



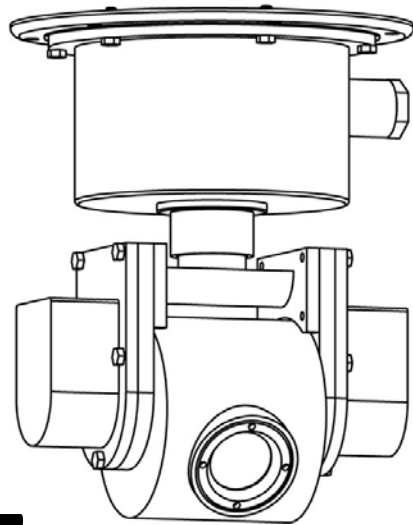
EX MARK: Exd CT6 (NO ETHYNE)

EExd B+H2T6

CERTIFICATE: CNEx04.1111X

Nemko 05ATEX1208

LICENSE: XK06-123-00251



SVEX-Q15 MANUAL BOOK

VEILUX INC.



SAFETY READING

Please carefully read the Manual Book before your operation

1. Installation

- Please install under required environment
- Ensure stable and reliable mounting in case camera be damaged
- Ensure supply power same as nameplate marked before equipment being powered
- Do not open the pan/tilt and enclosure under humid atmosphere, otherwise video picture will be influenced because of enclosure good sealing, humidity could not go outside.
- Please connect cable correctly

2. Maintenance

- Please shut off before maintenance and repair
- Pay attention to the flameproof joint while disassembly and assembly

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1. BRIEF

This **EXPLOSIONPROOF PAN TILT CAMERA** (therefore as SVEX-Q15) as a new monitoring equipment adopts advanced production techniques and matured quality management system to make its quality, performance and appearance a leading position in explosionproof monitoring products. It can be used in flammable and explosive environment to realize monitoring purpose.

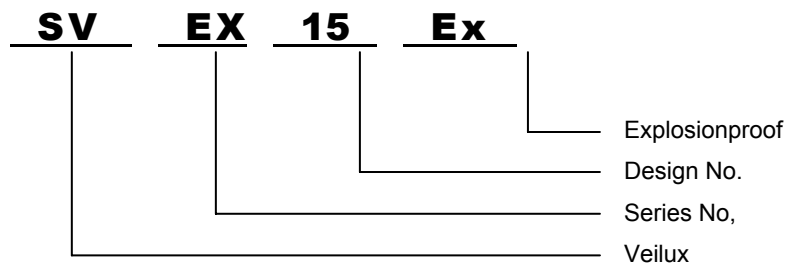
Strictly according to European Directive EC/94/9 and EN50014, Standards of GB3836.1-2000 GB3836.1—2000 Electrical apparatus for explosive atmosphere: General requirements, GB3836.2-2000 Electrical apparatus for explosive atmosphere: Flameproof 'd' and GB12476.1-2000 Electrical apparatus for explosive dust: Using enclosure and limiting surface temperature for protecting electrical apparatus Chapter 1: Technical requirements, this camera owns advantage of small volume, light weight and easy installation features and could be used in petroleum, chemical industry, jetty, port, mine, space, army and foodstuff area.

SVEX-Q15 with high performance color integrated camera, 23X optical lens, 10X digital zoom could adjust pan tilt speed according to lens location to keep a clear quality image. It owns low lux technique and color B/W auto change, digital picture up/down and freeze function.

SVEX-Q15 with multiple protocols to respond different control directives, its body moves 360° pan turning continuously and tilt -90°~+30°, with 64 presets to work in any complicated atmosphere.

2. TECHNICAL

2.1 Type Code



2.2 Certificate

Ex Mark	Exd_{II} CT6 (NO EHTYNE) / EExd_{II} B+H2T6
Ex Certificate	CNEx04.1111X / Nemko 05ATEX1208

License **XK06-123-00251**

2.3 Electric Data

Input voltage	220VAC, 50/60Hz
Working current	≤300mA
Power consumption	<50W
Communication	RS-485
Communication speed	multiple, could be set
Communication protocol	multiple, could be set
Address code	256
Prepositioning	64
Preposition error	≤0.5°
Video output	1.0±0.2Vp-p / 75Ω
Tour scan	45°、90°、180° optional
Electric connection	6-core cable for control, Power and video

2.4 Camera Data

Brand	HITACHI
Type	VK-S454E
Mode	PAL
Scan	Line scan
CCD	1/4 SONY CCD
Line Scan	15.625KHz
Site scan	50Hz
Pixel	470,000/795(H) x 596(V)
Lens	High performance /23X optic zoom / auto focus / F1.6, f=3.6~82.8mm / 10X digital zoom, total 230X
Min focus	0.01m (tele) / 1.0m (far)
View angle	54° (wide) / 2.5° (far)
Signal process	No. 6 DSP
Low Lux	0.1Lux (color) / 0.02Lux (black)
TVL	480 (color) / 600 (black/white)
SNR	> 50dB
Video output	BNC joint / 1.0± 0.2Vp-p / 75Ω
Power	DC12V± 0.5V

Power	5.0w
Syn.system	Inside/outside
Camera control	by RS232C control (or TTL)
Digital zoom	10X Zoom
Focus	Auto/manual
White balance	Auto/manual
Shutter	Auto : 1/50~1/4000s / Manual : 1/1.5~1/30000s
Frame	Manual : 2*,4*,6*,10*,16*,32*
Iris control	Auto/manual
Special control	Color/black switch / wide dynamic / auto move infrared filtrate / frame accumulation / digital picture move up/down / secret area shielded /image fr

