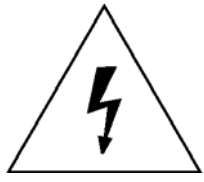


Ver 1.0

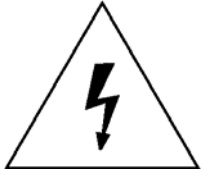
CLEBO PM-10S / PM-10HT

Megapixel Speed Dome Camera



:

가

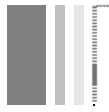


,

.



()



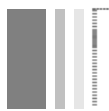
1.

2.

3.

4.

5.



1.

1.

2.

2.

1.

2.

3.

3.

1.

2.

3.

4.

5.

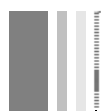
가

가

가

가

	●		5
			7
			8
	DIP		9
	●		12
			13
			14
	●		18
	/ 1.		19
	2.		20
	3.		21
4.	(X18)		22
	PTZ / 1.		23
	2.RS485		23
3. Preset	Preset Sequence		24
	4. Swing		25
	5.Pattern		27
	6.Group Tower		28
	/ 1.		29
	2. Emergency Alarm		30
	/ 1.IP		31
	2.Dynamic DNS		31
	3. Live Protocol		32
	4. IP		32
	/ 1.		33
	2.		33
	3.		34
	4.		35
	●		
	1.		36
	2.		39



IP-server LAN, ADSL/VDSL, and Wireless LAN IP



Camera (10X, 2M pixel model)

- : 1/3" 2Megapixel CMOS
- : × 10 , × 12
- Day & Night

Camera (18X, 1.3M pixel model)

- : 1/3" Megapixel solid State Progressive Scan CCD.
- : × 18
- WDR (Wide Dynamic Range)
- SNR(Super Noise Reduction)
- Auto-Focus, Manual Focus Semi-Auto Focus PTZ Focus
가 .



- H.264, MPEG4, MJPEG
- : 1280×720 ~ 256×144
- : 50kbps ~ 8Mbps
- HD-SDI (HDCCTV)



- : (IP-server Client PC / Decoder, Client PC / Decoder
IPserver),



- IP IP(DHCP), PPPoE
- 1:1, 1:N
-
- : TCP/IP, UDP, Multicast, DHCP, SMTP, HTTP, SNMP, RTP, RTSP

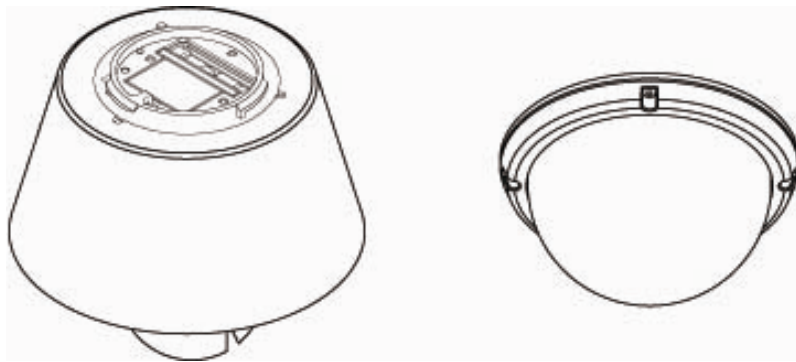
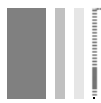
- /
 - 360°/ 가
 - 가
 - 0.05°/ 가 , 가

- ,
 - 255(×10)/99(×18) ,
 - 2 . (8)
 - (4)
 - / / 20 . (8)

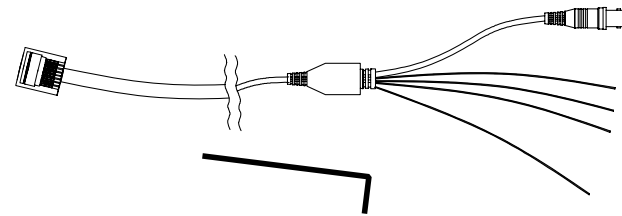
- PTZ
 - RS-485 . 255

- ()
 - 3 1
 -
 - Normal Open Normal Close , DC 5~12V
 - Pattern, Swing, Group
 - Post Alarm .

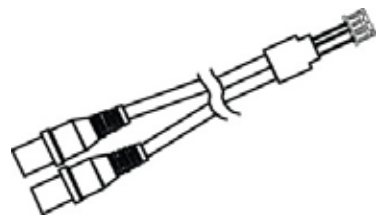
- - / 가 . IP67
 - 가 .



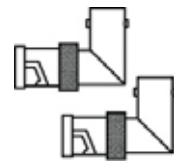
●



● Main Cable /



● Audio Cable



● BNC (2)



● Cross LAN Cable



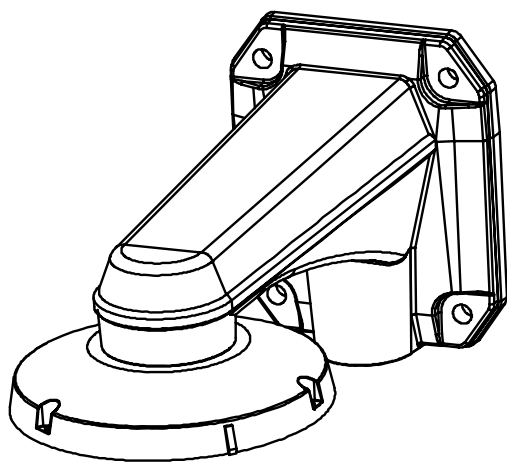
● CD



●

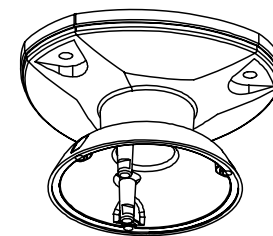


()



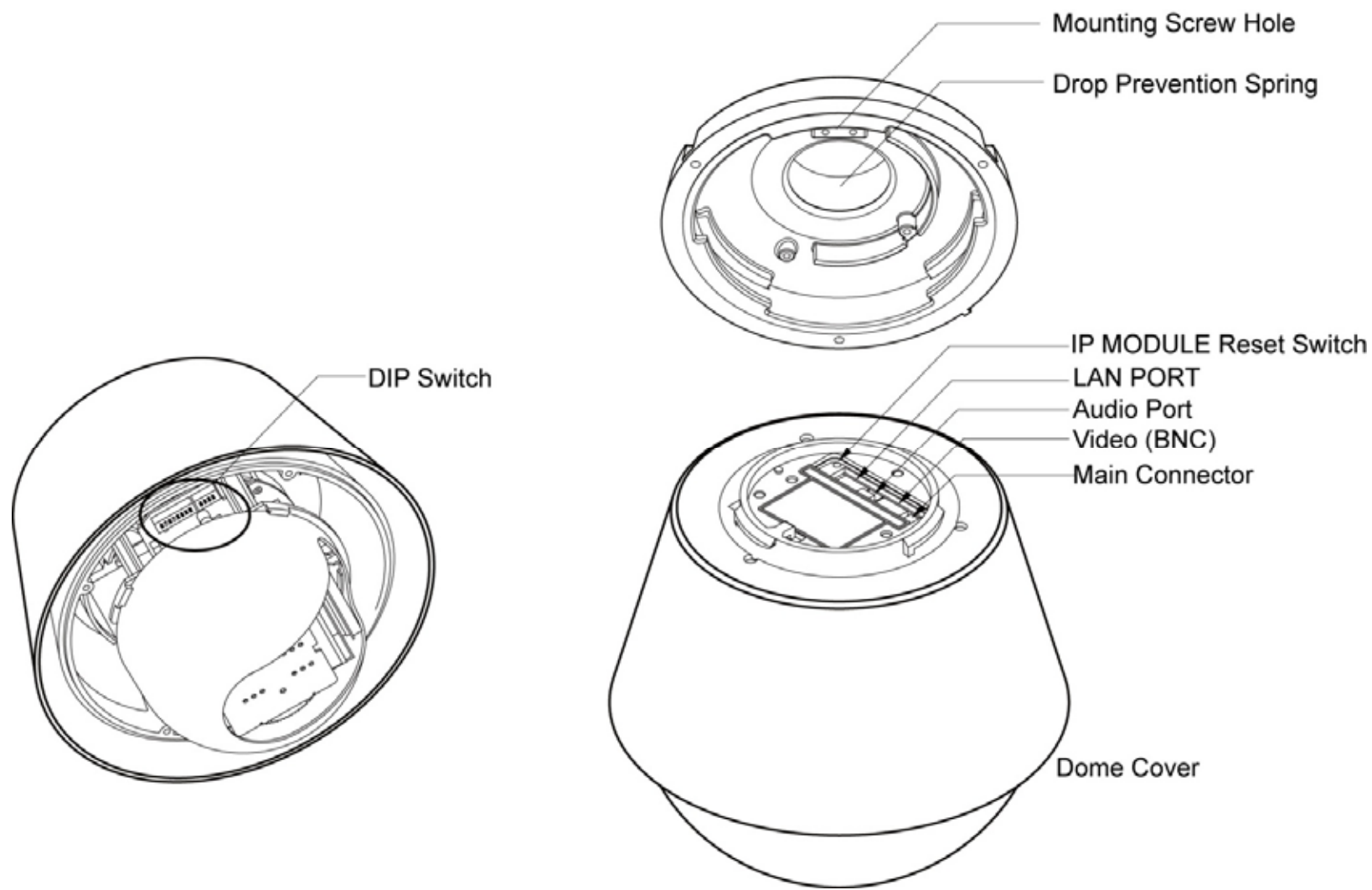
●

[: Machine M5×15, #14×50]



