User Manual

125kHz RFID Access Control Reader

SecureEntry-AC600

Table of contents

Specifications:

- **Warranty:** 1 year
- **Product type:** RFID card, password and fingerprint access control reader
- **Material:** metal
- **Processor:** 32-bit microprocessor with ARM core
- **Operating frequency:** 125 kHz
- **Max number of employees in the database:** 10,000
- **Max. number of fingerprints in the database:** 600
- **Supported RFID cards:** EM
- **Verification Type:** RFID Card, Password, Fingerprint
- **Access control:** yes
- **Interface:** Wiegand 26/34
- **Working Voltage:** DC 12-24V
- **Operating Current:** ≤100mA
- **Standby Current:** ≤35mA
- **Ingress Protection:** IP68
- **Keyboard and keys:** touch keyboard
- **Operating Temperature:** 0%~95%
- **Operating Humidity:** 5 to 95%
- **Product dimensions:** 13.9 x 5.6 x 2 cm
- **Package dimensions:** 19.3 x 12.6 x 6 cm
- **Product weight:** 500 g
- **Product weight with packaging:** 900 g

Set contents:

- RFID Access Control System
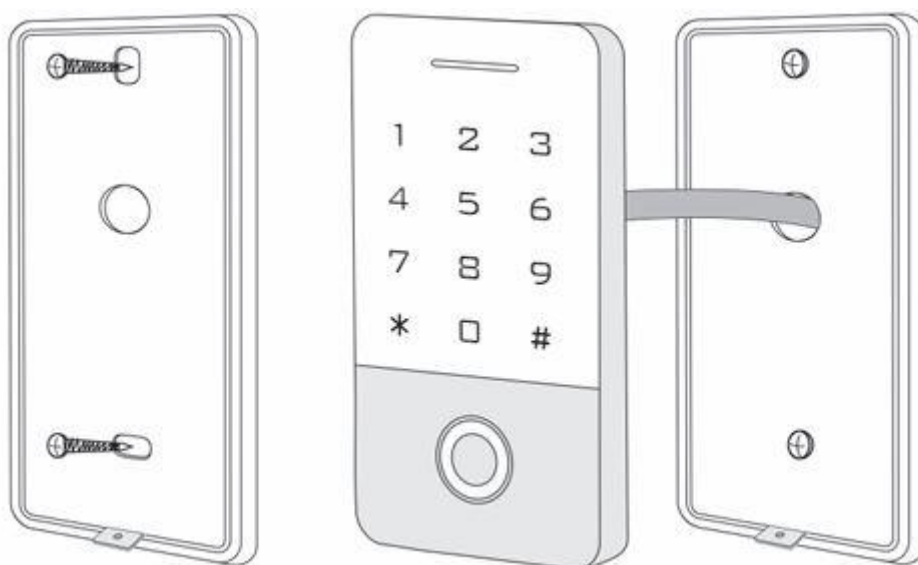- Screws and mounting pins
- Allen key
- Manual

Features:

- The access control reader offers user verification through an RFID card, individual password and fingerprint
- Ability to set a single verification method or a combination of several methods
- IP68 rating ensures water resistance, so the device can be installed outdoors
- The maximum capacity of users in the database is as much as 10,000, which makes the reader ideal equipment for large companies
- 126 kHz operating frequency and Wiegand 26 and Wiegand 34 interface
- Possibility to connect the reader with a time and attendance recorder, electronic and electromagnetic door lock, intercom, videophone and other external devices with DC 12-24V voltage

Introduction

The product in this series is a new generation of multifunctional autonomous access control. It uses a 32-bit microprocessor with an ARM core, which is efficient, stable and reliable. It includes reader mode and stand-alone access control mode, etc. Widely used in various situations, such as offices, residential communities, villas, banks, etc.

