RFID/Digital Access Control Keypad
Model:YK-868

YLI ELECTRONIC

FEATURES AND FUNCTIONS

- Simple Programming, Easy Operation
- 3-Operation Mode:

  ID Card Operation, User Code Operation,

  ID Card + User ID Number Operation

  1 Relay Output
- 250 Users
- Multi User Code or Single User Code Operation
- Operates Fail-safe or Fail-secure Electric Locks
- Auto or Manual Code Entry Checking
- Keypad Blocking for 30 Seconds after 10 False Entries
- Tamper Beep ON/OFF Selectable
- Tamper Warning Output, "ALM OUT" can be Connected to Alarm System
- Egress Input for Door-open Remote Triggering
- Doorbell Button
- 2 Bright Level Back-lit Key Button
- Non-volatile Memory in Power Failure

SPECIFICATIONS

- Operating Voltage : 12V DC
- Current Drain : Quiescent State = 31mA,
- Active State=52mA
- Relay Output Contacts : N.O. and N.C. Dry Contacts, Max Rating of Contact Current, 2A / 24V DC
- Capacity of Recording : 250 ID Cards, 250 Codes or 1 Common Code
- Card Reading Distance : Max Distance 10 CM
- Type of ID Card : EM Card, 125 KHZ
- Dimensions : 112 (H) mm x 84 (W) mm x 25 (D) mm
- Weight : 0.12kg

AUDIBLE & VISIBLE INDICATIONS

Definition of Audible and Visible Indications	Status Indicator Amber LED	Output Indicator Green LED	Audible Indicator Buzzer
	STATUS	PASS	
Standby mode	1 Flash in 2 Sec interval		
Successful key entry	1 Flash then light for 10Sec (Press # to return to standby mode)		1 Beeps
Successful card / code entry	2 Flashes	Light	2 Beeps
Successful operation	2 Flashes		2 Beeps
Unsuccessful card / code entry	5 Flashes		5 Beeps
Unsuccessful operation	5 Flashes		5 Beeps
In locking status (no response to card / code entry)	1 Flash in 10 Sec interval		1 Short beep in 10 secretary interval 1 Long beep finish blocking

In programming mode	Light	Light	
During programming	Light	Continuous Flash	
Programming confirmation (PRESS KEY #)	Light	Light	2 Beeps
Alarm status	Continuous flash		Continuous beeps

Notice to user: (1)Successful key entry, it will keep 10 seconds, if no further key entry in 10 seconds, It will return to normal operation status(Standby mode).

(2)In case wrong entry, cancel the wrong entry by pressing key #, or waiting for 10 seconds then re-enter.

PROGRAMMING

Before use of the new control station,programming every item to confirm the functions and settings meet the requirement of the users
Programming code = Management code = Master code
Default programming code is 1234
NOTE: (1) Successful programming operation The amber LED will show 2 flash and the buzzer will sound 2 beeps.
Unsuccessful programming operation The amber LED will show 5 flash and buzzer will sound 5 beeps.
(2)The User ID Number / User Card / User Code, are not allowed to record repeatedly. Repeat record will not be entered and will give warning signal : amber LED 5 flash, buzzer sound 5 beeps to signify rejection. It is required to delete the old data then re-enter.

PROCEDURES OF PROGRAMMING

(1) **Entry into programming**
PRESS KEY → Enter the programming code (4-8 digits, default code is 1234) → # (The amber LED and green LED lighted, signifying entry into the programming mode)
(2) **Recording the new programming code (This procedure must be done)**
Warning: For security purpose, the owner should change the default programming code (1234) to owner's private programming code (Master Code) before use of the new access control keypad.
PRESS KEY 0 →Enter the new programming code (4-8 digits) → # →Repeat the new programming code → #
(3) **Recording the User card**
(Assign a number of any 3 digits as the User ID Number for each User Card, the User ID Number is not allowed to repeat use in the programming, keep the User ID Number as a record of an user)
PRESS KEY 1 → Enter the User ID Number (3 digits) → Read the User Card → #
(When recording the User Card, should note if the recording is successful and the indicating amber LED show 2 flash and buzzer sound 2 beeps, signifying acceptance of the entry)

