

DA28A MANUAL

(READER Default PWD is: 888888)

SOFTWARE UserName : **SYSTEM**, Password: **555**

Part one Product summarize

With the functions of attendance machine、password access control、single-door access control、Chinese reader, and dual-door access control in this machine. Application: access control、attendance、patrol、 and park lot etc.

I. Main function features:

1. Multiple-purpose, wide applications

● With the functions of password keypad, Chinese reader, single-door controller, attendance machine, dual-door access controller in a device. With the keypad or without keypad, computer white or champers for option. It is a new product that can meet the multiple-requirements and with high performance-price ratio.

2. Leading technology, steady and reliable

● All the input/output ports are anti-electrostatic and anti-electric shock ; enhanced anti-interference ability, with anti-deadlock design; PCB has undergone damp-proof and anti-corrosive treatment, and can be suitable for all kinds of harsh environments.

3. Dynamic definition, flexible application

● 1 built-in card reader (EM or Mifare type), 2 sets of W26 interfaces, 2 sets of door magnet inputs, 2 sets of Open button inputs, 2 sets of relay outputs, 1 set of door bell interface, 1 set of RS485 port.

● I/O interface can be redefined. For example, W26 interface can be defined as standard output or input of W26; relay can be defined as output of door control, electric bell or warning; door control can be redefined as fire signal.

● Supports on-line upgrade of hardware.

4. Both Chinese and English menu, ease to use

● Full Chinese and English menus table, with backlight; can display name and employee number of the person who swipes the card.

● With the function of sending public and personal SMS.

● Can setup 16 alarm points, and the alarm support the working-days choosing.

● With clock modification parameter to ensure long-time accuracy

● Both can online (255 sets at most) and offline. In offline mode, device parameters can be set with the keypad.

5. Specialized door control, powerful functions

● Control door No.: 2 doors, standard Wiegand26 interface, can be connected to world famous card readers, such as HID, Motorola, etc.

● Supports 2,500 card holders, and stores 25,000 events of card swiping and warning.

● 32 time periods/64 time groups/16 application groups/8 holiday and weekend types/effective period of card/card password (6-digit figure).

● In offline mode, hardware has two layers anti-passback (A.P.B) and interlock (only one door can be opened at a time) functions

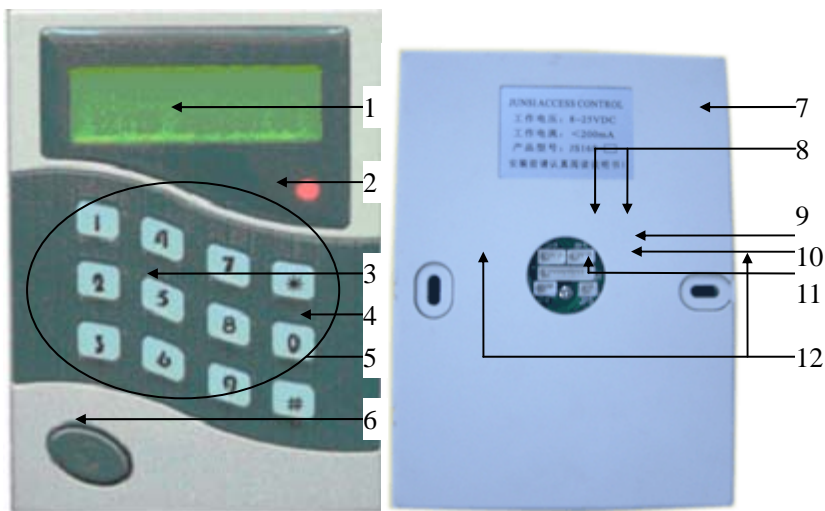
● Only Password Enter, Only Card Enter, and Card + Password Enter can be setup. Supports Duress Password Enter and Super Password Enter

● Remote control of random door points, with multiple warning event functions: Open Overtime, Close Overtime, Break In Warning, Duress Warning, Anti-Burglar Warning, Fire Warning, etc.

