Access Control Machine User Guide
(Standard Version)

Version: V1.0   Date: 2019/09/30

1. Wiring Instructions

⚠ Warning: No operation when power on!

Note: ① The system supports NO LOCK and NC LOCK. The NO LOCK (normally open by power on) is connected with NO terminal, and the NC LOCK is connected with NC terminal.

② To prevent the generation of self-inductance EMF which would affect the system, when the electrical lock is linked to the Access Control System, it is required to connect one FR107 diode (equipped in the package, do not reverse the polarities) in parallel in order to release the self-inductance EMF.

(1) Under following two situations, device shares power with the lock: ULOCK=12V, I_{Device} > I_{lock} ; and the lock is near to the device.
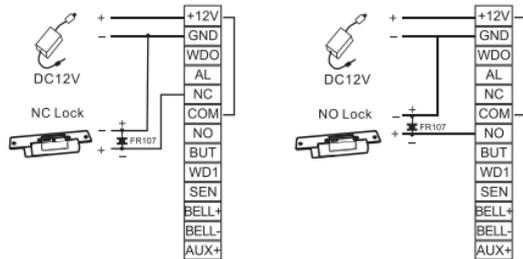
Figure 1-1

(2) Under following situations, device does NOT share power with the lock: Device does not share power with the lock:
① When ULOCK=12V, I< I_{Device} + I_{Lock} ;
② When ULOCK≠ 12V;
③ When the lock is far from the device.
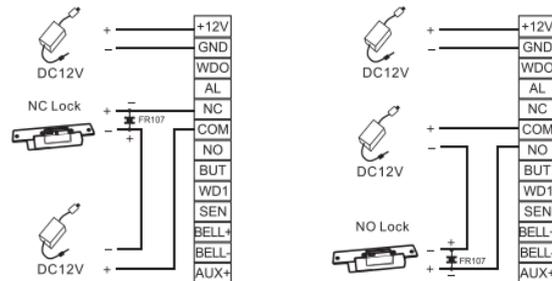
I: device's current output; ULOCK: lock voltage; ILOCK: lock current.

(3) Connect With power

Input DC12V, ≤ 200mA (≤ 150mA standby) Positive is connected with + 12V, negative is connected with GND (do not reverse the polarities).
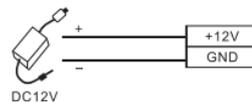
(4) Connect With Other Devices
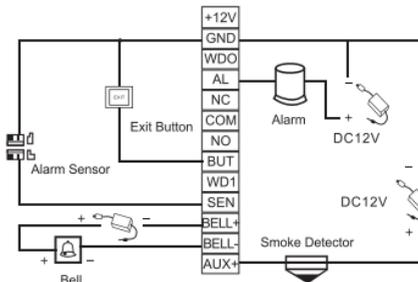
2. Basic Concept

In order to understand the function and operation method of the access control machine more quickly, you need to understand the following basic concepts.

2.1 DIP Switch Definition

(1) When the 1st and 2nd digits are turned ON, enter the Wiegand input mode.
(2) When the 3rd and 4th digits are turned ON, enter the Wiegand output mode (Factory Default).
(3) When the 5th and 6th digits are turned ON, enter the data copy mode.
(4) When the 1st, 2nd, 3rd, and 4th digits are turned ON, the machine is powered on and enters the factory reset.

2.2 Wiring Definition

Controller Mode	
Red	DC 12V
Black	GND
Yellow	NC
Pink	COM
Blue	NO
Light Blue	SEN
Gray	BUT
Purple	BELL+
Brown	BELL-
Weigand/UART	
Green	When the 1st and 2nd digits of the DIP switch are turned ON. (Green: WD0-in, White: WD1-in)
White	When the 3rt and 4th digits of the DIP switch are turned ON. (Green: WD0-out, White: WD1-out) When the 5th and 6th digits of the DIP switch are turned ON. (Green: RXD, White: TXD)
Linkage Function	
Orange	AL(Alarm)
Light Green	AUX+
Reader Mode	
Red	DC 12V
Black	GND

Green	WD0
White	WD1
Gray	BEEP
Light Blue	LED
Purple	BELL+
Brown	BELL-

3. Function Setting

Machine status in the following operations: The operation succeeds in green light, and the operation fails in blue.

