

# RFID Card Access Control Unit SAC105 (ID)



## ● Product Specification

Item	Index
Operating Voltage	12VDC±10%; Current 1.2A
Lock Relay	12VDC/2A
Environmental temperature	working:0°C~45°C; storage:-10°C~55°C
Relative humidity	working:40%~90%RH;storage:-20%~90%RH
RFID Card Capacity	500 cards, a "Personal PIN" goes alone with each card
4-digits public PIN Capacity	1234
Proximity Reader Frequency	125KHz
Compatible Cards	EM or EM compatible cards
Card Reading Distance	5—15CM

## ● Factory Defaults

Item	Value
Programming PIN	990101
Door Open Mode	Card or public pin (1234)
Lock Relay Time	3 seconds
Anti-Break Sensor Alarm	Disabled
Door Sensor Alarm	Disabled
Authorized Card Stored	none

## ● The LED and Buzzer

### A) Normal mode:

- Valid command: Short beep
- Invalid command: Long beep

### B) Programming mode:

- Green LED ON
- Valid command: Two Short beeps
- Invalid command: Three beeps

## ● Cancel Command

Press the "\*" key to cancel command

## ● Functions and setup

(All functions should be set in programming mode; the parameters can be set repeatedly; the effective setting should be the last one.)

### 1. Enter programming mode:

Press [\*]+[6 digits programming PIN], 2 beeps;

Under programming state, it should be noted that:

- 1) The controller cannot perform normal function instructions.
- 2) If there is no programming instruction within 20 seconds, system will automatically quit programming mode and enter the normal working mode.
- 3) Successfully set parameters, 2 beeps;
- 4) Fail to set parameters, 3 beeps;
- 5) Before some setting instruction is finished (i.e. the controller have already given off 2 beeps for successful setting, or 3 beeps for failed setting), if the input instruction is mistaken, press [\*], the controller gives off a long beep, meaning that the setting of the instruction has been cancelled.

### 2. Change programming PIN:

Press [0]+[6 digits new programming PIN]+[repeat 6 digits new programming PIN], 2 beeps;

### 3. Set door open mode:

- 1) Card or Public PIN:

Press [1]+[0], 2 beeps;

- 2) Card plus Personal PIN;

Press [1]+[1], 2 beeps;

### 4. Set Lock Relay Time:

Press [2]+[TT], 2 beeps; TT represents unlocking time, second as unit; if unlocking time is 3 seconds, TT=03;

### 5. Set Public PIN:

Press [3]+[4 digits public PIN], 2 beeps;

Press [3]+[0000], 2 beeps, eliminate all "public PIN"

### 6. Set Anti-Break Alarm:

- 1) Disable anti-break alarm: press [4]+[0], 2 beeps;
- 2) Enable anti-break alarm: press [4]+[1], 2 beeps;

### 7. Enrolling Cards:

Press [5]+[3 digits card code], after 2 beeps +[present a card to the controller], a beep, then 2 beeps, then the card was added successfully;

Enrolling more cards, repeat above mentioned operating steps;

- 1) [3 digits card code]: a code defined by the customer himself, can be any number between 000~500; the code of each card should not be repeated; the code is also the individual PIN for "card plus personal PIN" access control mode; if the customer lost the setting card, he could cancel the card code from the controller, thus, cancel the card from the controller (details see how to delete authorized card);

- 2) After press [5], the controller gives 3 beeps, meaning that the card capacity of the controller is full;

- 3) After press [5] +[3 digits card code], the controller gives off 3 beeps, meaning that the code is repeated and need a new operation;

- 4) After press [5]+[3 digits card code] 2 beeps +[induce the card to be set before the controller], a beep, then 3 beeps, meaning that the card number has already been set meanwhile the card code has also been cancelled induce the card to be set before the controller).

### 8. Deleting authorized card:

- 1) Code mode delete the authorized card: press [6]+[3 digits card code], 2 beeps;

- 2) Present the card to delete the authorized card: press [7]+[present the card to the controller], a beep, then 2 beeps;

- 3) Deleting multiple cards, repeat above mentioned operation;

- 4) Deleting all authorized cards: if the customer needs delete all cards, please restore the controller to factory defaults.

### 9. Set door sensor alarm state:

- 1) Disable door sensor alarm function: press [8]+[0], 2 beeps;

- 2) Enable door sensor alarm function: press [8]+[1], 2 beeps;

- 3) After turning on this function, the controller will give off continuous long beep when the door is not closed after normal opening, or the door is not opened through the controller;

### 10. Restore factory defaults:

Press [86], 2 beeps, then 3 long beeps, 3 short beeps after 5 seconds, enter normal working state;

### 11. Exit programming state:

Press [\*], 2 beeps;

Under programming mode, if there is no programming instruction within 20 seconds, the system will automatically quit the programming mode and enter normal working mode.

