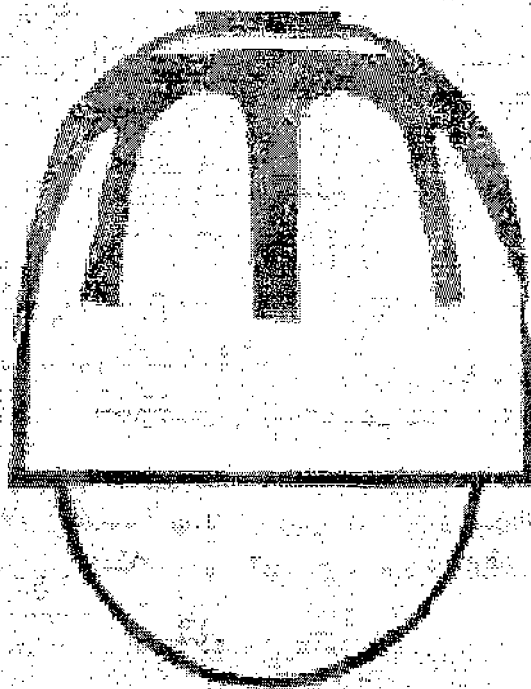


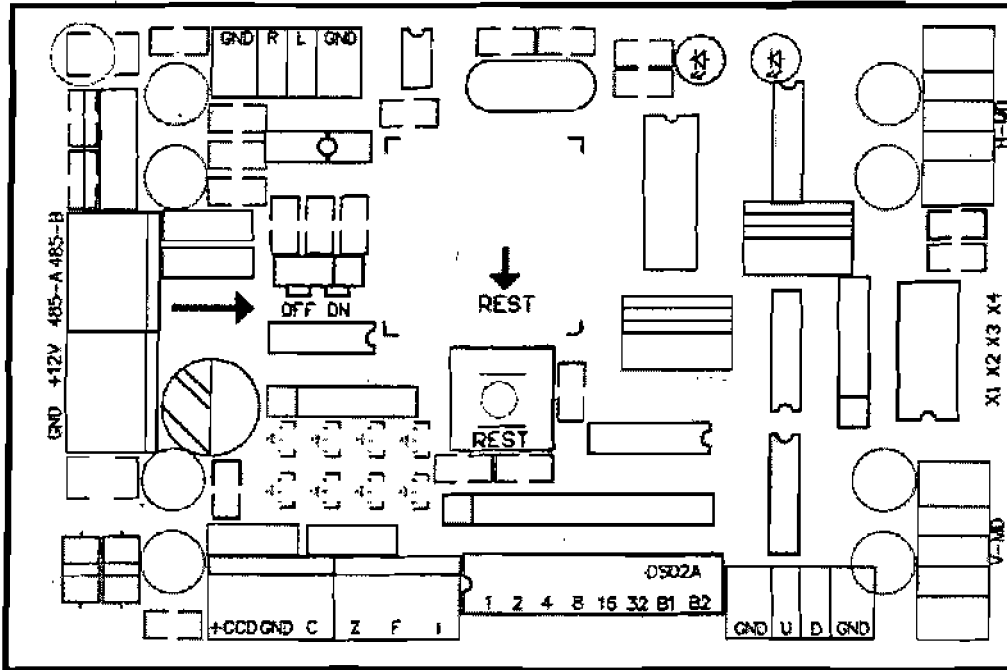
The manual intelligent of ball supervion

Ver1.0



before use of this product, please read the Manual carefully

This product is controlled by MCU, has the function of correspondence protection, and strong anti-jamming ability, Replace the original "yun tai" control and separated decoding board completely, to realize "yun tai" electrical control and the lens control function, reduced the voltage and current of limit switch, thus lengthened the use life of limit switch. Have strong agreement adaptation: can be commonly with most common agreement in domestic. The input voltage is DC12V/3000MA, no need match additional camera power manostat. 12V. direct current output current can reach 1000mA, satisfy the supply demand of big current camera, and has stable power performance. Mini insets board size (82mm×53mm), can satisfy most 3", 5", 6", 7", 9", 12", 14" "yun tai"



This product is a high-tech monitoring product, which collected the function of "yun tai", Lens control and decoding Maximum the connection and installation process between system parts, and enhanced the reliability of system. It is convenient to install and maintain, has the advantage of nice cosmetic, and simple operation etc.

1, Multi-agreement decoder:

(1). in-set decoder integrated various agreement, user can accord to the system demand through dial code switch to set communication agreement and baudrate directly.

