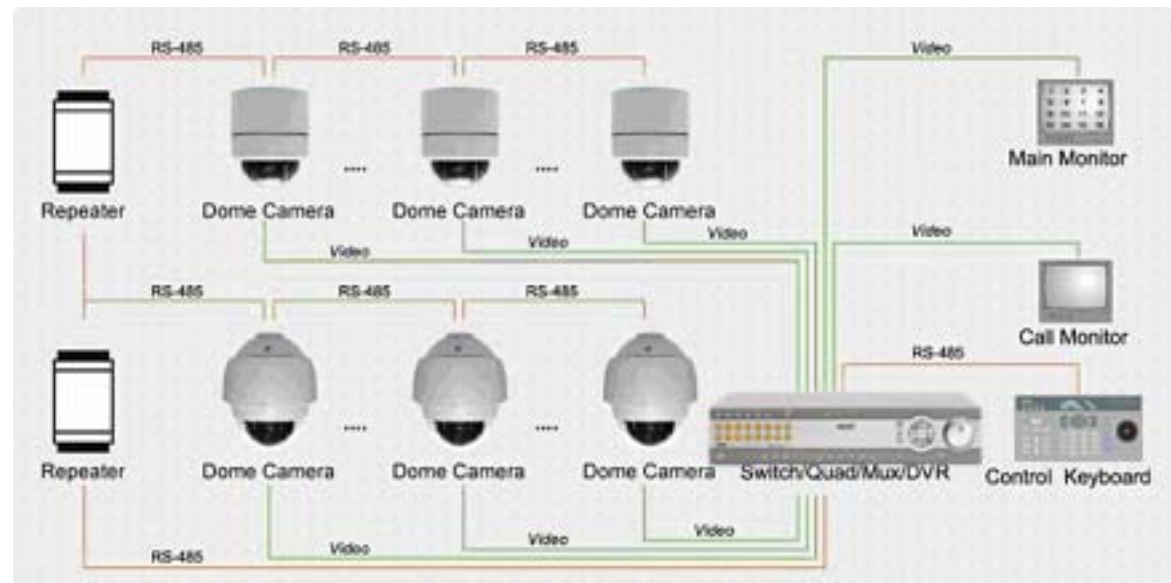This quick operation guide is a reference for users to install and operate dome cameras quickly, and thus only provides basic information on dome's various setting and operation. Before attempting to connect, configure and operate the dome camera, please read its installation guide and dome/control keyboard user's manual thoroughly.

System Configuration

NOTE: The figure above illustrates general system configuration. For the diagram of a specific dome camera, please refer to its User's Manual.

Dome Basic Equipments

- Dome Camera
- Optical Cover
- Data Cable (Standard equipped cable; AC24V or DC12V for Indoor Dome; AC24V for Outdoor Dome)
- Mounting Accessories (Hard Ceiling Mount, Decoration Ring and Fixing Plate are standard equipments for Indoor Dome. The Mounting Accessories for Outdoor Dome are optional.)
- Screws (For fixing the Outdoor Dome's cover/sunshield)
- Lubricant (Enables to smooth dome cover installation for Outdoor Dome)
- Quick Guide (Contains general dome setups information)
- CD (Contains Operation Manuals)

Dome Switch Definition

Indoor   **Outdoor**
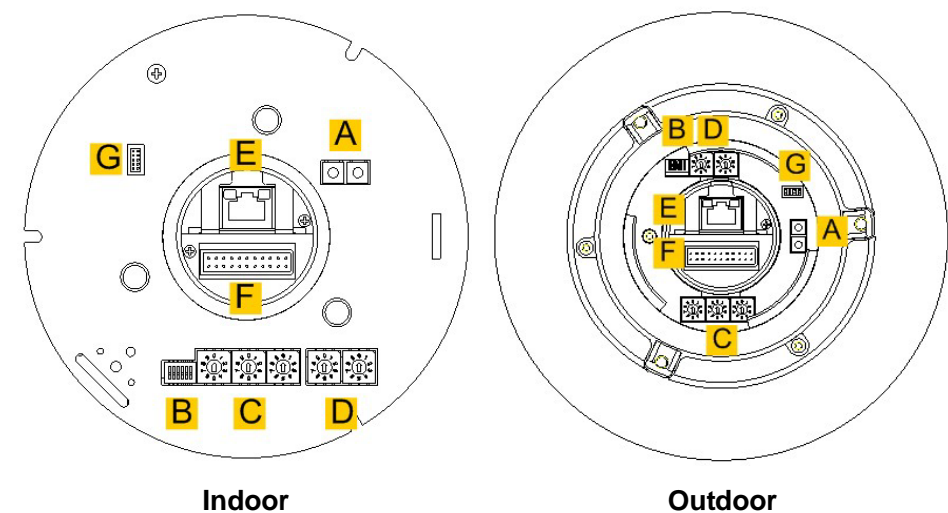
A	Reserved
B	Communication Switch

