.

```
DAYNIGHT
◎ D TIME           0/100
                 RETURN⤶
```

```
DAYNIGHT
  D CTPL          0/100
  DAY2NIGHT      80/100
  NIGHT2DAY      70/100
                 RETURN⤶
```

7. SYSTEM

"SYSTEM" contains 5 parameters.

- "TV GAMMA" is used to adjust contrast, it is fixed.
- "TV BRIGHT" is used to asjudt image bright.
- "TV SYSTEM" comes with "PAL" or "NTSC" two modes for user of dierent nationalities.
- "LANG" comes with "Chinese" "Japanese" "English" three languages for user of different nationalities. User can select the language by LEFT/RIGHT.
- "RELOAD FTY" is reset.

```
  DAYNIGHT        EXT⤶
◎ SYSTEM           ⤶
  BAD PIXEL        ⤶
  PRIVACY MASK     ⤶
  HLC              ⤶

PREV⤶ NEXT⤶ SAVE⤶ EXIT⤶
```

```
SYSTEM
  TV GAMMA       MIDDLE
  TV BRIGHT      MIDDLE
  TV SYSTEM      PAL
  LANG           ENG ◁ ▷
  RELOAD FTY     NO

                 RETURN⤶
```

8. BAD PIXEL

"BAD PIXEL" is for bad pixel repair. USER can choose "ON" or "OFF" mode.

```
BAD PIXEL
◎ MODE            ON
  INTENSITY      MIDDLE
                 RETURN⤶
```

9. PRIVACY MASK

User can adjust the size, position, color, transparency of the chosen area.

```
PRIVACY MASK
◎ MODE
  DEF COLOR       1/15
  SELECT          1/4
  SWITCH          OFF
  RANGE            ⤶
                 RETURN⤶
```

10. HLC

In "HLC" menu, press LEFT/RIGHT key to select "ON" or "OFF".

```
HLC
◎ MODE            OFF
  BLACKNESS      0/100

                 RETURN⤶
```

11. WDR

press "NEXT" button to enter next page.

In "WDR" menu, press LEFT/RIGHT key to select "LOW" "MIDDLE" "HIGH".

```
WDR              LOW

                 RETURN⤶
```

12. SAVE

When the user finish setting and want to save it, please choose "SAVE" and press "EXIT" to exit the OSD menu, the setting will be saved in FLASH and will not loose when the power supply is off or the system is restarted.

```
  DAYNIGHT        EXT⤶

  BAD PIXEL        ⤶
  PRIVACY MASK     ⤶
  HLC              ⤶

PREV⤶ NEXT⤶ ◎SAVE⤶ EXIT⤶
```

13. EXIT

Press "EXIT" to exit the OSD menu.

```
  DAYNIGHT        EXT⤶

  BAD PIXEL        ⤶
  PRIVACY MASK     ⤶
  HLC              ⤶

PREV⤶ NEXT⤶ SAVE⤶ ◎EXIT⤶
```

FC C€ RoHS