

TA7001

**Time & Attendance
Terminal**



UNIT1 INTRODUCTION.....2

1.1 INTRODUCTION.....2

1.2 WORK MODE.....2

1.3 FEATURES2

UNIT2 TA7001 INTRODUCTION5

2.1. TA7001 APPEARANCE5

2.2. JP WAY7

2.3. MENU SETUP10

UNIT3 INSTALLATION14

3.1 CHECK THE PRODUCT YOU GOT14

3.2 INSTALL TA7001.....14

Unit1 Introduction

1.1 Introduction

TA7001 is Keyking's new and practical terminal used for Time and attendance. When it used as the Time and attendance terminal, it is convenient, when the staff flash the card in the valid distance, any 3 items as you wish can be displayed in the LCD model, for example, the card number, the name, the department etc; It is also can be used as the normal access equipment, when the staff flash the card, they can enter into the authority area. So TA7001 can provide the convenience for the staff's access authority, attendance, and also provide the simple way for counting the attendance frequency and monitoring the access control, it is can be applied widely for companies' time and attendance.

1.2 Work Mode

There are 5 work modes as showed in the table:

Mode No.	Outside	Inside
1	TA7001	External reader
2	External reader	TA7001
3	TA7001	Door Release
4	TA7001	External reader +Door Release
5	External reader	TA7001 +Door Release

1.3 Features

1. It is combined the features of Keypad Password Lcd display reader, Standalone controller, Attendance equipment, it can use flexible as followed:
 - A. Attendance terminal:** it can connect the server-computer through the RS485 port, and can use the same RS485 wire which is used in TC3XY Series controller, and run by the Sphinx software at the same time.
 - B. Standalone controller:** It can be used as a Standalone controller and can work with the external reader.
 - C. Lcd Wiegand reader:** it can be used as the LCD reader, some information can be showed in the LCD, it also can output Wiegand 26Bits or Wiegand 34Bits, and worked with any access controller.
2. 1 door release 1 sensor input 1 Wiegand 26/34 signal input/output (it can read both IC and ID, it memorize the Serial number when flash the IC card, 2 extension input, 2 relay output 1 RS485 communication port, 1 doorbell switch port.

3. It can work with external Wiegand26/34 reader (include the keypad reader, it supports the enter modes as card, card + password, card + card, and SuperPin.
4. Lcd display optional: Chinese or English menu with backlight, it can show the card number, the name, the department etc
5. Can network 127 TA7001, and also can work when it is offline. When it is offline, we can setup the parameter by the keypad.
6. When the system is offline, it can register 100 Wiegand26/34 card, and when it is on line, it will send and download the transaction automatically; when the system is on line, it can register 30000 cards and 15000 events storage when it is off line.
7. Alarm clock function, it can be set up to 8 different alarm clocks to remind the work time and rest time.
8. The system can organize the time zone at any way in 365 days, and define the time to 120 groups of user. Each door dot can be authorized to 31 different time groups; there are also 7 groups holiday definition, and the quantity of the holiday of each group is unlimited, the holiday can be setup as any day in the 365 days, if there is a card which is not been authorized can open the door, the system will hold back; 2 temporary time groups. As the temporary time is recorded in the system, the entire controller can get the information to adjust the daily arrangement; the system can check the clock of the controller automatically to ensure the correction of the events time.
9. Remote control for any door dot, varied alarm events function: door open overtime, door close overtime, Threatening alarm, fire alarm etc.
10. Technical parameter

Voltage	DC12V±10%.
Power computation	<1W
Data storage time	>10 (no power)
Events storage	15000
Card holders	30000
LCD resolution	122×32 DOTS
Communication	1*RS485
Wiegand port	1
Relay output	2
Extension input	2
Card model	EM Mifare
Reading range	4—15cm
Network	127
Temperature	-20℃—70℃