| C	Dome ID Switch
D	Dome Control Protocol Switch
E	RJ-45 Connector (for IP dome only)
F	22-Pin Connector
G	ISP Connector (for FW upgrade)

Communication Switch Setting

The table below shows the function of each switch within the Communication Switch on the dome back plate.

Communication Switch	SW 1	RS-485 Setting
	SW 2	
	SW 3	Termination
	SW 4	Line Lock
	SW 5	System Initialization
	SW 6	Reserved

| RS-485 Setting	
Half-duplex	Full-duplex

Dome ID Setting

Please change the dome ID if there is more than one dome on the same installation. To change your speed dome ID, please turn the arrow of the ID switch to a desired number respectively. For instance, if the dome ID is 123, the ID switch should be set as below. The default Dome ID is "001".

Centesimal Digit   Decimal Digit   Single Digit
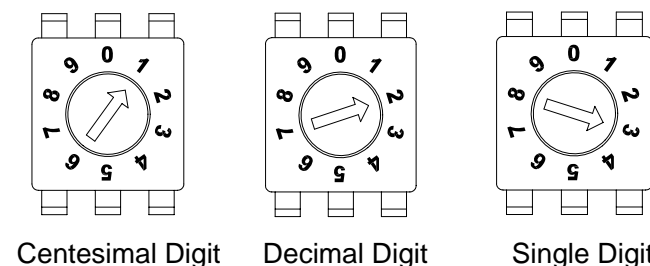
Dome Control Protocol Setting

Refer to the table below, select one sets of protocol and baud rate you would like to use, basing on the control device, and adjust the protocol Switch on the speed dome's back plate. For instance, the protocol switch should be set as below if you select protocol Pelco D, with switch no. 01 and baud rate 2400.

Switch No.	Protocol	Baud Rate
00	VCL	9600
01	Pelco D	2400
02	Pelco P	4800
04	Chiper	9600
05	Philips	9600
07	GANZ-PT	9600
08	AD422	4800
09	DM P	9600
11	Pelco D	4800
12	Pelco D	9600
13	Pelco P	2400
14	Pelco P	9600
15	JVC	9600

Decimal Digit   Single Digit
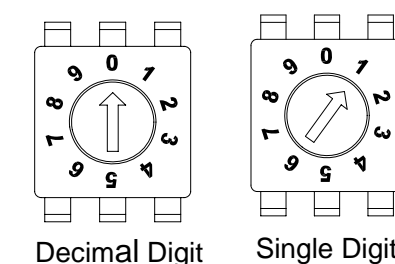
The Equipped Data Cable and Connector Definition

Depending on the dome camera you acquired, there is one kind of data cable shall be equipped, either of DC 12V or AC 24V. Please refer to the figures below for definition of each connector before wiring.
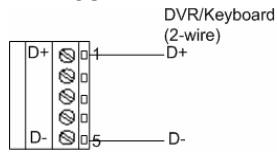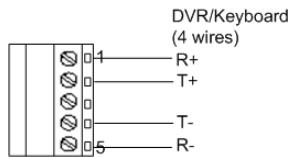
DC 12V Data Cable
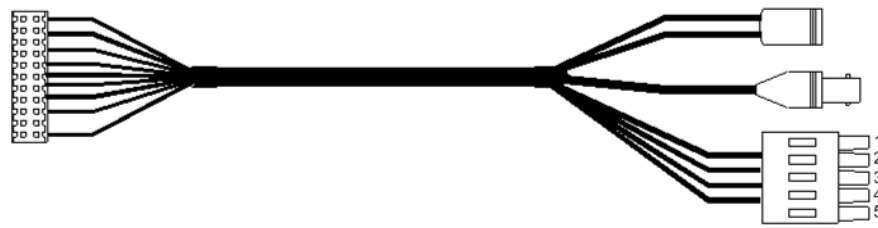
Power Input	DC12 Female Jack
Video Output	BNC Connector
RS485 Connector	2 wires