Installation

- Remove the back cover of the device using the special screwdriver provided.
- Drill 2 holes in the wall for self-tapping screws and 1 hole for wire.
- Insert the provided rubber plugs into the two holes.
- Secure the back cover to the wall using 2 self-tapping screws.
- Pull the cable through the cord hole.
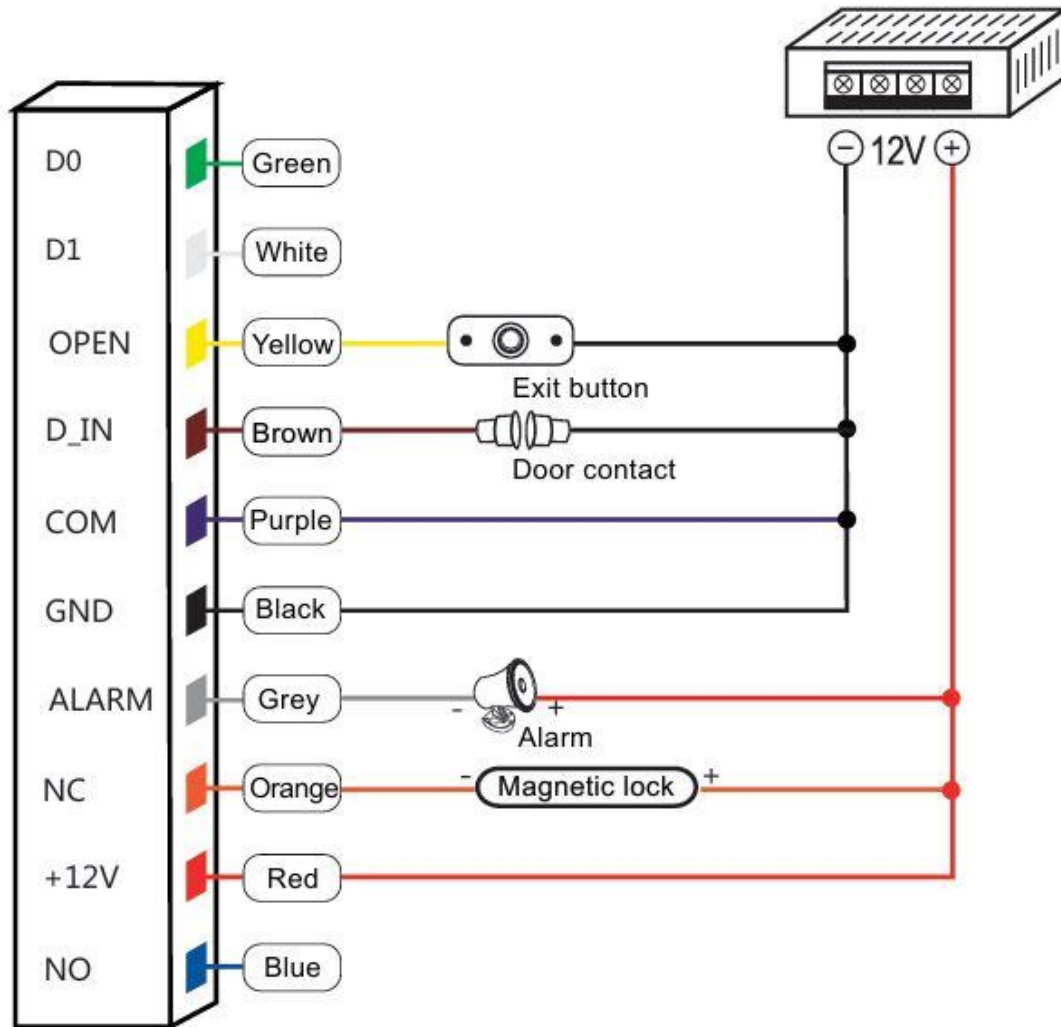- Attach the keyboard to the back cover. (See figure below.)

