Installation and Operations Manual

Model Number: DLD6440

Description: PTZ Control Code Converter

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Before installing and using the Protocol converter，please read these instructions carefully and retain for later reference.

INTRODUCTION

1. Features

- Protocol converter mainly used in the field to convert different protocol and baud rate between Matrix, keyboard controller, DVR or other hosts and PTZ, receiver or other terminal devices.

- When DVR and matrix control the terminal device, the protocol converter box may take on the functions of connection and convert protocol.

- Protocol converter box support multi-protocol and baud rates which are featured in equipment of large system surveillance projects.

2. Applications

1. Matrix controls the different high speed dome or PTZ with different protocol.

2. Matrix and DVR controls the terminal devices, i.e., PTZ or camera.

Note:

- Installation should be carried out only by qualified personnel and in accordance with any wiring regulations in force at the time.

- Do not use any accessories not specifically designed for use with this product.

- When you use it, please follow the instructions and keep the correct connection wire. The power supply, corresponding DIP position, communication Protocol, baud rate must be match your control equipment.

- Do not attempt to service or repair the

- protocol converter as opening or removing covers may expose dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

3. Accessories

1. DC9V power   1pc
2. Terminal Block   2pc
3. Manual   1pc

4.Technical Parameters

Adapter	120VAC or 230VAC
Power supply	3W
In /Communication	RS-485 or Manchester
Out/Communication	RS-485
Work Temperature	-40^0C $\sim$ $+70^0$C
Size（mm）	160 x 66 x 27
Weight（Kg）	0.69

5. Multi-Protocol Support

Input Protocol ：
   DLD6441-6: PELCO D/P AD（RS422/485)
           VICON, GE
   DLD6442-6：AD Manchester
   DLD6442-6: BOSCH Biphase

Output Protocol ：
       PELCO D/P, VICON, GE KALATEL

6. Multi-Baud Rate Support

1200、2400、4800、9600

1. The Protocol Converter DLD6440 Series

DLD6441/4-6：Input device is RS-485 communication protocol matrix or other equipment with RS-485 port. The Protocol in details see attached Item List.

DLD6442-6：Input Protocol is Manchester Code which supports AD other Matrix Host; Output is RS-485 communication protocol. The output protocol in details see attached Item List.

DLD6443-6：Input device is BOSCH Matrix; Output device is RS-485 communication Protocol. The output protocol in details see attached Item List.

● The product Item serial No. stands for the output protocols which protocol converter box support; and each product can only choose one of Item serial No. for use.

