Video Conference Camera
User Manual

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1. Precaution

● Electrical Safety

Confirm country and local electrical safety standard when using or installing the product.
The product itself has no power switch. Please stop power supply or plug out power socket when it
is not in good working.Video wire and control wire should be insulated and individual connected，can
not mix-up with other wires.

● Transportation with care

Product should be protected against extremes of pressure, vibration and humidity during transportation,
storage and installation. It is transported by integrated packing style.

● Installation with care

Please read carefully user installation manual when installation. Please pick up the camera parts
gently and do not press it, or else, which may cause malfunction; the camera parts belong to senior optical
products, please do not touch it by your hand in order to avoid scratch for protecting the imaging quality.

● Requirements to service personnel

All the service work should be done by qualified technicians.

● Do not disassemble the Pan/Tilt module

Do not disassemble screws and repair the parts of the Pan/Tilt module by yourself. Only qualified and
professional personnel can do this job.

● Environmental Requirements

|			
Environmental temp:	-40~+60°	Humidity:	<95%
Air Pressure:	86~106 Kpa	Power supply:DC12V±2V	
Power consumption:	Maximum 12W DC12V		

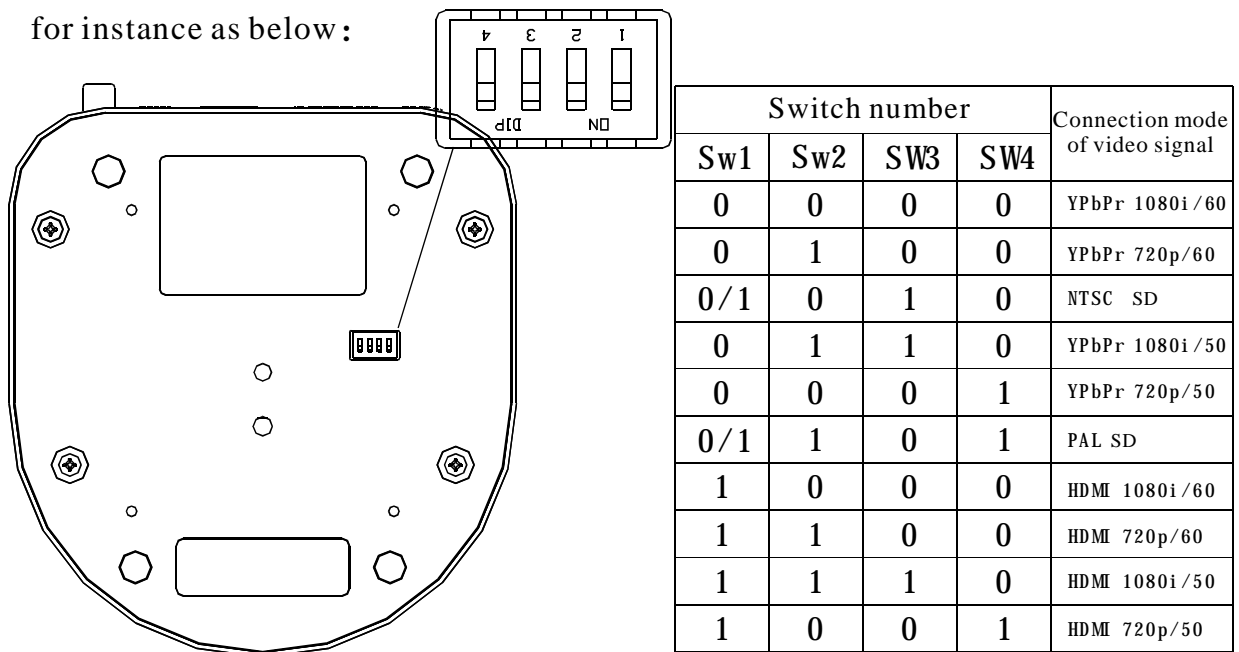● Don't focus the camera on objects with strong light

Don't focus the camera on objects with strong light. Don't focus the camera direct to the sun or
other bright objects no matter when in use or not. Otherwise ,it may affect image quality.

2. Operation illustration

2.1 Standard Definition camera operation illustration。 for instance as below:
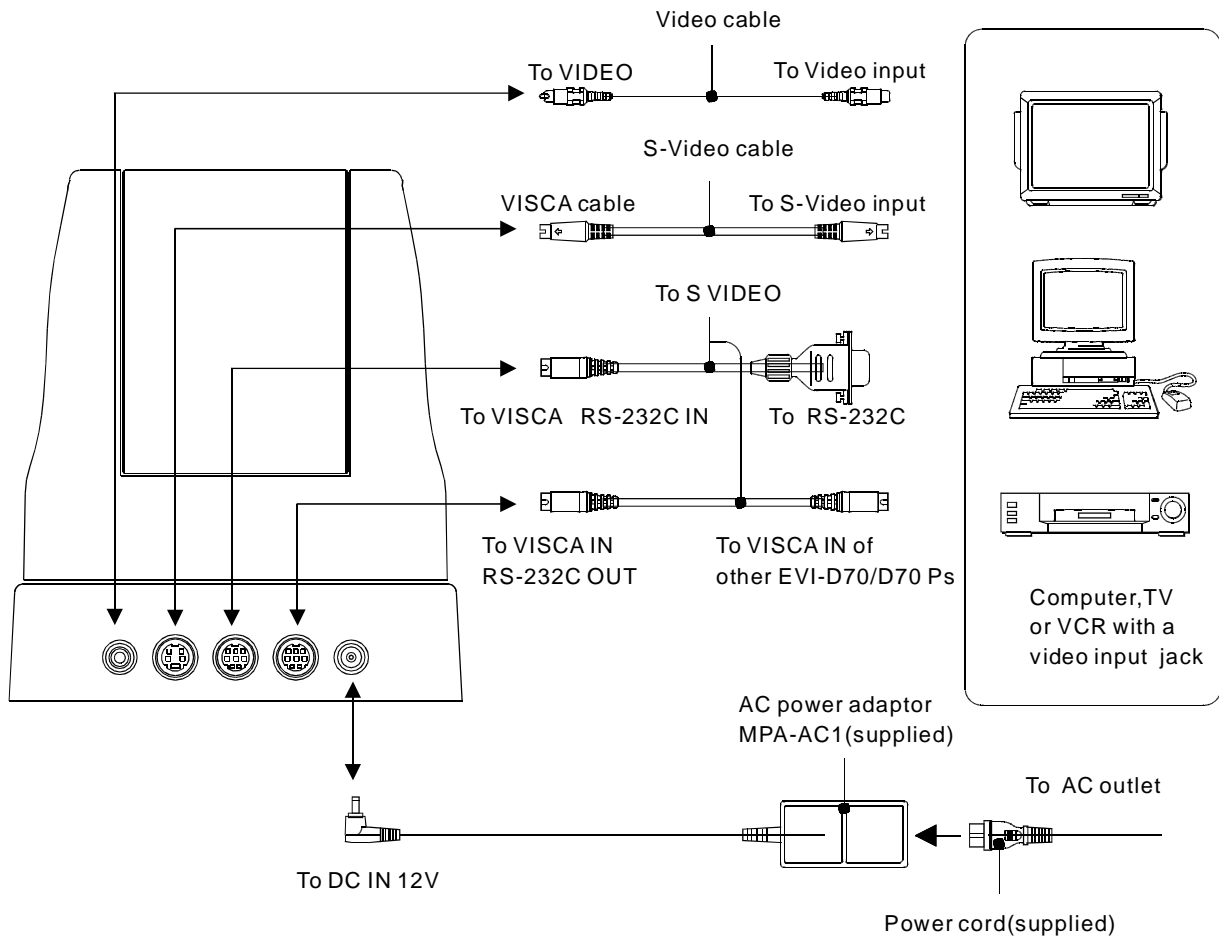
2.2 High Definition camera operation illustration, (SD camera is not with this function), for instance as below：

