

SOYAL

Operation Manual

Keypad

AR-721KP



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1. Main Features

- Up to 500 pin-codes programmable from keypad.
- Two access groups. (Optional)
- 2 request to exit inputs.
- 2 relay outputs contact support Latching or momentary outputs.
- Built-in watchdog to prevent the system from halting.
- Built-in tamper switch, include external security system interface.
- Bell output, Press together for bell using. (Optional)
- Keypad will be locked for 30 seconds while continuous error operation.

2. Notice

- If the master code is forgotten it can be restored to the factory default. Remove the AR-721KP from the mounting plate. Press and hold the reset switch 5 seconds (RESTER, on the KEYPAD circuit board). LED light green during 2.5 seconds and five beep sounds mean that master code is restored to the factory default 123456.
- If you would like to delete all user codes. Remove the AR-721KP from the mounting plate. Press and hold the reset switch 10 seconds (RESTER, on the KEYPAD circuit board). LED light green during 5 seconds and six beep sounds mean that all user are deleted.
- A user number programmed in the first group (000-249, default value) operates door relay-1. A user number programmed in the second group (250 to 499, default value) operates door relay-2.

3. Front Panel Indicators

1. The unit should make a beep sound when any key on the keypad is depressed.
2. In the programming mode, if no key is made within 30 seconds, it will automatically exit the programming mode.
3. In the programming mode, LED light green and flash rapidly. It means that the unit waits for entering. LED is red and flash rapidly, it means that the reader is busy.
4. LED light green and one beep sound mean acknowledge, LED light red and two beep sounds mean not acknowledge.
5. If five incorrect user code (or master code) are entered, keypad will be locked for 30 seconds.
6. The request-to-exit button activates door relay-1 and door relay-2 (the output, momentary or latched, and the time outputs are programmable). LED light green and two beeps (long sound + short sound) when the relay is activated.

4. Easy Guide

Enter the programming mode

Press + +

(all new units are preprogrammed with the master code 123456). The LED will flash green rapidly to show that the unit is in the programming mode. The unit will time out and return to the reading mode in 30 seconds if no key is pressed.

Exit the programming mode

Press -- exit the programming mode and return to the reading mode.

Setting the borderline of Users Number between 2 relays

Default value: A user number programmed in the first group

(000-249) operates door relay-1; A user number programmed in the second group

(250 to 499) operates door relay-2.

If Press

A green light and beep means that the borderline of users number had been changed into 300. Then, A user number programmed in

the first group (000-299) operates door relay-1; A user number programmed in the second group (300 to 499) operates door relay-2.

Setting Bell output

Step1: Press and master code follow an

Step2: Press

A green light and beep means that the command had been accepted.

NNN: 000 (Default value), disable bell function

NNN: 001, enable bell function

Step3: Press

Change your Master Code

Step1: Press and master code follow an

Step2: Enter

Re-type New Master Code-654321

A green light and beep means that the master code was changed. Note that 123456 is the default master code; use another number for best security.

Step3: Press

Add a User Code to the system

Step1: Press and master code follow an

Step2: Enter

User Number

User Code

The above for example, the user number 001 can access the door by entering 2081#. Note that a user code must be 3 to 6 digits in length and the key # cannot be used in a code.

For example: (The user code of user number 001 can be 123, 1234, 12345 or 123456)

Enter 12*001*123#(set user code 123 to user 001)

Or Enter 12*001*1234# (set user code 1234 to user 001)

Or Enter 12*001*12345# (set user code 12345 to user 001)

Or Enter 12*001*123456# (set user code 123456 to user 001).

Step3: Press

Disable (suspend) a User Code from the system

Step1: Press and master code follow an

Step2: Enter

Starting User Number 1

Ending User Number 1

A green light and beep means that the user code was disabled.

Step3: Press

Disable (suspend) a range of User Code from the system

Step1: Press and master code follow an

Step2: Enter

Starting User Number 1

Ending User Number 10

A green light and beep means that the range of user codes were disabled.

Step3: Press

Enable a User Code to the system

Step1: Press and master code follow an

Step2: Enter

Starting User Number 1

Ending User Number 1

A green light and beep means that the user code is enabled.

Step3: Press

Enable a range of User Code to the system

Step1: Press and master code follow an

Step2: Enter

Starting User Number 1

Ending User Number 10

A green light and beep means that the range of user codes are enabled.

Step:3 Press

Delete a User Code from the system

Step1: Press and master code follow an

Step2: Enter

User Number

A green light and beep means that the user code was deleted.

Step3: Press

Delete all User Codes from the system

Step1: Press and master code follow an

Step2: Enter

The LED flash red during 1 seconds to mean that the system is deleting all user codes. Then a green light and beep means that all user codes were deleted.