● **Users' Instructions:**

**1. Card or public PIN mode:**

1) Read authorized card: After a short beep, green light is on, yellow light is off and the door is open.

2) Public PIN entered: Green light is on, yellow light is off and the door is open;

The customer should continuously type in 4 digits public PIN; the interval between each key pressing should be less than 2 seconds. If the interval is more than 2 seconds, the system will automatically quit this time's PIN input.

3) If the customer entered the wrong PIN, press [\*], and enter the right PIN again to open the lock.

**2. Door opening mode of card + PIN**

1) Read authorized card, after a beep,

(1) Enter the right 4 digits PIN (code) within 5 seconds, the green light is on and the door is unlocked;

(2) Not enter the PIN within 5 seconds, the buzzer gives off a long beep and the door is not unlocked;

(3) Wrong 4 digits PIN is entered, the buzzer gives off a long beep and the door stays locked; read card again, enter the right PIN to unlock the door.

(4) Wrong PIN for less than 4 digits, press [\*], need not to read card again, directly input the right PIN and unlock the door;

2) Read unauthorized card, the buzzer gives off a beep, then a long beep when pressing the first PIN, and the door stays locked.

● **Installation:**

1 Cautions during installation:

There should not be 100KHz—150 KHz frequency source within 50CM of the controller in the installation;

1) The installation distance between 2 unifying machines, or 1 unifying machine and other 125 KHz card reader should be  $\geq 50$ CM;

2) When the customer sets "Check door sensor when unlocking", the controller checks door sensor open and close state during unlocking; when the door sensor is separated, the controller regards the door opened already. At this time, except pressing fire control door opening button, the controller will keep the door locked no matter using any other door opening mode.

2. Installation and line connection:

Must cut off 12VDC power supply during installation and connection. Connecting with electricity is strictly prohibited!!!

● **Force to restore factory defaults:**

1. Remove the controller;

2. Use metal tweezer to short connect the J2, the controller gives off a beep, then 2 beeps, and the restored factory default programming PIN is 990101;

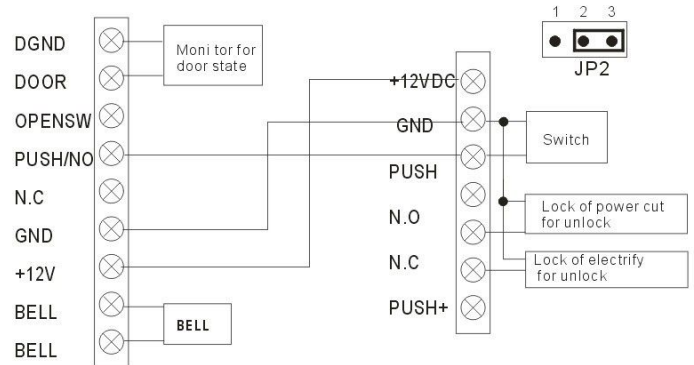
● **Wiring**

**1、 With normal power supply**

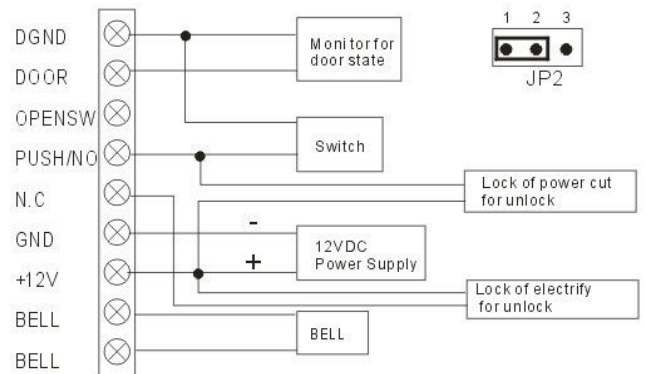
Door	To door contact	The other end to GGND
DGND		
Push/no	To exit button	The other end to DGND
NC	To GND of the fail-safe lock	The other end off the lock to +12VDC
GND	To the GND of power supply	
+12VDC	To the +12V or power supply	
Bell	To door bell	
Bell	To door bell	
JP3	Short JP3	
JP2	Short 1,2	

**2、 With access control power supply**

Door	To door contact	The other end to GGND
DGND		
Push/no	To exit button	The other end to DGND
NC	To GND of the fail-safe lock	The other end off the lock to +12VDC
GND	To the GND of power supply	
+12VDC	To the +12V or power supply	
Bell	To door bell	
Bell	To door bell	
JP3	Short JP3	
JP2	Short 1,2	



Build in connection one  
Special electrical source for access control



Build in connection two  
Ordinary electrical source out 12VDC