PAS-EMHK12

User manual

PARTIZAN™

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2026

Content

1. Product overview

Fig.1. PAS-EMHK12

The Partizan PAS-EMHK12 is a standalone access controller with a built-in card reader and keypad, designed to manage a single door while supporting the connection of a second external reader. It combines EM-Marin, Mifare, and HID card recognition with keypad PIN entry, giving installers flexibility to choose the access method that fits the site.

Built around a Wiegand 26–37 interface, the controller can operate independently, as a controller paired with an external Wiegand reader, or as a standard Wiegand reader connected to a third-party system — making it adaptable to a wide range of access control setups. Its non-volatile memory stores data for up to 600 users, so access rights are retained even during a power outage.

Housed in a solid metal enclosure rated IP66 for dust and moisture protection, the PAS-EMHK12 is built to perform reliably both indoors and outdoors, withstanding temperatures from −40°C to +60°C. A 2A relay output allows it to directly control an electric door lock, while sound and light indicators keep users informed of access status at a glance.

Compact and durable, the PAS-EMHK12 is backed by a 3-year warranty, offering a dependable all-in-one solution for single-door access control.

2. Installation

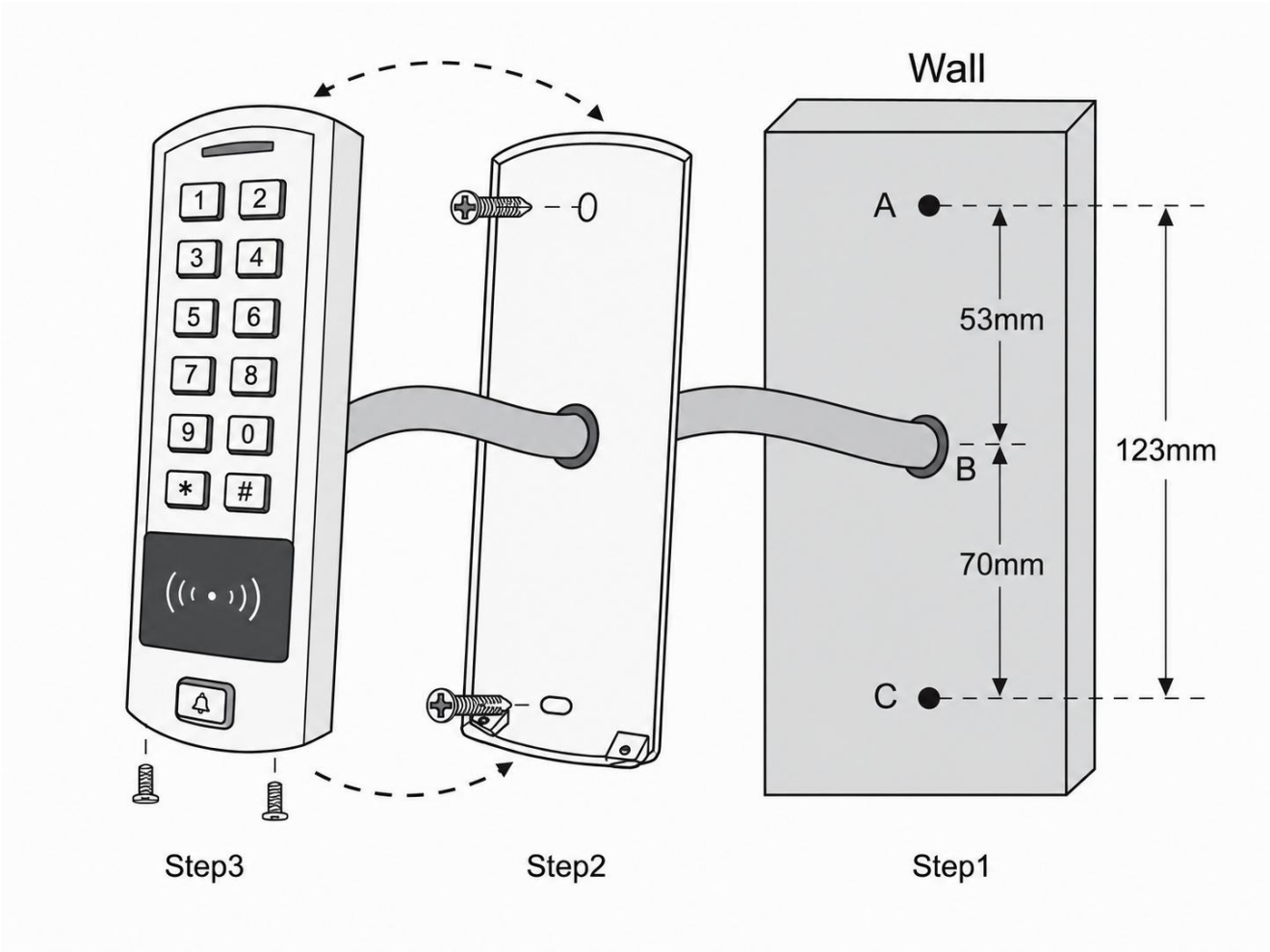


Fig.2. Installation

To install the unit:

- remove the back cover;
- drill two holes (A, C) in the wall for the mounting screws, plus one hole for the cable;
- insert the supplied rubber bungs into the screw holes (A, C);
- fix the back cover firmly to the wall using the four flat-head screws;
- thread the cable through the cable hole (B);
- then attach the unit to the back cover.

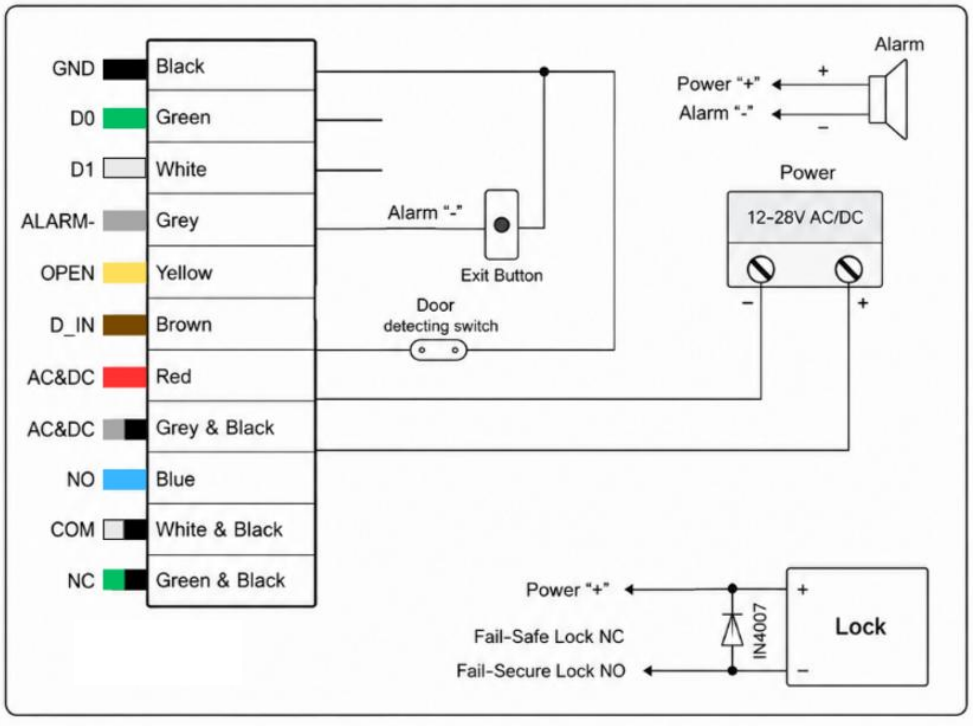
3. Wiring

3.1. Basic standalone wiring

In basic standalone wiring, the red wire and the grey/black wire both carry the 12–28V AC/DC power input, while black is the negative pole (GND). The blue wire is the normally open relay output, white/black is the common relay connection, and green/black is the normally closed relay output. The yellow wire is used for the Request-to-Exit (REX) input.