Wiring Diagram

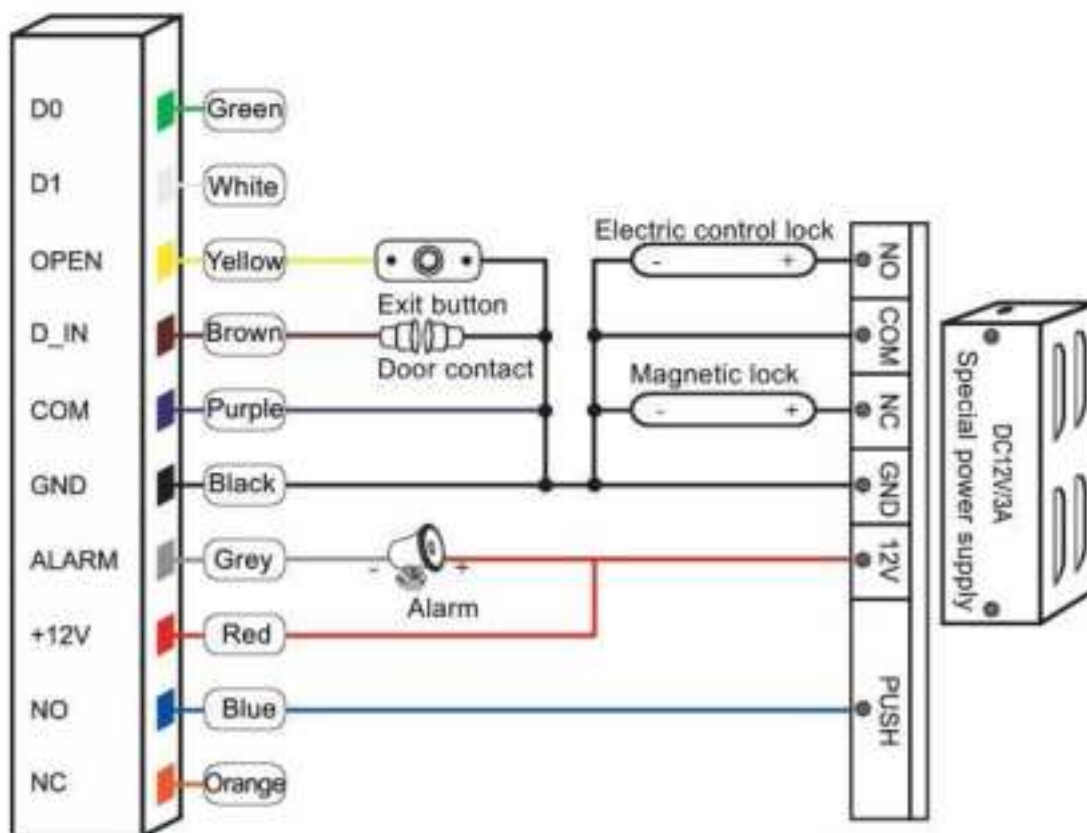| No.	Color	Marks	Description
1	Green	D0	Wiegand input (Wiegand output as reader mode)
2	White	D1	Wiegand input (Wiegand output as reader mode)
3	Grey	ALARM	Alarm signal MOS tube drain output end (optional)
4	Yellow	OPEN（BEEP）	Exit button input end (Beeper input as reader mode)
5	Brown	D_IN（LED）	Door contact switch input (LED input as reader mode) (optional)
6	Red	+12V	Positive power supply or AC power supply end
7	Black	GND	Negative power supply
8	Blue	NO	Relay NO end
9	Purple	COM	Relay COM end
10	Orange	NC	Relay NC end

Drawing Connection Diagram
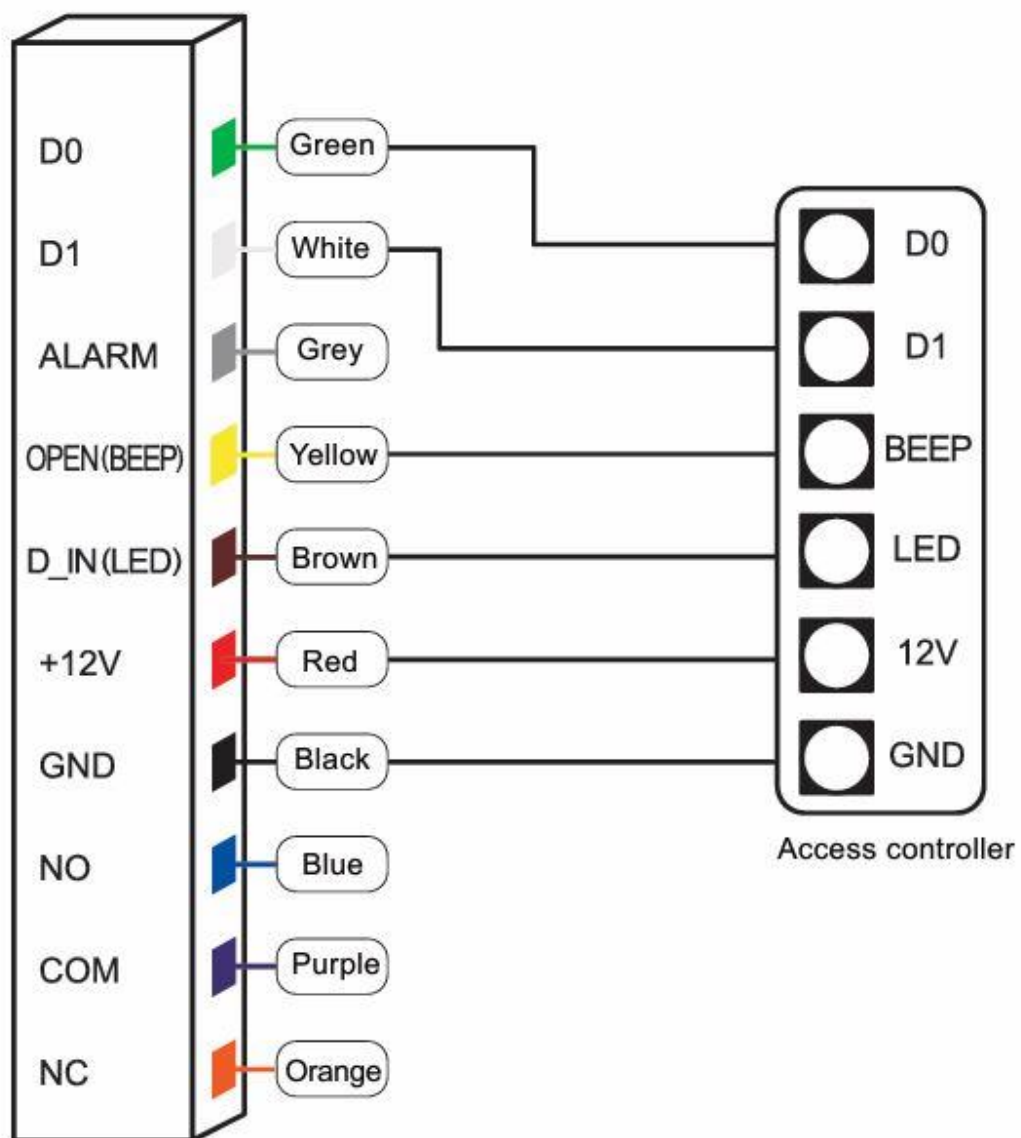
1. Shared power supply