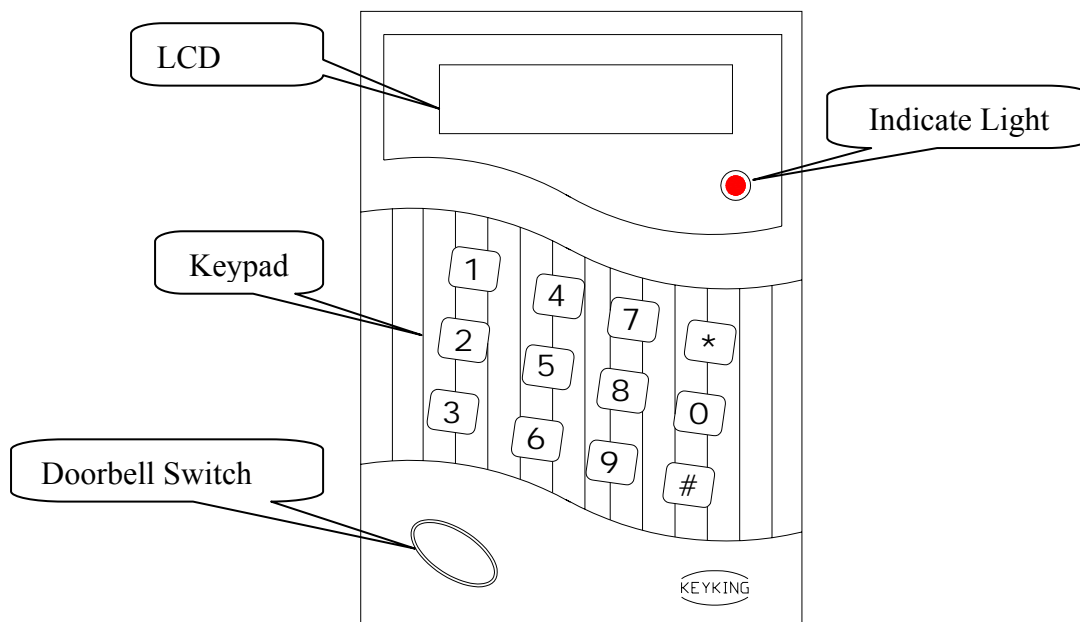


TA7001 Time & Attendance Terminal

Humidity	20%—90%
Storage temperature	-25°C—85°C
Dimension	L120×W88×H 18mm
Weight	160

Unit2 TA7001 Introduction

2.1. TA7001 Appearance



TA7001Apperance



TA7001 Picture

Meaning of the pattern

Pattern	Meaning
□	The contents have not been choose in

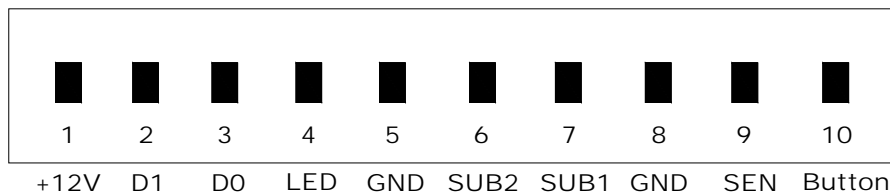
	the double-choose table
<input checked="" type="checkbox"/>	The contents have been choose in the double-choose table
<input type="radio"/>	The contents have not been choose in the single-choose table
<input type="radio"/>	The contents have been choose in the single-choose table

Keypad function

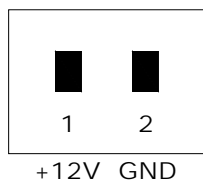
Keypad	Function
< 0 >< 1 >< 2 > < 4 >< 5 >< 6 > < 7 >< 8 >	Digit input
< 3 >	Digit input Upturn menu
< 9 >	Digit input downturn menu
< * >	cancel return the last action save and exit
< # >	ok enter the next menu to choose the next action

2.2. JP way

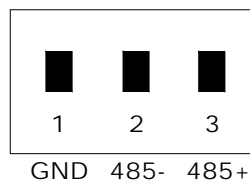
JP1



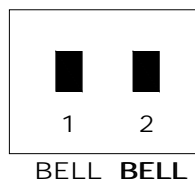
JP2



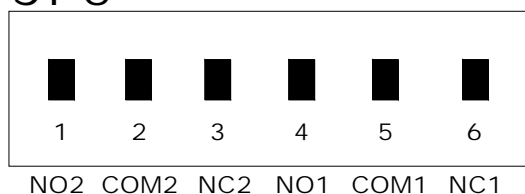
JP3



JP4



JP5



JP

JP1 port

dip	signal	color	mark
1	+12V	Red	when it used as WG input, the standard function is useful, but when it is used as WG output, it can just be as a reader, and the port are the same
2	D1	White	
3	D0	Green	
4	LED	Blue	
5	GND	Black	
6	SUB2	Orange	Extension input2
7	SUB1	Yellow	Extension input1
8	GND	Black	GND
9	SEN	violent	sensor
10	BUT	grey	Door release

