ELMO

User's Manual

ENGLISH

INDOOR / OUTDOOR
HOUSING

STANDARD

Version 1.0

Before attempting to connect or operate this product, please read these instructions completely.

CONTENTS

PREFACE

The housing is designed for dome camera installation. There are two kinds of installation types for this product. One is indoor environment use, the other is outdoor environment use.

It supports AC24V and DC12V power input. Fan and heater built in for temperature control. Sun shield is used to outdoor environment.

FEATURES

Housing Features

1. Clear Optical Cover.
2. Support AC24V and DC12V power input.
3. Fan and Heater built in.

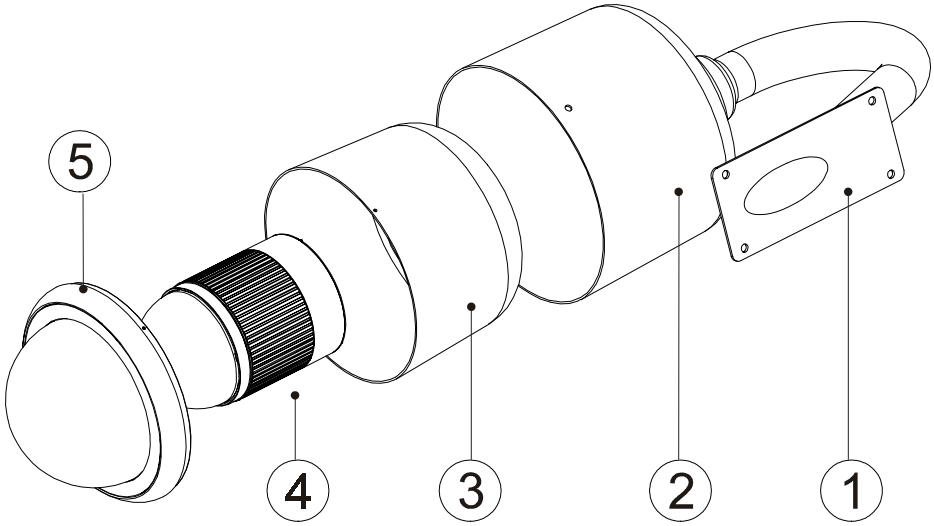
Pendent Features

1. Straight ,Goose Neck Profile.

PRECAUTIONS

1. **Handle the Optical Cover Carefully**
   Do not damage the optical cover. Deep scratches will interfere with the auto-focus function.