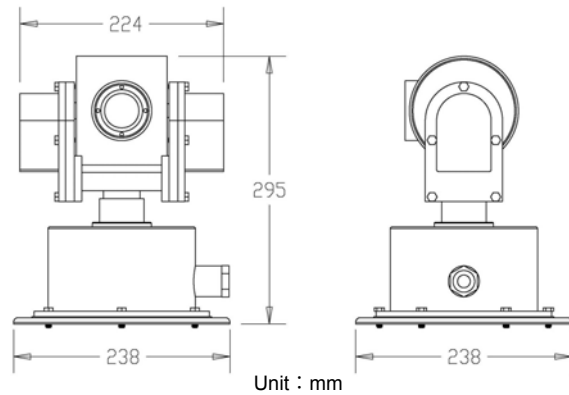
2.5 Mechanical

Material	Stainless 1Cr18Ni9Ti or 316L
IP level	IP65
Pan	0~360° continuously
Tilt	-90°~-+30°
Pan speed	35°/S
Tilt speed	35°/S
Unit/ Ship weight	16Kg / 20Kg
Mounting	ceiling or base

2.6 Environmental

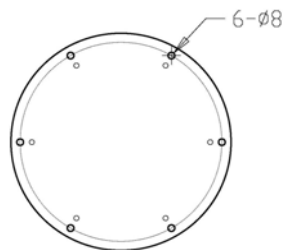
Air pressure	86~106KPa
Environment temperature	-40 ~+60 (with auto-heat)
Relative humidity	≤95%RH (+25)

2.7 Dimension



P1. SVEX-Q15 out dimension

2.8 Mounting Size



unit : mm

P2. camera bottom fix hole on diameter 216mm round

3. INSTALLATION

3.1 Caution

Please carefully check before installation

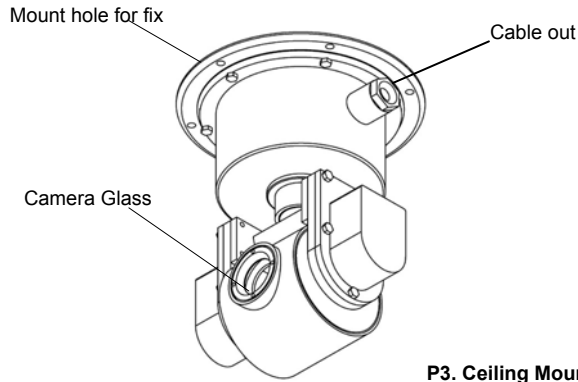
- If there is ex-marking license
- The ex-marking satisfy environment use
- All ex-proof and flameproof parts are complete enough for structure
- Inside and outside earthings are ready

Stop immediately while there is any unconformity

Be careful of the "AHEAD" mark on button of the camera before installation. This is especially important when it is

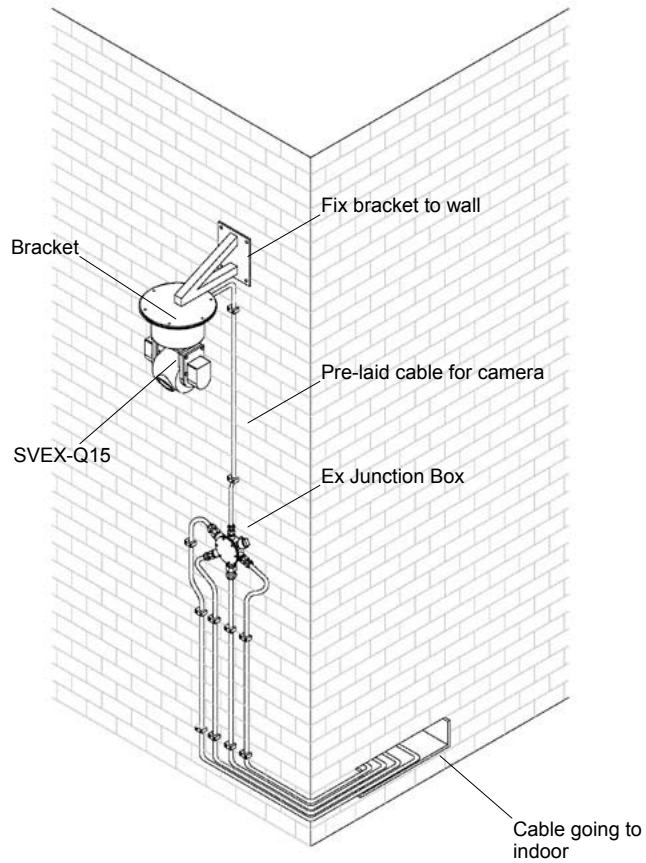
wall-mounting; the direction of “AHEAD” should be wide area exclude wall or barrier.

3.2 Ceiling Mount



P3. Ceiling Mount

Before installation of SVEX-Q15, please make sure its correct set, in order to make a good view of camera, please mount camera onto a higher and open location. Below is the picture of camera bottom mount for reference.