II. Main technology parameter

Working voltage	DC 8~25V
Power consumption	<1W
Data storage	>10 years(power-off)
Record capacity	25000
Control card No.	2500
LCD resolution	122×32DOTS
Built-in font	16×16national grade-2 Chinese font
Communication manner	RS485×1
Wiegand26 interface	2
Relay output	2
Status input	4
Card type	EM card compatible or Mifare card
Transmitting distance	4-15cm
Network capacity	255 sets
Working temperature	-20℃-70℃
Working humidity	20%-90%
Storage temperature	-25℃-85℃
size	L120×W88×18mm
weight	160g


III. Appearance structure note



- | | |
|----------------------|-----------------------------|
| 1. LCD display | 7. Back-cover board |
| 2. Indicator light | 8. Wiegand26 interface2 |
| 3. Keypad | 9. Main interface |
| 4. Black front-cover | 10. RS485 transmitting port |
| 5. Card reading area | 11. Door bell interface |
| 6. Door bell bottom | 12. Installment hole |

□. Quick index

1. Display icon index

icon	meaning
	Present options of the menu
↓	It means there is content under it, can press <9> key to read
↑	It means there is content above it, can press<7>key to read
□	It means the items not been chose by the multi-checkbox
☑	It means the items been chose by the multi-checkbox
○	It means the item not been chose by the single-checkbox
⊙	It means the items been chose by the single-checkbox

2. The keypad function index

keypad	function
< 0 >< 1 >< 2 > < 3 >< 4 >< 5 > < 6 >< 8 >	Input the data
< 7 >	Input the data Upturn the menu
< 9 >	Input data Downturn the menu
<*>	Cancel the operating Return to the previous menu Withdraw the multi-options or single-option choosing, and store the changing
<#>	Confirm the operating Enter in the next menu Choose the multi-options or single-option

3. Main menu index

	Main menu
	├─Time clock management
	─setup the time
	─calibrate the error
	─○need not to adjust
	─○adjust fast everyday
	─○adjust low everyday
	─alarm time
	─☑bell 01->
	─☑open the bell
	─alarm time
	─continued time
	─alarm week—☑Sunday, ☑Monday...☑Saturday
	.
	.
	.
	─☑bell 16->
	(as the above)
	├─card management
	─add card
	─modify card
	─delete card
	├─system setting
	─Equipment No.
	─backlight mode—○close, ○open, ○automatic, ○time zone
	─pronunciation indicate—☑keypad voice, ☑alarm voice, ☑indicate voice
	─transmitting speed—○2400bps, ○4800bps, ○9600bps, ○19200bps
	─record options—☑enter records, ☑exit records, ☑events records, ☑full record cycle, □prohibit the some , ☑capacity warning, □5 digits card
No.	
	─menu password
	─resource statistic
	─delete the system
	─software upgrade
	├─access control
	─setup door 1
	─right setting
	─time period— (time period 0—time period31)
	─time zone table— (time zone 0—time zone 63)
	─vacation
	─app group— (app group 0—app group 15)
	─management type—○in &out management, ○in management , ○in management and out for task, ○passback & inter-look
	─enter manner—○just swipe the card, ○just need password, ○card+ password
	─door magnet—○door magnet open, ○door magnet close, ○fire alarm open, ○fire alarm close, ○invalid
	─door-open bottom—○open, ○close, ○invalid
	─opening time
	─closing time
	─first enter open—○open in the first open, ○close in the first open
	─duress password
	─opening password
	─setup door 2
	(the some as the setup door 1)
	─copy1->2 doors
	─copy2->1 []
	├─port setting
	─relay 1—○door lock 1, ○door lock 2, ○power bell, ○warning, ○invalid
	─relay 2—○door lock 1, ○door lock 2, ○power bell, ○warning, ○invalid
	─W26interface 1—○enter 1, ○exit 1, ○enter 2, ○exit 2, ○W26interface, ○invalid
	─W26 interface 2—○enter 1, ○exit 1, ○enter 2, ○exit 2, ○W26 interface, ○invalid
	─card—○enter 1, ○exit 1, ○enter 2, ○exit 2, ○invalid
	├─menu language—○sample Chinese, ○English

The operating index of the commonly used keypad

Menu to enter

Press **<*>key +<#>key** in the initial status, press<#>key again in the short time, can enter in the menu status.

Menu browsing

The menu is the tree-structure, in a menu, press<.7> key to upturn and press <9.>key to downturn , to choose the items, and the optioned ones have the anti-white display, press<#> key to confirm the items setting, press<*>key to give up items setting, and turn-back to the previous menu.. If there is not any operating in three minutes, the system will withdraw the menu automatically, and enter in the initial table.

Multi-options and single-option

Press key<7> to upturn for reading; Press key<9> to downturn for reading; Press key<#> to choose multi-options or single-option; Press key<*> to withdraw the multi-options or single-option choosing, and store the choosing result.

Password to enter-----apply to have the opening password or duress password setup

.Press <#>in the initial status, the screen indicate inputting the password, and press<0>- <9>key to input the password, and press key <#> to confirm the inputting.