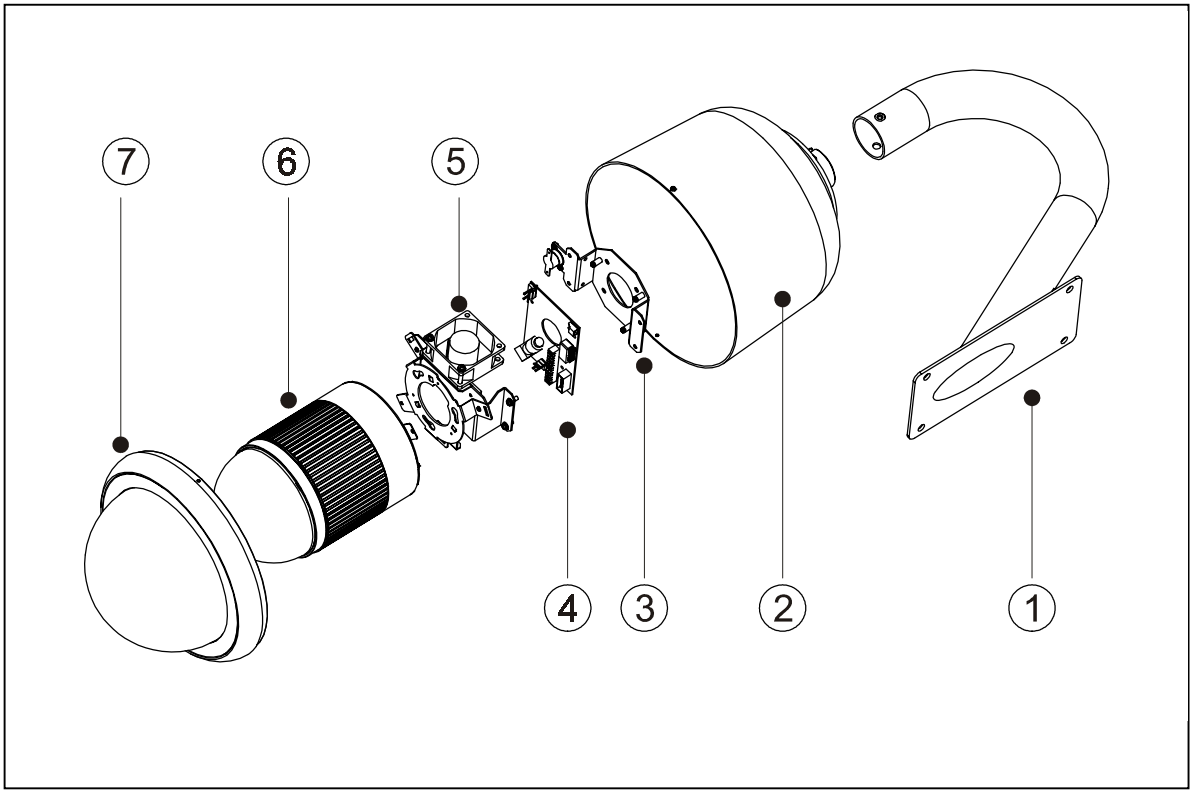
CONSTRUCTION



1. **Pendant**
2. **Sun Shield**
3. **Main Housing**
4. **Dome Camera**
5. **Dome Cover**