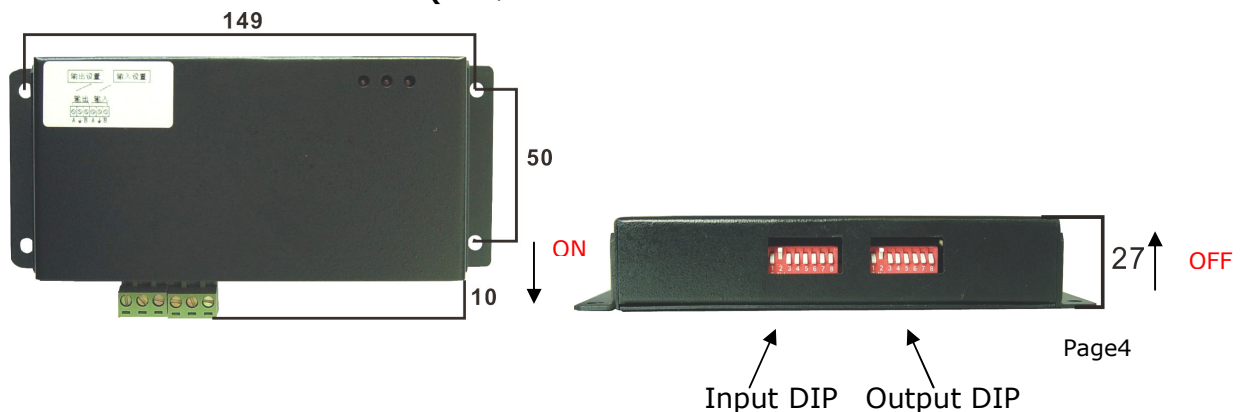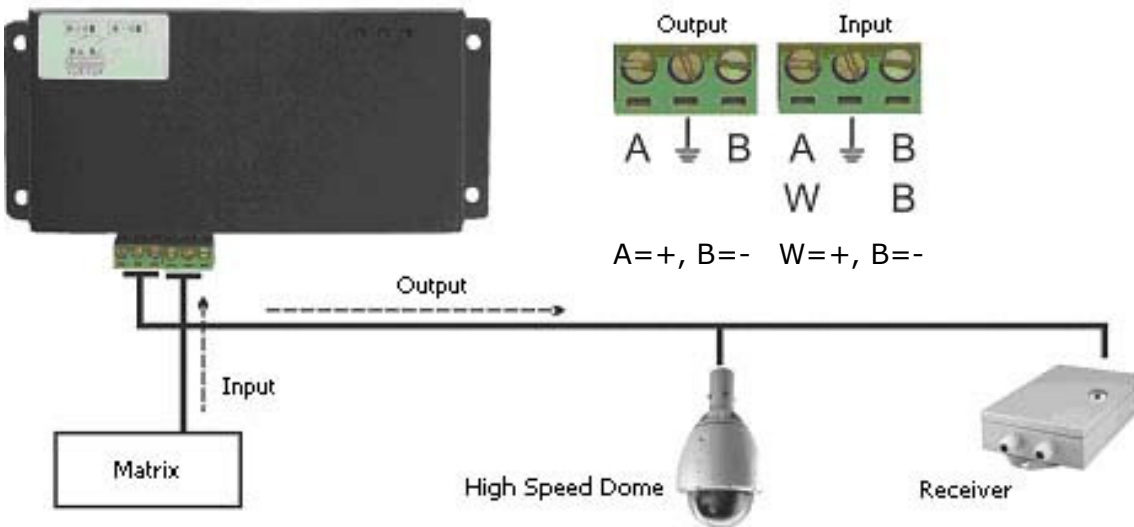### Application Diagram：

●The matrix controls the high speed dome and receiver with different protocol.

●The Matrix and DVR controls the terminal device.
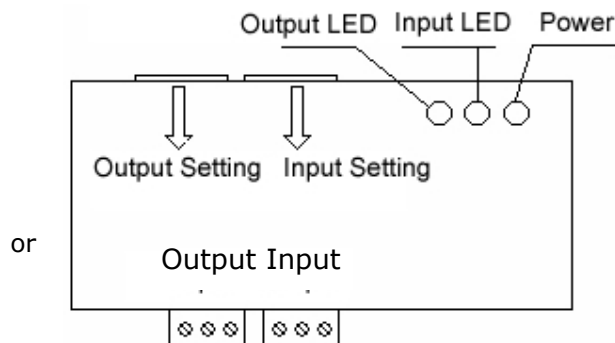
Dimensions of Protocol Converter (mm）

149

50

10

ON

OFF

27

Input DIP   Output DIP

2. The connection diagram of Protocol Converter

A=+, B=- W=+, B=-

Note:

A. The output of protocol convert is RS-485 port, the max communication distance up to 1200M (Add a 120 ohm resistor at the end of RS-485 + and RS-485)

B. Using twisted-pair cable for communication.

3、Front Panel View

(A=485+   B=485-)

- When the power on, the LED will be on.When the matrix controls the PTZ, the input LED will be on or wink.(When you control the PTZ left right, the LED will be ON and be OFF after stop)
- Output is RS-485 code

- Input connects with Matrix, keyboard, DVR or other control device; Output connects with high speed dome, receiver and other terminal device.

PLEASE NOTE THE ADDRESSING MUST BE CONFIGURED AS FOLLOWS:

IF PHYSICAL PTZ IS SET AS ADDRESS NUMBER "X" Ex: 2, THEN SAME PTZ MUST BE SET IN DVR AT ONE NUMBER HIGHER AS NUMBER "X+1" or 3

AT DVR OR KEYBOARD SOURCE SENDIG CODE ALWAYS SET THE (SOURCE) PTZ ADDRESS AS ONE NUMBER HIGHER THAN PHYSICAL ADDRESS IN PTZ "X+1"

DLD6441-6, DLD6444-6 Protocol Converter

Supports general host with RS-485 communication; for available protocol, please see the following list in details.