Switch number				Connection mode of video signal
Sw1	Sw2	SW3	SW4	
0	0	0	0	YPbPr 1080i / 60
0	1	0	0	YPbPr 720p / 60
0/1	0	1	0	NTSC SD
0	1	1	0	YPbPr 1080i / 50
0	0	0	1	YPbPr 720p / 50
0/1	1	0	1	PAL SD
1	0	0	0	HDMI 1080i / 60
1	1	0	0	HDMI 720p / 60
1	1	1	0	HDMI 1080i / 50
1	0	0	1	HDMI 720p / 50

Illustration:

1、SW1 is for setting video signal fan-out of HDMI and YPBPR。When SW1 is set as "ON", it stands for HDMI; when SW1 is set as "OFF", it stands for Ypbpr.Please be noted the both HDMI and YPBPR signal fan-outs can not be efficient in same time, and both are only efficient for high definition video signals. It is no any signals under standard definition mode ,the signals of which are transmitted by RCA fan-out ;

2、the combination for SW2, SW3, and SW4 are for setting modes of video out,such as 1080i/60、720P/50 and SD etc.Please refer to the above list for details;

3、"**0**" switch as "OFF"; "1" switch as "ON";

Video cable

To VIDEO   To Video input

YPbPr VIDEO
YPbPr cable   **To TV input**   Y
                                        Pb
To HDMI VIDEO   Pr

To S VIDEO

To VISCA   RS-232C IN   To RS-232C

VIDEO YPbPr HDMI IN RS-232C OUT DC IN 12V

To VISCA IN   To VISCA IN of
RS-232C OUT   other EVI-D70/D70 Ps

Computer,TV
or VCR with a
video input jack

AC power adaptor
MPA-AC1(supplied)