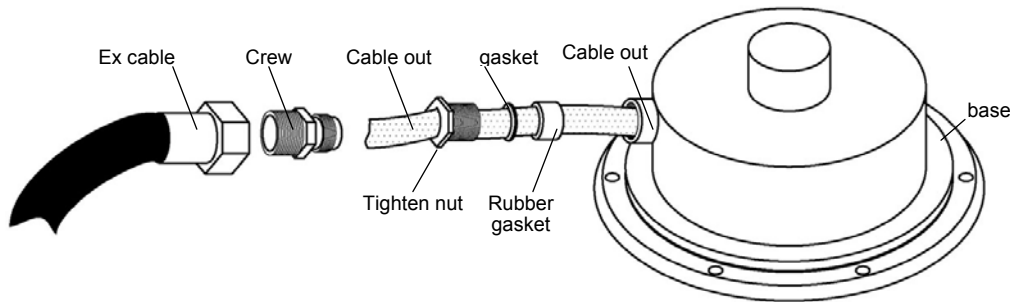
P4. Bracket and wall mount

While Camera cable connecting to junction box, please make sure using ex cable for connection or armoured cable with ex gland to fix them. The cable from junction box to indoor shall be covered by mental pipe or used armoured cable.

3.3 Cable Working

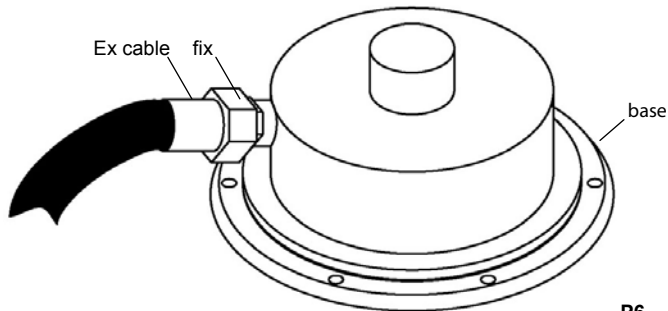
3.3.1 Ex Cable Use

a. As P5, open the tighten screw on the base of camera, open ex cable screw joint for future use



P5.

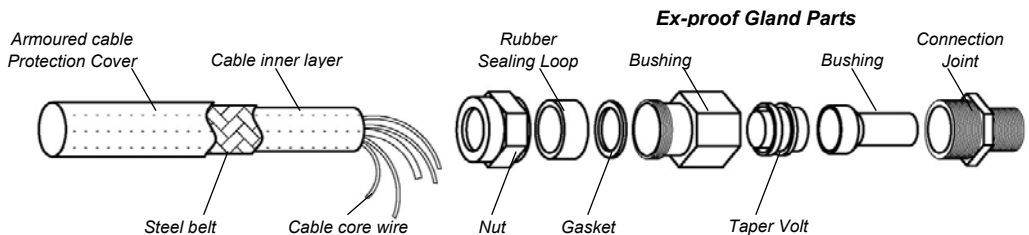
b. as P6 firstly tight screw joint and then tight ex cable



P6.

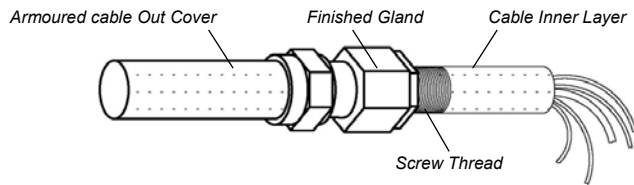
3.3.2 Armoured Cable Use

a. As Picture 7, remove proper length cable protection cover and cut off not used part.



P7.

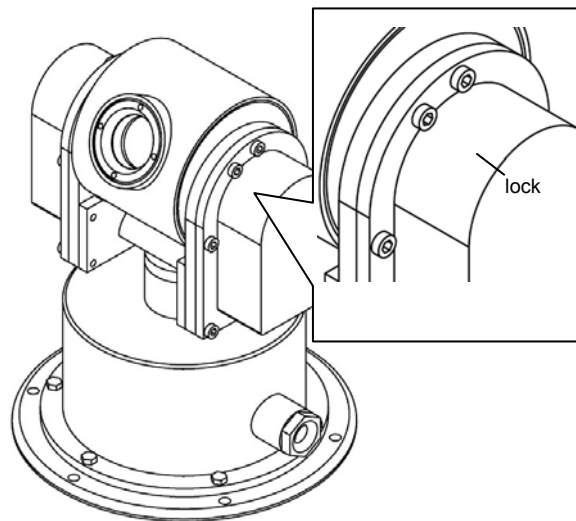
b. As Picture 8, install Ex-proof Gland to Armoured Cable, as the method please refer to Document for Installation of Ex-proof Gland.



P8.