Step3: Press

Set the door relay-1 release time

Step1: Press and master code follow an

Step2: Enter

1 Seconds

TTT = 000: Latch (Toggle) / TTT = 001 ~ 600 (001 ~ 600) seconds / TTT = 601 ~ 609 (0.1 ~ 0.9) second. A green light and beep means that the door relay release time was changed. Note that door relay release time must be represented in a three-digit format. For example 5 seconds is entered as 005. Latching relay time is entered with a time of 000.

Step3: Press

Set the door relay-2 release time

Step1: Press and master code follow an

Step2: Enter

1 Seconds

TTT = 000: Latch (Toggle) / TTT = 001 ~ 600 (001 ~ 600) seconds / TTT = 601 ~ 609 (0.1 ~ 0.9) second. A green light and beep means that the door relay release time was changed. Note that door relay release time must be represented in a three-digit format. For example 5 seconds is entered as 005. Latching relay time is entered with a time of 000.

Step3: Press

Set time out value

Step1: Press and master code follow an

Step2: Enter

0.5 Seconds

TT = 00 ~ 09 (0 ~ 0.9) seconds / TT = 10 ~ 49 (1 ~ 4.9) seconds. Note that time out value must be represented in a two-digit format. For example 2 seconds is entered as 20.

Step3: Press

Set keypad lock of continuous error operation

Step1: Press and master code follow an

Step2: Enter

times

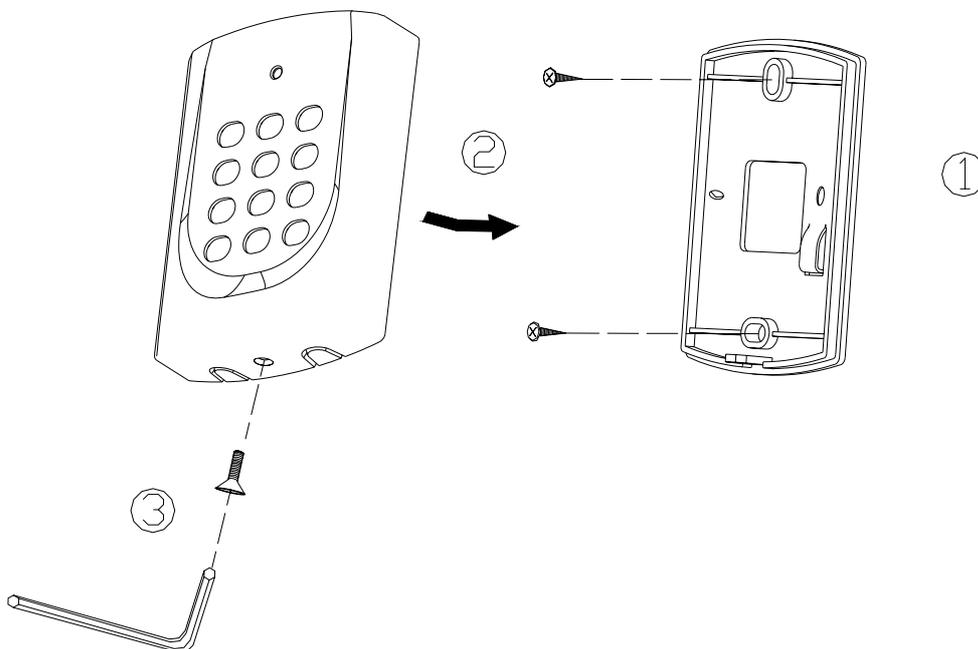
T = 0 or 3 ~ 9. The above for example, three incorrect user code (or master code) are entered, keypad will be locked for 30 seconds. If you do not need keypad lock of continuous error operation function, enter

Step3: Press

5. Installation

5.1 Steps

1. Use the screwdriver to screw the mounting plate on the wall.
2. Pull cable ends through the access hole in the mounting plate.
3. Attach the AR-721KP to the mounting plate and install screw (supplied) into the hole at the bottom with the Allen wrench (supplied).
4. Apply power. The red LED will flash once and the beeper will sound.



5.2 Installation Notice

1. Exit Switch input must be a dry contact, with no voltage present.
2. The AR-721KP does not supply power to operate electric strike or magnetic locks – a separate supply is required. Refer to strike/magnetic lock manufactures instructions. If common power supply is used for both the AR-721KP and electronic door lock, be sure to install the diode which is provided with the AR-721KP.
3. Alternatively, you can use any good 9-18 VDC supply that provides at least 150mA. DC power should be clean and filtered with no more than 1 VAC ripple (Peak to Peak). Do not run AC power in the same cable with DC power to the AR-721KP.