Colour	Function	Notes
Red	AC&DC	12-28V AC/DC power input
Grey & black	AC&DC	12-28V AC/DC power input
Black	GND	Negative pole
Blue	Relay NO	Normally open relay output
White & black	Relay common	Common connection for relay output
Green & black	Relay NC	Normally closed relay output
Yellow	Open	Request to exit (REX) input

Common Power Supply:



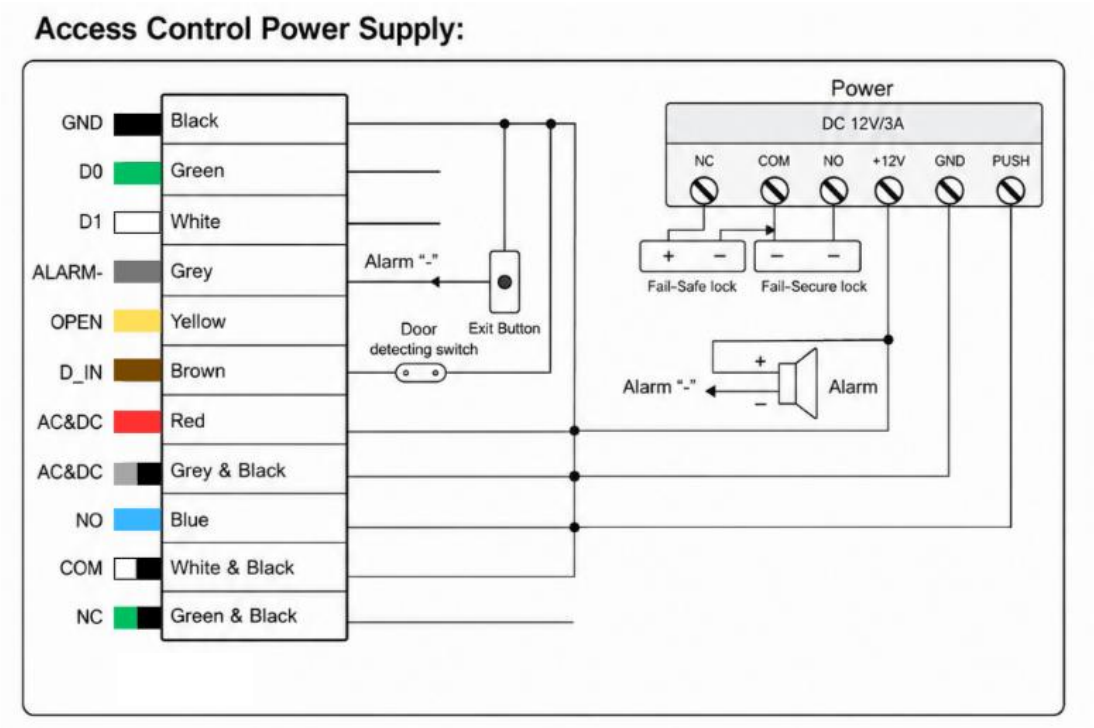


Fig.3. Basic standalone wiring diagram

3.2. Pass-through wiring

For pass-through wiring, when the unit is connected to a Wiegand reader or controller, the green wire carries Wiegand Data 0 and the white wire carries Wiegand Data 1.

Colour	Function	Notes
Green	D 0	Wiegand input/output data 0
White	D 1	Wiegand input/output data 1