JP2 port

dip	Signal	color	mark
1	+12V	red	voltage+
2	GND	black	GND

JP3 port

dip	signal	color	Mark
1	GND	Black	GND
2	485-	green	RS485-
3	485+	yellow	RS485+

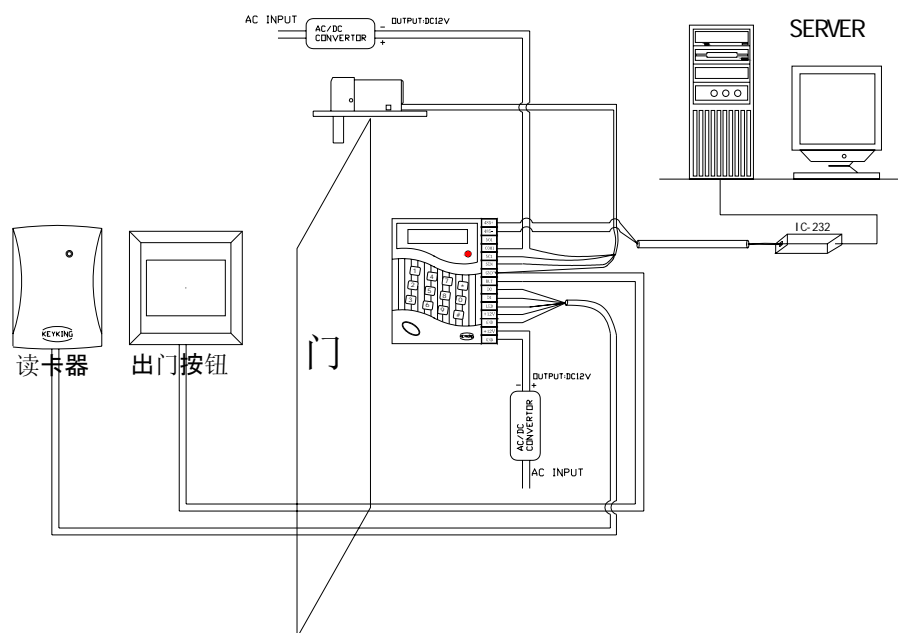
JP4Port

dip	signal	color	Mark
1	BELL	Grey	Doorbell open normal
2	BELL	grey	

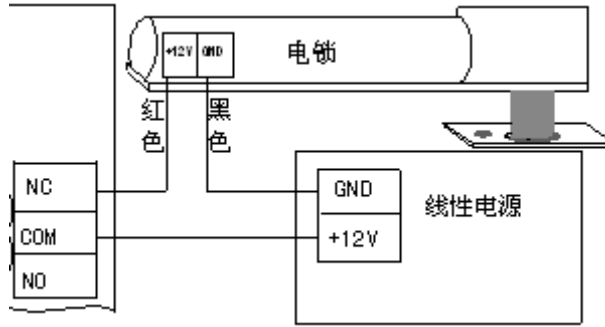
JP5 port

dip	signal	color	Mark
1	NO2	violent	Relay port
2	COM2	Green	
3	NC2	Blue	
4	NO1	Brown	
5	COM1	Yellow	
6	NC1	orange	

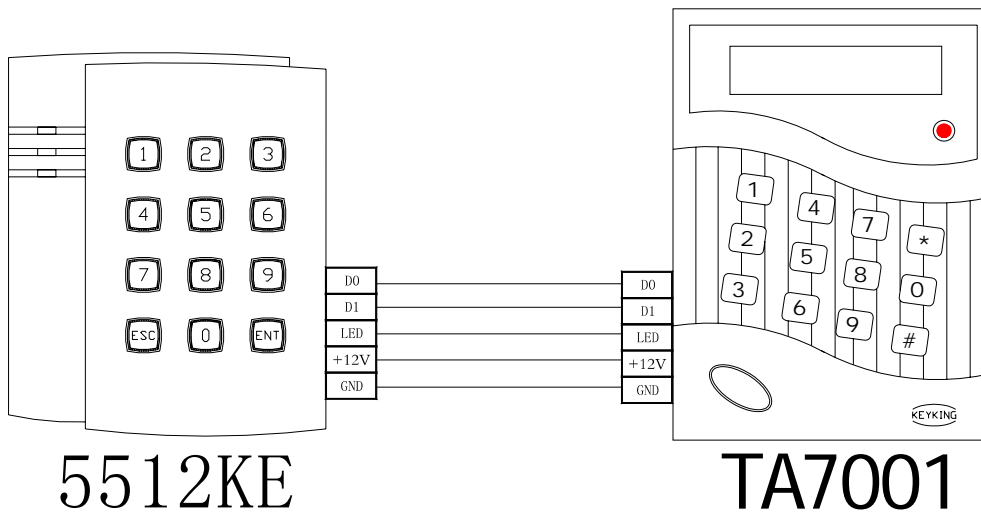
The wire connection diagram: (the followed diagram is draw according to the 5512 reader, 5512KE reader, and ML205, the products made by KeyKing)



TA7001 access control system diagram



ML205 Diagram



Reader Diagram

2.3. Menu setup

Before using the TA7001, please enter *39 # to enter the menu setup interface. Then, in the followed step, * means cancel, # means enter, 3 means downturn, and 9 means upturn.