Personnel password modifying-apply to the having card together with password setup

After swiped card or keyed-in password, key-in <8>+<#> quickly, it will indicate you to swipe the card and key-in the password twice. Success.(default personnel password: 888888)

Part two product installment

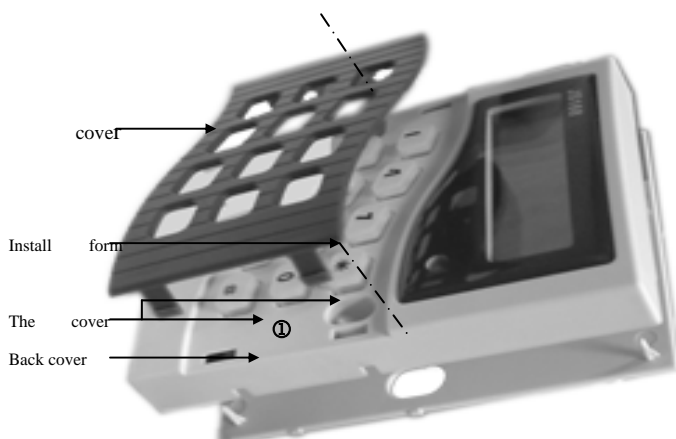
Right installment is the premise to guarantee the normal working of the product, this part descript the hardware and software installment form and steps of the smart attendance machine in detail.

I. Open and seal the list

Open the package, and check it carefully:

A set mainframe, one software &CD, 5 connection line.

II. Installment picture



Note: After powered, the system can backward through the cover open& seal groove of the side-face.

3. Network with the management PC

Provide RS485 networking form, transmitting distance is 1200 meters, can be used for transmitting to single and multiple machine, need RS232/RS422 converter to connect with the PC. The connection detail information, pls. see to the appendix A for reference.

2.1 Using of the single machine

2.1.1 RS485

The connecting as shown in figure 2-2. The RS485 interface JP1 or JP2, needing the RS232/RS422 converter to connect. Since the long distance lead to the transmitting signal loss, so should setup a 120 ohms end resistance.

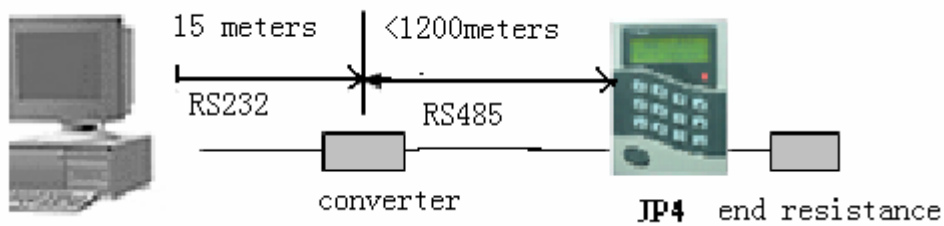


Diagram 2-2 RS485 single machine network

2.2 Multiple machines networking

The connecting as shown in figure 2-3, multiple machines networking is through JP1 and JP2, which are one in one out connection(JP1 and JP2 can exchange), as the figure shown, the end should connected with a 120 ohms end resistance. The distance can be 1200meters at most.

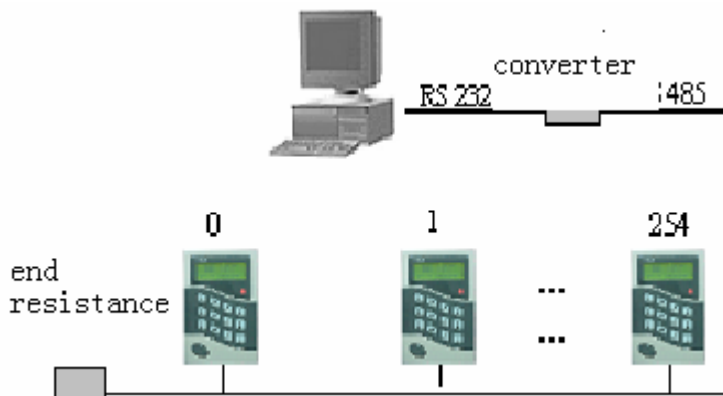


Diagram 2-3 RS485 multiple machines network

IV log on working

Power on the controller, the system backward, and then it begin to detect automatically when it heard the buzzer of “du” , if it works normally, the screen enter in the initial table.

NOTE: The controller doesn't accept swiping the card when it is undergoing menu setting and transmitting with the management PC long time and continuously.

Part three Setup the system

This part focus intruduce the setting form of the attendance machine. To setup the system, you not only can completed it through the keypas, but also can do it through operating the management software.