To AC outlet

To DC IN 12V

Power cord(supplied)
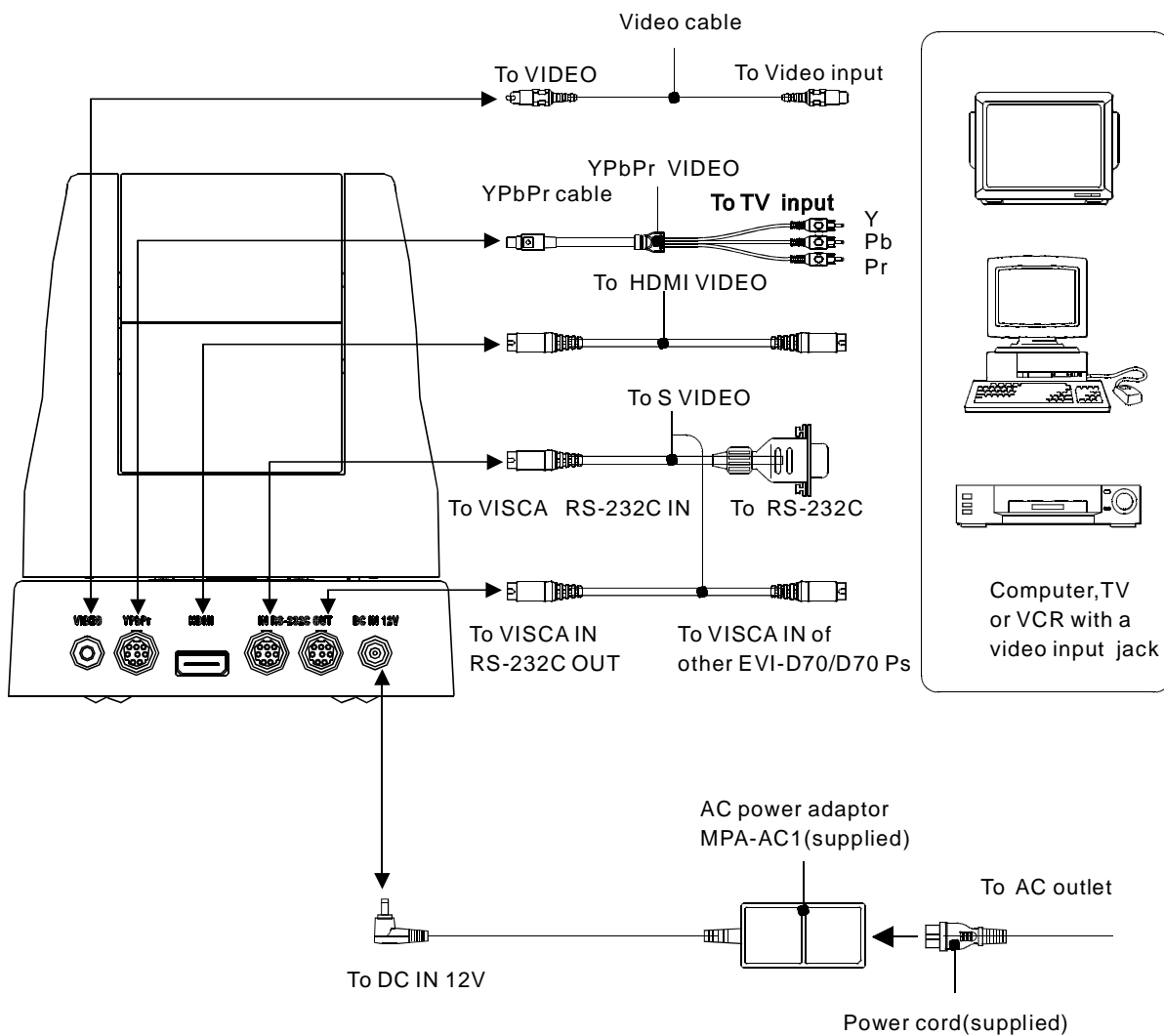
3. Performance

3.1 Camera parameter

Electricity：		Communications：	
Power supply	DC12V	Baud rate（RS232）	9600bps
Power consumption	12W	Protocol	Visca
Decoder	Built in	Address setting	1~8
Operation：		Environmental：	
Pan rotation	170°	Working environmental temperature	0℃~ +50℃
Tilt rotation	120°	Environmental humidity	0~95% No-condensation
Rotation speed	Pan 0.4° ~80° /s		
Physical：			
Presets	Remote controller 9 Visca protocol 128	Installation	Stand-up position
net weight	1.7kg		

3.2 Camera parameter

Spec \ Type	APS: 18× color	BPS:18X color	GPS:10X color	HPS:10X color/Black&White	JPS:10X color/Black&White
Signal system	PAL				
Imaging element	1/4″ Sony Super HAD CCD	1/4 ″ Sony Exview HAD CCD		1/3 ″ Sony Exview HAD CCD	1/3 ″ COM
Scan system	2：1 Interlace scanning				N/A
Effective Pixel	752×582（H*V）				2 million
Scan Frequency	Pan15.625KHz / Tilt50Hz				
Resolution	Color480TVL			Color530TVL Black&White570TVL	N/A
Mini Illumination	0.9 Lux	0.7 Lux	Color 0.7Lux	Color0.015Lux Black&White0.0004Lux	Color1Lux Black&White0.1Lux
Zoom	18X Optical,12X Digital		10X Optical 10X Digital	10X Optical 12X Digital	10X Optical 10X Digital
Lens	4.1mm-73.8mm		4.2mm-42mm	5.1mm-51mm	
Angel of view	W 48.0° /T 2.8°		W46° /T 4.6°	W50° /T5.4°	W50° /T5.4° F1.8/F2.1
Lris	Auto/Manual				
Focus	Auto/Manual				
White balance	Auto/Manual（R/Badjustable）				Auto/Manual
Back light compensation	OFF/Auto				
S/N ratio	≥50dB				
Electronic Shutter	1/50 ～ 1/10,000 s	1/1~1/10,000 s			1/2~1/10,000 s
Video output	1.0±0.2Vp-p				
Video fan-out	Female BNC				
Wide Dynamic Range	N/A				
Privacy Zone Masking	8	24			N/A

3.3 Performance&Features

Remark：The parameter for each video camera module is different; please refer to the details in Chapter 3.2

Ø System

● Video signal: PAL color

● Pixel: 440,000

● Minimum distance for imaging: (wide view, the nearest settings under Visca protocol):10mm

● S/N Ratio: 50 dB

● Pan/Tilt: Pan±170°, maximum speed:100°/S

    Tilt:+90°, -30°, maximum speed: 90°/S

Ø Input/Output port:

● Output: RCA tone socket 1vpp, 75 ohm, Non-balance Sync: Negative

● S output: 4-core minisize DIN

● Input/Output control connection port: Visca RS-232C: 8-Core Minisize DIN (input:1; output:1)

● Mode of signal control: 9600bps data:8 bit Stop bit:1

● Power connection port: JEITA 4

Ø Features

● 440,000 effective pixel, can take high resolution image by this camera.

● With Fast, wide Pan/Tilt functions.

● With RS-232C communication and Visca protocol, can control video conference camera by terminal equipment and computer.

● Improved quality and definition of digital zoom image by the newest development digital signal processor (DSP).

● Can remove and attenuate IR light by attenuation-filter. Besides, this filter can open and close automatically; it provides image with good quality in high definition and strong brightness in large scope.

● Can save 9 presets in memory, it's available for working when necessary.