2.3.1. System setup

Choose “system setup” through 3 and 9, and enter # to enter the interface of system setup. In the system setup interface, you can choose language setup, menu password setup, terminal NO. Setup, backlight setup, events alarm, reader setup, resource calculation, cleans the parameter setup. And all the system setup must be done in the TA7001 keypad directly. And the details are as followed:

- Language (English Chinese)
- Password (enter the 6bits password, the original password is 123456, and if you want to clean the password, please enter 000000)
- **DIP**
- Backlight: open normal close normal auto (it will be closed in 8 seconds without action)
- Events alarm: the events alarm interface
When the quantity events is over than this interface, it will show events full, then in order to avoid the events disappear, you must make it be on line to send the events record. The events storage of TA7001 is 15000, so when it is off line, the events is over $15000 \times 95\% = 14250$, the TA7001 will alarm automatically, and the LCD display will show events full.
- Reader setup:
WG26 input WG34 input WG26 output WG34 output
And it also can setup as WG26/WG34 input/ output, and have the same port.
When it worked as WG input, the external reader will worked as go out reader, and the internal reader will worked as enter in reader. And when it worked as WG output, TA7001 can work as a normal reader.
- Recourse Calculation
- Events calculation, it calculates the storage events when it is off line.
- Clean Parameter
- Clean the events
- Clean the register table
- Clean the access control parameter
- Clean all the parameters

2.3.2. Card setup

Choose “Card setup” through the keypad 3 and 9, and then press # to enter into the card setup interface. In the card setup interface, you can edit card, add card,

delete card. At the same time, you can run the card setup in the software, and then send to TA7001. The details of run the card setup through the keypad is as followed:

- Edit card
Enter the interface of edit card, and enter # to make sure, and the LCD will show “flash the card you need edit”, if you know the card number, enter # to make sure, then you can enter the card number directly.
If the card does not belong to this system, the LCD will show “the card can not be edited” after flash the card, and then it will enter into the followed menu automatically:
- Edit the card property
You can setup the card as the first card, (first card keep the door normal open, area card, special card
- Edit the card area
When the systems setup the Anti-Pass-back, the card area is valid.
- Edit the card password
When the mode is card + password, the password can be 4 bits.
- Edit the card authority of door1 (0 means no authority and there are 5 time zones, and you can setup the details of the time zone in the software)
- Edit the card authority of door1 (0 means no authority and there are 5 time zones)

When there is an external reader, then setup the authority.
- Edit the card information (0...63)
You can choose the LCD show any one kind of information during the 63 card information, and all the transaction will be shown in the software.
- Add card
When it is off line, and you can register 100 cards, and it will be send the card information when it is on line. When it is on line, you can register 30000 cards.
When it remind “please flash the card you wanted to add”, if this card has been registered, the LCD will remind “this card can not be added” after flash the registered card; if it has not been registered before, after flash the card, the LCD will show “are you sure to add this card? *****” (the * means the card number), then press # to enter into the edit card interface.
- Clean the card
Choose “clean the card” and press # to make sure, then the system

will remind “please flash the card you want to clean”, if this card has not been registered, the LCD will remind “this card can not be deleted” after flash the registered card; if it has been registered before, after flash the card, the LCD will show “are you sure to delete this card? *****” (the * means the card number), then press # to delete this card.

2.3.3. *Time setup*

- Modify the time
You can modify the year, month, date, hour and minutes in the T&A terminal, and then it will check with the server when it is on line.
- Modify the Clock alarm
The clock function is to remind the staff the work time and rest time, and it can set 8 clocks according to the different time.
- Clock alarm 1
- Use the clock alarm:
- Alarm time: xx hour xx minutes
- Alarm week:
From Sunday to Saturday, you can choose set up the alarm function everyday, and you also can setup the alarm function several days in this week, for example, if the staff need work 5 days in 1 week, you can choose setup the alarm function from Monday to Friday.
- Output setup: buzzer the relay1 open the relay 2 open and you can setup the alarm 2 to alarm 8 as the way to setup the alarm 1.