(2). RS485 serial control ball "yun tai" address 1-64, (if need 255 addresses need pre-make), have anti-radar protection function.

2, Integrates multi-positions "yun tai" control function

(1), Rotary degrees: Left and Right 0-355°, vertical 0-90°.

(2), Rotary velocity: Level 0-30°/S, vertical 0-35°/S.

(3), Support "yun tai" do three-dimensional scanning between two point, each point stop 4second, line sweeping speed is 8.5°/S.

(4), With 64 pre-placed positions, the data can be memorized ever the power cut off.

(5), patrol path: 6pcs, each patrol path can set 16 pre-placed point, stop 4 second on pre-placed point, patrolling speed is 8.5°/S, after finishing setting can adjust patrol path according to demand.

A, "yun tai" horizontal limit connecting definition

pin	1	2	3	4	2 GND
definition	GND	KR	KL	GND	

B, "yun tai" vertical limit connecting definition

pin	1	2	3	4	3 Altogether carries (GND)
definition	GND	KU	KD	GND	

C, 12VDC and 485 correspondence connecting plug.

1.GND; 2 Feet: +12V; 3 Feet: 485-A; 4 feet: 485-B

D. camera power and lens output definition

plug	definition	plug	definition
1	Lens 12V (+CCD)	4	ZOOM
2	Lens (GND)	5	FOCUS
3	COM	6	IRIS

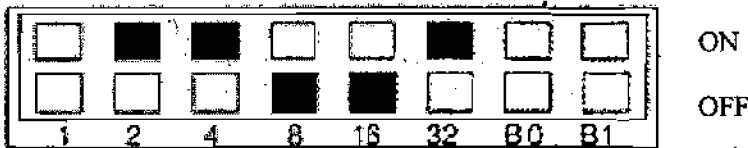
3. Agreement protocol

Number	1	2	3	4	Protocol
1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	6000
2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PANASONIC
3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HACNI (HC)
4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PELCO-P
5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SAMSUNG
6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PELCO-D
7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ALCE/TAAN
8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	LILIN
9	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	MAINVAN

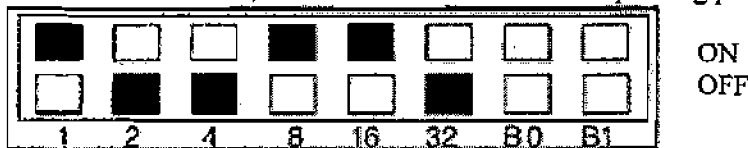
4. Address position

“yun tai” number setting: switch 1-16 means decoding address, to totaly cam set 64 channels. “yun tai” way value for the corresponding ON sum of value

If choose 38 channel, it means, $38=2+4+32$ the corresponding position set ON

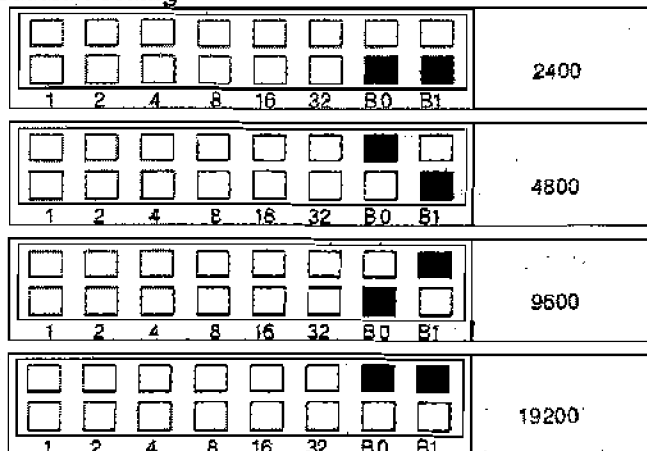


If choose 25 channel, it means $25=1+8+16$ the corresponding position set ON



Note: When do “曼码” agreement and PELCO-P agreement, the address start from 0, namely add 1 according to the above value.