3.1 Factory Reset

1) After getting the new access control machine, restore factory Settings to complete equipment initialization before other operations.
2) Pull the 1, 2, 3, and 4 digits of the DIP switch on the back of the access control machine to the ON position at the same time. After the machine is powered on, you can enter the factory reset operation.
3) After the factory reset is successful, pull the 3rd and 4th digits of the DIP switch to the ON position, in the Wiegand output mode (factory default state), and then power on the machine again.

Note: Restoring the factory settings will delete all user data, please be cautious.

3.2 Log out

Press ＊ to exit the administrator status or no action will automatically exit the management state after 10 seconds.

3.3 Initial Password

No.	Category	
1	Administrator password	The default initial value is 1234, and the password length is 1-8 digits.
2	Door password	The default initial value is 8888, the password length is 4-6 digits, and the general password set by the administrator for opening the door.
3	User password	User-defined opening password, no default value, password length 4-6 digits.
4	Data copy password	The default is *1514885702#, which is used for copying data from two machines. It cannot be changed.

3.4 Set Door Password
Press * # administrator password 9 input 4-6 door password #
Note: The default administrator password is 1234, and the default door password is 8888.
Delete door password: Press * # administrator password 9 0000#

3.5 Set Manage Card
Press * # administrator password 0 swiping card
Note: After you swiping the manage card, you can enter the administrator status.

3.6 Set Add Card And Delete Card
Press * # administrator password 9 swipe the first card as an add card.
                                        swipe the second card as an delete card.

3.7 Set Quick Operation
In standby mode, you can enter different functional modes by using the manage card, add card, and delete card.
(1) Swipe the management card once, enter the administrator mode.
(2) Swipe the management card twice, enter the door magnetic normally open / normally closed switching mode.
(3) Swipe the management card three times, enter the reader mode.
(4) Swipe the add card directly to enter the batch add card type user mode.
(5) Swipe the delete card directly to enter the batch delete card type user mode.

3.8 Add Card Type User
Press * # administrator password 1 swiping card
Note: Continuous swiping card can add card type users in batches.

3.9 Add Password Type User
Press * # administrator password 2 input 4-6 user password #
Note: (1) 4-6 user password, at least 4 user password.
        (2) After adding a password type user successfully, continue to enter the user password to continuously add a password type user.

3.10 Add Card &Password Type User
Support two ways to add card &password type user.
(1) Press * # administrator password 3 4-6 user password # swiping card
(2) Press * # administrator password 3 swiping card 4-6 user password #
Note: (1) After adding a card &password type user, continue to add a card &password type user in batches according to the above methods.
        (2) You can open the door by entering the password and then swiping the card or swiping the card first and then entering the password.

3.11 Delete Single User
Support three ways to delete a single user.
(1) Press * # administrator password 4 enter user password #
Note: Enter the password continuously to delete the user.
(2) Press * # administrator password 4 swiping card
Note: Enter the password continuously to delete the user.
(3) Press * # administrator password 4 enter decimal card number #
Note: ● Enter the decimal card number continuously to delete the user.
        ● Automatically delete the card &password when deleting the card or password.

3.12 Delete All User
Support two ways to delete all users.
(1) Press * # administrator password 5 #
(2) In standby mode, swipe the management card (to enter the management state), delete card, add card, delete card.

3.13 Modify Administrator Password
Press * # administrator password 0 New password # New password #
Note: The administrator password is 1-8 digits in length.If you forget the administrator password, you can reset the administrator password by swiping the management card.

3.14 Modify User Password
Support two ways to modify user password.
(1) password type user: Press * # administrator password 6 old password # 4-6 digit New password #
(2) card &password type user: Press * # administrator password 6 swiping card # 4-6 digit New password #
Note: Continuous operation in the management state.