Input DIP position: Both of Switch 1 and Switch 2 is baud rate setting;
From Switch 3 to Switch 8 is output protocol setting.
Output DIP position: Both of Switch 1 and Switch 2 is baud rate setting;
From Switch 3 to Switch 8 is output protocol setting.

Input protocol setting:
From Switch 3 to Switch 8 is input protocol setting.

Item No.	Input Protocol	Switch 8	Switch 7	Switch 6	Switch 5	Switch 4	Switch 3
0	PELCO-D	ON	ON	ON	ON	ON	ON
1	VICON Matrix V1422／4800	ON	ON	ON	ON	ON	OFF
2	VICON – surveyor 99	ON	ON	ON	ON	OFF	ON
3	AD (RS-422/RS-485)	ON	ON	ON	ON	OFF	OFF
4	DH	ON	ON	ON	OFF	ON	ON
5	MOLYNX	ON	ON	ON	OFF	ON	OFF
6	PIH1016	ON	ON	ON	OFF	OFF	ON
7	ADT8060 ADT	ON	ON	ON	OFF	OFF	OFF
8	PELCO-P	ON	ON	OFF	ON	ON	ON
9		ON	ON	OFF	ON	ON	OFF
10		ON	ON	OFF	ON	OFF	ON
11	KODICOM -RX ／ KRE-301RX	ON	ON	OFF	ON	OFF	OFF
12		ON	ON	OFF	OFF	ON	ON
13		ON	ON	OFF	OFF	ON	OFF
14	V1200（Baud Rate9600／Address begin with 0）	ON	ON	OFF	OFF	OFF	ON
15	KTD348-KTD304/4800 KALATEL HOST SANTACHI-450/9600	ON	ON	OFF	OFF	OFF	OFF

Input and Output Baud rate setting:
Both of Switch 1 and Switch 2 is baud rate setting;

Item No.	Baud Rate	Switch 1	Switch 2
0	1200	ON	ON
1	2400	ON	OFF
2	4800	OFF	ON
3	9600	OFF	OFF

Output protocol setting:

From Switch 3 to Switch 8 is output protocol setting.

Item No.	Input Protocol	Switch 8	Switch 7	Switch 6	Switch 5	Switch 4	Switch 3
0	PELCO-D	ON	ON	ON	ON	ON	ON
1		ON	ON	ON	ON	ON	OFF
2	VICON	ON	ON	ON	ON	OFF	ON
3		ON	ON	ON	ON	OFF	OFF
4		ON	ON	ON	OFF	ON	ON
5		ON	ON	ON	OFF	ON	OFF
6	PIH1016 2400	ON	ON	ON	OFF	OFF	ON
7	MOLYNX 9600	ON	ON	ON	OFF	OFF	OFF
8	PELCO-P	ON	ON	OFF	ON	ON	ON
9	SAMSUNG 9600	ON	ON	OFF	ON	ON	OFF
10	SAE 9600	ON	ON	OFF	ON	OFF	ON
11	B01/TD500 9600	ON	ON	OFF	ON	OFF	OFF
12		ON	ON	OFF	OFF	ON	ON
13	AD-Dome	ON	ON	OFF	OFF	ON	OFF
14	Panasonic CS-850/860	ON	ON	OFF	OFF	OFF	ON
15	KALATEL	ON	ON	OFF	OFF	OFF	OFF

● **The other operations of PTZ, matrix and dome see attached special function list.**

DLD6442-6 AD Manchester Protocol converter

Input Protocol is Manchester Code which supports AD and AB Matrix Switchers;

DIP position setting

Input DIP position: 8 switch OFF

Output DIP position: Both of Switch 1 and Switch 2 is baud rate setting;
From Switch 3 to Switch 8 is output protocol setting.

Baud rate setting:

Switch 1 and Switch 2 is for baud rate setting

Item NO.	Baud Rate	Switch 1	Switch 2
0	1200	ON	ON
1	2400	ON	OFF
2	4800	OFF	ON
3	9600	OFF	OFF

Output protocol setting:

Switch 3 to Switch 8 is output protocol setting.