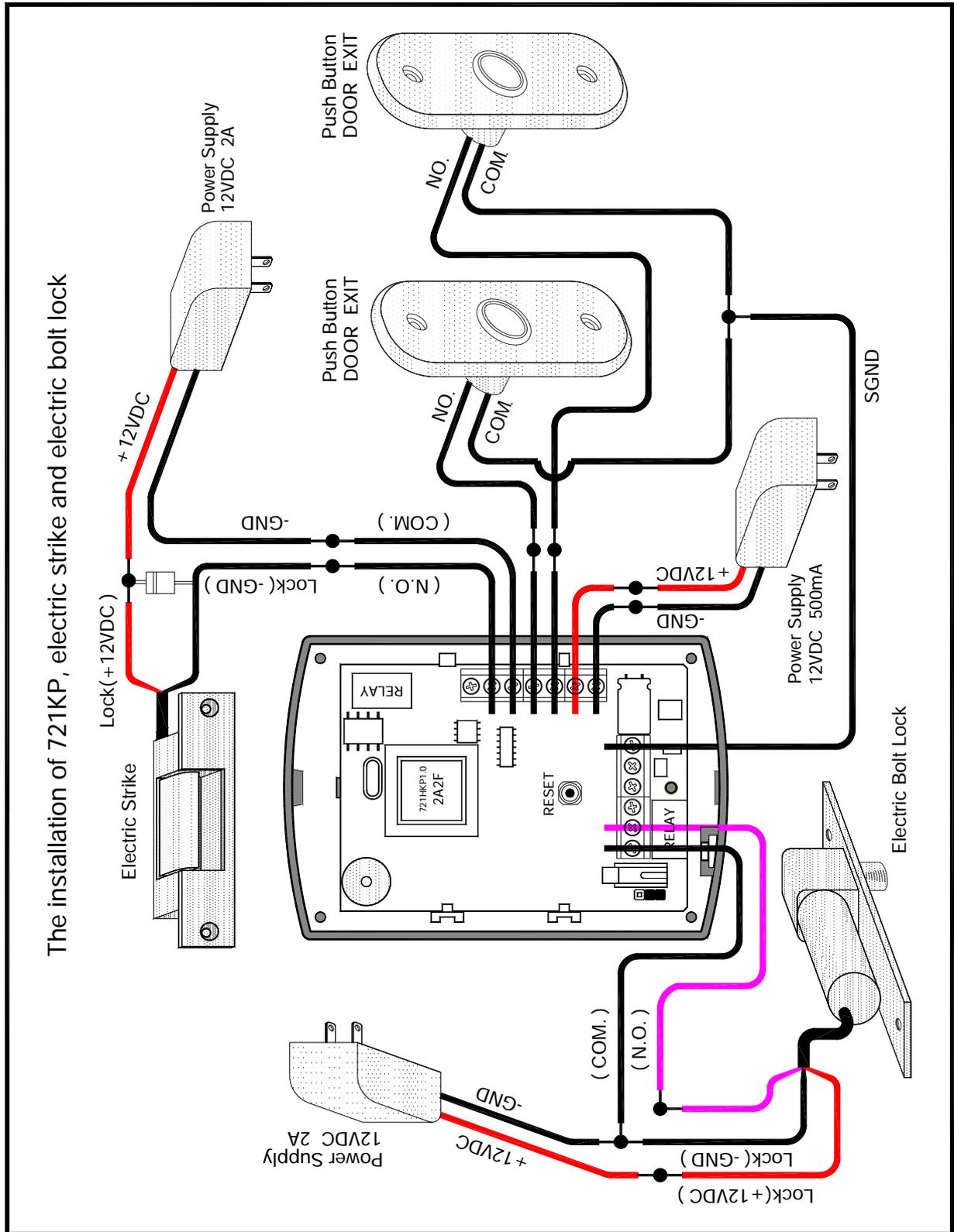
6. Terminal Cable

Table 1 - Connector CN1 Coding		
Wire Application	Wire	Description
Door Relay-1	1	(N.C.) DC24V1Amp
	2	(N.O.) DC24V1Amp
	3	(COM) DC24V1Amp
Exit Switch	4	Door Relay-1 Negative Trigger Input
	5	Door Relay-2 Negative Trigger Input
Power	6	DC Power 12V
	7	DC Power 0V