● With 1 Multi function IR Remote controller, which is easily and convenient to control video con ference camera.
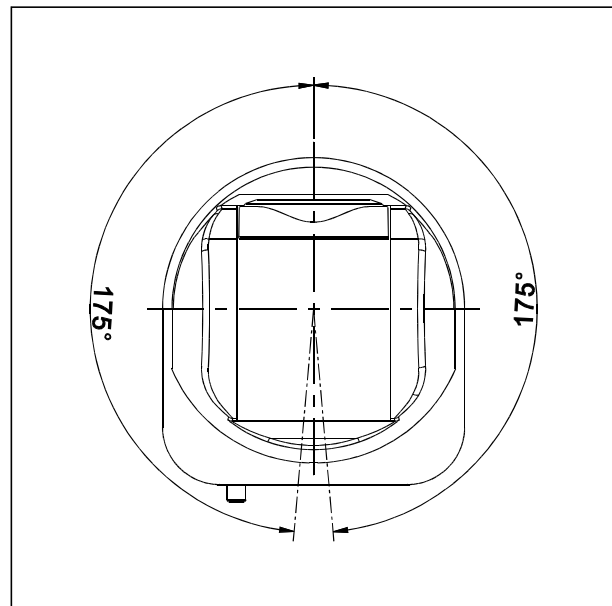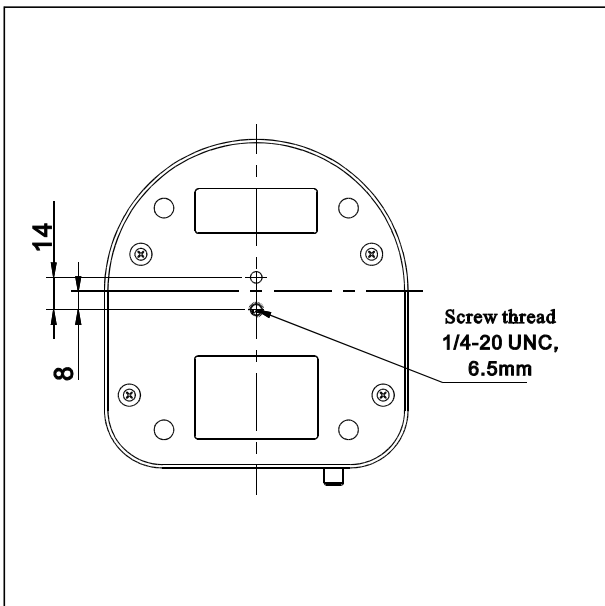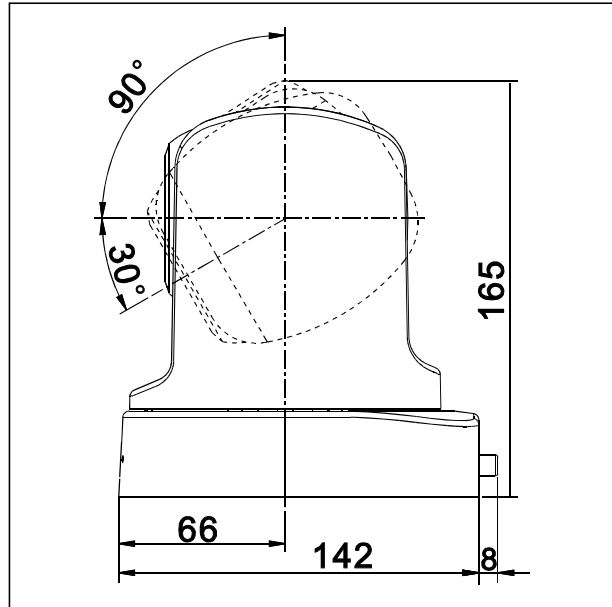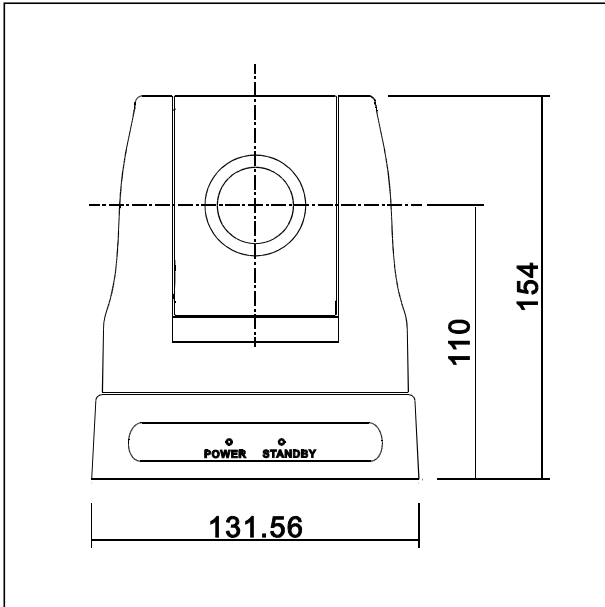
4. Functions

4.1 positions of control system

Position of camera can be
set with wide zoom lens

light of standby

light of power

Sensor of remote
controller.

