# User Manual DJ 4T ID, DJ 8T ID, DJ 12T EXT, DJ 24T EXT



#### Features

- · Full anodize aluminum panel.
- SONY color CCD camera.
- · camera angle adjustable.
- · ID card access control
- · Night-view LED with CDS light sensor.
- · Backlit name plate for each button.
- · Use DIP switches for multi Door Station configuration.
- Direct connect to electronic lock of 12Vdc.
- · Exit button.
- · USB-RS485 interface to connect to computer.
- · Plug-in connector to connect bus line.
- On line Monitor search.



## Place Name Plate

Press down and shift right/left to open the transparent name plate cover, then insert the name paper, then put the plate cover back to the panel. Note thar double button line panel can be opened both direction, single button line Can only be opened at right side.



## **Electronic Specifications**

Power supply: Power Consumption: Unlock Power output: NO, COM exchange contact: Monostable relay activation time: Working temperature: supplied by SP18 1W in standby, 15 W in working 12Vdc 300mA Max. 48V dc 1.5A 1 second to 10 minutes ±5% -5°C +45°C



## Camera Angle adjustment

Open the mounting box of the panel, use a cross screw to adjust the view angle of the camera before installation.



## Installation with expanding panel





- +12V: 12VDC power output.
- LK-(GND): power ground.
- LK+(COM): electronical load activation relay contact common.
- NO.: electronical load activation relay normally open contact (the default setting for this terminal is NO, this
  terminal can be configured to NC, normally-closed contact by the easyconfig software). That means, by
  default, only the power-to-unlock type of electronic lock can be connected to the COM and NO terminal, if using
  the power-off-to-unlock type locks, the NO terminal must be set to NC contact by the easyconfig software.
- EB+: Exit button.
- EB-: Exit buton.
- JP-LK: For electronic lock safety type setting(refer to Door Station Lock Connections).
- T/R-: USB-RS485 communication terminal negative.
- T/R+: USB-RS485 communication terminal positive.
- SET: DIP switches for system configurations.
- PA: Press once to sent the name list to Monitor; press and hold for 3 seconds to add Master card.
- PB: Press once to search the Right line Monitor; press and hold for 3 seconds to search left line Monitor.
- Bus(L1,L2): non-polarity bus line.

#### Door Station wiring

This example is one Door Station wiring, note that the lock used here is a 12Vdc 300mA power-to-unlock type.



### **DIP Switches settings**

Total 6 bits in the DIP switches can be configured. The switches can be modified either before or after installation.

· Bit-1 and Bit 2 is for Door Station ID settings, when mutil Door Stations are installed in the system, these two bit



must be set correctly, the first Door Station set to 00, the second one set to 01, the third one set to 10, the fourth one set to 11. If only one Door Station is installed, set to 00.

- Bit-3: Single line button Door Station or double line button Door Station selection. If the Door Station is a double line button, for examlpe, the DJ 8T ID, set this bit to 0, set to 1 for single line button Door Stations.
- Bit-4: Button code selection; if use the default codes for each button of the Door Station, set to 0, if use the
  programmed codes, set to 1.(the code for each button can be programmed by the easyconfig software, see the
  program section in this manual)
- Bit-5: Unlocking time quick selection, by default it is set to 0, for 1 second unlocking time; set to 1 for 5 seconds. (this 5 second unlocking time can be changed by easyconfig software)
- Bit-6: MUST be set to off.

Bit definition	Bit state	Function Descriptions		
	123456 ON	Default setting, ID = 0, set to the first Door Station.		
Bit-1 and bit-2 Door Station ID setting	123456	ID = 1, set to the second Door Station.		
	123456 N	ID = 2, set to the third Door Station.		
	123456 N	ID = 3, set to the fourth Door Station.		
Bit-3	123456 ON	Default setting for using a double line button Door Station.		
User ID select	123456 ON	when using a single line button Door Station.		
Bit-4	123456 ON	Default setting for using the default codes of the button.		
Button line select	123456 ON	using the progremmed codes of the button.		
Bit-5	123456 ON	Default setting, unlocking time = 1 second.		
Unlocking time quick select	123456 ON	Unlocking time = 5 seconds.(can be changed by software)		
Bit-6	123456 ON	Working state.		
Function reserved	1 2 3 4 5 6 ON	Function reserved.		



## 1. Direct lock connection

Use the power of the system to supply for the electronic lock, so that the lock can connect to the Door Station directly, without a additional power supply for the electronic lock. Note that the Door Station can only output a 12Vdc power, therefore the kind of lock used is limited.