●

[: Machine M5×15, Anchor Bolt 3/8"×70]



● Dome Cover

가
 , 가

● DIP Switch

ID

● Drop Prevention Spring

● Mount Screw Hole

● Main

● LAN

Ethernet

. (IP)

● Audio Port

Audio In/Out

● Video (BNC)

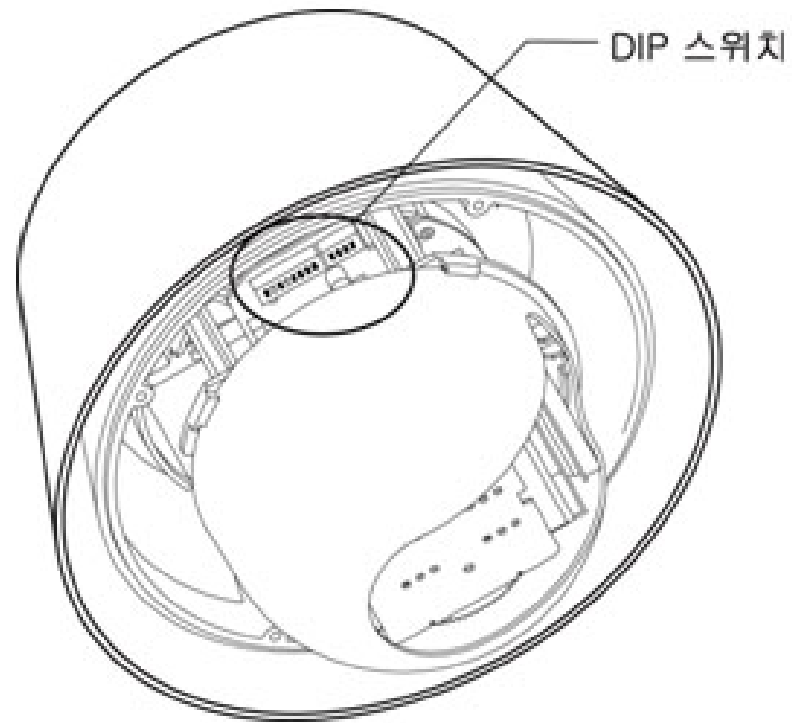
HD-SDI

● IP Module

Reset Switch

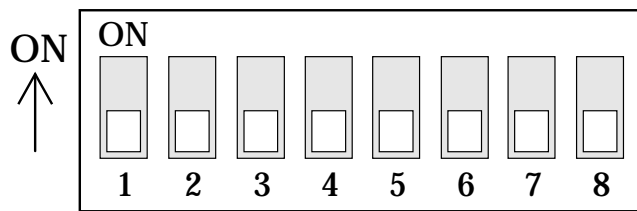
DIP

, ID DIP .



□ ID

● ID 2



	1	2	3	4	5	6	7	8
	1	2	4	8	16	32	64	128
ex) ID=5	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
ex) ID=10	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF

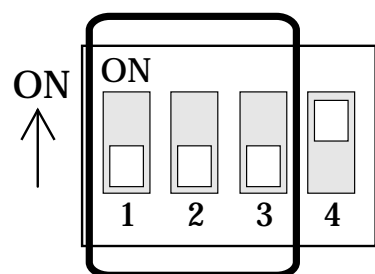
● 1~255 255 ID

0 ID

● ID 1

● DIP ID

ID

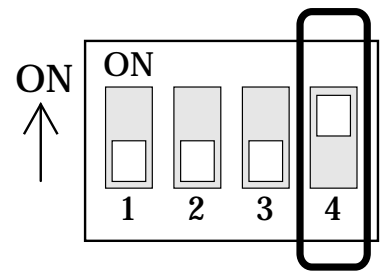


P0 (Pin 1)	P1 (Pin 2)	P2 (Pin 3)	
OFF	OFF	OFF	PELCO-D, 2400 bps
ON	OFF	OFF	PELCO-D, 9600 bps
OFF	ON	OFF	PELCO-P, 4800 bps
ON	ON	OFF	PELCO-P, 9600 bps
			Reserved

