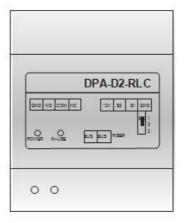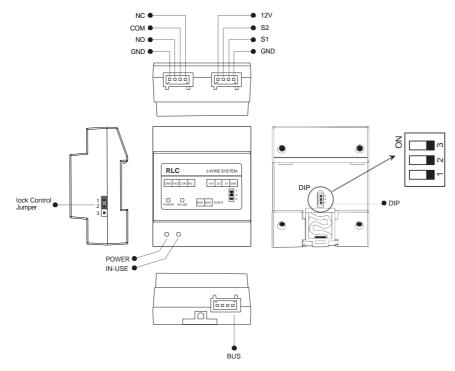# DPA-D2-RLC

RLC unit for D2 videodoor system

User´s manual

1.About RLC Unit

Discription:

The relay actuator RLC is a accessory device designed for DT system to control door locks and lights. It has the features as follows:
- Allows to open gate door locks and control lights;
- Support high power-consumption lock;
- With configurable unlock timed output;
- Support exit control button.

2. Parts and Name

+12V:12V power output. Can be used to power the lock.

S2:Reserved.

S1:Exit button contact. Short this contact and the GND to unlock.

GND:The common Ground of the other 3 contacts: S1, S2 and +12V.

NC:The normally-closed contact to COM.

COM: The common contact of the unlock relay.

NO: The normally-open contact to COM.

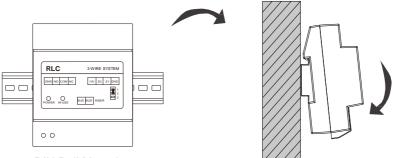Lock Control Jumper: To select the lock type: see section 5,6.

POWER:Working indicator,it will light up when plugs in power supply.

IN-USE:Unlock indicator,it will light up when unlock.

Bus:Connect to the bus line, no polarity.

DIP :Used for setting the address of the RLC.

2. Unit Mounting

DIN Rail Mounting

3. How to set the work mode

1).In DIP 1 = ON, DIP 2 = ON, DIP 3 = OFF status, exit button(S1 and GND) short-circuit, meanwhile, the RLC will power-on to activate the setting mode;

2).In setting status, struck repeatedly DIP 1 four times to switch work modes:

   A.When the IN-USE indicator flashes once, it means the system will enter the lock control mode.

   B.When the IN-USE indicator flashes two times, it means the system will enter the light control mode.

3).When the setting complete,it will automatically restart.

Please note the setting state valid within 5 seconds, more than five seconds without operation, it will exit the setting mode automatically.

4. How to set the unlock time

In lock control mode:

1). Power-on within 5 seconds, short-circuit S2 up to 3 seconds, the IN-USE indicator flash.

2). Short-circuit S1 up to 3 seconds, and the IN-USE indicator always light.

3). Short-circuit again S2, meanwhile, the time of short-circuit equal to unlock time. (the IN-USE indicator flashes once per second, Less than two seconds by one second calculation; The maximum setting time is 30 seconds.)

4). After S2 released, saved unlock time, and exit the setting.

5. How to set the light working time

In light control mode:

1). Power-on within 5 seconds, short-circuit S2 up to 3 seconds, the IN-USE indicator flash.

2). Short-circuit S1 up to 3 seconds, and the IN-USE indicator always light.

3). Short-circuit again S2, meanwhile, the time of short-circuit 1 seconds equal to light working time 30 seconds.(the IN-USE indicator flashes once per second, Less than two seconds by one second calculation; The maximum setting time is 30 seconds.)

4). After S2 released, saved unlock time, and exit the setting.

6. DIP Switch Setting

The DIP switch in the back of the panel is used to set the address of the RLC. Please refer to the followings for more detail informations about the DIP settings:

A. DIP settings for lock.

DIP	Bit State	Descriptions
ON 3 2 1	OFF,OFF,OFF	Applies to door station1 & lock 1

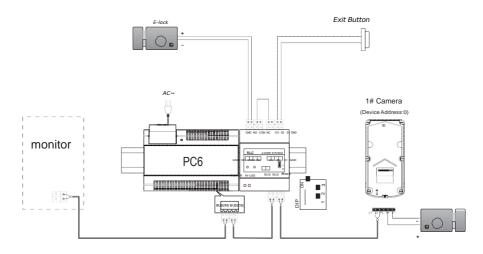| DIP	Bit State	Descriptions
ON, 3 2 1	OFF,OFF,ON	Applies to door station1 & lock 2
ON, 3 2 1	ON,OFF,OFF	Applies to door station2 & lock 1
ON, 3 2 1	ON,OFF,ON	Applies to door station2 & lock 2
ON, 3 2 1	OFF,ON,OFF	Applies to door station3 & lock 1
ON, 3 2 1	OFF,ON,ON	Applies to door station3 & lock 2
ON, 3 2 1	ON,ON,OFF	Applies to door station4 & lock 1
ON, 3 2 1	ON,ON,ON	Applies to door station4 & lock 2

B. DIP settings for light.

DIP	Bit State	Descriptions
ON, 3 2 1	OFF,OFF,OFF	Set to the first RLC.
ON, 3 2 1	OFF,OFF,ON	Set to the second RLC.
ON, 3 2 1	ON,OFF,OFF	Set to the third RLC.