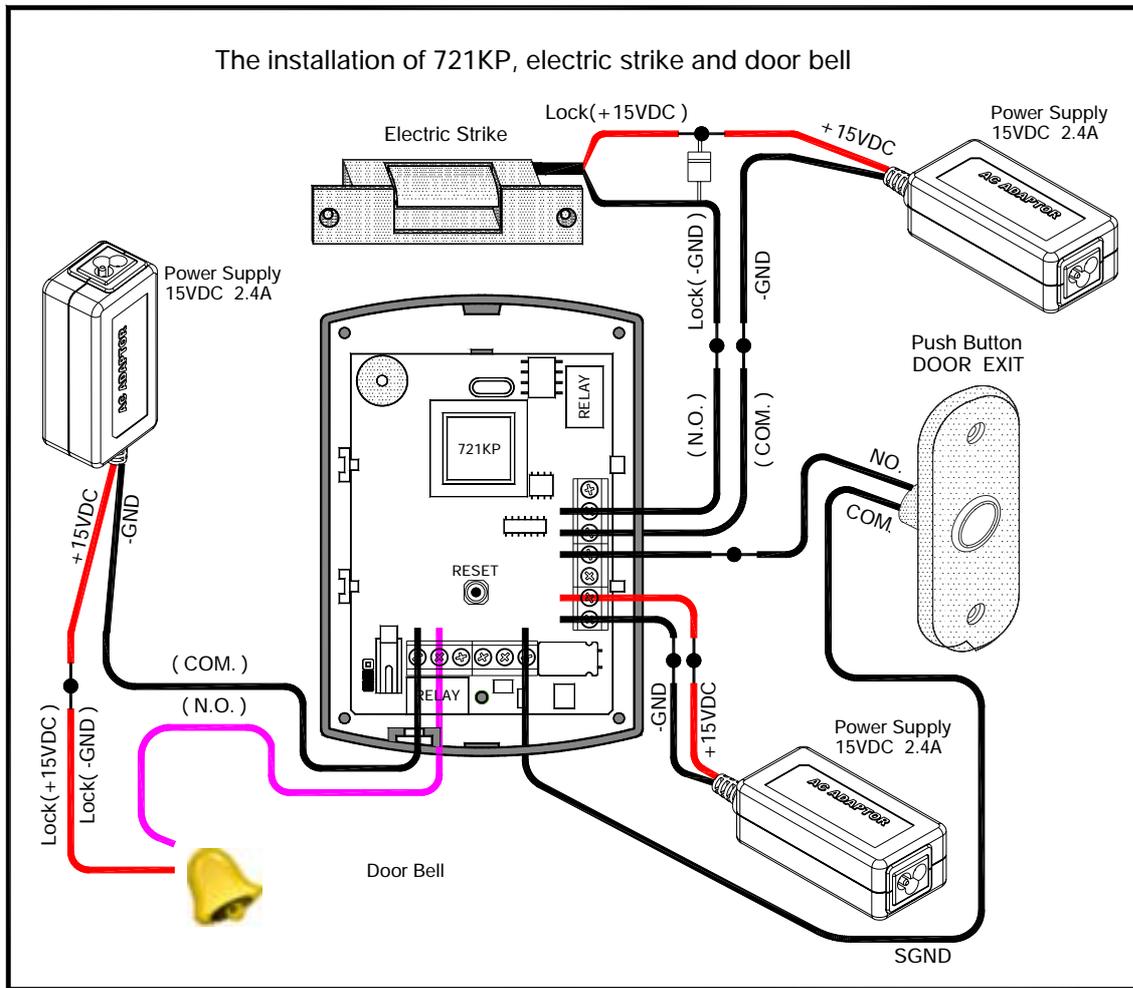
Table 2 - Connector CN2 Coding		
Wire Application	Wire	Description
Door Relay-2	1	(COM) DC24V1Amp
	2	(N.O.) DC24V1Amp
	3	(N.C.) DC24V1Amp
Tamper Switch	4	N/O N/C select via jumper
	5	COM
SGND	6	Signal Ground

7. Installation diagram

7.1 Electric bolt lock & Electric strike



7.2 Bell & Electric bolt lock



8. Troubleshooting

Questions	Answer
No appearance	<ol style="list-style-type: none"> 1. Check power, if it is 9 – 18 VAC/VDC adaptor? 2. Check if the polarity is correct? 3. The unit should make a beep sound when any key on the keypad is depressed. 4. If you remove and restore power, the unit should beep once and the LED should flash red once.

9. Return of Products

If you think that you have a defective unit, please contact the distributor who sold you the unit. All service and repairs must be done through an authorized distributor.

10. Warranty

SOYAL warrants that the product(s) shall be free from manufacturing defects in materials and workmanship for a period of fifteen (15) month from the date of delivery provided that the product was properly installed and used. The foregoing warranty shall not apply to defects resulting from abuse, misuse, accident, unauthorized alteration or repair, neglect, acts of God (such as floods, fire, etc.). SOYAL shall, at its option, either repair or replace product(s) which prove to be defective within the warranty period.

SOYAL will replace any product found to be defective within the first three months of purchase provided said product was properly installed and used. Distributor agrees to insure the product or assume the risk of loss or damage in transit to prepay shipping charges and to use the original shipping container or equivalent. Customers shall seek assistance from the distributor who sold you product(s). Repaired or replaced product(s) are warranted for ninety (90) days from the date of repair or replacement, or for the remainder of the original product's warranty period, whichever is longer.

Note: Don't tear a paster such as S/N: 721KP-08336 on the PCB board, because it is SOYAL warranty.