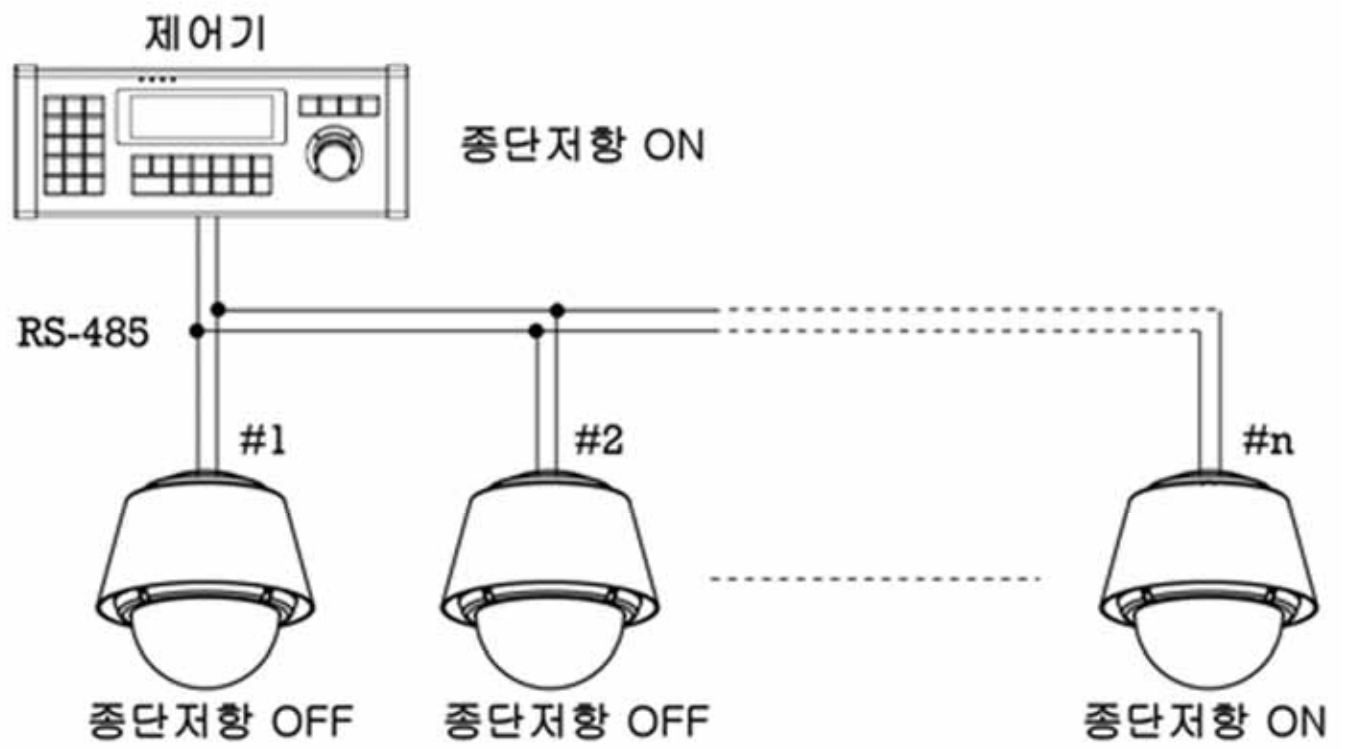
-
-
-

DVR

Pelco-D, 2400 bps

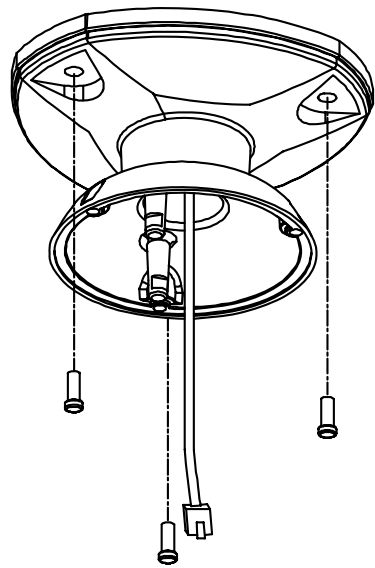


- (1:1)
가
가
ON
- 가
ON
ON
ON

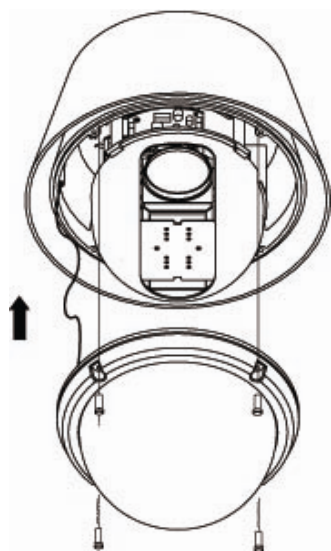
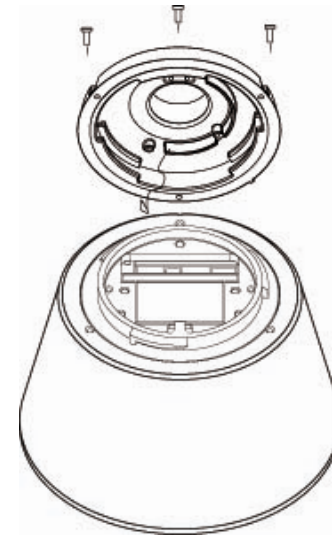


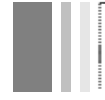
Mount

(Anchor Bolt 3/8"×70)



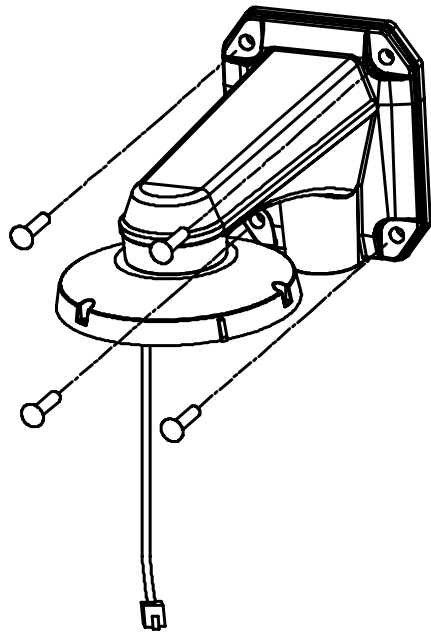
(Machine M5×15)



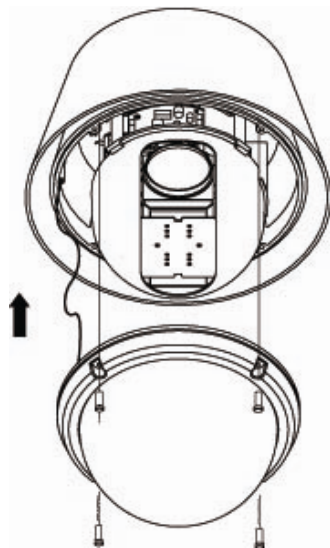
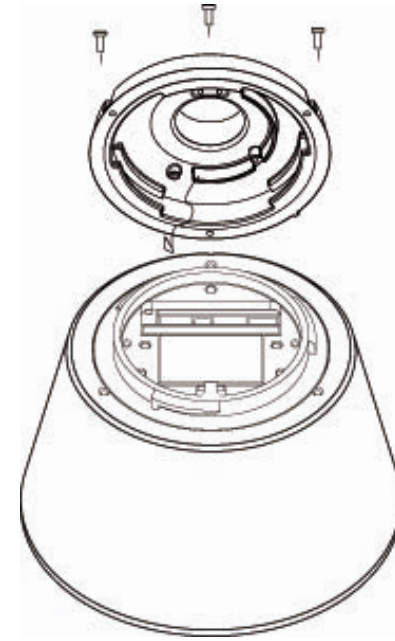


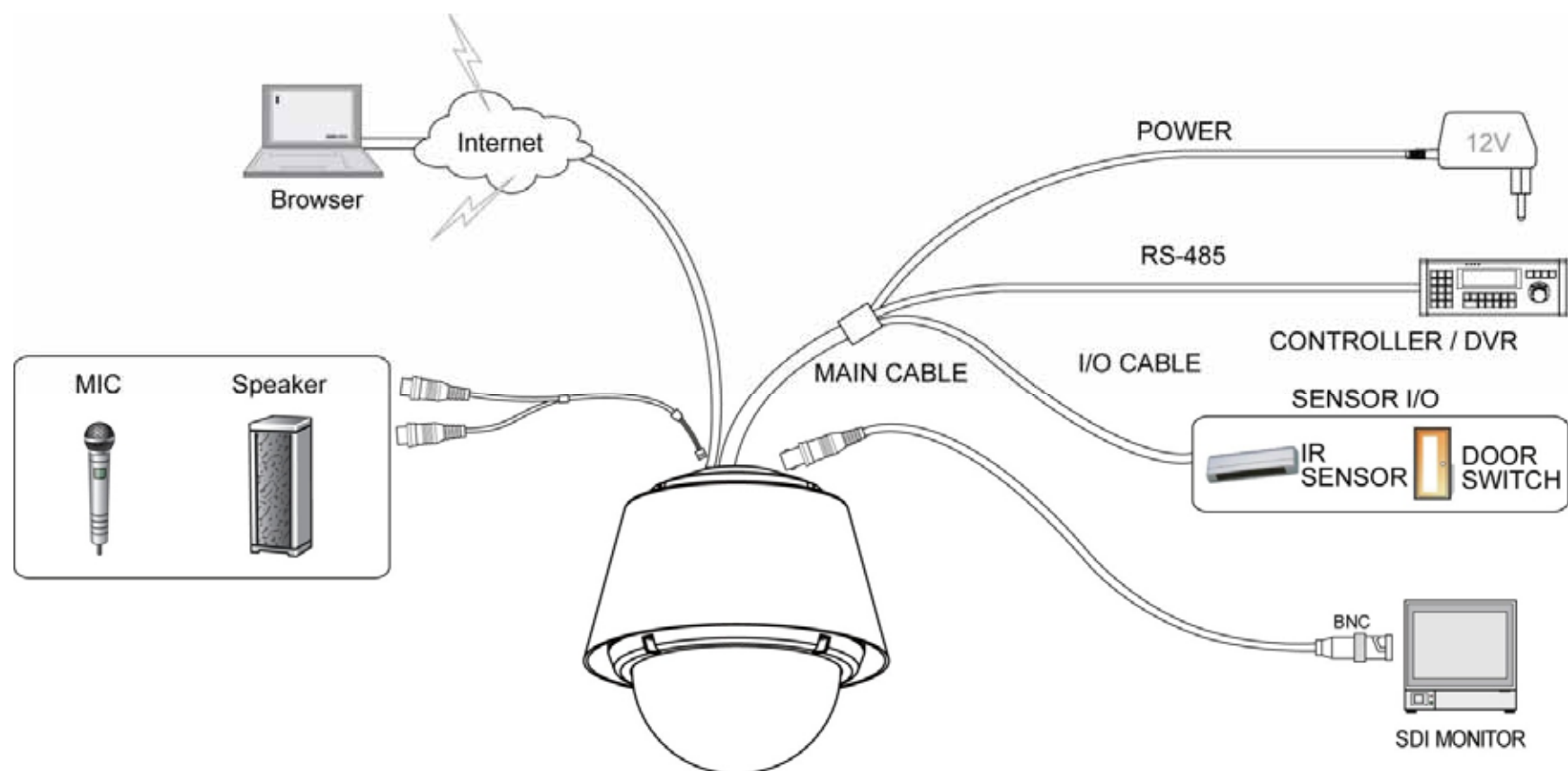
Mount

(#14×50)



(Machine M5×15)





- Main Cable

1	Black	RS-485 +
2	Brown	RS-485 -
3	Red	DC 12V
4	Orange	Ground
5	Yellow	OUT 2 (Relay Output 2)
6	Green	OUT 1 (Relay Output 1)
7	Blue	IN COM (Sensor Input Common)
8	Violet	IN 1 (Sensor Input 1)
9	Gray	IN 2 (Sensor Input 2)
10	White	IN 3 (Sensor Input 3)