POWER   STANDBY

VIDEO SVIDEO   IN RS-232C OUT   DC IN 12V

Video port

S-Video port

Input port

DC12V power input port

Out put port

6
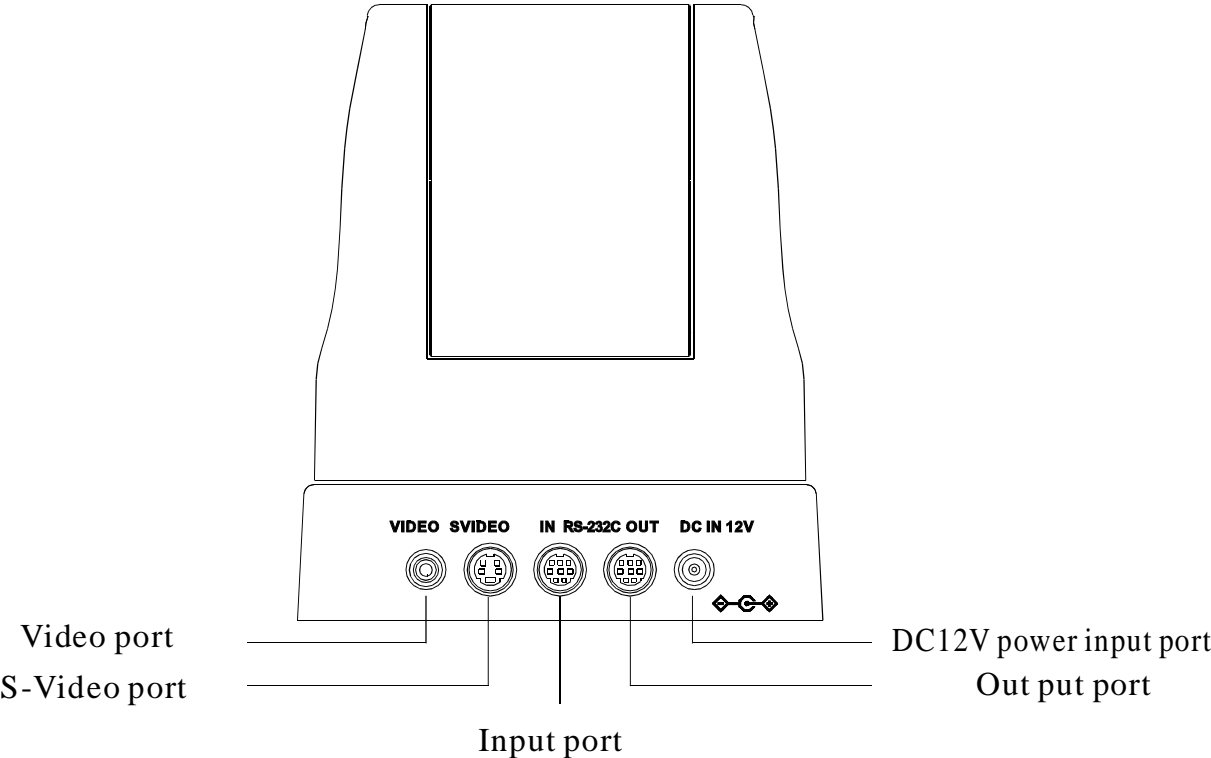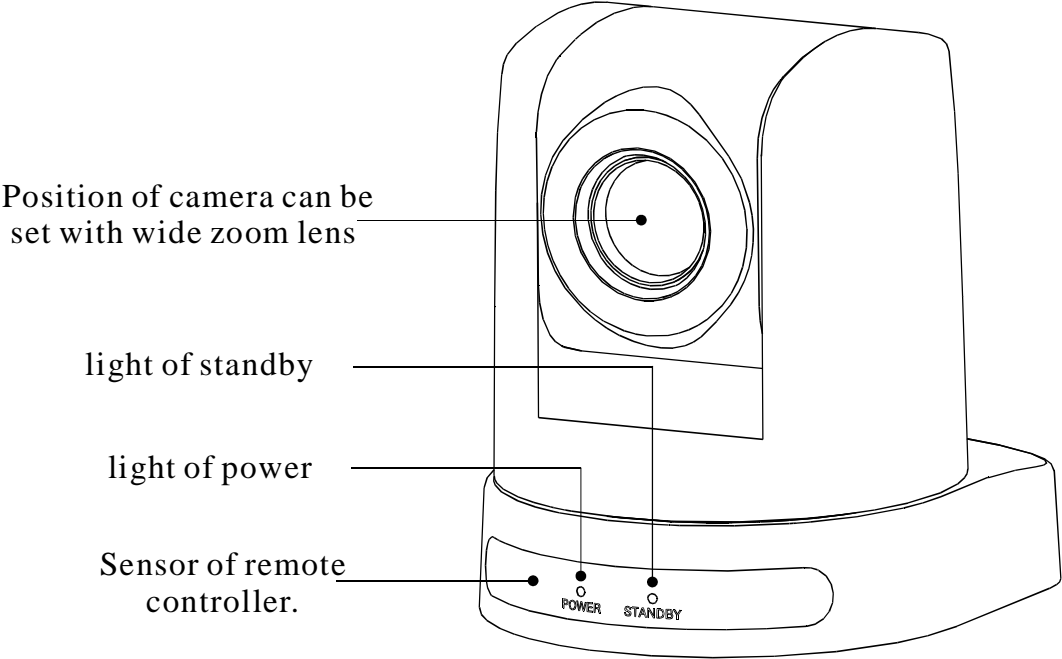
4.2 **Dimension**

Size for Standard definition video conference camera is as below:

Functions ℭℨ

4.3 Functions of remote controller

① POWER：open/close power

② DATA SCREEN：press Data screen return to original settings,then press 3 in 2 seconds, image will be flipped to inversion if the camera with flip function.

③ BACK LIGHT：press for back light compensation.

④ AUTO： press for auto-focus.

⑤ FAR：press for far zoom, focus on objects in far distance；

　NEAR：press for near zoom, focus on objects in near distance.

⑥ MANUAL ：press for Manual Auto/ focus.

⑦ POSITION：Setting for preset and reset.

　PRESET：press any number from 0-9 within 2 seconds

　after press "preset" to set preset.

　RESET ：press any number from 0-9 within 2 seconds

　after press "reset" to delete preset.

　Press any number to see preset.

⑧ HOME：press this key to set position in central of front side.

⑨ SLOW T：focus on near object slowly

⑩ SLOW W：focus on far object slowly

⑪ FAST T：focus on near object fast

⑫ FAST W：focus on far object fast

⑬ L/R DIRECTION/SET：1.press 1 in 2 seconds

　after press this key, camera start left to right rotation

　under upside installation style; Press 2 in 2 seconds after

　press this key, camera start left to right rotation under
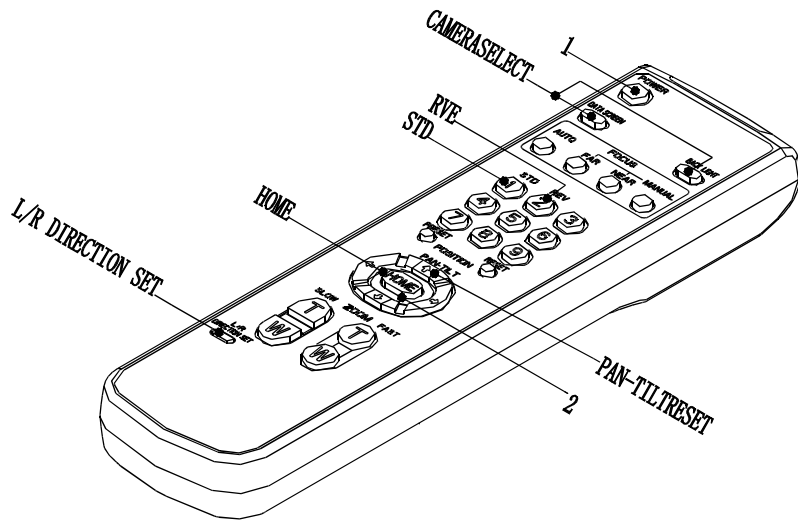
　upside-down installation style.
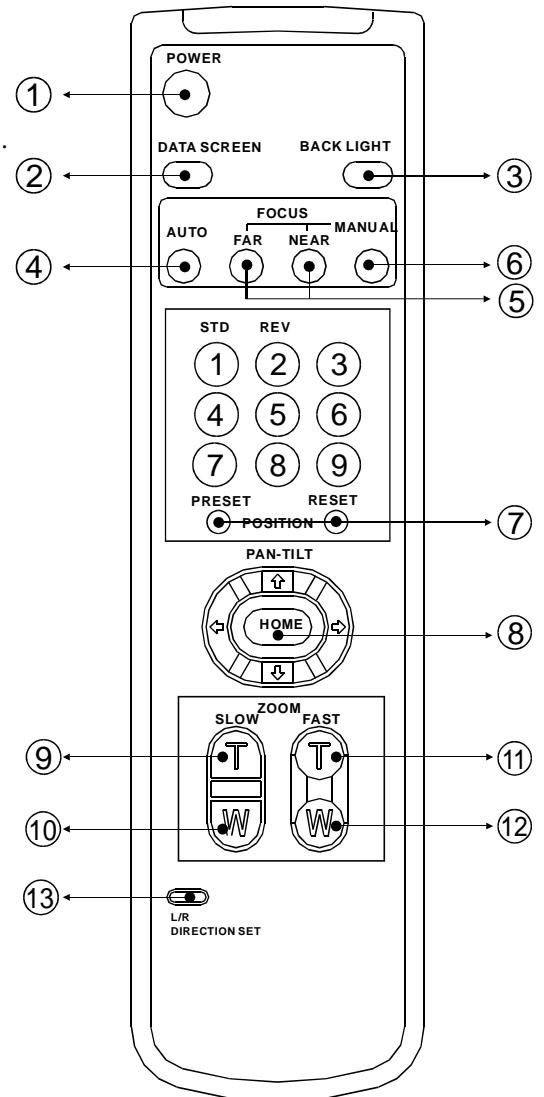
● **Notes:**