Item No.	Output Protocol	Switch 8	Switch 7	Switch 6	Switch 5	Switch 4	Switch 3
0	PELCO-D	ON	ON	ON	ON	ON	ON
1		ON	ON	ON	ON	ON	OFF
2	VICON	ON	ON	ON	ON	OFF	ON
3		ON	ON	ON	ON	OFF	OFF
4		ON	ON	ON	OFF	ON	ON
5		ON	ON	ON	OFF	ON	OFF
6	PIH1016 2400	ON	ON	ON	OFF	OFF	ON
7	MOLYNX 9600	ON	ON	ON	OFF	OFF	OFF
8	PELCO-P	ON	ON	OFF	ON	ON	ON
9	SAMSUNG 9600	ON	ON	OFF	ON	ON	OFF
10	SAE 9600	ON	ON	OFF	ON	OFF	ON
11	B01/TD500 9600	ON	ON	OFF	ON	OFF	OFF
12		ON	ON	OFF	OFF	ON	ON
13	AD-Dome	ON	ON	OFF	OFF	ON	OFF
14	Panasonic CS-850/860	ON	ON	OFF	OFF	OFF	ON
15	KALATEL	ON	ON	OFF	OFF	OFF	OFF

- **The operations of AD/AB with compatible matrix:**

- AUX1
- AUX2
- AUX3 is AUTO
- Call preset 65 is PATTERN START
- Call preset 66 is PATTERN STOP
- Call preset 67 is PATTERN PLAY

- Call preset 68 is MENU ON
- Call preset 69 is MENU OFF
- Call preset 70 is SCAN START
- Call preset 71 is SCAN STOP
- Call preset 72 is ENTER (ACK)

DLD6443-6 Bosch Biphase Protocol Converter

Input device support BOSCH Matrix Host.

DIP position setting

Input DIP position: 8 switch OFF

Output DIP position: Both of Switch 1 and Switch 2 is baud rate setting;

From Switch 3 to Switch 8 is output protocol setting.

Baud rate setting:

Switch 1 and Switch 2 is for baud rate setting

Item No.	Baud Rate	Switch 1	Switch 2
0	1200	ON	ON
1	2400	ON	OFF
2	4800	OFF	ON
3	9600	OFF	OFF

Output protocol setting:

Switch 3 to Switch 8 is output protocol setting.

Item No.	Output Protocol	Switch 8	Switch 7	Switch 6	Switch 5	Switch 4	Switch 3
0	PELCO-D	ON	ON	ON	ON	ON	ON
1		ON	ON	ON	ON	ON	OFF
2	VICON	ON	ON	ON	ON	OFF	ON
3		ON	ON	ON	ON	OFF	OFF
4		ON	ON	ON	OFF	ON	ON
5		ON	ON	ON	OFF	ON	OFF
6	PIH1016 2400	ON	ON	ON	OFF	OFF	ON
7	MOLYNX 9600	ON	ON	ON	OFF	OFF	OFF
8	PELCO-P	ON	ON	OFF	ON	ON	ON
9	SAMSUNG 9600	ON	ON	OFF	ON	ON	OFF
10	SAE 9600	ON	ON	OFF	ON	OFF	ON
11	B01/TD500 9600	ON	ON	OFF	ON	OFF	OFF
12		ON	ON	OFF	OFF	ON	ON
13	AD-Dome	ON	ON	OFF	OFF	ON	OFF
14	Panasonic CS-850/860	ON	ON	OFF	OFF	OFF	ON
15	KALATEL	ON	ON	OFF	OFF	OFF	OFF

● **The operations of PHILIPS MATRIX:**

Connection：Philips Matrix DB9－1＝RS-485B   DB9－2＝RS-485A

- AUX3 ON －－－PATTERN START
- AUX3 OFF －－－PATTERN STOP
- AUX4 ON －－－PATTERN RUN
- AUX5 ON －－－SCAN START
- AUX5 OFF －－－SCAN STOP

- AUX6 ON －－－AUTO ON
- AUX6 OFF －－－AUTO OFF
- AUX1
- AUX2