- Audio Cable

1	RCA(Yellow)	Audio IN
2		Audio GND
3	RCA(White)	Audio OUT

□

-

Model			
DC12V Model	IP Model	DC 12V	3.0 A

- DC

가

- DC

DC

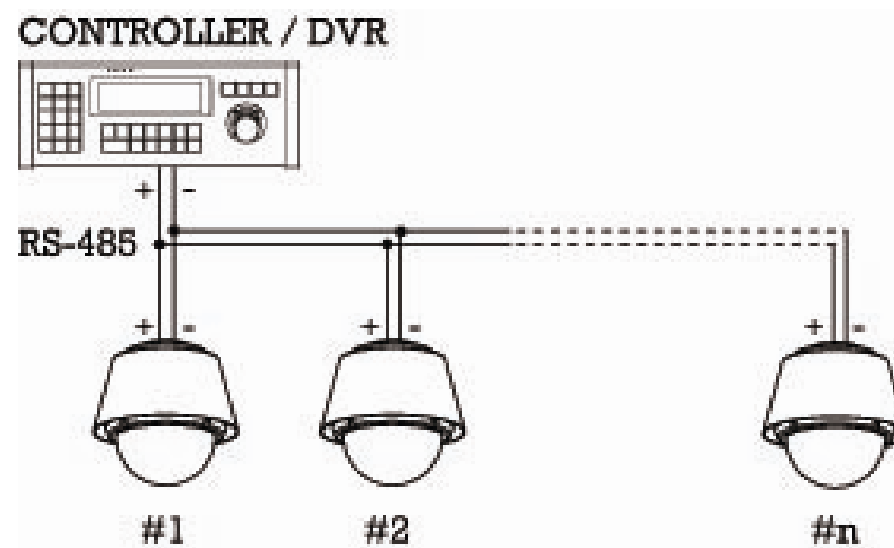
가

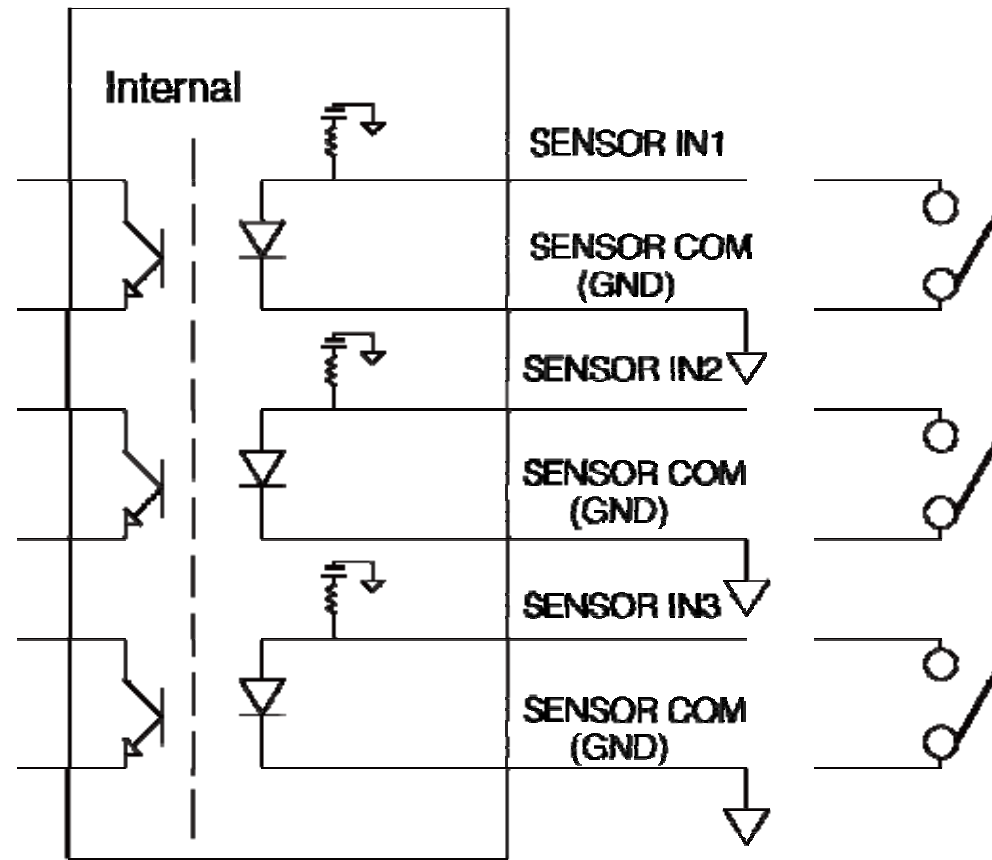
□ RS-485

- PTZ

, DVR

RS-485

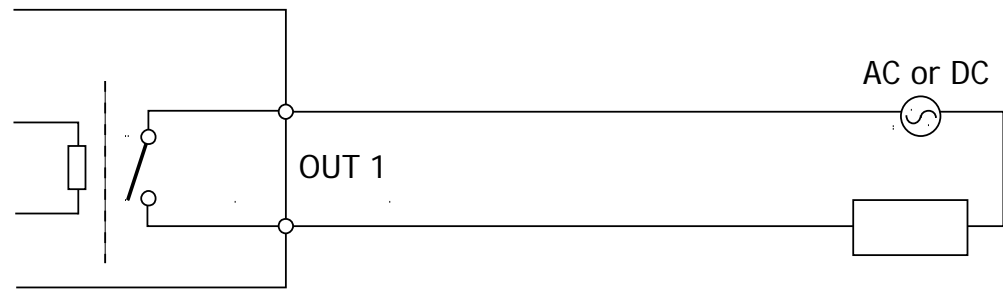




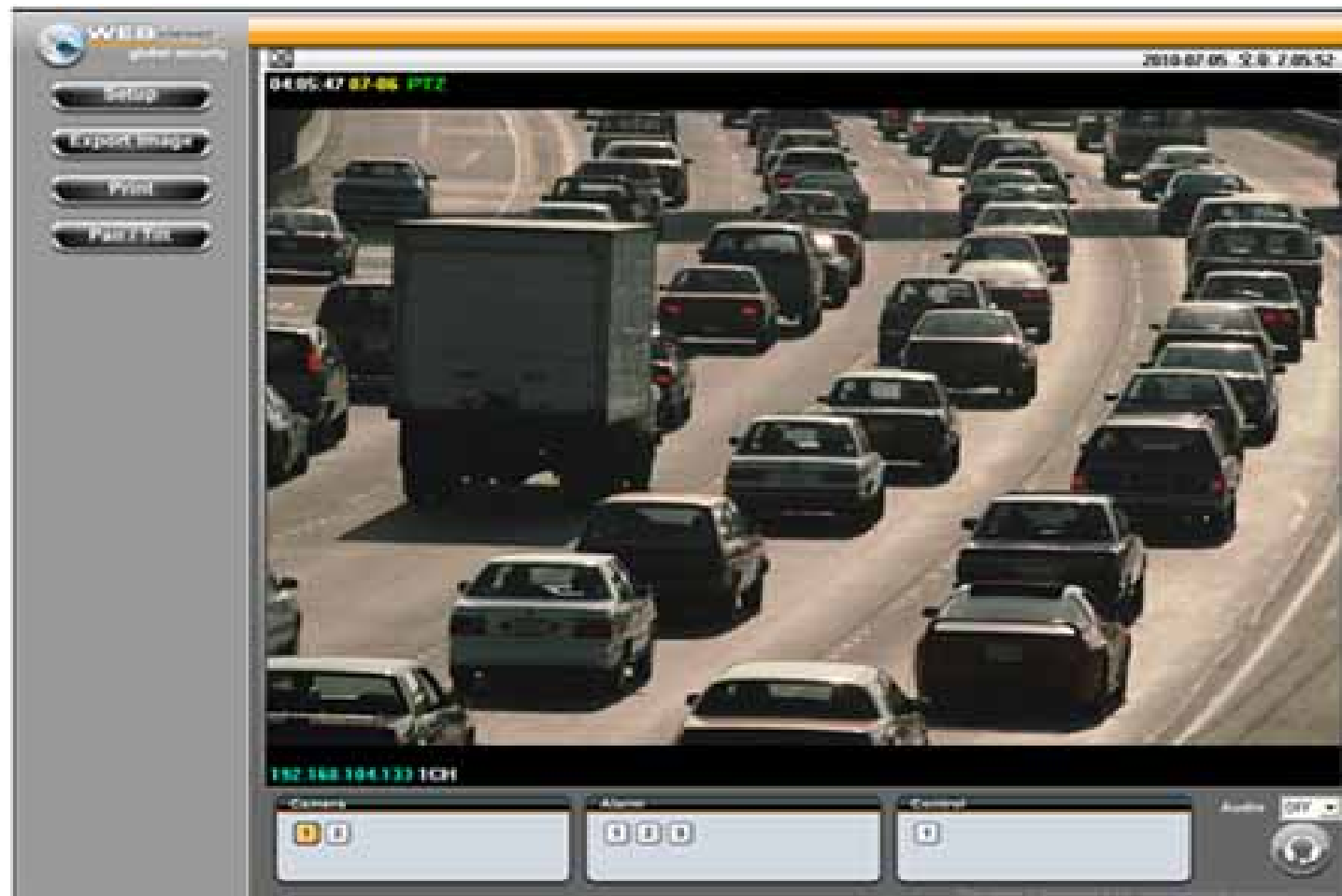
	IN COM (+)	IN COM (-)	Open Collector (+, -)	Voltage Output	PUSH	IN1, IN2, IN3
	IN COM	IN1, IN2, IN3				
	IN COM+					(+)
	IN1 -, IN2 -, IN3 -					