DVR/Keyboard (2-wire)
D+ — D+
D- — D-

4 wires

DVR/Keyboard (4 wires)
R+
T+
T-
R-

AC 24V Data Cable
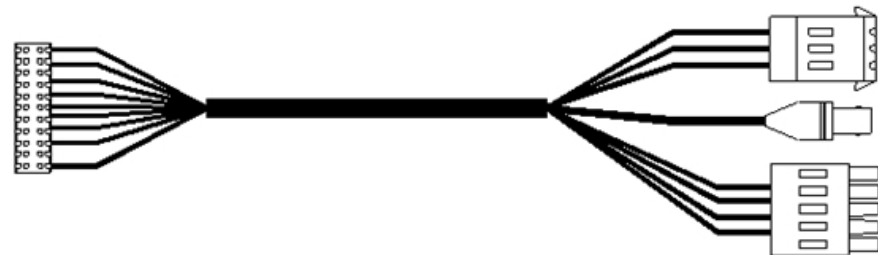
Power Input	3-Pin Terminal Block — Green (GND)
Video Output	BNC connector
RS485 Connector	2 wires

DVR/Keyboard (2-wire)
D+ — D+
D- — D-

4 wires

DVR/Keyboard (4 wires)
R+
T+
T-
R-
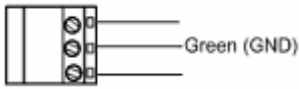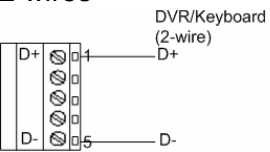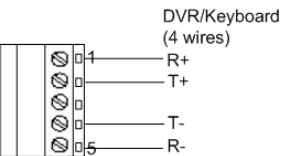
⚠ **NOTE:** The outdoor dome camera only supports AC 24V.

22-Pin Connector Definition

When cabling, please refer to the figure and table below for information about the definition of each pin on the data cable.

22-Pin Connector

The 22-pin connector definition is listed as below.

Pin	Definition	Cable
1	AC 24-1/DC (＋)	20AWG
2	ALM NC	
3	AC 24-2/DC (－)	20AWG
4	ALM NO	
5	FG	20AWG
6	ALM COM	
7	T+	24AWG
8	R-	
9	T-	
10	R+	
11	ISOG	
12	ALM-1	
13	ALM-3	
14	ALM-2	
15	ALM-4	
16	ALM-5	
17	ALM-6	
18	ALM-7	
19	ALM-8	
20	ALM GND	
21	VGND	24AWG
22	Video	

DOME OSD Menu Tree

The OSD setup menu structure is listed as follows. The star symbol indicates the factory default.

Indoor/Outdoor Vandal Proof Mini Speed Dome Camera Menu Tree

Item	Layer 1	Layer 2	Layer 3	Default
LANGUAGE	English			
DEFAULT CAMERA	<ON>, <OFF>			ON
BACKLIGHT	<ON>, <OFF>			OFF
FOCUS	<AUTO>, <MANUAL>			
AE MODE	EXPODURE COMP.	<OFF>, EXPOSURE VALUE: <-10.5dB> ~ <10.5dB>		
	AE MODE	IRIS	IRIS VALUE <CLOSE>, <F1.6> ~ <F28>	
		AUTO		
		SHUTTER	SHUTTER SPEED <1/50> ~ <1/10000> SEC.	
	EXIT	YES		
WBC MODE	AUTO (Auto White Balance)			☆
	INDOOR			
	OUTDOOR			
	MANUAL	R GAIN <000> ~ <127>		
		B GAIN <000> ~ <127>		