　1. if the remote controller doesn't work, please change batteries.

　2. camera can not work if there is any block between remote controller and camera, please make sure the controller is direct to the sensor when using.

5. Instruction

5.1 Pan/Tilt operation

1. Press direction keys to change the direction. If need to change vision angle of camera, please press the right direction key. Press short time for slow moving, press long time for fast moving.
2. Press "Home" to set position in central of front side.
3. There are 2 installation ways for selection: upside and upside-down. The default setting for new camera is upside installation way. Please press 3 in 2 seconds after press "Data screen" to set installatin mode. Under model of upside-down installation, image can be flipped, but the direction keys are different from original. If need to change the direction, please press "1" (same direction as remote controller) or "2" (upside-down、opposite direction of remote controller) in 2 seconds after pressingL/R/Direction/set.
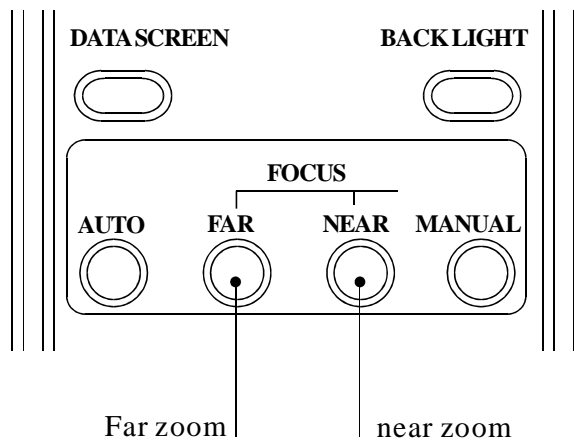
5.2 Camera control
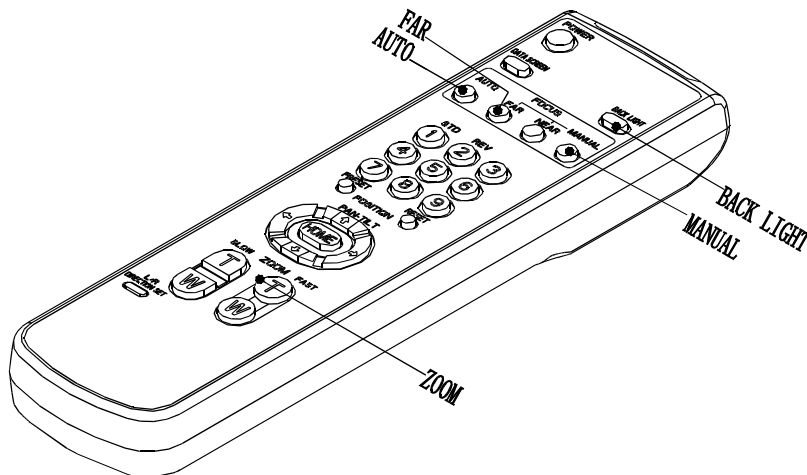
Focus

1. Auto focusing: press "auto", camera will focus on the central object.
2. Manual focusing: press "manual" to switch auto and manual focusing. Under model of "manual focusing", press "far" to set focus in far distance, press "near" to set focus in near distance.
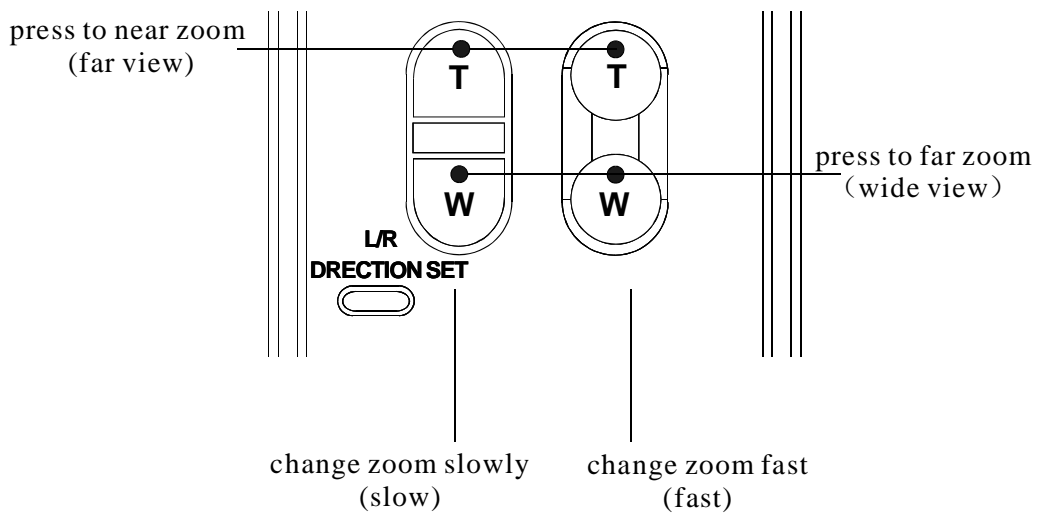
Instruction ℭ