**

- Normal Open : 가
- Normal Close : 가



	DC	AC
	Max DC 24V, 1A	Max AC125V, 0.5A



- Setup
IP 가
- Export Image
JPEG
- Print
Printer
- Pan/Tilt
PTZ Controller , Setup PTZ
- Camera
가
- Alarm
Sensor 가
- Control
Relay
- Audio

- Audio Out



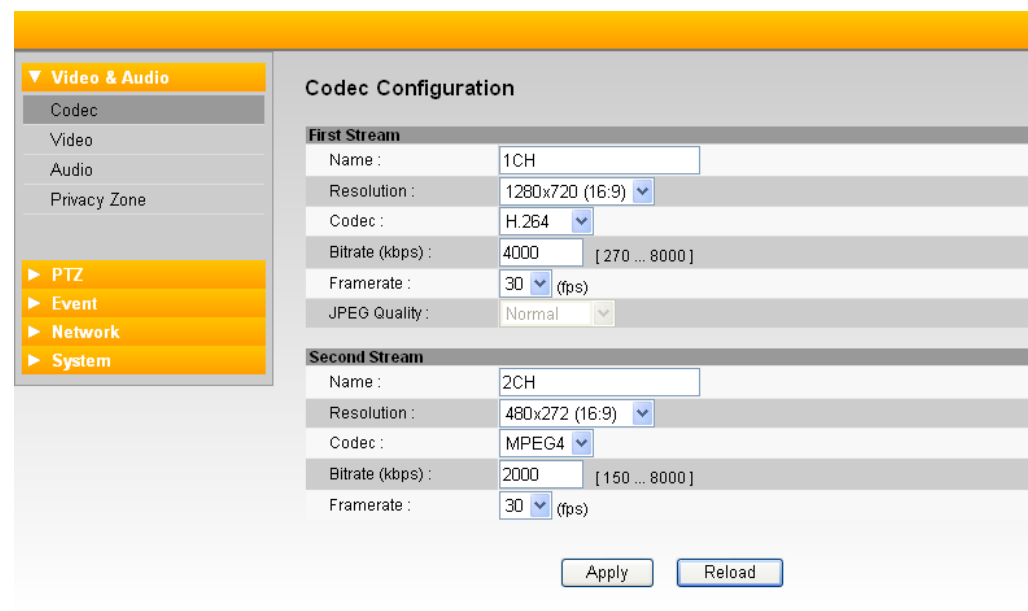
가

-



ESC

1.



-

. 16:9 8 4:3

8

-

-

H.264, MPEG4, MJPEG

-

H.264 MPEG4
Kbps

-

0~30

-

JPEG

JPEG

, Low~Super Fine

2.

가



- White Balance

Auto

Auto

Manual

가

, Red

Blue

- Auto Exposure

- ◆ Auto

Iris Gain , Shutter Speed

- ◆ Manual

Iris Gain, Shutter Speed

- ◆ Shutter

Shutter Speed

- ◆ Iris

Iris

- ◆ Bright

Bright Iris Gain

- Day & Night

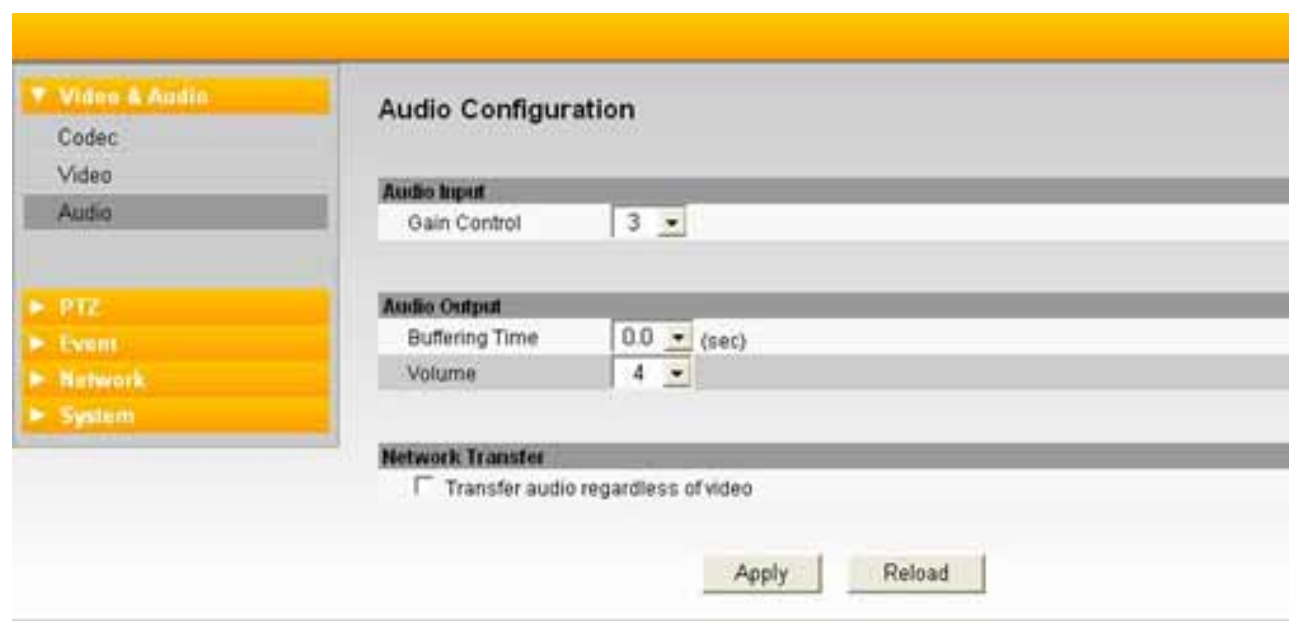
Auto

Day/Night

가

- Focus
Auto Manual 가
- BLC(Backlight Compensation)
- Digital Zoom
Off Optical Zoom , On Optical Digital Zoom
- Aperture Level
Edge

3.



- In/Out ,

- Input Gain

- Output



, 가 가 ,

- ◆ Volume



4. (X18)



-
- 가 . 4 , 50 ° 8
- - ◆
 - ◆ PTZ Controller
 - ◆ 가
 - ◆ Set [Undefined]
 - 가
- - ◆
 - ◆ Delete [Undefined] , 가

PTZ

1.

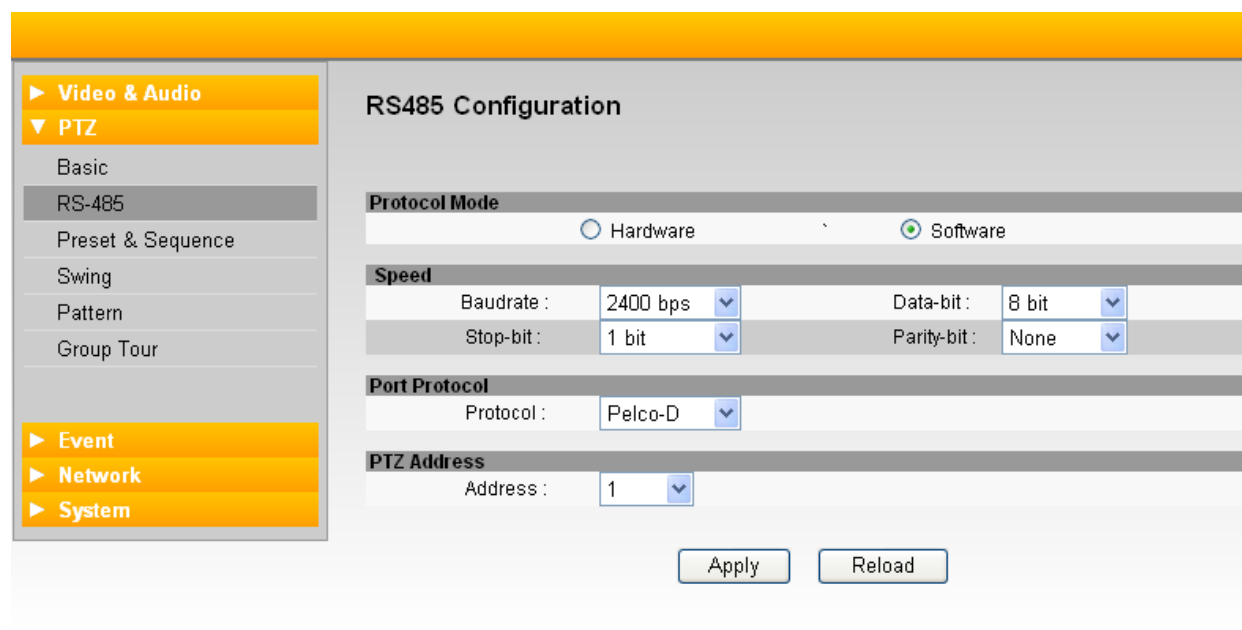


- PTZ

. Pan/Tilt/Zoom/Focus

Auto Flip

2. RS485



- RS485

Controller

PTZ

. Controller

- - ◆ , , DIP Software 가 Hardware
- / /
 - ◆ Software Controller

3. Preset Preset Sequence



- Preset
 - ◆ Preset PTZ Controller Dwell Time Set [Undefined]
 - ◆ Preset Clear [Undefined]
 - ◆ Preset Move Preset
- Preset Sequence
 - Preset Preset Dwell Time Preset Preset