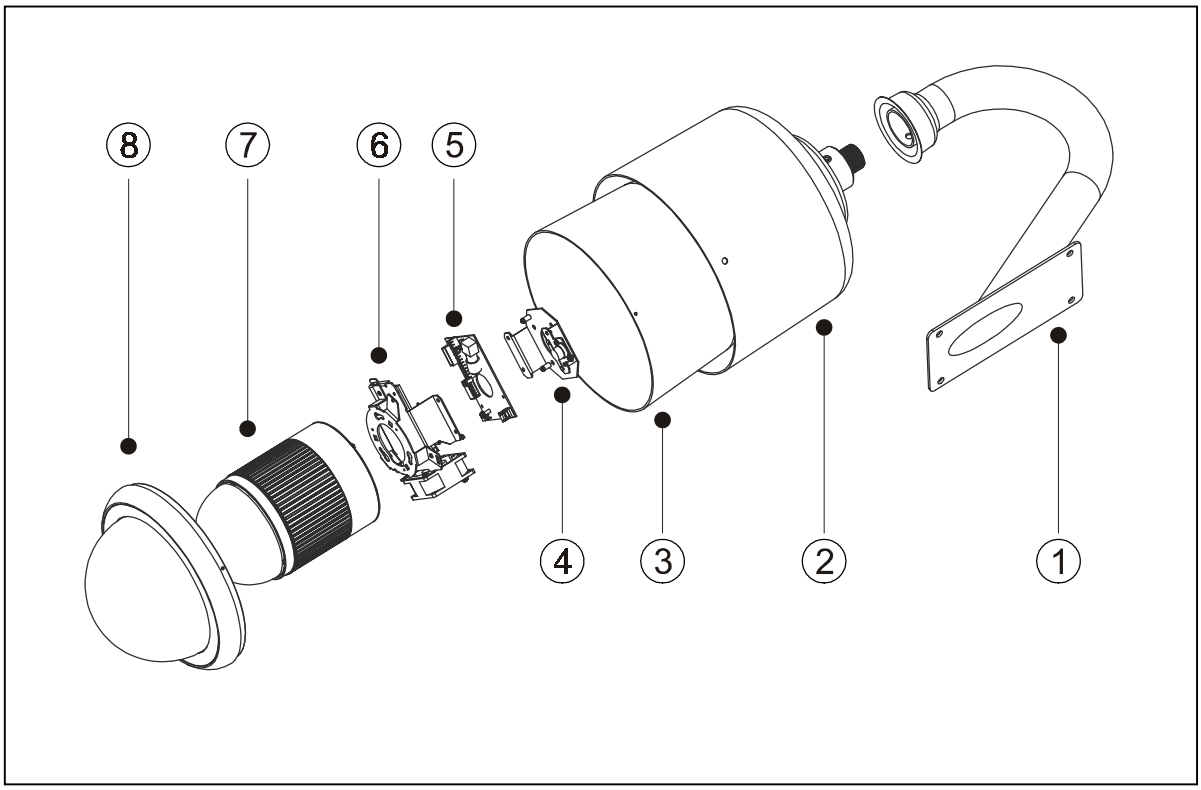
INSTALLATION

INSTALLATION FOR INDOOR ENVIRONMENT



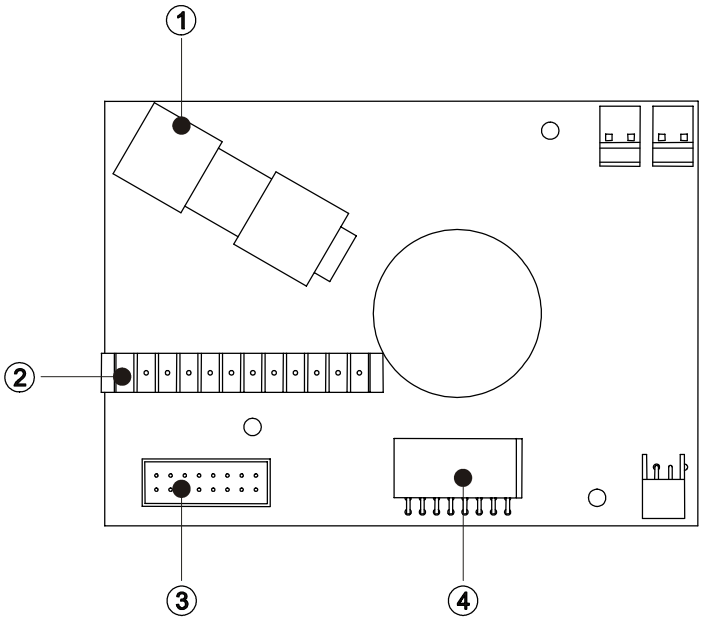
1. Pendant
2. Main Housing
3. PCB Frame
4. PCB
5. Heater Frame
6. Dome Camera
7. Dome Cover

INSTALLATION FOR OUTDOOR ENVIRONMENT



1. Pendant
2. Sun Shield
3. Main Housing
4. PCB Frame
5. PCB
6. Heater Frame
7. Dome Camera
8. Dome Cover

PCB CONNECTION



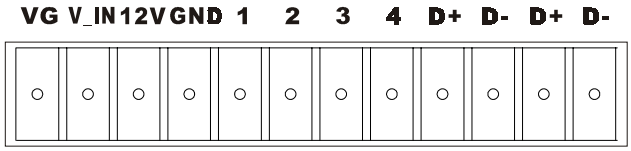
1. BNC Video Output
You can connect video cable to monitor directly.

2. Terminal Block
Power, Control Signal and alarm inputs.

3. 16 Pin Connector
Connect cable to dome camera

4. 16 Pin Connector
Connect cable to external box (Optional)