- The rated power of the lock must be less than 12Vdc 300mA when using direct lock connection method.
- The GND must connect to the negative of the lock, and the COM connect to the positive .
- Jumper set to 1-2 position for Power-to-Unlock safety type; set to 2-3 position for Power-off-to -Unlock type(in this case the Unlock Relay mode should be set to Normally Closed on easyconfig software)
- The 5th bit of the DIP switches is for the unlocking time setting, it's set to off by default, for 1 second unloking time. If set this bit to on, the unlocking time is 5 seconds.
- If different unlocking time is needed to be configured, the easyconfig software can be used to change the Unlock Timing on the Parameter tab(see the program section).



A. Connection for Power-to-Unlock type:



DIPS-5: default set to off, unlocking time is 1 second. (In most cases, 1 second is work for Power-to-Unlock type)

### B. Connection for Power--off-to-Unlock type:





DIPS-5: set to on, unlocking time is 5 seconds.

#### 2. Additional power supply

When the electronic lock is over 12 Vdc, additional power supply for the lock is needed.

- The power supply for the lock must be less than 48Vdc 1.5A.
- The Jumper must be removed when using additional power supply. The default is set for Power-to-Unlock type(<u>Normally open</u>), if use Power-off-to-Unlock type, change the Unlock Relay mode to <u>Normally closed</u> on the <u>Parameter</u> tab of easyconfig software.
- If different unlocking time is needed to be configured, please use the easyconfig software to change the setting on the <u>Parameter</u> tab(see the program section).

### C. Connection for Power-to-Unlock type:



## D. Connection for Power--off-to-Unlock type:



# Proximity ID Card Operation

- Up to 1000 user cards can be registered by the Door Station.
- Easy management with LED state and Sound hint.
- There are two master cards, one <u>MASTER CARD ADD</u> card and one <u>MASTER CARD DELETE</u> card, When adding a new master card, the old one will be replaced automatically.
- Card reading distance is from 3 to 5 cm.

The Master cards are necessary when you add or delete user cards, Please keep the Master cards carefully. However, it is much easier to manage the ID cards using easyconfig software.



#### How to add user cards:



## Add user cards by Room:





Press the button(s) that the cards belong to on the Door Station.(all cards belong to the room will be deleted) Show the <u>MASTER</u> <u>CARD DELETE</u> card again to confirm and exit.

Note 1: The <u>MASTER CARD ADD</u> card must be showed before the Reader can get in to the Authorize DELETE-Card state, and make sure each operation have to take place within 10 seconds, or the Door Station will return to normal state automatically.

# Card management shoud hints

State	Operation	Sound hint	
standby state	show user card(registered)	a long 'D~.' (door opens)	
	show user card(not-registered)	3 short 'Di' (Di, Di ,Di)	
Card management state	Enter the card management state	a long 'Di~' + a short 'Di' (Di~ Di)	
	Exit out the card management state	2 short 'Di' (Di ,Di)	
	Add card/Delete card/Format successful	a long 'Di~' (Di~)	
	Add a already existed card	2 long 'Di~' (Di~, Di~)	
	Add card/Delete card/Format unsuccessful	3 short 'Di' (Di, Di, Di)	
	Add a debug card(16666666)	4 short 'Di' (Di, Di ,Di, Di)	
	Add card failure (1000 cards registered)	5 short 'Di' (Di, Di ,Di, Di, Di)	

## Card management LED hints

State	LED-A	LED-B	LED-C	LED-D
Standby	ON	ON	ON	ON
Authorize ADD-Card	ON	OFF	OFF	ON
Authorize DELETE-Card	OFF	ON	OFF	ON
Add user card	ON	OFF	OFF	OFF
Delete user card	OFF	ON	OFF	OFF
Format	ON	ON	OFF	OFF



DJ 8T ID

#### Online manual search

Online search function is designed for the purpose of getting a quick view of the Monitors installing situations, or to check if each of them works or not. This is very useful for installation maintain. There are 3 different ways to use the Online Search function, manually search, use the ID tab and use the easyconfig software.

When the Online search is actting, the Door Station will search every Monitor with the User Code from 1 to 32. If the Monitor is one line(work normally), the LED light of that button will light up, and one 'Di~' sound hit will be heared; if the Monitor is off line(disconnected or mulfunctioning), the LED light of that button will not light up, and a 'Di,Di,Di' sound hit will be heared. After 32 Monitors all be searched, the Monitor will quit out automatically, or press PB button to abort the seaching.

- · Press the PBbutton, will search the Monitors in the right Call Buttons column.
- · Press the PB button and hold for 3 seconds, will search the Monitors in the left Call Buttons column.



Online search range

Online search range

For Example, if 01, 03, 04, 11, 12, 13, 28 Monitors are installed and work correctly, the result will be:



press PB button and hold for 3 seconds

press PB button once

To execute searching, just press PB button(or hold it for 3 seconds) on Door Station Connection Board, the Door Station will start searching, and the result is shown by lighting the related Name Label backlight with sound tips. After 5 seconds, Door Station returns to normal.