c. armored cable with ex gland could be connected with any ex equipments

3.4 Lock Device



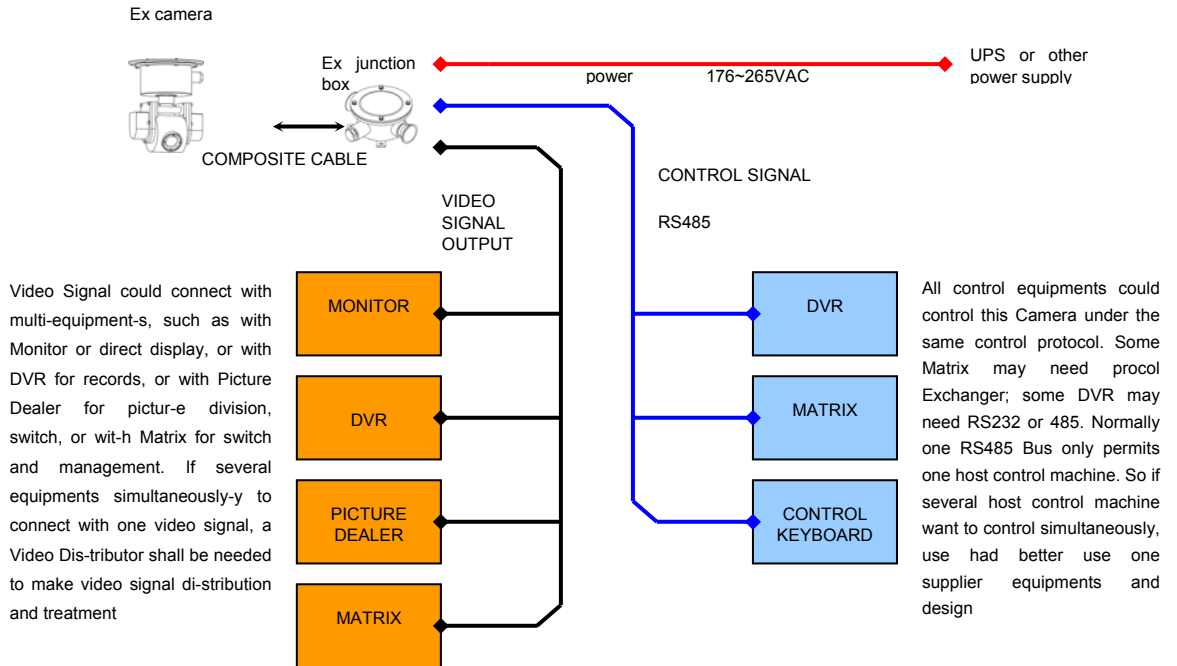
P9. To loose screw as picture

! IMPORTANT : Before power on of Camera, please make sure that FIXED screw has been moved away by special tool supplied by factory in package

4. APPLICATION

4.1 System Connection

4.1.1 System Diagram



P10. System Connection

4.1.2 Cable Definition

While camera leaves factory, we supply a Composite Cable** with camera, the cable goes out from Camera bottom with length at least 2 meters. So while connection the system, just connect the cable with Junction Box.

(*Composite Cable: A special cable, one Composite Cable includes one group power, one group control and one group video, it is generally used in Industry CCTV system.)

Table 1: Cable Definition

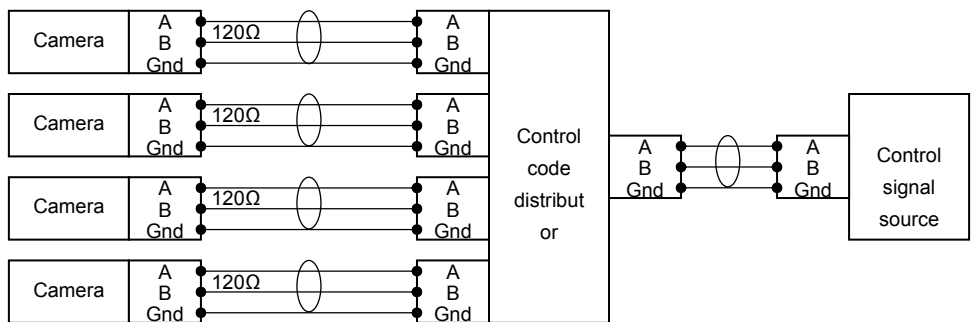
Composite Cable							
Name	Power			Control (shielded)			Video
Function	Live wire	Zero wire	Earth wire	A	B	G	SYV-75-3 Standard Video Cable
Colour	Brown	Grey	Black	Red	Blue	Brown	

4.1.3 Power and Video Cable Connection

A junction box shall be used with SVEX-Q15 as Picture, and refer to P to connect cable of power and video inside Junction Box. Remember to use ex cable for power cable out of Junction Box.

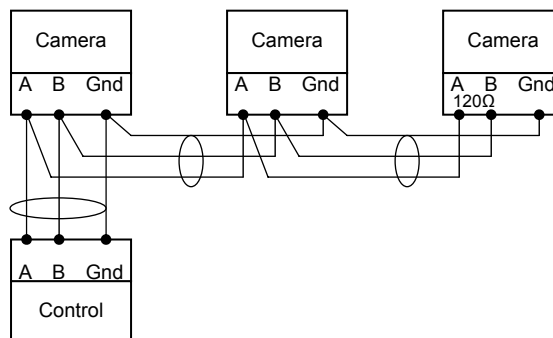
4.1.4 Control Signal Connection

While connecting Control Source and Cameras as below, please use Control Code Distributor. Besides adding a 120Ohm Terminal Resistor between Terminal A and B (as TB Communication Board, Jumper JMP1 under off position