TERMINAL BLOCK DEFINITION

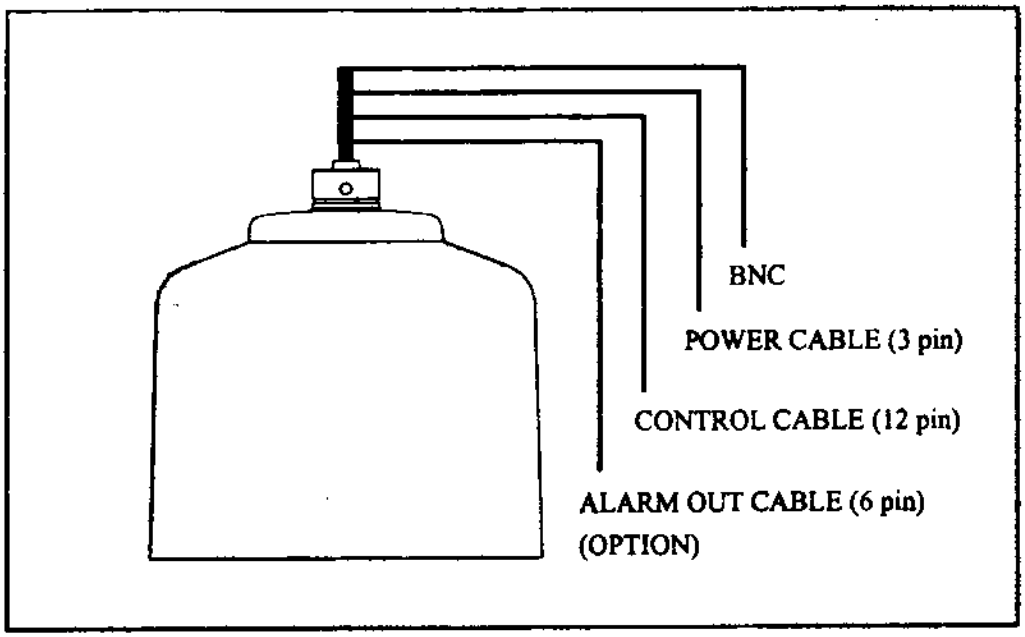


Pin Name	AC24V Set	DC12V Set
VG	AC24V in : line2	DC12V in : GND
V_IN	AC24V in : line1	DC12V in : +12V
12V	DC12V output : +12V (For Keyboard ; Max.400mA)	
GND	DC12V output Ground and Alarm Ground.	
1	Alarm 1	
2	Alarm 2	
3	Alarm 3	
4	Alarm 4	
D+	RS-485 Differential Signal D+ (Tx +)	
D-	RS-485 Differential Signal D- (Tx -)	
D+	Additional RS-485 Differential Signal D+ (Tx +)	
D-	Additional RS-485 Differential Signal D- (Tx -)	

Remark :
1. Half-duplex mode is standard.
2. D+,D- are used to transmit and received commands. You need only two wires to transmit and receive commands under half-duplex mode.

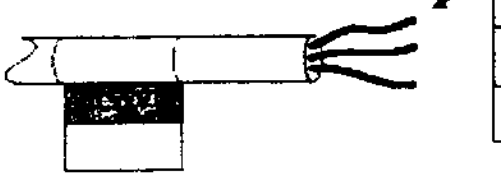
CABLE DEFINITION

CABLE CONNECTION



(1).BNC : Video output.

(2).POWER CABLE(3 pin)

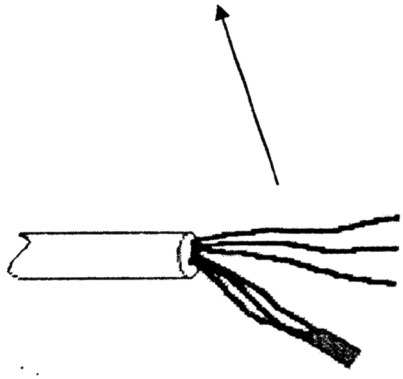


	Power Source		
Wire Color	**AC24V**	**AC110V**	**AC220V**
White	AC24V line-1	AC110V line-1	AC220V line-1
Green	Earth-GND		
Black	AC24V line-2	AC110V line-2	AC220V line-2

Power Source Suggestion :
AC24V: 4A (with heater 2A))
AC110V: 1.2A
AC220: 0.6A

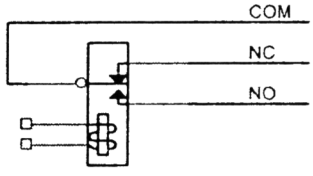
(3) CONTROL CABLE (12 pin)