I. Time clock management

Main menu

```
|—Time clock management
|   |—Setup the time
|   |—correct the error
|   |   |—○need not to adjust
|   |   |—○adjust fast everyday
|   |   |—○adjust low everyday
|   |
|   |—alarm time
|   |   |—bell 01->
|   |   |   |—open the bell
|   |   |   |—alarm time
|   |   |   |—continuous time
|   |   |   |—alarm week—Sunday, Monday...Saturday
|   |   |   .
|   |   |   .
|   |   |   .
|   |   |—bell 16->
```

Setup the time

The system afte long time working, th time clock may be lower, so need to correct it right.(System time express as 24hours)

12:00 08/01/2003

The setup information as shown in the right picture

Correct the error

This is the amendment to the system clock, it is get to the purpose of the small error for long time working.

- need not to adjust-----do not process system amendment.
- adjust fast everyday----enter in display as the right picture, input the amendment data
- adjust low everyday----enter in display as the right picture, input the amendment data.

Alarm time

The user can setup 16 bell points(bell01-bell16),and each alarm point include the following 4 items:

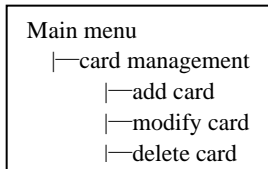
Open the bell---tick means opening, otherwise means close. Press <#>key to process cycle alarm.

Alarm time---input the alarm time

Continuous time---alarming continuous time

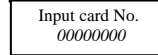
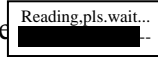
Alarm week--- can choose the days from the week to the *alarm point to alarm*

II. Card management



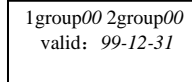
Management to the card including: add card, modify card, delete card.

Add card: After enter the card No. through swiping the card, if the card you want to add doesn't in your hand, press<#>key to input the card No. directly, shown in the picture



The system enter in the table of card right allocation after get the card No.

As shown in the picture.



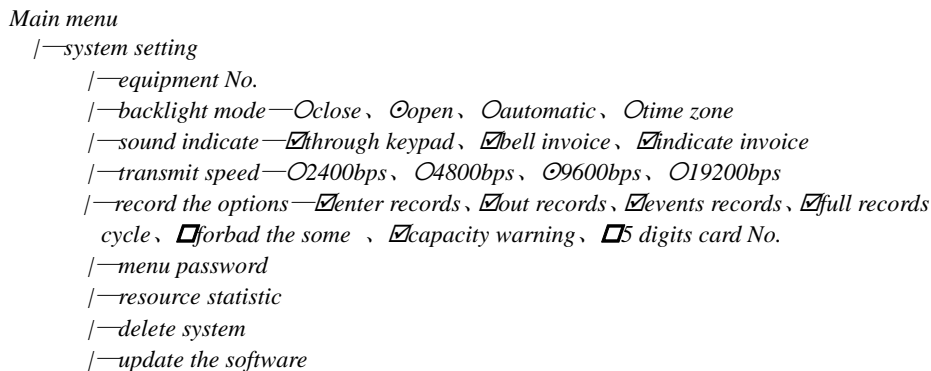
1. Group---The app group adapted to the door 1
2. group---The app group adapted to the door 2

Note: The new add card have not personnel password, that is "888888", the user can modify it through the keypad independently, pls. see to "personnel password modifying".

Modify the card: As to the card that existed in the system, maybe should do some modifying to the right. The operating steps are the some as the previous card adding.

Delete card: Delete a card from the system totally.

III. Setup the system



Setup the system parameter

Equipment No.

Among the RS485 network, each equipment should have an only one No., which we call it machine No. It support the No of 0-245

Backlight mode

Close---the backlight been closed all the time

Open---the backlight been opened all the time

Automatic---open the backlight when the events of press the key or swipe the card happen. The backlight close automatically when no events happen

Time zone---The backlight open in the setup time zone.

Sound indicate

Keypad sound----Sound "du" when press a key

Alarm sound----sound when warning

Indicate sound----System events, sounding

Transmitting speed

Support 2400, 4800, 9600 and 19200 four kinds of transmitting baud rate, which can adapt to RS485 network transmitting of the complex environment.

Note: The causes of the environment interference is strong, or the transmitting line is not standard, will effect the transmitting, and decrease the baud rate.

Record options

Enter records---record the swiping card for entering records

Out records---record the swiping card for outing records

Events records---including software opening records, password opening records, fire warning records, press bottom to open records, duress password records, delete warning records etc.

Full record cycle---it will cover the oldest record when full of the record capacity.

Forbad the same---don't record the same place, the same card records in a same minute.