Remark. Door contact and alarm function are optional.

2. Special power supply

Remark. Door contact and alarm function are optional.

3. Reader Mode

Access controller

Sound and light signalling

Operation status	Light signal	Beep
Ready for action	Red	
Operation successful	Green	One longer beep
Operation failed		Three short signals
Starting the programming mode via the administrator tab		Two short signals
Disabling Programming Mode via Admin Tab		One longer beep
Pressing the number button		One short beep
Press the * button		One long beep
Enter your access code	Red LED flashes slowly	
Card reading in card plus code mode	Red LED flashes slowly	
Multi-user card reading	Red LED flashes slowly	
Entering Programming Mode	Red LED flashes slowly	
Enable Settings Status	Orange	
Unlock	Green	
Audible alarm	The red LED flashes quickly	Alarm

Admin Menu - Standalone Mode Settings

Device Management

Entering Programming Mode	Menu	Stages of action	Description	Default
Press * Admin Code# (By default, the admin code is "999999")	00	New admin code # new admin code #	Change the admin code	999999
	01	Card reading/fingerprint input twice*	Add an admin card or fingerprint	
	02	Card reading/fingerprint input twice*	Remove an admin card or fingerprint	
	03	0#	Reader Mode	
		1#	Self-contained access control mode	1
		2#	Switching relay mode	
	08		WIFI Matching	Optional
	09	Unlock code # (4-6 digits)	Access code	

Add and remove users

Entering Programming Mode	Menu	Stages of action	Description	Default
Press * Admin Code# (By default, the admin code is „999999")	11	Card reading / double fingerprint entry...*	Continuous addition of card users or fingerprints	„..." Means repetition Previous Operation Press* to exit.
		Entering the 8 or 10 digit card number # ...*	Add card users by card number	
		Entering the ID number, reading the card, entering the fingerprint times ...*	Add card or fingerprint users by a specific ID	
		Enter ID number # enter 8 or 10 digit card number # ...*	Add cardholders by specific ID and card number	
		Enter ID number # enter code # ...*	Add independent user code by a specific ID number	
	12	Read user card, enter the first fingerprint twice, enter the second fingerprint twice	Matching Fingerprints to Card (Maximum of 2 Fingerprints)	
	13	Enter ID number # Enter 8 or 10 digit card number # Enter number of cards #	Adding a master card with a number	

		Delete users		
	21	Card reading/fingerprint input ...*	Remove card users by read card / Delete fingerprints by entering a fingerprint	„...." Means repetition Previous Operation Press* to exit.
		Please enter your 8 or 10 digit card number...*	Delete card users by card number	
		Enter ID number #	Delete users by ID	
	20	000#	Delete all users	

Ways to access

Entering Programming Mode	Menu	Stages of action	Description	Default
Press *Admin Code# (By default, the admin code is „999999")	31	0 #	Door locked	4
		1 #	Code only entry	
		2 #	Card-only entry	
		3 #	Entry via card + password or fingerprint + code	
		4 #	Entry by card, fingerprint or code	
		5 #	Fingerprint-only entry	
		6 #	Fingerprint + card entry	
		7 #	Multi-fingerprint/multi-card entry	

| | 32 | 1# | Door opening setting via 1 user card/ fingerprint | 1 |
| | | 2-10 # | Door opening setting by 2-10 user cards/fingerprints Fingerprints | |