2.3.4. *Password initialization*

If you forget the password, you can press * continually for 6 times, then there is a beep for 3 times, and the LCD will show “??????++” , at the same time, the door release, sensor, extension 1, and extension 2 will work for a short time, press 30#, and the password is initialized to “123456”. Three methods to open the door

2.4. Card

- 1) Flash the valid card → door open, the LCD will show the card number and card information, if it is the first card, and if the “first card keep the door open normal” is valid in the software, the door will keep the door open normal.
- 2) If flash a unauthorized card, the Lcd will show “unauthorized card + ***** (the card number)”
- 3) If flash a unregistered card, the LCD will show “invalid card + ***** (card number)”

2.4.1. *Method 2: Card +password or card+ threatening password*

Open the software, and run the reading password and the threatening, and setup the 4 bits card password, threatening password, and the time gap of pressing the keypad. (The time gap is between 1 to 255 seconds, the tacit is 5 seconds).

- 1) Flash the valid card → the LCD show “please enter the card password”, and the light lightening → enter the 4 bits password in the press keypad time, enter # when you finish pressing the password → door open.
- 2) Flash the valid card → the LCD show “please enter the card password”, and the light lightening → enter the 4 bits threatening password in the press keypad time, enter # when you finish pressing the password → door open.

It also can connect the alarm to remind.

- 3) If there is no password of the card you flash, after flash the card, the LCD will show” no password card + ***** (card number)”, because you have run the password, the methods to open the door is card + password or card + threatening password so all the cards you flash must have the password.
- 4) If you have enter the wrong password for 3 times continually, the card will be invalid, then you need contact the administrator, and authorize the card again.

2.4.2. *Method 3: Many cards or SuperPin*

Setup 8 bits super pin, and modify the reading way to be many cards to make sure, the card quantity is 2 to 8, and the tacit is 2 cards, the time gap between flash the card is as the same as the time gap of pressing the keypad.

- 1) Flash the valid card + flash the valid card again → door open (at this time, the card quantity is 2 cards).
- 2) press* → enter the 8 super pin → press# → door open

Unit3 Installation

3.1 Check the product you got

When you got one package of TA7001, it should include: TA7001, the software, and the 5 *JPG wire.

3.2 Install TA7001

3.2.1 *TA7001 equipment picture*

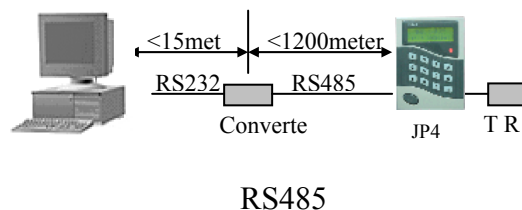


3.2.2 *Connect the sever computer*

TA7001 support RS485, and the communication distance is 1200 meters, you can connect 1 TA7001 with the computer, and you also can connect many TA7001 to work together. When it is muti-TA7001 work together, it needs RS232/RS422 to connect with the computer.

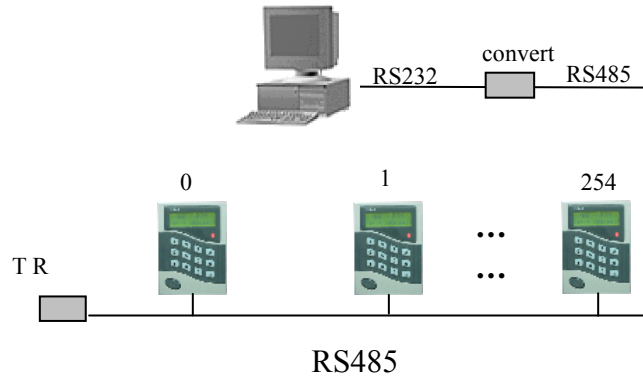
Single TA7001 use:

Through the RS484 port of JP3, it needs RS232/RS422 converter, because the long distance, so the terminal resistance should be 12Ω



Muti-TA7001 work together:

Muti-TA7001 work together is through RS485.



3.2.3 *Run*

Keep it be power on, there will be a long beep, then the system will check it automatically, if the system is ok, the panel will enter the initiation interface.

Attention:

When it is in menu setup process, or it is communicating with the sever computer for a long time, if you flash the card, there will be no response.

When the reader do nut use the power in TA7001, the GND of the reader must connect with the GND of the TA7001.

If you forget the password, you can press * continually for 6 times, then there is a beep for 3 times, and the LCD will show “?????+?” , at the same time, the door release, sensor, extension 1, and extension 2 will work for a short time, press 30#, and the password is initialized to “123456”