DIP	Bit State	Descriptions
ON 3 2 1	ON,OFF,ON	Set to the fourth RLC.
ON 3 2 1	OFF,ON,OFF	Set to the fifth RLC.
ON 3 2 1	OFF,ON,ON	Set to the sixth RLC.
ON 3 2 1	ON,ON,OFF	Set to the seventh RLC.
ON 3 2 1	ON,ON,ON	Set to the eighth RLC.

7. Internal powered lock connection(only suitable for Power-on-to-unlock type)
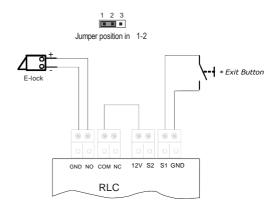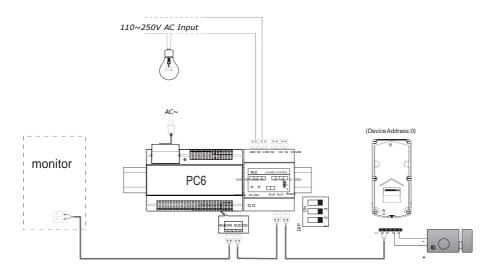
RLC control the second lock of door station 1

RLC connect lock

Note:

1. When RLC connect Electronic lock, the jumper position in 1-2.

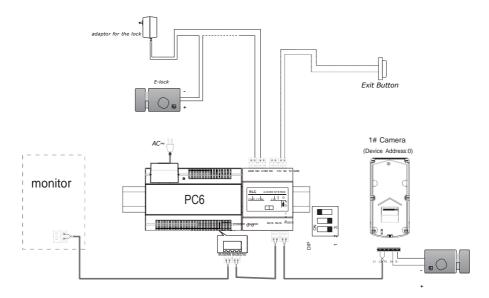2. When RLC connect E-magnetic lock, the jumper position in 2-3.

1 2 3

Jumper position in   1-2

E-lock

* Exit Button

GND NO COM NC   12V S2   S1 GND

RLC

8. RLC Connections for Light Control

110~250V AC Input

AC~

monitor

PC6

GND NO COM NC   12V S2 S1 GND

RLC   2-WIRE SYSTEM

IN-USE   BUS BUS RISER

BUS(IM) BUS (DS)

DIP

ON

1 2 3

(Device Address:0)

9. External Power Supply powered lock connection
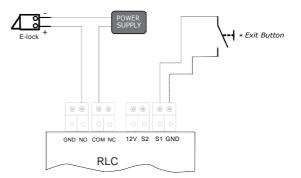
A. Power-on-to-unlock type:

RLC control the second lock of door station 1
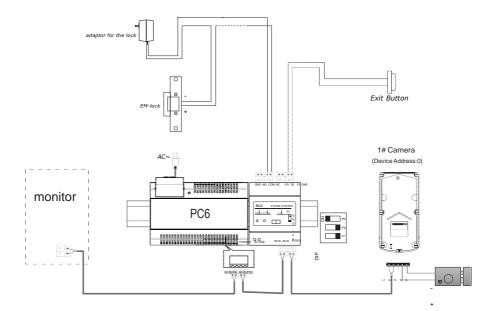

RLC connect lock

Note:

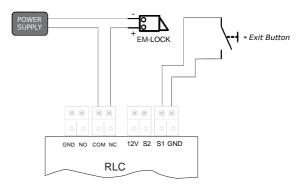1. Here's lock type is Electronic lock.

B.P ower-off-to-unlock type:
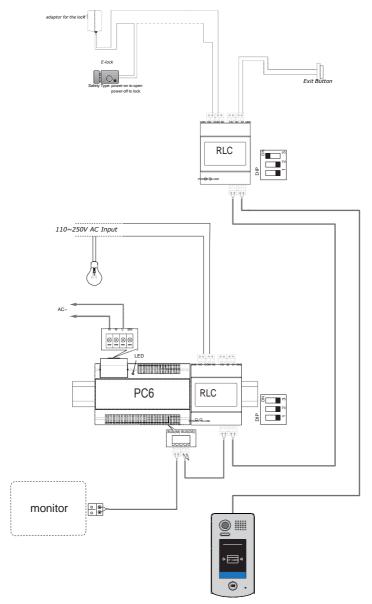
RLC control the second lock of door station 1

adaptor for the lock

EM-lock

-

+

Exit Button

1# Camera
(Device Address:0)

AC~

monitor

PC6

GND NO COM NC 12V S2 S1 GND

RLC 2-WIRE SYSTEM
S1

POWER N-USE BUS BUS RISER

BUS(M) BUS(DS)

DIP

L1 L2 PL S-

-

+

RLC connect lock

Note:

1. Here's lock type is
   E-magnetic lock.

POWER
SUPPLY

-

+
EM-LOCK

∗ Exit Button

GND NO COM NC   12V S2   S1 GND

RLC

10. Connecting 2 RLCs

You can connect 2 RLCs to control both the front door lock and light.

11. Specification

- Power Supply :   DC24V;
- Unlocking Time: 1~30s(Default 1s);
- Lock Power supply: 12Vdc, 450mA(Internal Power);
- Working Temperature: $-10^0C\sim+40^0C$;
- Dimension: 89(H)×71(W)×45(D)mm.