Advanced settings

Entering Programming Mode	Menu	Stages of action	Description	Default
Press *Admin Code# (By default, the admin code is „999999")	41	(0-300) #	Door open time range: 0-300s, 0 equals 50ms	5
	42	0 #	Alarm time setting, 0s means no alarm	0
		(1-99) #	Alarm Time Range: 1-99min	
	61	0#	Normal Operating Mode	0
		1#	External alarm and built-in buzzer will work if incorrect operations are repeated 5 times.	

HDWR
Hardware for business

		2#	The device will be locked for 10 minutes if incorrect operations are performed 5 times	
	62	0#	LED Off	1
		1#	LED Switching On	
	63	0#	Turning off keyboard backlighting	1
		1#	Turning on the keyboard backlight	
		(2-99) #	Keyboard backlight time: 2-99 sec.	
	64	0#	Sound off	1
		1#	Sound on	

Reader mode settings

Entering Programming Mode	Menu	Stages of action	Description	Default
Press *Admin Code # (By default, the admin code is "999999")	00	New Admin Code #	Change the admin code	999999
	01	Card reading / double input Fingerprint*	Add an administrator card or fingerprint	
	02	Card reading / double input Fingerprint*	Remove an administrator card or fingerprint	
	03	0#	Reader Mode	1
		1#	Stand-alone access control mode	
		2#	Switching relay mode	
	11	Enter your fingerprint twice...*	Adding user fingerprints continuously	"..."means to repeat the previous operation, Press * to exit. to exit.
		Enter the ID number # Enter your fingerprint twice...*	Add user fingerprints by specific ID number	
	21	Enter your fingerprint once...* Enter the second fingerprint...*	Removing user fingerprints continuously	
		Tap ID number # ... *	Delete users by a specific ID number	
	20	0000#	Delete all users	

	42	0#	Alarm time setting, 0s means no alarm	0
		(1-99) #	Alarm Time Range: 1-99min	
	51	(0-255) #	Set the device number	0
	52	(26-58) #	Wiegand Output:26-58 bits	26
	53	0#	Keyboard transmission format 4 bits	0
		1#	8-bit keyboard transmission format	
		2#	Virtual card output number	

Admin card support

Read added admin card -> **Read first user card** -> **Read second user card** -> ... -> **Read admin card again**

Note: The add tab is used to add tab users continuously and quickly. When reading the card for the first time, you will hear a short beep twice and the LED will illuminate orange. This means that user addition programming has been introduced.

When you read the administrator card again, you will hear a long, single beep and the LED will turn red. This means you exit the user addition program.

Delete a card

Read Delete Admin Card -> **Read First User Tab** -> **Read Second User Tab** -> ... -> **Read Admin Tab Again**

Note: The Delete Card feature is used to continuously and quickly delete user cards. When reading the administrator card, you will hear a short beep twice and the LED will light up amber, indicating that the user has been removed.

When you read the administrator card again, you will hear a long, single beep and the LED will turn red, indicating that you are out of the user delete settings program.

User support

    1. **Change your user code with a card**

Press * -> read card -> enter old code # -> enter new code # -> re-enter new code #

Remark. The default code "1234" of the matching card cannot open the door unless you change the other codes.

    2. **Changing the user passcode with your fingerprint**

Press * -> Enter fingerprint -> Enter old code # -> Enter new code # -> re-enter new code #

Remark. The default "1234" code of the matching fingerprint cannot open the door without changing other codes.

    3. **Changing the user code with the ID number**

Press * -> enter ID number # -> enter old code # -> enter new code # -> re-enter new code #

Remark. The ID number must be known to the administrator before changing the code, the user code cannot be the default code "1234".

Other operations

    1. **Alarm Off**

Read admin card or **read valid user card** or **enter fingerprint** or **type admin code #**

Remark. When the alarm is activated, the user can turn off the alarm by reading the registered card or entering the registered fingerprint or administrator code.

2. Factory reset

Users can restore the factory default settings if they forget the admin code or modify the default settings.

To restore the device to factory settings, turn off the power, press and hold the # button or the exit button continuously, turn on the power, release the # button or the exit button until you hear a double beep. The admin code will be reset to the default code, which is 999999.

Remark. Registered user data will not be deleted after a factory reset.