P11. Star Connection

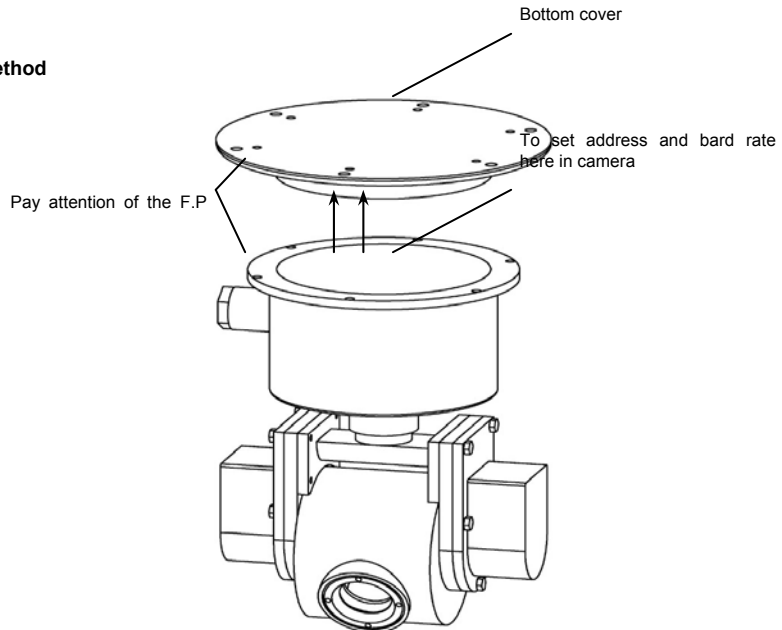
While connecting Control Source and Camera as below, please just add one 120Ohm Terminal Resistor between Terminal A and B (take off JMP1 from the board). And pay attention that the distance between junction box and camera shall not beyond 7meters



P12. "chrysanthemum" Connection

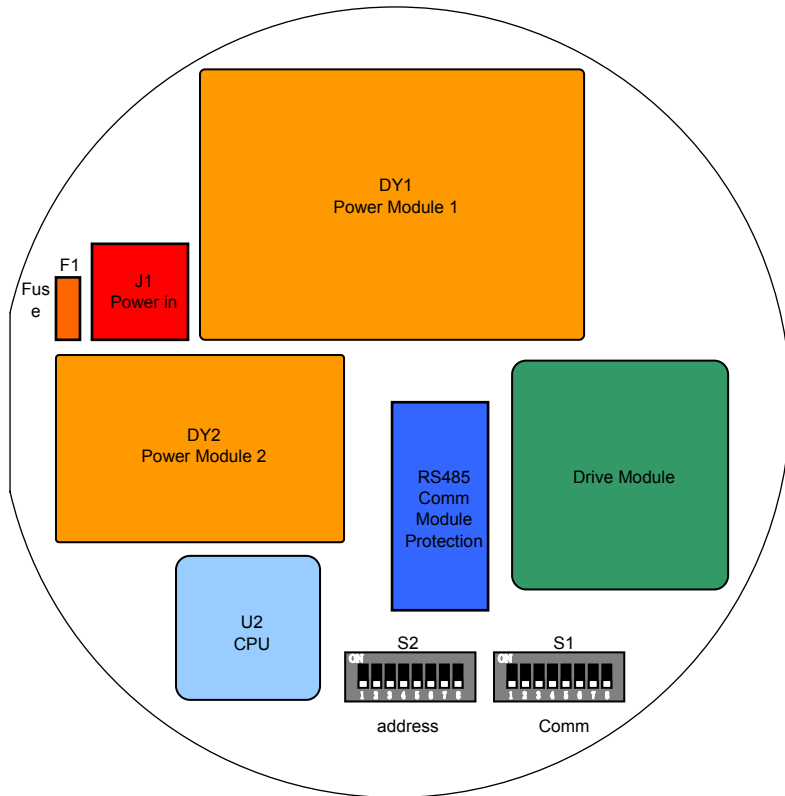
4.2 Set

4.2.1 Set Method



P13. Set Method

As picture 13 shows, after opening camera bottom cover, main power board of SVEX-Q15 could be seen clearly. Because engineer has done their inside cable connection before camera leaving factory, so operator to just do the baud rate and protocol set is enough. See below.



P14. Main power board structure

The fuse could auto-recover, the comm. Module and drive module may differ because of different camera version. To change CPU while software is upgrading

4.2.2 Camera Address Set

Camera address adopts binary system, ON to 1, OFF to 0. Normally address has been set down before camera leaving factory, but if there is need to adjust the address, please refer to manual instruction. After re-set, please re-power on camera to affect the new set.



P15. Decode Switch SW2

T2. Address Set

ADDR	DIP1	DIP2	DIP3	DIP4	DIP5	DIP6	DIP7	DIP8	ADDR	DIP1	DIP2	DIP3	DIP4	DIP5	DIP6	DIP7	DIP8
0	0	0	0	0	0	0	0	0	128	0	0	0	0	0	0	0	1
1	1	0	0	0	0	0	0	0	129	1	0	0	0	0	0	0	1
2	0	1	0	0	0	0	0	0	130	0	1	0	0	0	0	0	1
3	1	1	0	0	0	0	0	0	131	1	1	0	0	0	0	0	1
4	0	0	1	0	0	0	0	0	132	0	0	1	0	0	0	0	1
5	1	0	1	0	0	0	0	0	133	1	0	1	0	0	0	0	1