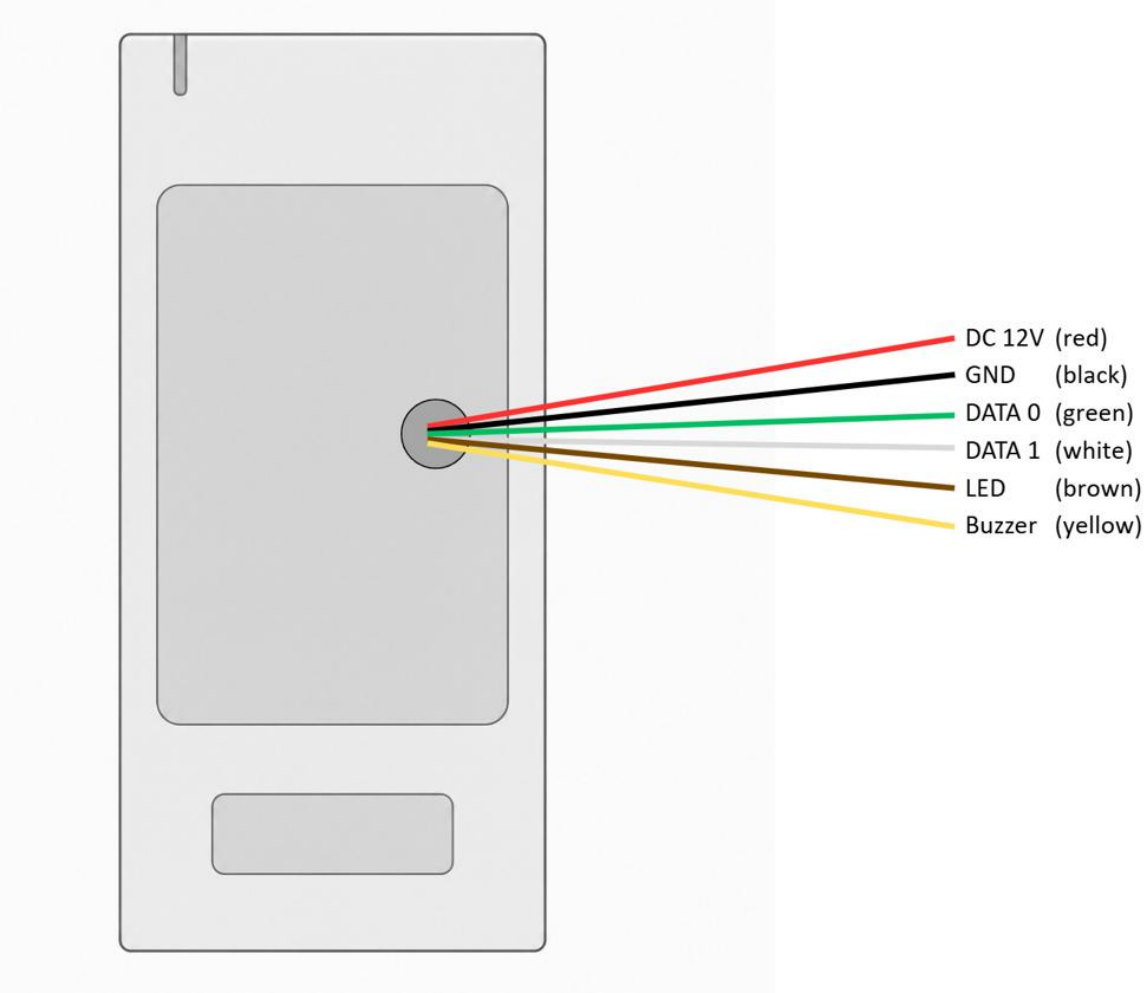


Fig.4. Pass-through wiring diagram

3.3. Advanced input and output features

Among the advanced input and output features, the grey wire provides a negative alarm output contact, and the brown wire is a door/gate contact input (normally closed). On the PAS-EMHK12, the brown & black wires form the Door Bell A contact, and the yellow & black wires form the Door Bell B contact.

Colour	Function	Notes
Grey	Alarm output	Negative contact for alarm
Brown	Contact input	Door/gate contact input (normally closed)
Brown & Black	Doorbell A	Contact for doorbell
Yellow & Black	Doorbell B	Contact for doorbell