4. Swing
가.A (X 12)



- Swing

Speed, Dwell Time
 PTZ Controller
 First Position
 PTZ Controller
 End Position Swing [Undefined]

- Swing

Delete Swing [Undefined]

- Swing

Run Swing Swing Speed Dwell Time

- Direction

- Swing , Shortest, Clockwise, Counter Clockwise 3 가

.B (X 18)



- Swing

	Swing			
1st Position	Preset	2nd Position	Preset	
Speed	Dwell Time			
Apply	Swing		[Undefined]	

- Swing

1st Position	2nd Position	Not Used	Apply	Swing
	[Undefined]			

- Swing

Run Swing	Swing	Speed	Dwell Time
-----------	-------	-------	------------

- Direction

- Swing, Shortest, Clockwise, Counter Clockwise 3가

5. Pattern



- Pattern

PTZ Controller

Set Pattern Start

Pattern

PTZ Controller

가

Set Pattern Stop

Pattern

[Undefined]

- Pattern

Delete Pattern

, Pattern

가

[Undefined]

- Pattern

Run Pattern

Pattern

6. Group Tour

No.	Action	Dwell Time(sec)	Speed(/sec)	Repeat
1	Not Use	5	360.00	1
2	Not Use	5	360.00	1
3	Not Use	5	360.00	1
4	Not Use	5	360.00	1
5	Not Use	5	360.00	1
6	Not Use	5	360.00	1
7	Not Use	5	360.00	1
8	Not Use	5	360.00	1
9	Not Use	5	360.00	1
10	Not Use	5	360.00	1
11	Not Use	5	360.00	1
12	Not Use	5	360.00	1
13	Not Use	5	360.00	1
14	Not Use	5	360.00	1
15	Not Use	5	360.00	1
16	Not Use	5	360.00	1
17	Not Use	5	360.00	1
18	Not Use	5	360.00	1
19	Not Use	5	360.00	1
20	Not Use	5	360.00	1

- 1~8 8
- Action Preset, Swing, Pattern
- Dwell Time Preset Pattern, Swing
- Speed Preset Swing
- Repeat Pattern Swing

1.

Sensor						
Use	Type	Delay(sec)	Camera	Preset	Relay	Dur(sec)
<input checked="" type="checkbox"/> 1	<input type="radio"/> NO <input type="radio"/> NC	0	None	None	1	0
<input type="checkbox"/> 2	<input type="radio"/> NO <input type="radio"/> NC	0	None	None	None	0
<input type="checkbox"/> 3	<input type="radio"/> NO <input type="radio"/> NC	0	None	None	None	0

Relay Activity		
Use	Name	Activity Time
<input type="checkbox"/> 1		0:00 - 0:00

- - ◆ Use /
 - ◆ Type
 - ◆ Delay
 - ◆ Camera
 - ◆ Preset Preset, Emergency Alarm
 - ◆ Relay Preset 가
 - ◆ Duration

- - ◆ Use
 - ◆ Name
 - ◆ Activity Time 가

2. Emergency Alarm

Emergency Alarm Configuration

Stream for EA
 Stream First Second

Site Information
 Site Code
 Transfer Time sec

EA Server List

	IP	Port
Server1	<input type="text"/>	<input type="text" value="0"/>
Server2	<input type="text"/>	<input type="text" value="0"/>
Server3	<input type="text"/>	<input type="text" value="0"/>
Server4	<input type="text"/>	<input type="text" value="0"/>
Server5	<input type="text"/>	<input type="text" value="0"/>

Apply Reload

가

EA

- Stream
- Site Code
- Transfer Time
- EA Server List

IP

1. IP

IP&Port Configuration

IP Mode

DHCP

PPPoE

Username :

Password :

Static IP

IP address :

Netmask :

Gateway :

DNS

Primary DNS :

Secondary DNS :

MAC Address : 00:1C:A6:01:17:C8

PORT

Command Port : Live Port :

2Way Audio Port : Web Port :

Apply Reload

System Reboot

- IP DNS, Port

2. Dynamic DNS

Dynamic DNS Configuration

DDNS

Use DDNS

System Name :

Username :

Password :

Hostname :