6	0	1	1	0	0	0	0	0	134	0	1	1	0	0	0	0	1
7	1	1	1	0	0	0	0	0	135	1	1	1	0	0	0	0	1
8	0	0	0	1	0	0	0	0	136	0	0	0	1	0	0	0	1
9	1	0	0	1	0	0	0	0	137	1	0	0	1	0	0	0	1
10	0	1	0	1	0	0	0	0	138	0	1	0	1	0	0	0	1
11	1	1	0	1	0	0	0	0	139	1	1	0	1	0	0	0	1
12	0	0	1	1	0	0	0	0	140	0	0	1	1	0	0	0	1
13	1	0	1	1	0	0	0	0	141	1	0	1	1	0	0	0	1
14	0	1	1	1	0	0	0	0	142	0	1	1	1	0	0	0	1
15	1	1	1	1	0	0	0	0	143	1	1	1	1	0	0	0	1
16	0	0	0	0	1	0	0	0	144	0	0	0	0	1	0	0	1
17	1	0	0	0	1	0	0	0	145	1	0	0	0	1	0	0	1
18	0	1	0	0	1	0	0	0	146	0	1	0	0	1	0	0	1
19	1	1	0	0	1	0	0	0	147	1	1	0	0	1	0	0	1
20	0	0	1	0	1	0	0	0	148	0	0	1	0	1	0	0	1
21	1	0	1	0	1	0	0	0	149	1	0	1	0	1	0	0	1
22	0	1	1	0	1	0	0	0	150	0	1	1	0	1	0	0	1
23	1	1	1	0	1	0	0	0	151	1	1	1	0	1	0	0	1
24	0	0	0	1	1	0	0	0	152	0	0	0	1	1	0	0	1
25	1	0	0	1	1	0	0	0	153	1	0	0	1	1	0	0	1
26	0	1	0	1	1	0	0	0	154	0	1	0	1	1	0	0	1
27	1	1	0	1	1	0	0	0	155	1	1	0	1	1	0	0	1
28	0	0	1	1	1	0	0	0	156	0	0	1	1	1	0	0	1
29	1	0	1	1	1	0	0	0	157	1	0	1	1	1	0	0	1
30	0	1	1	1	1	0	0	0	158	0	1	1	1	1	0	0	1
31	1	1	1	1	1	0	0	0	159	1	1	1	1	1	0	0	1
32	0	0	0	0	0	1	0	0	160	0	0	0	0	0	1	0	1
33	1	0	0	0	0	1	0	0	161	1	0	0	0	0	1	0	1
34	0	1	0	0	0	1	0	0	162	0	1	0	0	0	1	0	1
35	1	1	0	0	0	1	0	0	163	1	1	0	0	0	1	0	1
36	0	0	1	0	0	1	0	0	164	0	0	1	0	0	1	0	1
37	1	0	1	0	0	1	0	0	165	1	0	1	0	0	1	0	1
38	0	1	1	0	0	1	0	0	166	0	1	1	0	0	1	0	1
39	1	1	1	0	0	1	0	0	167	1	1	1	0	0	1	0	1
40	0	0	0	1	0	1	0	0	168	0	0	0	1	0	1	0	1
41	1	0	0	1	0	1	0	0	169	1	0	0	1	0	1	0	1
42	0	1	0	1	0	1	0	0	170	0	1	0	1	0	1	0	1
43	1	1	0	1	0	1	0	0	171	1	1	0	1	0	1	0	1
44	0	0	1	1	0	1	0	0	172	0	0	1	1	0	1	0	1
45	1	0	1	1	0	1	0	0	173	1	0	1	1	0	1	0	1
46	0	1	1	1	0	1	0	0	174	0	1	1	1	0	1	0	1
47	1	1	1	1	0	1	0	0	175	1	1	1	1	0	1	0	1
48	0	0	0	0	1	1	0	0	176	0	0	0	0	1	1	0	1
49	1	0	0	0	1	1	0	0	177	1	0	0	0	1	1	0	1
50	0	1	0	0	1	1	0	0	178	0	1	0	0	1	1	0	1
51	1	1	0	0	1	1	0	0	179	1	1	0	0	1	1	0	1
52	0	0	1	0	1	1	0	0	180	0	0	1	0	1	1	0	1
53	1	0	1	0	1	1	0	0	181	1	0	1	0	1	1	0	1
54	0	1	1	0	1	1	0	0	182	0	1	1	0	1	1	0	1
55	1	1	1	0	1	1	0	0	183	1	1	1	0	1	1	0	1
56	0	0	0	1	1	1	0	0	184	0	0	0	1	1	1	0	1
57	1	0	0	1	1	1	0	0	185	1	0	0	1	1	1	0	1
58	0	1	0	1	1	1	0	0	186	0	1	0	1	1	1	0	1
59	1	1	0	1	1	1	0	0	187	1	1	0	1	1	1	0	1
60	0	0	1	1	1	1	0	0	188	0	0	1	1	1	1	0	1
61	1	0	1	1	1	1	0	0	189	1	0	1	1	1	1	0	1
62	0	1	1	1	1	1	0	0	190	0	1	1	1	1	1	0	1
63	1	1	1	1	1	1	0	0	191	1	1	1	1	1	1	0	1
64	0	0	0	0	0	1	0	0	192	0	0	0	0	0	0	1	1
65	1	0	0	0	0	0	1	0	193	1	0	0	0	0	0	1	1
66	0	1	0	0	0	0	1	0	194	0	1	0	0	0	0	1	1
67	1	1	0	0	0	0	1	0	195	1	1	0	0	0	0	1	1
68	0	0	1	0	0	0	1	0	196	0	0	1	0	0	0	1	1
69	1	0	1	0	0	0	1	0	197	1	0	1	0	0	0	1	1
70	0	1	1	0	0	0	1	0	198	0	1	1	0	0	0	1	1
71	1	1	1	0	0	0	1	0	199	1	1	1	0	0	0	1	1
72	0	0	0	1	0	0	1	0	200	0	0	0	1	0	0	1	1
73	1	0	0	1	0	0	1	0	201	1	0	0	1	0	0	1	1
74	0	1	0	1	0	0	1	0	202	0	1	0	1	0	0	1	1
75	1	1	0	1	0	0	1	0	203	1	1	0	1	0	0	1	1
76	0	0	1	1	0	0	1	0	204	0	0	1	1	0	0	1	1
77	1	0	1	1	0	0	1	0	205	1	0	1	1	0	0	1	1
78	0	1	1	1	0	0	1	0	206	0	1	1	1	0	0	1	1
79	1	1	1	1	0	0	1	0	207	1	1	1	1	0	0	1	1
80	0	0	0	0	1	0	1	0	208	0	0	0	0	1	0	1	1
81	1	0	0	0	1	0	1	0	209	1	0	0	0	1	0	1	1
82	0	1	0	0	1	0	1	0	210	0	1	0	0	1	0	1	1
83	1	1	0	0	1	0	1	0	211	1	1	0	0	1	0	1	1
84	0	0	1	0	1	0	1	0	212	0	0	1	0	1	0	1	1
85	1	0	1	0	1	0	1	0	213	1	0	1	0	1	0	1	1
86	0	1	1	0	1	0	1	0	214	0	1	1	0	1	0	1	1
87	1	1	1	0	1	0	1	0	215	1	1	1	0	1	0	1	1
88	0	0	0	1	1	0	1	0	216	0	0	0	1	1	0	1	1
89	1	0	0	1	1	0	1	0	217	1	0	0	1	1	0	1	1
90	0	1	0	1	1	0	1	0	218	0	1	0	1	1	0	1	1
91	1	1	0	1	1	0	1	0	219	1	1	0	1	1	0	1	1
92	0	0	1	1	1	0	1	0	220	0	0	1	1	1	0	1	1
93	1	0	1	1	1	0	1	0	221	1	0	1	1	1	0	1	1
94	0	1	1	1	1	0	1	0	222	0	1	1	1	1	0	1	1
95	1	1	1	1	1	0	1	0	223	1	1	1	1	1	0	1	1
96	0	0	0	0	0	1	1	0	224	0	0	0	0	0	1	1	1