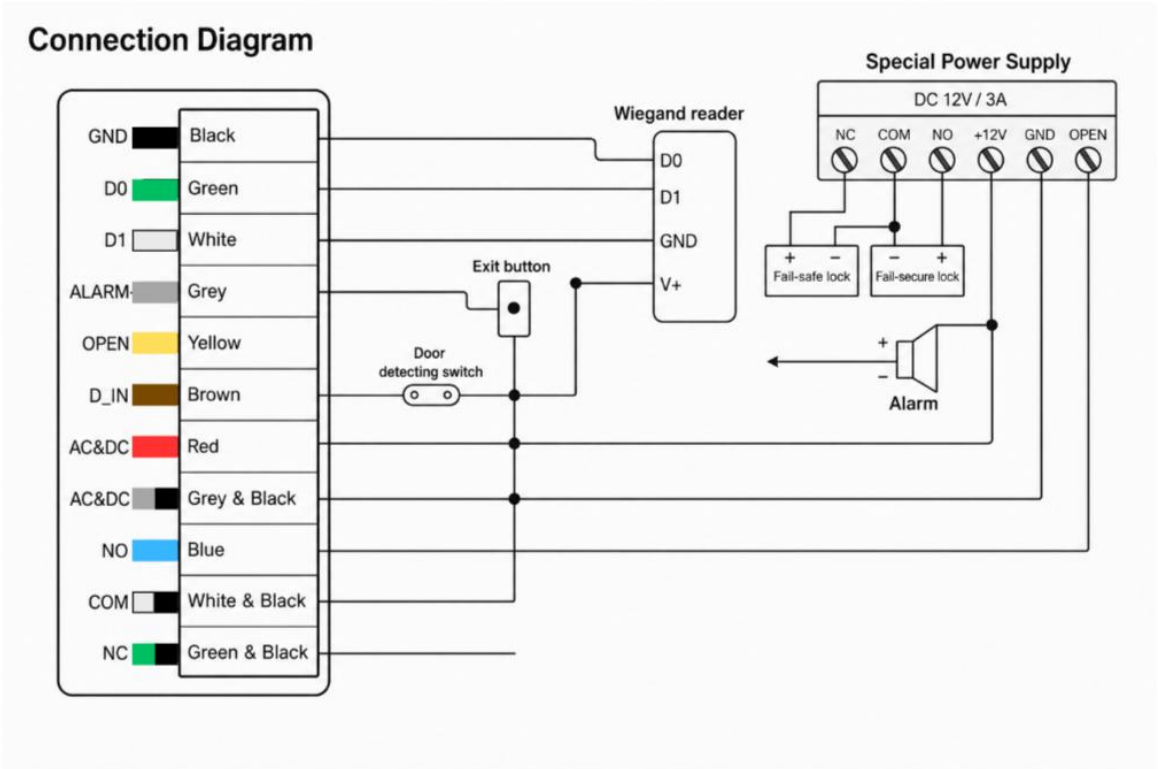


Fig.5. Advanced input and output features wiring diagram

3.4. Sound and light indication

In standby, the LED stays bright red with no buzzer sound. When entering programming mode, the LED shines red with one beep. While in programming mode, the LED glows orange with one beep. An operation error produces three beeps. Exiting programming mode returns the LED to bright red with one beep. When the lock opens, the LED turns bright green with one beep. During an alarm, the LED flashes red rapidly with continuous beeping.

Operating status	LED	Buzzer
Stand by	Red light bright	-
Enter programming mode	Red light shines	One beep
In the programming mode	Orange light bright	One beep
Operation error	-	Three beeps
Exit from the programming mode	Red light bright	One beep
Open lock	Green light bright	One beep
Alarm	Red light shines quickly	Beeps

4. Basic configuration

To enter programming mode, press the star key, then the Master Code, then the hash key (the factory default Master Code is 123456). To exit programming mode at any time, press the star key.

Programming step	Keystroke combination
Enter program mode	* Master Code* (The factory default Master Code is 123456)
Exit program mode	*

4.1. Set master code

To change the Master Code, enter programming mode, then press 0, the new 6-digit code, hash, repeat the new code, and hash again to confirm. Exit programming mode when done.

Programming step	Keystroke combination
1. Enter program mode	* Master Code*
2. Update master code	0 (New Master Code) # (repeat new Master Code) # Master code is any 6 digits
3. Exit program mode	*

4.2. Set working mode

The PAS-EMHK12 supports three working modes: Standalone Mode, Controller Mode, and Wiegand Reader Mode. To select a mode, enter programming mode, then press 8 0 for Standalone/Controller Mode (factory default) or 8 1 for Wiegand Reader Mode, then exit.

Programming step	Keystroke combination
1. Enter program mode	* Master Code*
2. Standalone/controller mode OR 2. Wiegand reader mode	8 0 # (factory default) 8 1 #
3. Exit program mode	*

5. Standalone mode

The PAS-EMHK12 can operate as a standalone reader for a single door (factory default: 8 0#). Connection diagrams show the common power supply wiring, the access control power supply wiring, and — for the PAS-EMHK12 — the door bell connection.

Attention: when using a common power supply, install a 1N4004 diode (or equivalent) to prevent damage to the keypad; the diode is included in the packaging.

Programming procedures vary depending on the chosen access configuration — follow the instructions relevant to your setup.

Notes

- Each access card or PIN is tracked using a User ID. Common user IDs range from 1 to 598, while panic user IDs are reserved for 599–600. User IDs do not need leading zeros, and it is important to keep a record of them, since any future modification to a user requires their ID.
- The reader accepts any standard 125 kHz 26-bit HID or EM card, as well as 13.56 MHz Mifare cards.
- PINs can be any 4–6 digit combination except 8888, which is reserved.

