# X-CAM X140B for SONY NEX5 Series Brushless Gimbal System

X-CAM X140B is customized for SONY Nex5 series and factory-adjusted READY TO RUN, **the distance of horizontal pitch holes is 155mm, the distance of font and back pitch holes is 185mm**

**Parameters :**

Weight: 730g (without camera)  Supports SONY NEX5 Series Camera

TILT distance of travel :  +-90 degree

ROLL distance of travel :  +-45 degree

PAN distance of travel :  365 degree unlimited

Input Voltage : 12V  **(12v output BEC is strongly recommend )**

**There are 4 editions in the X140B as below:**

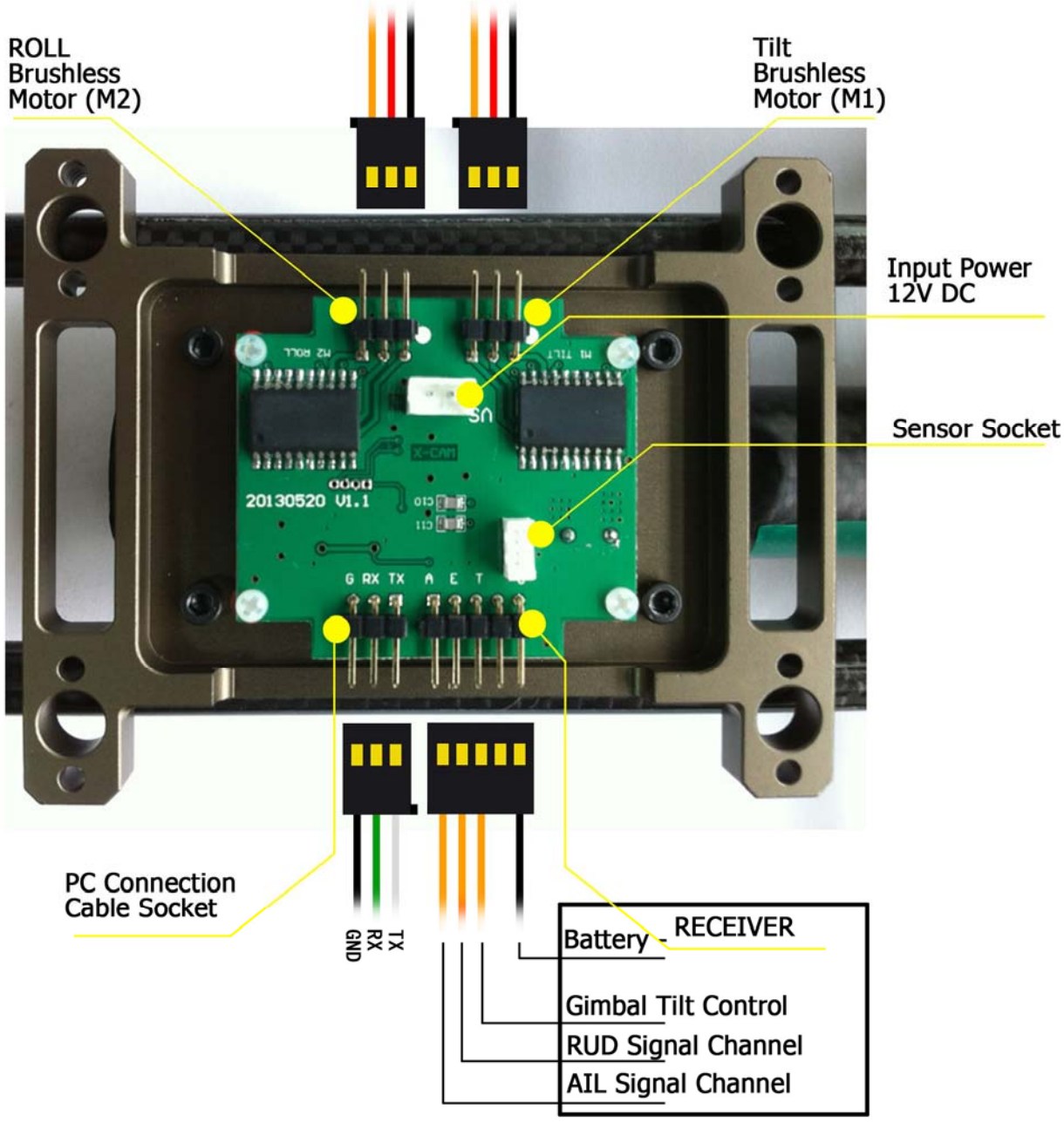
| | X140Bs | X140BL | X140Bs-3H | X140BL-3H |
|---|---|---|---|---|
| Axis Count | 2 Axis | | 3 Axis | |
| Support Camera | Sony Nex5n, 5R, 5T | | | |
| Support Lens | E PZ 16-50mm(SELP1650)<br>E 16mm F2.8 (SEL16F28)<br>E 20mm F2.8 (SEL20F28) | E 18-55mm (SEL1855)<br>E 10-18mm F4 OSS (SEL1018)<br>E 35mm F1.8.OSS (SEL35F18)<br>E 16mm + VCL-ECU1 0.75x E-Mount Wide Angle Conversion Lens | E PZ 16-50mm(SELP1650)<br>E 16mm F2.8 (SEL16F28)<br>E 20mm F2.8 (SEL20F28) | E 18-55mm (SEL1855)<br>E 10-18mm F4 OSS (SEL1018)<br>E 35mm F1.8.OSS (SEL35F18)<br>E 16mm + VCL-ECU1 0.75x E-Mount Wide Angle Conversion Lens |