Item	Layer 1	Layer 2	Layer 3	Default
SETUP MENU 1	ENTER	ZOOM SPEED	<1>	1
		DIGITAL ZOOM	<ON>, <OFF>	ON
		SLOW SHUTTER	NONE	
		APERTURE	<01>	
		EXIT	<YES>	
SETUP MENU 2	ENTER	FLIP	<OFF>, <M.E.>	OFF
		ANGLE ADJUSTER	ADJUST MIN ANGL <-10> ~ <+10> DEG	00
			ADJUST MAX ANGL <080> ~ <100> DEG	90
		SPEED BY ZOOM	<ON>, <OFF>	OFF
		AUTO CALI.	<ON>, <OFF>	OFF
		SYSTEM RESET	<YES>	
		EXIT	<YES>	
ID DISPLAY	<ON>, <OFF>			ON
TITLE DISPLAY	<ON>, <OFF>			OFF
TITLE SETTING	<01> ~ <16>			01
PRESET	PRESET SET	<001>~<256>		ENTER
	PRESET RUN	<001>~<256>		ENTER
	EXIT	YES		ENTER
SEQUENCE	ENTER	SEQUENCE LINE	<1> ~ <8>	1
		SEQUENCE POINT	<01> ~ <32>	01
		PRESET POS.	<001> ~ <255>, <END>	001
		SPEED	<01> ~ <15>	01
		DWELL TIME	<000> ~ <127> Sec.	000
		RUN SEQUENCE	ENTER	
		EXIT	<YES>	
AUTOPAN	ENTER	AUTOPAN LINE	<1> ~ <4>	1
		START POINT	<TO FIND>, <TO SAVE>	
		END POINT	<TO FIND>, <TO SAVE>	
		DIRECTION	<RIGHT>, <LEFT>	Right
		SPEED	<01> ~ <04>	01
		RUN AUTOPAN		
		EXIT		
CRUISE	ENTER	RECORD START	ENTER	
		RECORD END	ENTER	
		RUN CRUISE	ENTER	
		EXIT	ENTER	
HOME SETTING	ENTER	HOME FUNCTION	<ON>, <OFF>	OFF
		SELECT MODE	PRESET	☆
			SEQUENCE	
			AUTOPAN	
			CRUISE	
		PRESET POINT SEQUENCE LINE AUTOPAN LINE CRUISE LINE	<001> ~ <256> <1> ~ <8> <1> ~ <4> <1>	001
		RETURN TIME	<000> ~ <128> MIN.	001
		GO	ENTER	
		EXIT	YES	
IR FUNCTION (Optional)	<AUTO>, <ON>, <OFF>			
ALARM SETTNG	ENTER	ALARM PIN	<1> ~ <8>	1
		ALARM SWITCH	<ON>, <OFF>	OFF
		ALARM TYPE	<NO>, <NC>	NC
		ALARM ACTION	PRESET	☆
			SEQUENCE	

Item	Layer 1	Layer 2	Layer 3	Default
			AUTOPAN	
			CRUISE	
		PRESET POINT	<001> ~ <256>	001
		SEQUENCE LINE	<1> ~ <8>	
		AUTOPAN LINE	<1> ~ <4>	
		CRUISE LINE	<1>	
		DWELL TIME	<001> ~ <127> SEC, <ALWAYS>	ALWAYS
		EXIT	YES	
ALARM DETECT	<NONE>			
PRIVACY MASK	<NONE>			
TIME SETTING	ENTER	TIME DISPLAY	<ON>, <OFF>	OFF
		SET YEAR	<00> ~ <99>	
		SET MONTH	<01> ~ <12>	
		SET DAY	<01> ~ <31>	
		SET HOUR	<00> ~ <23>	
		SET MINUTE	<00> ~ <59>	
		EXIT+SAVE	YES	
SCHEDULE	SCHEDULE SWITCH	<ON>, <OFF>		OFF
	POINT	<01> ~ <32>		01
	HOUR	<00> ~ <23>		00
	MINUTE	<00> ~ <59>		00
	MODE	NONE	NO FUNCTION	☆
		PRESET	PRESET POINT <001> ~ <256>	
		SEQUENCE	SEQUENCE LINE <1> ~ <8>	
		AUTOPAN	AUTOPAN LINE <1> ~ <4>	
		CRUISE	CRUISE LINE <1>	
EXIT OSD	YES			