5.1. Add common users

To add a card user, enter programming mode, then choose one of the following methods:

Auto ID — press 1, read the card, then hash; the reader automatically assigns the next available User ID, and cards can be added continuously.

Specific ID — press 1, the desired User ID (1–598), hash, then read the card, then hash.

By card number — press 1, input the 8- or 10-digit card number, then hash.

Block enrolment — press 1, the starting User ID, hash, the quantity of cards, hash, and the first card number, then hash; this enrols up to 598 consecutive cards in a single step and takes about two minutes.

Programming step	Keystroke combination
Enter program mode	* Master Code*
Add card: using auto ID	1 (read card) # The cards can be added continuously
Add card: select specific ID	1 (user ID) # (read card) # User ID is any number from 1-598
Add card: by card number	1 (input 8/10 digit card number) #
Add card: block enrolment	1 (user ID) # (card quantity) # (the first card number) #
Exit program mode	*

5.2. Add PIN user

To add a PIN user, choose Auto ID (press 1, the PIN, then hash — PINs can be added continuously, 4–6 digits) or Specific ID (press 1, the User ID, hash, the PIN, then hash). Exit programming mode with the star key when finished.

Programming step	Keystroke combination
Enter program mode	* Master Code*
Add PIN: using auto ID	1 (PIN) # The PIN can be added continuously (PIN: 4-6 digits)
Add PIN: select specific ID	1 (user ID) # (PIN) # User ID is any number from 1-598
Exit program mode	*

5.3. Simplified instruction

Enter programming mode with star, 123456 (factory default), hash. Change the Master Code with 0, the new code, hash, repeat the code, hash. Add a card user with 1, read card, hash (cards can be added continuously). Add a PIN user with 1, the PIN, hash (4–6 digits). Delete a user with 2, read card, hash (for card users) or 2, PIN, hash (for PIN users). Exit programming mode with star.

Function description	Operation
Enter programming mode	*- 123456 -# (123456 is the factory default master code to do the programming)
Change the master code	0 – new code - # - repeat the new code -# (code: 6 digits)
Add card user	1 – read card - #
Add PIN user	1 – PIN - #
Delete user	2 – read card - # (for card user) 2 – PIN - # (for PIN user)
Exit from the programming mode	*

To gain access, card users simply read their card, while PIN users enter their PIN followed by hash.

Function description	Operation
Enter program mode	* Master Code*
Card user	Read card
PIN user	Input PIN #
Exit program mode	*

5.4. Add panic users

Enter programming mode, press 1, the panic User ID (599–600), hash, then either read the card (or enter the 8/10-digit card number) or enter the PIN, then hash. Exit with star.

Programming step	Keystroke combination
1. Enter program mode	* (Master Code) #
2. Add card OR 2. Add PIN	1 (User ID) #(read card/input 8/10 digit card number) # 1 (User ID) #(PIN) #
3. Exit	*

5.5. Change PIN users

Users can change their own PIN outside programming mode. To change a PIN by card, read the card, enter the old PIN, hash, the new PIN, hash, repeat the new PIN, hash. Note that a default PIN of 8888 is automatically assigned to a card when it is first added. To change a PIN by User ID, press star, the User ID, hash, the old PIN, hash, the new PIN, hash, repeat the new PIN, hash.

Note: Below is done outside programming mode, users can undertake this themselves

Programming step	Keystroke combination
1. Change PIN: by card (There will auto allocate PIN(8888) to cards when adding)	* (read card) (old PIN) # (new PIN) # (repeat new PIN) #
2. Change PIN: by PIN	* (user ID) # (old PIN) # (new PIN) # (repeat new PIN) #
3. Exit	*

5.6. Delete users

Enter programming mode, then delete a common card user with 2, read card, hash (cards can be deleted continuously); or 2, the User ID, hash; or 2, the 8/10-digit card number, hash. Delete a common PIN user with 2, the PIN, hash, or 2, the User ID, hash. Delete a panic card or PIN user with 2, the User ID, hash. Delete all users at once with 2, the Master Code, hash. Exit with star.