Ø **Back light imaging**

Light behind of the object, which will be black, press "back light" for compensation.
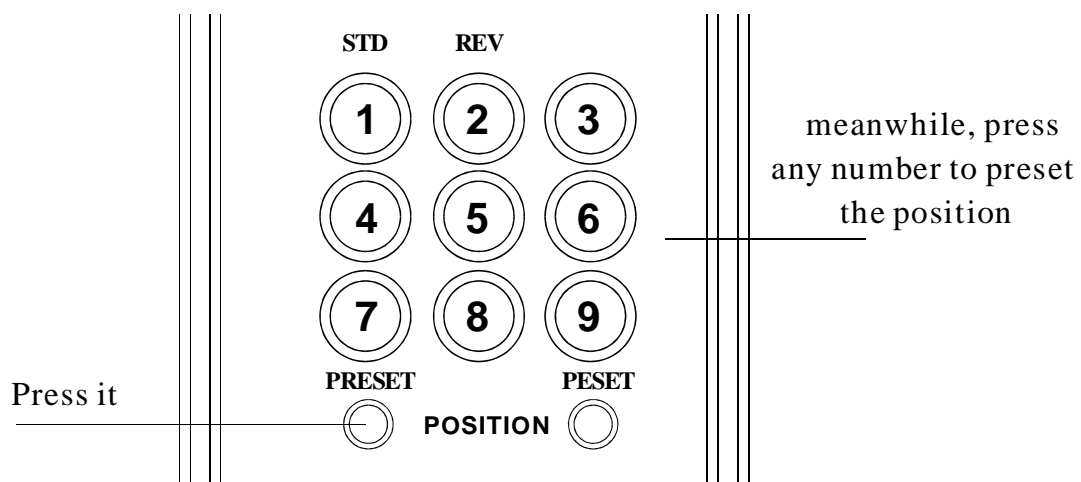
Press again for cancel this function.

DATA SCREEN BACK LIGHT

FOCUS

AUTO FAR NEAR MANUAL

Far zoom near zoom

Ø **Change focus**

Press any button of zoom to realize different zoom.

press to near zoom
(far view)

T T

press to far zoom
（wide view）

W W

L/R
DRECTION SET

change zoom slowly
(slow)

change zoom fast
(fast)

5.3 Memory settings-preset function

Can set 9 combinations of presets: position, zoom and back light etc.

1. Confirm standby with no glitter.

2. Adjust camera position, zoom and focus on back light.

3. Keeping press preset key, then press any number 1-9 to save presets.

4. Choose the memory setting key .

STD   REV

① ② ③

④ ⑤ ⑥

⑦ ⑧ ⑨

PRESET   PESET

POSITION

Press it

meanwhile, press
any number to preset
the position

Choose memory settings：Press any number 1-9 which stands for the saved preset.

Delete memory settings： Press PESET while press the related number which is saved for
the preset for deletion.

Attention

1、 When camera wired into the power supply, it starts automatically from the memory presets.

2、 If you want to keep the presets effective when start again after power break off, you can save the presets in
position .

3、 Preset is saved or deleted in one position, it can not use other presets when setting. Same preset only can
be saved or deleted in one position.

6. System menu settings

1. Press 【DATA SCREEN】of the remote control to enter menu.

2. It shows only one line of the menu. Press "up" and "down" keys to choose the menu, press "left" and "right" keys to set the function settings.

3. Basic operation of the menu

    1．【AE MODE】 AE mode

      (1) Available options of AE MODE

        ● 【AUTO】: default setting, automatic exposure mode

        ● 【BRIGHT】: brightness priority mode

        ● 【IRIS】: iris priority mode

        ● 【SHUTTER】: shutter priority mode

      (2) Choose iris priority mode 【IRIS】,press right key to save

      (3) Press the arrow keys of the remote control to the sub-choices of AE mode 【IRIS F1.6】,press "up" and "down" keys to choose adequate Iris. Press right key to save.

        ● 【SHUTTER 1/50】it means shutter speed, when AE mode is shutter priority, this function can be set.

        ● 【IRIS F1.6/0DB】 it means the size of iris, when AE mode is iris priority,this function can be set.

        ● 【BRIGHT F1.6/ODB】 it means brightness, when AE mode is brightness priority, this function can be set.

  2．【FIRMWARE】version number of the software.

  3．【DEFAULT】resume the default settings

  4．【CAM ADRESS】camera address

  5．【BAUDRATE】baud rate of PTZ camera

  6．【PROTOCOL】protocol of PTZ camera

  7．【L-R DIRECTION】arrow keys of the remote control & running direction of camera

      ● 【OFF】the arrow keys are in same direction as camera

      ● 【ON】 the arrow keys are in different direction as camera

  8．【HEAD DOWN】inverted image 【OFF】upside installation 【ON】upside-down installation

  9．【ZOOM LABEL】magnification display settings

 10．【DISPLAY】display setting of the functions

 11．【SHARPNESS】image acutance settings

12.【FLIP】180 ° image inversion function

13.【MIRROR】mirror image function

14.【WB MODE】white balance mode

Auto mode【AUTO】is the default mode of PTZ camera. It is natural color, which is automatically reverted by the white balance sensors of the camera after it checks the environment.【R GAIN】and 【B GAIN】can be adjustable when it is in manual mode【MANUAL】.

● 【R GAIN】the optional range is 1-255.The bigger numerical value, the more red adding, and it changes to warm tone.

● 【B GAIN】the optional range is 1-255.The bigger numerical value, the more blue adding, and it changes to cold tone.

● Indoor mode.【INDOOR】 tone leans to cold

● Outdoor mode【OUTDOOR】 tone leans to warm

● 【ATW】auto tracking mode

● 【OPW】white balance mode

15.【EX-COMP】exposure compensation

16.【BLC-MODE】back light compensation

● 【OFF】close BLC-MODE

● 【ON】open BLC-MODE

17.【SLOW SHUTTER】slow shutter function

● 【OFF】close SLOW SHUTTER

● 【ON】open SLOW SHUTTER

18.【IR CUT FILTER】Color/Black switch setting. Options are as following,【AUTO】is default mode.

● 【AUTO】Auto mode, it means the mode automatically transfers according to the luminance.