97	1	0	0	0	0	1	1	0	225	1	0	0	0	0	1	1	1
98	0	1	0	0	0	1	1	0	226	0	1	0	0	0	1	1	1
99	1	1	0	0	0	1	1	0	227	1	1	0	0	0	1	1	1
100	0	0	1	0	0	1	1	0	228	0	0	1	0	0	1	1	1
101	1	0	1	0	0	1	1	0	229	1	0	1	0	0	1	1	1
102	0	1	1	0	0	1	1	0	230	0	1	1	0	0	1	1	1
103	1	1	1	0	0	1	1	0	231	1	1	1	0	0	1	1	1
104	0	0	0	1	0	1	1	0	232	0	0	0	1	0	1	1	1
105	1	0	0	1	0	1	1	0	233	1	0	0	1	0	1	1	1
106	0	1	0	1	0	1	1	0	234	0	1	0	1	0	1	1	1
107	1	1	0	1	0	1	1	0	235	1	1	0	1	0	1	1	1
108	0	0	1	1	0	1	1	0	236	0	0	1	1	0	1	1	1
109	1	0	1	1	0	1	1	0	237	1	0	1	1	0	1	1	1
110	0	1	1	1	0	1	1	0	238	0	1	1	1	0	1	1	1
111	1	1	1	1	0	1	1	0	239	1	1	1	1	0	1	1	1
112	0	0	0	0	1	1	1	0	240	0	0	0	0	1	1	1	1
113	1	0	0	0	1	1	1	0	241	1	0	0	0	1	1	1	1
114	0	1	0	0	1	1	1	0	242	0	1	0	0	1	1	1	1
115	1	1	0	0	1	1	1	0	243	1	1	0	0	1	1	1	1
116	0	0	1	0	1	1	1	0	244	0	0	1	0	1	1	1	1
117	1	0	1	0	1	1	1	0	245	1	0	1	0	1	1	1	1
118	0	1	1	0	1	1	1	0	246	0	1	1	0	1	1	1	1
119	1	1	1	0	1	1	1	0	247	1	1	1	0	1	1	1	1
120	0	0	0	1	1	1	1	0	248	0	0	0	1	1	1	1	1
121	1	0	0	1	1	1	1	0	249	1	0	0	1	1	1	1	1
122	0	1	0	1	1	1	1	0	250	0	1	0	1	1	1	1	1
123	1	1	0	1	1	1	1	0	251	1	1	0	1	1	1	1	1
124	0	0	1	1	1	1	1	0	252	0	0	1	1	1	1	1	1
125	1	0	1	1	1	1	1	0	253	1	0	1	1	1	1	1	1
126	0	1	1	1	1	1	1	0	254	0	1	1	1	1	1	1	1
127	1	1	1	1	1	1	1	0	255	1	1	1	1	1	1	1	1

4.2.3 Comm Protocol Set

Please firstly make sure camera comm. Protocol, then to make S1 set and power again to affect camera.



P16. Switch S1

T3. Protocol (S1)

type	DIP4	DIP5	DIP6
PELCO-P	OFF	OFF	OFF
PELCO-D	ON	OFF	OFF

4.2.4 Comm Speed Set

According to T4 to make set for S1 and re-power camera to affect.