Capacity warning---can alarm after been chose, as the following table:

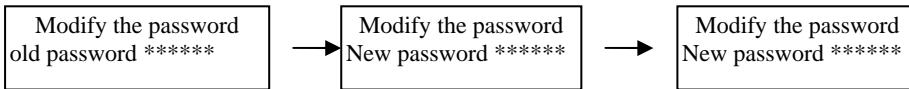
Setup alarm capacity
95%

5 digits card No.---default not choose, and read 8 digits card No; choose ~~and read 5 digits~~ card No.

Menu password

Setup the password to enter in the main menu, and the password can be 6 digits. After enter in, the picture as the followings:

Input the old password first, when the input is right, input the new one for twice, modify password succeed. If you want to cancel the password, just input the null new password. If you press the wrong key, can click <*> to delete a digit, and then click <#> to confirm the input.



NOTE: suggest to setup the password when form using.(the menu password is null when it leave from the factory)

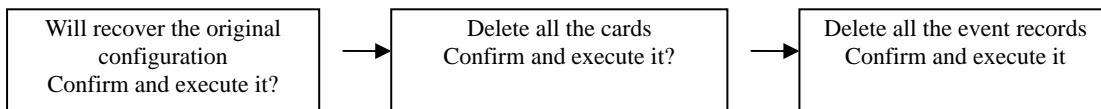
Resource statistic

Display events record No, registered card No. and used storage capacity

Record 00002 occupy
00%
Card 00000 occupy
00%

Delete system

It can delete three kinds of data respectively: system setting, registered card, event records. Do the delete working according to the needs. Press <# >to confirm the delete, and press <*> to cancel the delete.



Software upgrade

Support the hardware to upgrade online. The operating steps as following:

1. Transmitting port connected with the PC through the RS485/RS232 inverter
2. Enter in the upgrade waiting status, the operating as: system setting->software upgrade

The PC installed "JSUpData hardware upgrade tool". Processing JSUpData.exe, choose the right series ports for the transmitting port, the baud rate is 19200, and choose the xxxxx.upd upgrade documents provided by the factory as the upgrade documents, press "process". Upgrade begin, the CSC stick indicate the upgrade process, pls. must be not interrupt the process, the end machine will restart automatically after it completed.

IV. Door control management

Main menu

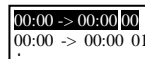
- |—door control management
 - |—setup door1
 - | |—setup the right &restriction
 - | | |—time period table— (time period 0—time period 31)
 - | | |—time zone table— (time zone 0—time zone 63)
 - | | |—holidays
 - | | |—app group— (app group 0—app group 15)
 - | |—control type—enter/out control, enter control, enter and appointment control, passback and interlock
 - | |—enter manner—just swipe, just password, card and password
 - | |—type of door magnet—door magnet open, door magnet close, fire alarm open, fire alarm close, invalid
 - | |—opening bottom—open, close, invalid
 - | |—opening time
 - | |—closing time
 - | |—first enter open—open the first opening, close the first opening
 - | |—duress password
 - | |—opening password
 - |—setup door 2
 - | (the same as setup door1)
 - |—copy 1->2door
 - |—copy 2->1door

Support 2 doors access control

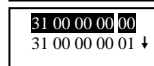
Setup door 1

Right & restriction setting

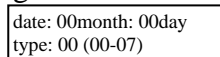
Time period table----support 32 time periods, shown as picture



Time zone table----support 64 time zones, shown as picture



Holidays----can pre-setup holiday right & restriction type of one year, shown as the picture



App group----support 16 app management, it is that setup here.

groups, the app group mentioned in card

Control type

Both enter/out control----both enter and out are controlled by the right &restriction management strictly

Enter control----control entering according to the right& restriction strictly, the card is invalid to out.

Control enter and allocation----control entering according to the right & restriction strictly, it is valid only you swipe the card for out

Passback and interlock----if only you swipe the card to enter, that swipe the card to out is valid.

Enter manner

Just need to swipe----test the card right

Just need password----can enter after key-in the designated opening password or duress password

Card + password-----not only test the card right, but also key-in personnel password to test.

Door magnet type

Door magnet open----when the signal line shorting the GND, it means the door magnet has signal, so the door is opened

Door magnet close----the signal line open to GND, it means the door magnet has signal, so the door is opened.

Fire alarm open----the signal line shorting the GND, it means have fire alarm signal, trigger to alarm

Fire alarm close----the signal line open to GND, it means have fire alarm signal, trigger to alarm.

Invalid----signal is invalid

Opening bottom

Open----the signal line shorting GND, it means having the open bottom pressed

Close----the signal line open to GND, it means having the opening bottom pressed

Invalid----the signal is invalid

Opening time

The time that lock