● 【COLOR】set as colorized mode

● 【BLACK】set as black-and-white mode

■ This function is subject to model no. and parameters of the built-in camera of PTZ. If the camera does not have these functions, then the function options are not available (N/A).
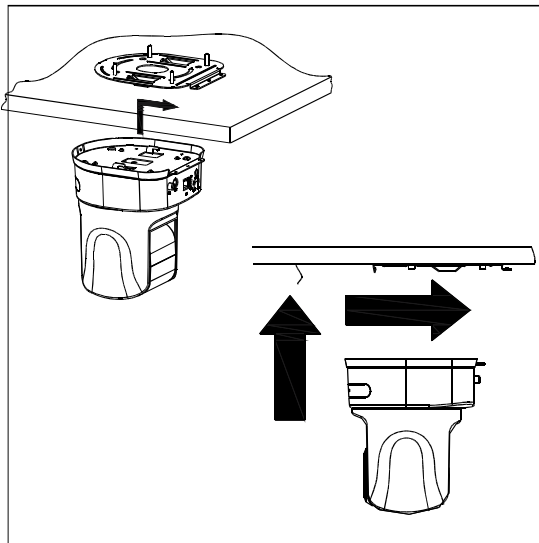
7. Installation instruction
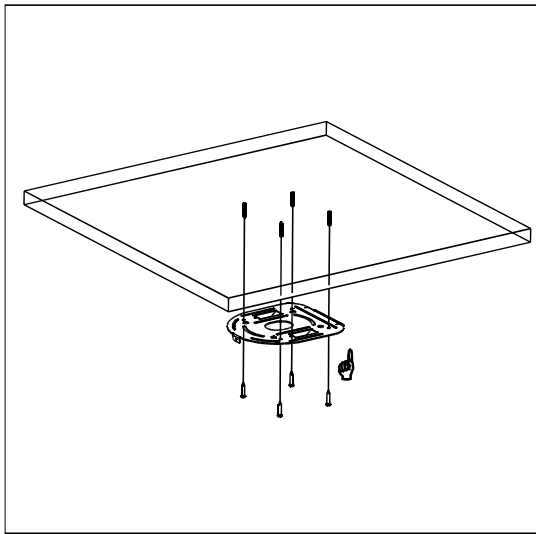
1.To drill 4 M4 screw hole in ceiling (see above sketch), use 4pc STP4X16 cross screws to fix the upside-down installation board of D57 on ceiling.
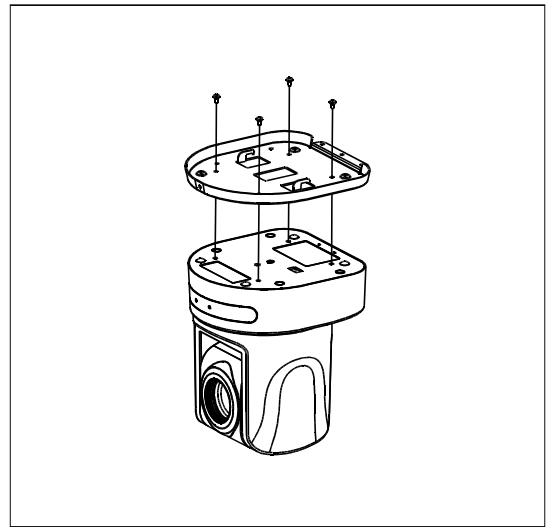
2.Use 4 M3 x5 cross screws to fix the video conference camera on the connection board, showed as the sketch.

3.Hang the discreteness made in step 2 on the installation board, showed as the above sketch.
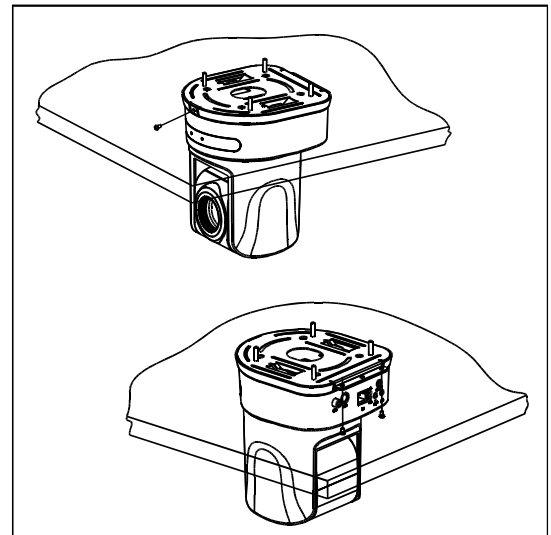
4.Use 3pcs M3X5 cross screws to fix the connection board and installation board, like above sketch.

8. Maintenance service terms

1. Range of warranty

● The product will be maintained free for one year.

● The product will be obtained the free maintenance service if the same malfunction appears again within three payable maintenance months.

● Malfunction of products caused by force majeure (such as war, earthquake, lightning strike and so on), abuse, non-standard operation, change of construction, non-normal wear or accident are non-free of warranty.

● Please prevent from the damage which is caused by heavy pressure , the fierce vibration and soaks in the process of transportation and storage, which does not belong to the free maintenance range.

● Please adopt the way of fission package or original package to transport because the product damage dose not belong to the free maintenance scope if you use the whole packing way , not the original packing way.

● The maintenance services will not be free when the pan/tilt module is disassembled or serviced by the user voluntarily.

● Our company implements the lifetime payable service if the product in malfunction has surpassed the warranty period.

● To the products with defect :if it's in the period of warranty, please fill in the form of warranty information correctly, describe the trouble in details, and provide original sales. invoice or its copy.

● For the damage and loss which was caused by the user's specifically application, factory won't bear any risk and responsibility. The factory compensation made by breach of faith, negligence or tortious won't exceed the amount of the products. The factory won't bear any responsibility for the special, unexpected and continue damage caused by any other reasons.

● Our company has the final right of explanation for the above terms.

2. Warranty terms

● If the products are within the warranty time, the buyer should fill in the warranty card and send back together with the products.

3. Shipping

● If the product needs repaired , you can return it to the manufacturer through the supplier or directly. If you choose the later , please contact us in order to speed up the process. And our company only undertake the one-way freight from manufacturer to customer after maintenance.