5. Baudrate setting



§ External power input: 12VDC/3000MA

§ “yun tai” driver voltage 12VDC, the largest driver current 1600mA

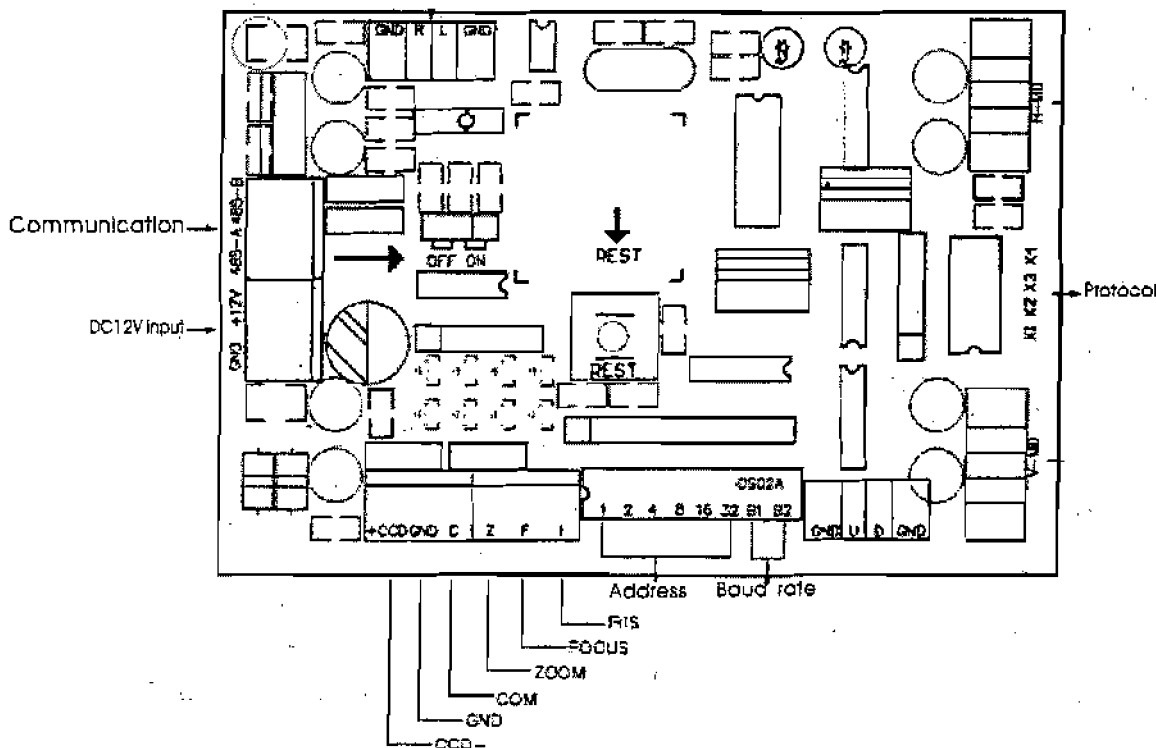
§ Camera 12V output voltage: 12VDC±10%, rated output current 1000mA

§ Lens driver voltage: DC12V the largest driver current 100mA

- (1) Uses twisted-paired control cable, like parallel cable, the communication distance will be reduced greatly.
- (2) Intelligent ball selects RS485 communication method, uses two core twisted pair lines, the tie cable length does not surpass 1200 meters, the system may use the chain type and the star type connection, RS+(A), RS-(B) is the signal end, meets main engine RS485 A and B, cannot meet instead. More than

(3), When many intelligent ball connection, to the farthest ball, should insert the JPI to on end (refer to the System connection diagram), is advantageous for 120Ω electricity cloudy match.

System connection reference diagram.



6. keyboard (auxiliary switch) cruise path operation set auto cruising path:

1, keyboard: Numeral ①+ON (refer to keyboard auxiliary switch manual) is the pre-placed point ①, Operation direction key (or rocking bar), adjusting the camera to monitor point, stop the direction key (or rocking bar) to pre-placed point ②, Then operate direction key again (or rocking bar), to get more pre-placed points, each path can set 16 pre-placed point at most.

2, Exit path setting: Auxiliary switch numeral +OFF (or AUXOFF);

3, After setting path, if you don't operate direction key (or rocking bar) about 10 seconds, the system will exit from the setting automatically.

4, Auto cruise exit: Operation the direction key (or rocking bar) is ok.

A Setting path status:

Operating procedure	path
31+ON	enters first path establishment status
32+ON	enter second path establishment status
.....
36+ ON	enter sixth path establishment status

B .Withdrawal path status:

Operating procedure	path
31+OFF	withdraws from first path establishment status
32+OFF	withdraws from second path establishment status
.....
36+ OFF	withdraws from sixth path establishment status

C transfer path status::

Operating procedure	path
41+ON	transfers first path establishment status
42+ON	transfers second path establishment status
.....
46+ ON	Transfers sixth path establishment status