Apply Reload

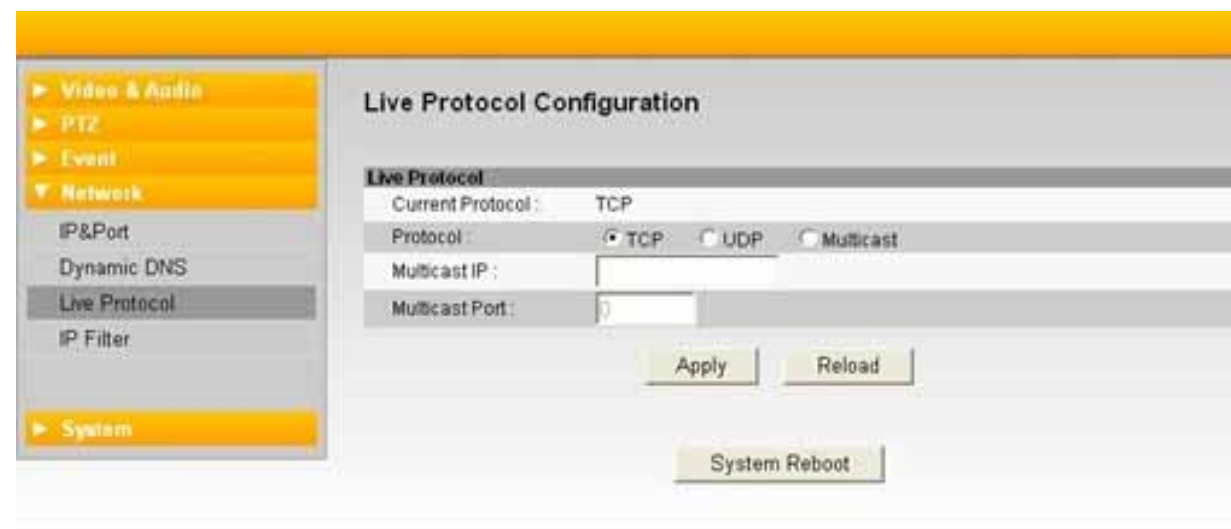
System Reboot

- IP

DHCP PPPoE

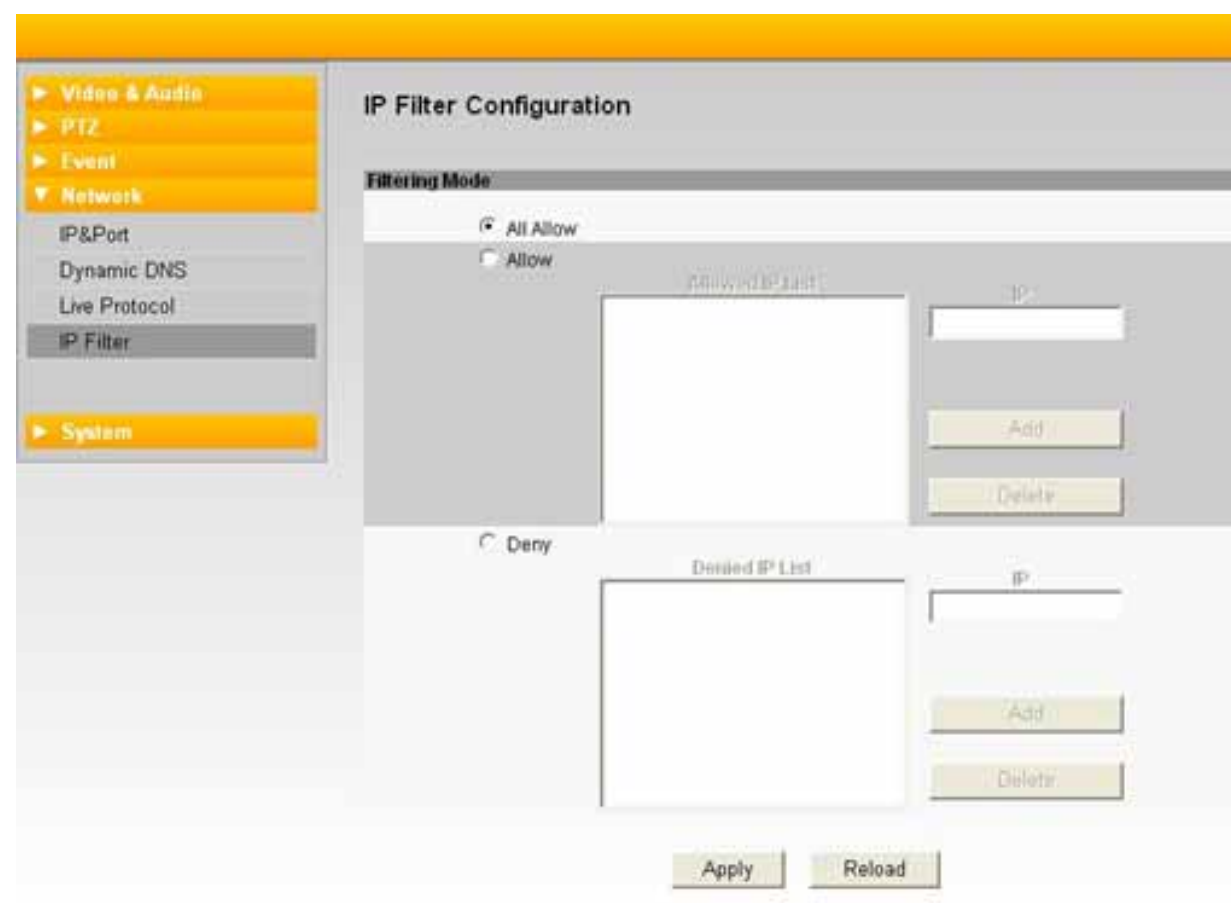
IP

3. Live Protocol



- Remote , .

4. IP



- .

- All Allow

가 .

- Allow

.

- Deny

가 .

1.



가 , System Reboot
 , Upgrade Status

2.



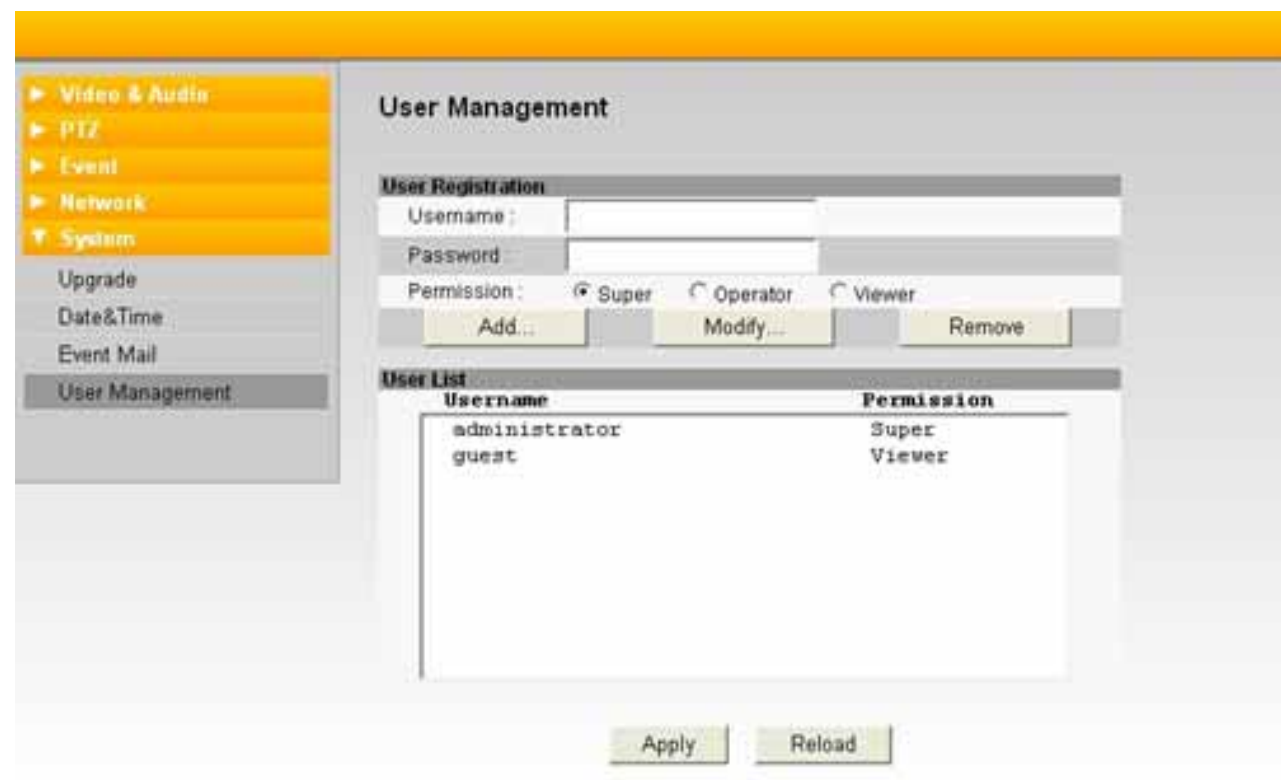
· , , , , ,

3.

The screenshot shows a web interface for configuring event mail. On the left is a navigation menu with categories: Video & Audio, PTZ, Event, Network, and System. Under System, there are options for Upgrade, Date&Time, Event Mail (which is selected), and User Management. The main content area is titled 'Event Mail Configuration'. It features a checkbox for 'Use Event Mail'. Below this, there are several fields: 'Events' with checkboxes for Sensor, Relay, Reboot, and Upgrade; 'SMTP Server' with a text input; 'Username' with a text input; 'Password' with a text input; 'Sender E-Mail' with a text input; and 'E-Mail List' with a text input and three buttons: Add, Modify, and Delete. At the bottom of the configuration area are 'Apply' and 'Reload' buttons.

- Events
- SMTP Serve
SMTP
- Username/Password
SMTP Server Password
- Sender E-Mail
- E-Mail List

4.



가/ / .
 Super/Operator/Viewer , Super ,
 Operator &Audio, PTZ, Event , Viewer
 가 .

Camera Part (Clebo PM-10S 10X zoom, 2M pixel model)		
Image Sensor	1/3", 2 Mega CMOS Image Sensor	
Lens	F1.8(Wide) ~ F2.1(Tele), f=5.1 ~ 51mm	
	×10 Optical Zoom, ×12 Digital Zoom	
Angle of View	H : 50°(Wide) ~ 5.4°(Tele)	
Focus Range	∞ ~ 10mm	
Minimum Object Distance	10mm (Wide), 800mm(Tele)	
Zoom Speed	1 sec (Wide to Tele)	
S/N Ratio	More 50 dB	
AE Mode	Auto, Manual, Bright, Shutter Priority, Iris Priority, Spot	
Iris Control	Auto / Manual (F1.8 ~ F26, Close)	
Gain Control	Auto / Manual (-3 ~ 18dB)	
Shutter Speed Control	Auto / Manual (1/2 ~ 1/10,000sec)	
White Balance	Auto / Manual (Red, Blue Gain Adjustable. 3,000°K~7,500°K)	
Auto DSS Limit	1/60 ~ 1/2 or 1/50 ~ 1/2	
Day & Night	Auto / Day / Night(ICR)	
Min. Illumination	12 Lux (Color) / 1.0 Lux (B/W), 50 IRE / F1.8	
BLC	Auto / Manual	
WDR	On / Off	
Aperture Control	16 Levels	
Video	Standards	Main Stream : H.264HP/MPEG4SP/MJPEG, Secondary Stream : H.264HP / MPEG4SP
	Output	1 × BNC (HD-SDI)
	Resolution	1280x720/30fps ~ 256×144/30fps
	Frame Rate	0 ~ 30 fps
	Bit Rate	50 Kbps ~ 8 Mbps
Audio	Algorithm	G.711
	Input	1 × Line - In
	Output	1 × Line - Out
	Sample Rate	G.711 : 8 KHz