3.15 Set Open Delay Time
Press * # administrator password 7 1 input open delay time #
Note: The door open delay time is 0-60 seconds, the default is 3 seconds, and the maximum is 60 seconds.

3.16 Set Wrong Press Alarm Switch
Press * # administrator password 7 8 0/1 (0: off, 1: on)
Note: (1) The default state of wrong press alarm switch is on. After entering the wrong 5 times administrator password continuously, only the button can be pressed in 10S and the card is not opened, and normal operation can be resumed after 10 seconds.

        (2) If the number of wrong clicks does not exceed five times, after 1 minute of no operation, the number of wrong clicks will be restored to 5 times.

3.17 Restore Default Settings
Support two ways to restore the default settings of the access control. Restoring default settings will retain all user data.
(1) Press * # administrator password 8 # 0 #
(2) In standby mode, the quick operation mode: Directly swipe the delete card, add card, delete card in sequence, and then complete the default parameter setting initialization.
Note: After initialization is successful, all settings are cleared but user data is retained.

Default parameter setting

Door Password	The default initial value is 8888.
Door Sensor Mode	Normally open
Open Delay Time	0-60 seconds, default 3 seconds
Door Sensor Alarm Delay Time	0-255 seconds, default 15 seconds
Door Sensor Alarm	open
Tamper Alarm	open
Working Mode	Controller Mode
Key Backlight	Constantly bright

4. Working Mode Conversion
● In standby mode, the blue light flashes to indicate the controller mode.
● In standby mode, the blue light is always on, indicating that it is the reader mode.

4.1 Reader mode switch controller mode
●Mechanical button type:Always press * 5 seconds, then press # administrator password 8 1 0
●Touch button type:Short press * for 5 times,then press # administrator password 8 1 0

4.2 Controller mode switch reader mode
    (1)Set the Wiegand mode of reader head.(Make sure that the 3rd and 4th digits of the DIP switch are turned ON position and the device is in Wiegand output mode.)
        Standard Wiegand mode: press * # administrator password 8 2 0
        Custom Wiegand Mode 1 (Spain):press * # administrator password 8 2 1
        Custom Wiegand Mode 2 (Russia): press * # administrator password 8 2 2
    (2) Then set the Wiegand format.

        Press * # administrator password 8 1 1 or 2 or 3 or7 (1:WG26,2:WG34, 3: WG42,7:WG44)

5. Data Copy Operation
5.1 Copy data through the access control machine.
    (1) Pull the 5th and 6th positions of the DIP switches of the two access control machines to the ON position.
    (2) The TXD of the main access control machine is connected with the RXD of the auxiliary access control machine, and the RXD of the main access control machine is connected with the TXD of the auxiliary access control machine, and the GND of the two access control machines are connected.
    (3) Enter the data copy password *1514885702# on the main access control machine. The two access control machines display the blue and green indicator lights flashing at the same time, and wait until the sound drops to complete the data copy.
Note: The main access control machine is a data access control machine, and the auxiliary access control machine is an access control machine that needs to write data.

5.2 Copy data through DEMO software.
    (1) Pull the 5th and 6th positions of the DIP switches of the two access control machines to the ON position.
    (2) The RXD of the access control machine is connected with the TXD of the serial port tool, and the TXD of the access control machine is connected with the RXD of the serial port tool. The GND of the access control machine and serial port tool are connected.
    (3) Export user data of access control machine to local computer through DEMO software.
    (4) Import user data exported from the access control machine into other access control machines through DEMO software. Or fill in the user data according to the template, and then import the user data through the DEMO software.
Note: Please contact technical staff to get DEMO software.

FAQ

Questions	Solution
Swipe card does not open the door	1、Check if the card is registered. 2、Check if the card is registered. 3、Make sure the access control mode is correct.
Do not read the card	1、Check if the card type is correct or the card is damaged. 2、Check if the external card reader is too close to the host.