Brown = RS-485 (D+)
Orange = RS-485 (D-)
Black = DC GND



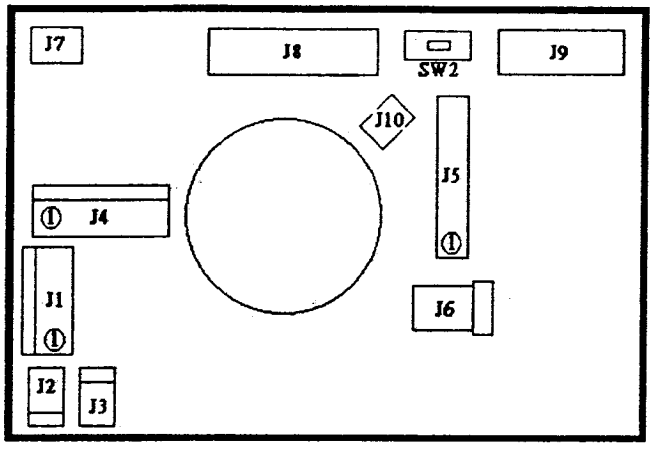
PIN	Wire color	Half-duplex	Full-duplex
RA	Brown	D+	RX+
RB	Orange	D-	RX-
TA	Yellow	D+	TX+
TB	Green	D-	TX-
GND	Black	DC_GND	
IR	Blue	Reserve	
A1	Purple	Alarm1_IN	
A2	Gray	Alarm2_IN	
A3	White	Alarm3_IN	
A4	Pink	Alarm4_IN	
GND	Light green	DC_GND	
12V	Red	12V_OUT(400mA)	

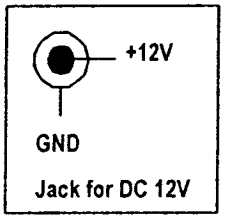
(4)ALARM CABLE (6 pin) (OPTIONAL)



Color	Definition
Green	NO of Alarm-out 2
Yellow	COM of Alarm-out 2
Orange	NC of Alarm-out 2
Red	NO of Alarm-out 1
Brown	COM of Alarm-out 1
Black	NC of Alarm-out 1

PCB DEFINITION





J1 : Power

Pin	Color	Definition
1	Black	AC line1 (IN)
2	Green	Earth GND
3	White	AC line2 (IN)

J4 : Alarm Out

Pin	Color	Definition
1	Green	NO of Alarm Out 2
2	Yellow	COM of Alarm Out 2
3	Orange	NC of Alarm Out 2
4	Red	NO of Alarm Out 1
5	Brown	COM of Alarm Out 1
6	Black	NC of Alarm Out 1

J5 : RS-485 and Alarm In

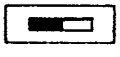
PIN	Color	Half Duplex	Full Duplex
R+	Brown	D+	RX+
R-	Orange	D-	RX-
T+	Yellow	D+	TX+
T-	Green	D-	TX-
GND	Black	Power GND	
IR	Blue	Reserved	
A1	Purple	Alarm In 1	
A2	Gray	Alarm In 2	
A3	White	Alarm In 3	
A4	Pink	Alarm In 4	
GND	Light Green	Power GND	
12V	Red	DC12V OUT	

J1 : Power
J2 : Heater
J3 : Thermostat
J4 : Alarm Out
J5 : RS-485 and Alarm In
J6 : Additional Power Jack
J7 : Fan
J8 : D7721 Blindmate Dome Connector
J9 : D7720 Standard Dome Connector
J10 :BNC
SW2 : RS-485 Mode Switch (Half / Full duplex) Default(Half duplex)

SWITCH SETTING

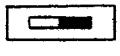
SW2 (RS-485 communication mode)

Full-duplex Half-duplex



RS-485 is Communication is Full duplex
(Available only for **D7721**)

Full-duplex Half-duplex



RS-485 Half duplex mode

APPENDIX

ACCESSORIES

Pendent …… 1 pcs.

Operation Manual …… 1 pcs.

ELMO

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