Camera Part (Clebo PM-10HT 18X zoom, 1.3M pixel model)		
Image Sensor	1/3", Solid State Progressive Scan CCD	
Total Pixels	1348(H) × 976(V), 1.3M	
Effective Pixels	1296(H) × 966(V), 1.25M	
Lens	F1.6(Wide) ~ F2.8(Tele), f=4.7 ~ 84.6mm	
	×18 Optical Zoom	
Angle of View	H : 55.2°(Wide) ~ 3.2°(Tele)	
Focus Range	∞ ~ 0.01m(Wide), 1m(Tele)	
Minimum Object Distance	10mm (Wide), 1000mm(Tele)	
Zoom Speed	3.5 sec (Wide to Tele)	
AE Mode	AE / AER / AE+ / AER+ / Shutter / Exposure / AGC	
Iris Control	Auto / Manual (F1.6 ~ F34)	
Gain Control	Auto / Manual (0 ~ 30dB)	
Shutter Speed Control	Auto / Manual (1/4 ~ 1/10,000sec)	
White Balance	Auto / Manual (Red, Blue Gain Adjustable)	
Auto DSS Limit	×2, ×4, ×8 fields	
Day & Night (ICR)	Auto / Manual	
Min. Illumination	0.5 Lux (Color) / 0.02 Lux (B/W) @ 50 IRE & F1.6 & 1/4s & 28dB	
BLC	Auto / Manual, 256 Levels	
WDR	On / Off	
Privacy Mask	8 Masks (Spherical Coordinate)	
Video	Standards	Main Stream : H.264HP/MPEG4SP/MJPEG, Secondary Stream : H.264HP / MPEG4SP
	Output	1 × BNC (Composite or HD-SDI, Optional)
	Resolution	1280×720/30fps ~ 256×144/30fps
	Frame Rate	0 ~ 30 fps
	Bit Rate	50 Kbps ~ 8 Mbps
Audio	Algorithm	G.711
	Input	1 × Line - In
	Output	1 × Line - Out
	Sample Rate	G.711 : 8 KHz

Mechanism Part			
Network	Interface	Ethernet 10/100 Base-T (RJ-45)	
	Protocol	TCP/IP, UDP, Multicast, DHCP, SMTP HTTP, SNMP, RTP, RTSP	
Software	True CMS, Web Viewer	Live Monitoring, Recording, Search & Playback, Backup	
Pan/Tilt	Travel Range	Pan : 360°(Endless), Tilt : 180°	
	Speed	Preset	360°/sec
		Jog	0.05 ~ 360°/sec (Proportional to Zoom)
		Swing	1.41° ~ 180°/sec
	Preset	255 Presets (×10 model), 99 Presets (×18 model)	
	Pattern	4 Patterns (760 command/Pattern)	
	Swing	8 Swings	
	Group	8 Groups (20 Actions/Group)	
Communication	Type	RS-485	
	PTZ Protocol	Pelco-D, Pelco-P Selectable	
Sensor / Alarm	Sensor	3 Inputs, Photo-Coupler Input	
	Alarm	1 Relay Outputs, Max Load : DC24V 1A / AC125V 0.5A	
	IP Reset Button	Yes	
Physical	Mount Accessory	Wall Mount or Ceiling Mount, Sun-shield (Optional)	
	Dimension	Dome	∅ 150mm / ∅ 5.9"
		Wall	292.5×279.8 mm / 11.5×11 "
		Ceiling	∅ 185×378.5 mm / ∅ 7.3×14.9 " (Standard Pipe)
	Weight	Wall	Approx 3.8 Kg
		Ceiling	Approx 3.2 Kg
	Material	Dome	Polycarbonate
		Internal	Polycarbonate, ABS
		External	Aluminum
	Rated Power	DC12V, 3A (36W)	
	Waterproof	IP 67	
	Fan	Always ON	
	Heater	Operation start from Internal Temperature 10°C	
Operation Temperature	-30°C ~ 60°C / -34°F ~ 140°F		

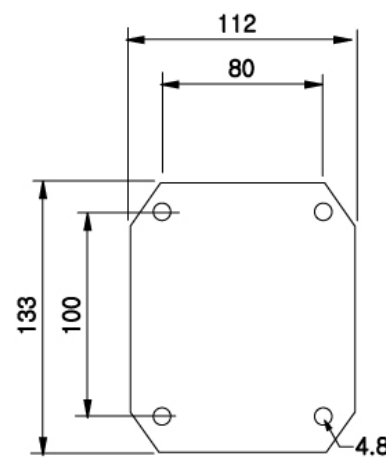
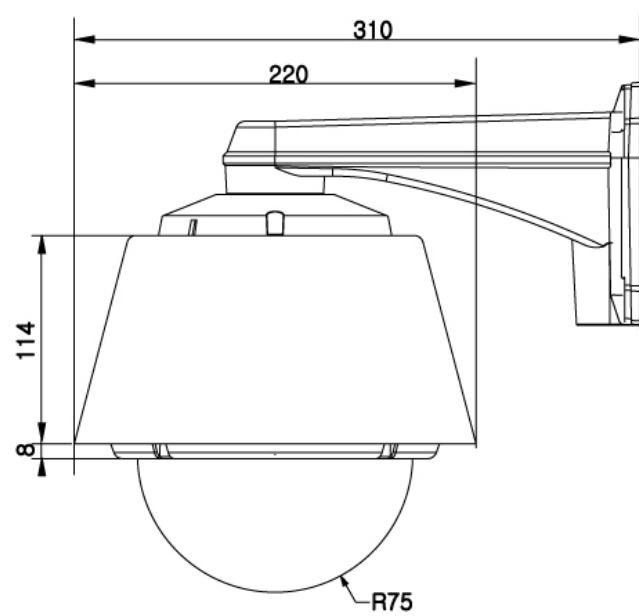
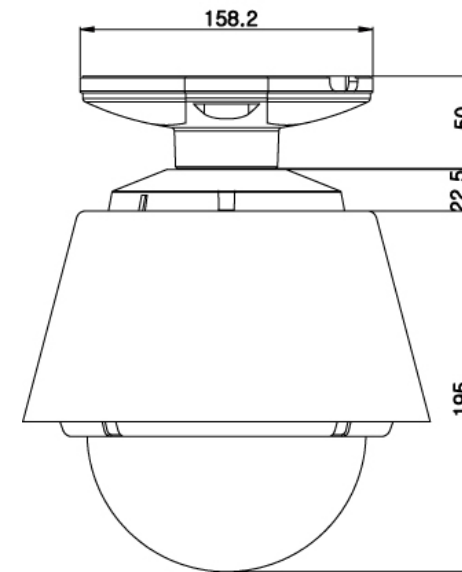
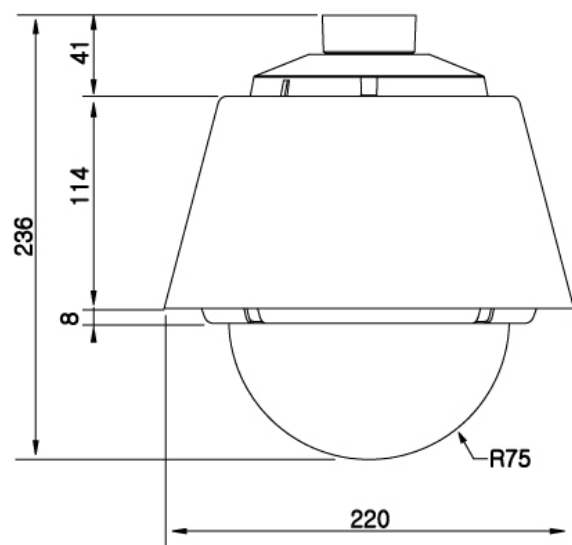
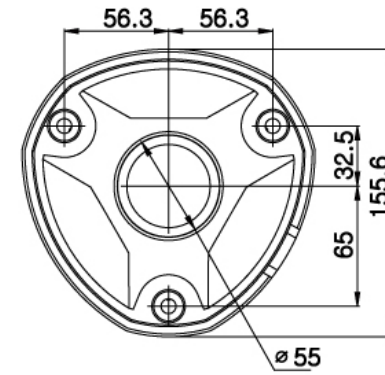
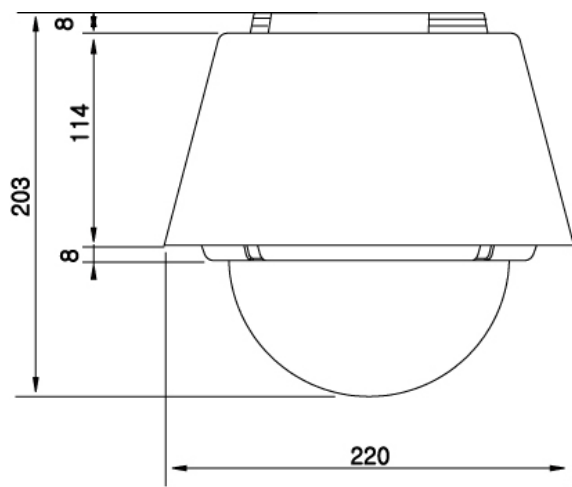
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