Programming step	Keystroke combination
Enter program mode	* Master Code*
Delete card - by card	2 (read card) # The cards can be deleted continuously.
Delete card - by ID number	2 (user ID) #
Delete user - by card number	2 (input 8/10 digits card number) #
Delete PIN - by PIN	2 (input PIN) #
Delete PIN - by ID number	2 (user ID) #
Delete panic card user	2 (user ID) #
Delete panic PIN user	2 (user ID) #
Delete all users	2 (master code) #
Exit	*

5.7. Set relay configuration

The relay configuration sets the behaviour of the output relay on activation.

The relay configuration determines how the output relay behaves when activated. Enter programming mode, then choose Pulse Mode (press 3, a value from 1–99 representing seconds, hash — factory default is 5 seconds, where 1 equals 50 ms) or Toggle Mode (press 3, 0, hash, which sets the relay to ON/OFF toggle). Exit with star.

Programming step	Keystroke combination
Enter program mode	* Master Code*
Pulse mode	3 (1-99) # (factory default) — The relay time is 1-99 seconds (1 is 50mS) (Default is 5 seconds)
Toggle mode	3 0 # — Sets the relay to ON/OFF Toggle mode
Exit	*

5.8. Set access mode

For Multi cards/PINs access mode, the interval time of reading cards/inputting PINs can not exceed 5 seconds, or else, the PAS-EMHK12 will exit to standby automatically.

For multi-card or multi-PIN access modes, the interval between reading cards or entering PINs cannot exceed 5 seconds, or the unit automatically returns to standby. Enter programming mode, then select the access mode: Card access (4 0#), Card+PIN access (4 1#), Card or PIN access (4 2#, factory default), or Multi cards/PINs access (4, a number from 2–9, then #, meaning the door opens only after that many cards or PINs are read). Exit with star.

Programming step	Keystroke combination
Enter program mode	* (Master Code) #
Card access	4 0 #
Card+PIN access	4 1 #
Card or PIN access	4 2 # (Factory default)
Multi cards/PINs access	4 3 (2~9) # (Only after reading 2~9 cards or PINs, the door can be opened)
Exit	*

5.9. Door detecting

Door Open Too Long (DOTL) warning: When used with an optional magnetic contact or built-in magnetic contact of the lock, if the door is opened normally, but not closed after 1 minute, the inside buzzer will beep automatically to remind people to close the door and continue for 1 minute before switching off automatically.

Door Forced Open warning

When used with an optional magnetic contact or built-in magnetic contact of the lock, if the door is opened by force, or if the door is opened after 60 seconds of the electro-mechanical lock not closed properly, the inside buzzer and alarm output will both operate. Enter Master code # or valid user card /PIN to silence.

Programming step	Keystroke combination
Enter program mode	* (Master Code) #
To disable door open detection	5 0 # (factory default)
To enable door open detection	5 1 #
Exit	*

5.10. Set strike-out alarm

The strike-out alarm will engage after 10 failed card/PIN attempts (Factory default is OFF). It can be set to deny access for 10 minutes after engaging or disengage only after entering a valid card/PIN or Master code.

Programming step	Keystroke combination
Enter program mode	* (Master Code) #
Strike-Out OFF	6 0 # (factory default)
Strike-Out ON	6 1 # Access will be denied for 10 minutes
Strike-Out ON (Alarm)	6 2 #
Exit	*

5.11. Set audible and visual response

Programming step	Keystroke combination	
Enter program mode	* (Master Code) #	
Control sounds	OFF = 7 0 #	ON = 7 1 #
Control LED	OFF = 7 2 #	ON = 7 3 #
Control keypad backlit	OFF = 7 4 #	ON = 7 5 # (factory defaults are ON)
OFF	after 20 Seconds = 7 6 #	
Exit	*	

5.12. Master cards usage

Using Master Cards to add and delete card / PIN users

Add a user	1. (Read Master Add Card) 2. (Read User Card) — Step 2 for additional user cards 3. (Read Master Add Card)
Delete a user	1. (Read Master Delete Card) 2. (Read User Card) — Step 2 for additional user cards 3. (Read Master Delete Card)

5.13. Users' operation & reset to factory default

- Open the door: Read valid user card or inputting valid user PIN.
- Remove Alarm: Read valid user card or inputting valid user PIN, or input Master Code #
- To reset to factory default & Add Master Cards: power off, press the exit button, hold it and power on, there will be two beeps, the LED red light starts to shine, release the exit button, then read any two cards (can be 125KHz EM card, 125KHz HID card or 13.56MHz Mifare card, the LED red light stays ON, means reset successfully. Of the two cards reading Card, the 2nd one is the Master Delete Card).