## Accessories

- X140B x 1
- 2 Axis / 3 Axis electro controller (Assembled) x 1
- 3 in 1 Connection Cable x 1
- Power Wire x 1
- HDMI To AV Signal Transfer Card x 1
- Screw for lock Camera x 1
- 12mm Clamp x 8
- Damping Ball x 6

## Gallery

**Controller Connection Indicator Diagram**




Uses the 3 in 1 connection cable to connect with your receiver

A wire (White & Black) connect to gimbal Tilt Control Channel ( use the wire which has the GND )

A wire (Blue) connect to the AIL Channel

A wire (Yellow) connect to the RUD channel

If you are using a receiver without PPM channels such as Futaba 6203 then could not use this function

Notice: the gimbal system still works if you do not use the 3 in 1 connection cable, but there are no decoupling offset, the performance will be affected.

**Adjusting instruction**

X140B supports Lens as below (Notice: different edition supports various lens )

| | |
|---|---|
| E PZ 16-50mm(SELP1650) | E 18-55mm (SEL1855) |
| E 16mm F2.8 (SEL16F28) | E 10-18mm F4 OSS (SEL1018) |
| E 20mm F2.8 (SEL20F28) | E 35mm F1.8.OSS (SEL35F18) |
| | E 16mm + VCL-ECU1 0.75x E-Mount Wide Angle Conversion Lens |

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**The default adjusting model is by SONY NEX5R + 16-50 lens**

The metal spacing board which is the back of the camera frame could be adjusted for balancing the camera gravity when use a different lens. After the adjustment, lock the 4 screws ( 2 on the top and 2 under the bottom ), next time just push the camera to the metal spacing board, that is the center of gravity.

The left & right frame brace are adjustable as well

Adjust the screws, which are inboard out for adjusting up & down.

Normally, you do not need to adjust the center of gravity on ROLL

If you need to adjust it, just loosen the screws for adjustment.

Make sure the center of gravity is correct, that is very important.

Push the camera frame to left and right, up and down gently and withdraw your hand quickly. Check if it stops immediately or not.

If not, it should be adjusted again. If yes, then congratulations! You have finished the gravity adjustment.

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Top tray assembling method:

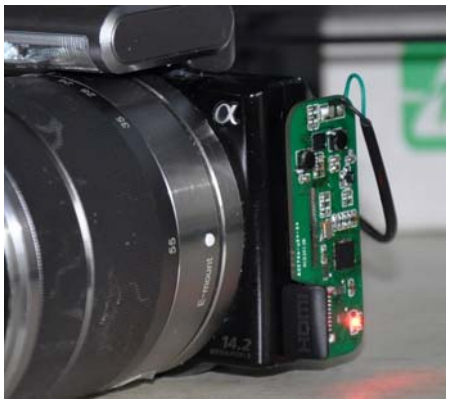
There are 6 damping balls in the package, 2 are backups.

Assemble one on each corner and use the outermost hole..

12mm Clamp assembling way as below:

Notice: for safety, please make the necessary protection between the butterfly shaped metal plate with reserved hole, please use these holes do the necessary protective connection in case the damping ball fails during flight

HDMI To AV Signal Transfer Card




Notice: the HDMI Resolution Setup must be set to AUTO

## Announcements

1. **Do not use the gimbal without camera**
2. **Keep the gimbal quiescent after power on, do not touch anything during the initialization until you hear one BEEP (about 6 secs)**
3. **Try to avoid touching control board and sensor by hand, static electricity will cause damage to electronic components**
4. **If the gimbal is occasionally out of control please check whether there is interference force. After clearing interference, pls restart it.**
5. **Damping ball used for a long time will be aging, and needs to be replaced periodically.Generally change it in 20-30 flights.**
6. **If there are 2 BEEP after the initialization, pls contact us.**

## Disclaimer

**The warranty of X140B is 1 year , please do not disassemble or refit the holder of mechanical structure in the warranty period, the program X140B control module is based on X140B structure and motor customization, all debugging has been completed in factory. We do not bear the loss and the corresponding compensation liability for any direct or indirect damage caused by the user during use of the gimbal,**

**X-CAM does not assume any responsibility for any damage or loss caused in the process of using X140B platform.**