T4. Baud rate set (S1)

Baud rate	DIP2	DIP3
2400 bps	OFF	OFF
4800 bps	ON	OFF
9600 bps	OFF	ON
19200 bps	ON	ON

4.2.5 Other Set

S1 first button is for auto check,, while power on, camera will do auto check automatically

T5. Auto-check set (S1)

State	DIP1
Open	ON
Close	OFF

S1 seventh button is for dual control set that is to control camera for dual direction turning simultaneously

T6. Dual control set (S1)

Control Mode	DIP7
Single	ON
Pan and Tilt dual way	OFF

S1 eighth button is for lens control set

T7. Lens control set (S1)

Control mode	DIP8
Relay control	ON
TTL / RS-232 / RS-485	OFF

4.2.6 Terminal Resister

Refer to T8 to adjust "120" of comm. Module as diagram of 4.1.4

T8.Terminal 120 resister adjust

120ohm	" 120" jumper
increase	ON
Remove	OFF

4.3 Usage

After correction of system, power could be on for camera working. But before power on, please make sure correct input voltage, and the lock screw is moved away and with correct set for address and baud.

Normally, SVEX-Q15 will do self-check with video on monitor, after that control operations could be done as directives, for any problems please refer to the problem shooting steps

4.3.1 Preset tour running

- Preset tour running is camera discontinuously use one appointed group of presets. This product support 64 presets in all, among which No.1~63 is useable, these presets all support "set", "use", "delete", etc. No.1~20 at the same time support preset tour running.
- To run Preset Tour function: please run Preset No.64.
- Once the order is start up, camera will quickly start from preset No.1 to other presets in a sequence and stop for about 30 seconds in every preset. When the last preset in queue finishes its running, camera will start preset running again in reverse order, to finish one group tour running. About 30 minutes later, camera will do the preset tour running again.
- Among the presets No.1~20, one that is not defined will not be used. If you want to delete a preset, you

should execute "Delete" order.

- In the interval of preset tour running, implement the pan/tilt or lens operation will stop the preset tour running.

4.3.2 Reserved Directives

The following is reserved directives for system, in normal operations, they are not suggested to use.

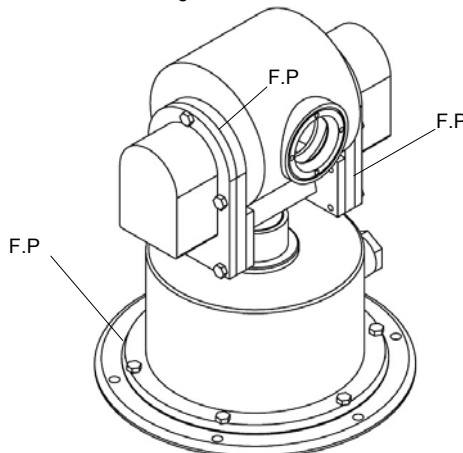
T9. System Reserved Directives

Directives	Functions
Aux 1 /ON	Pan tilt goes down by force
Aux 1/OFF	None
Aux 2 /ON	Pan tilt goes up by force
Aux 2 /OFF	System auto check

While system works for some long time, if its preset accuracy is not as perfect as required, system auto check could be used to improve or correct its accuracy

5. FLAMEPROOF STRUCTURE

- Completely consider the explosive air getting into ex-proof structure, which may lead to explosion because of some reason and to confirm and ensure camera explosion proof performance based on its structure gap, length and max temperature it will get to.
- Enclosure shall burden water pressure testing for 1.5Mpa for 10~12 seconds without leakage as pass, which is ordered in GB3836.2-2000.
- Camera surface temperature max shall not over 80 while it is working.
- Window glass adopts steel glass to burden Impact and Heat change testing.
- Enclosure protection to IP66
- Cable for Camera uses inlaid device to tighten its screw and nut and make cable tight and no move..



P17. Flameproof point location

6. TROUBLE SHOOTING

P14. Trouble shooting

Problems	Reason	Method
No image	Power off	Make sure the power is ok
	Video cable not good connection	Check the Video Cable
Sometime no image	Video cable not good connection	Check the Video Cable
Control error	Not good connection of Signal cable	Check Signal Cable is correct connection
	Too long communication distance make signal loose	Add repeaters to make communication distance longer
	Signal reflect	Short connect the farthest camera decoder board'120 and add 120Ω resistance to remove reflect
	Not correct Address	To re-set refer to Manual book
	Not correct Protocol	
Not correct Baud rate		
Wash system error	No enough pressure in the water tank	Use air pump to add pressure
	Block on the water filling hole is loose	Screw down the block with tools to assure airproof
	The gas leaks from pressure enhancement outlet	Repair or change the valve core of pressure enhancement outlet
	The gas leaks from water spraying outlet	Repair or change the valve core of water spraying outlet
	Water spraying outlet stop up	Clean out water spraying outlet
	Water pipe craze	Change the water pipe
	Water tank craze	Send it back to factory to repair

7. SHIPPING AND STORGE

After package, without rain or snow fall directly to product, shipment could do by air or sea and store for one year under the environment of 0 ~+40 , humidity >90%

8. INSTALLATION ACCESSARIES

Please make sure Camera cable outlets are equipped with 8mm rubber sealing gasket and the followings in package

- 8mm rubber sealing gasket one piece
- Hex wrench one piece

9. QUALITY GUARANTEE

For any camera produced by VEILUX, we promise half-year to change and one year to repair.

During Guarantee period, we supply free service except following situations:

- User does not operate as manual book requires
- User un-install the whole product by themselves
- Lightning or Act of God

If there are additional agreements between VEILUX and buyer, then agreements shall be strictly done

10. COMPANY COMMITMENT

- VEILUX owns the final design changing and final specification rights and no responsibility to inform user
- This manual book belongs to VEILUX rights, without permits or any book inform, any company or private copy of whole or part of the book shall be prohibited.



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