Remarks:

- If no Master Cards added, must press the Exit Button for at least 10 seconds before release.
- Reset to factory default, the user's information is still retained.

6. Controller mode

PAS-EMHK12 can work as Controller, connected with the external Wiegand reader. (Factory default mode)—8 0 #

Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the reader might be damaged. (1N4004 is included in the packing)

6.1. Set wiegand input formats

Please set the Wiegand input formats according to the Wiegand output format of the external Reader.

Programming step	Keystroke combination
Enter program mode	* (Master Code) #
Wiegand input bits	8 (26~37) # (factory default is 26bits)
Exit	*

6.2. Programming

- Basic Programming is the same as Standalone Mode
- There are some exceptions for your attention:
- PAS-EMHK12 Connected with External Card Reader:
    - If EM card reader or HID card reader: users can be added/deleted on either PAS-EMHK12 or external reader.
    - If Mifare reader: users can only be added/deleted on external reader.

6.3. PAS-EMHK12 Connected with Fingerprint Reader

For example: Connect F2 as the fingerprint reader to PAS-EMHK12, it is of two steps to enroll the valid fingerprint. Step 1: Add the Fingerprint (A) on F2. Step 2: Add the same Fingerprint(A) on PAS-EMHK12:

Programming step	Keystroke combination
Enter program mode	* (Master Code) #
Fingerprint reader connection	1 (Press Fingerprint A once on F2) # (ID auto allocated) OR 1 (User ID) # (Press Fingerprint A on F2) # (Select specific ID)
Exit	*

6.4. PAS-EMHK12 Connected with Keypad Reader

PAS-EMHK12 Connected with Keypad Reader: The keypad reader can be 4 Bits, 8 Bits (ASCII), or 10 Bits output format. Choose the below operation according to the PIN output format of your reader.

Programming step	Keystroke combination
Enter program mode	* (Master Code) #
PIN input bits	8 (4 or 8 or 10) # (factory default is 4bits)
Exit	*

Remarks: 4 means 4 bits, 8 means 8 bits, 10 means 10 digits virtual number.

- Add PIN Users: To add PIN users, after entering into programming mode on PAS-EMHK12, PIN(s) can be input/added on either PAS-EMHK12 controller or the external Keypad Reader.
- Delete PIN Users: the same way as add users.

7. Wiegand reader mode

PAS-EMHK12 can work as Standard Wiegand Reader, connected to the third-party Controller --- 8 1 #

Note:

When set into Wiegand Reader mode, nearly all settings in Controller Model will become invalid. And Brown & Yellow wires will be redefined as below:

Brown wire: Green LED light control

Yellow wire: Buzzer control

If you need to connect Brown/Yellow wires: When the input voltage for LED is low, the LED will turn into Green; and when the input voltage for Buzzer is low, it will sound.

7.1. Set wiegand output formats

Please set the Wiegand output formats according to the Wiegand input format of the controller.

Programming step	Keystroke combination
Enter program mode	* (Master Code) #
Wiegand output bits	8 (26~37) # (Factory default is 26bits)
PIN output bits	8 (4 or 8 or 10) # (Factory default is 4bits)
Exit	*

8. Advanced application: interlock

The PAS-EMHK12 supports the Interlock function. It is of two keypads for two doors, and mainly used for banks, prisons, and other places where a higher level security is required.

Remarks: The Door Contact must be installed and connected as the diagram. Let's name the two PAS-EMHK12 Keypads as "A" and "B" for two doors "1" and "2"

Step1: Enroll the users on Keypad A and Keypad B

Step2: Set both of the two readers (A and B) to Interlock function

Programming step	Keystroke combination
Enter program mode	* (Master Code) #
Interlocked OFF	9 0 # (factory default)
Interlocked ON	9 1 #
Exit	*

The interlock operation is finished.

When and only door 2 is closed, the user can read the valid card or input valid PIN on Reader A, door 1 will open; then when and only door 1 closed, read valid card or input valid PIN on Reader B, door 2 will open.

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