NOTE : If continue to record more User Cards, at the end of each recording, it is no necessary to press the key # per each time, to repeat above steps, until all User Cards recordings are finished. Finally to press the key # to confirm all recordings are completed.
(4) **Deleting the User ID Card**
A. PRESS KEY 2 → 0000 → # (Deleted all the User Cards)
B. PRESS KEY 2 1 →Read the User Card to be deleted →# (Deleted the Read User Card)
C. PRESS KEY 2 1→Enter the User ID Number of the User Card to be deleted→#(Deleted the User Card of the User ID Number)
(5) **Programming the open－door mode**
A. PRESS KEY 3 → 00 → # (Open door by User Card)
B. PRESS KEY 3 → 01 → # (Open door by User Card or User Code)
C. PRESS KEY 3 → 02 → # (Open door by User Card + User Code)
NOTE : Factory setting "Open door by User Card or User Code"
(6) **Programming the door－open time**
PRESS KEY 4 → (01-99 seconds) → # (Setting door-opening time 1- 99 seconds)
NOTE : Factory setting "door-opening time is 3 seconds"
(7) **Recording the User Code (Use either A or B)**
A. **Single User Code (Common User Code)**
PRESS KEY 5 → 00 → Enter the User Code (4-8 digits) → #
＊ Deleting the common User Code
When enter new common User Code the old one will be deleted automatically
B. **Multi-User Codes**
PRESS KEY 5 → 01 → Enter the User ID Number (3 digits)→Enter the User Code (4-8 digits) → # (Confirming the code length) (Green LED flash) → # (Green LED stop flash) (confirmed entering is completed) 2

NOTE : 1. If continue to record more User Codes, at the end of each recording, it is no necessary to press the key # per each time, to repeat the above steps until all User Code recordings are finished. Finally to press the key # to confirm all recordings are completed.

2. The User ID Number of the User Code and the User ID Number of the User Card must be the same, i.e. The User ID Number of the User Code is 008, the User ID Number of the User Card is also 008, so in "Card + User Code" operation mode the User ID Number of both the User Card and User Code can be matched in application.

＊ Deleting the User Code recorded (Multi-User Codes)

PRESS KEY 5 → 02 → 0000 → # (Deleted all the User Codes)

PRESS KEY 5 → 02 → Enter the User Code to be deleted → # (Deleted the User Code)

PRESS KEY 5 → 02 → Enter the User ID Number of the User Code → # (Deleted the User Code of the User ID Number)

(8) **Programming User Code entry mode**

MANUAL code entry checking mode

PRESS KEY 70 → 0 → # (Manual entry mode, have to press the key # follow the User Code entered to confirm the code length of the User Code entered. The User Code can be 4-8 digits)

AUTO code entry checking mode

PRESS KEY 70 → 1→ # (Auto entry mode, the User Code must be set in the same code length as the programming code. No need to PRESS KEY # to confirm the code length of the User Code entered. The User Code can be 4-8 digits)

Note : Factory setting "Manual code entry checking mode"

(9) End of programming

After completing all programming procedures, exit programming mode in 60 seconds

PRESS KEY ＊ to exit programming mode and return to normal operation status (Standby mode)

OPERATION OF THE ACCESS CONTROL KEYPAD

NOTE: The amber LED 1 flash in 2 second interval-the control station is in normal operation mode, standby for use.

(1) Open door by User Card (Door opened by reading User Card)

(2) Open door by User Code (Door opened by entering User Code)

(3) Open door by User Card + User Code (Door opened by reading User Card, green LED will flash,in 10 seconds entering the User Code)

(4) In any case, the door can be opened by entering the programming code (Management Code)

SAFETY FUNCTIONS

(1) Entry of 10 false codes or reading 10 invalid ID Cards, the control station locks for 30 seconds.

(2) In case tamper switch is activated, warning signal is indicated: amber LED continuous flash and buzzer continuous beeps, until tamper switch is deactivated.

(3) "ALM OUT" (ALARM OUT) can be connected to security alarm system.

Access control keypad in blocking state:

No response to ID Card / or key entry, amber LED and green LED show 1 flash and buzzer sounds 1 short beep in 10 seconds interval, at the end of locking the buzzer sounds 1 long beep to signify the end of locking and return to normal operation mode.

RESTORING THE DEFAULT PROGRAMMING CODE

If the programming code is lost (or unknown), use the DPC jumper to restore the default programming code, procedures as follows:

(1) Disconnect power supply.

(2) Put the DPC jumper from OFF position to ON position.

(3) Reconnect power supply, amber LED will flash constantly and the buzzer will beep constantly.

(4) Put the DPC jumper back to OFF position, amber LED will stop flashing, buzzer will stop beep.

(5) Press the key # one time.

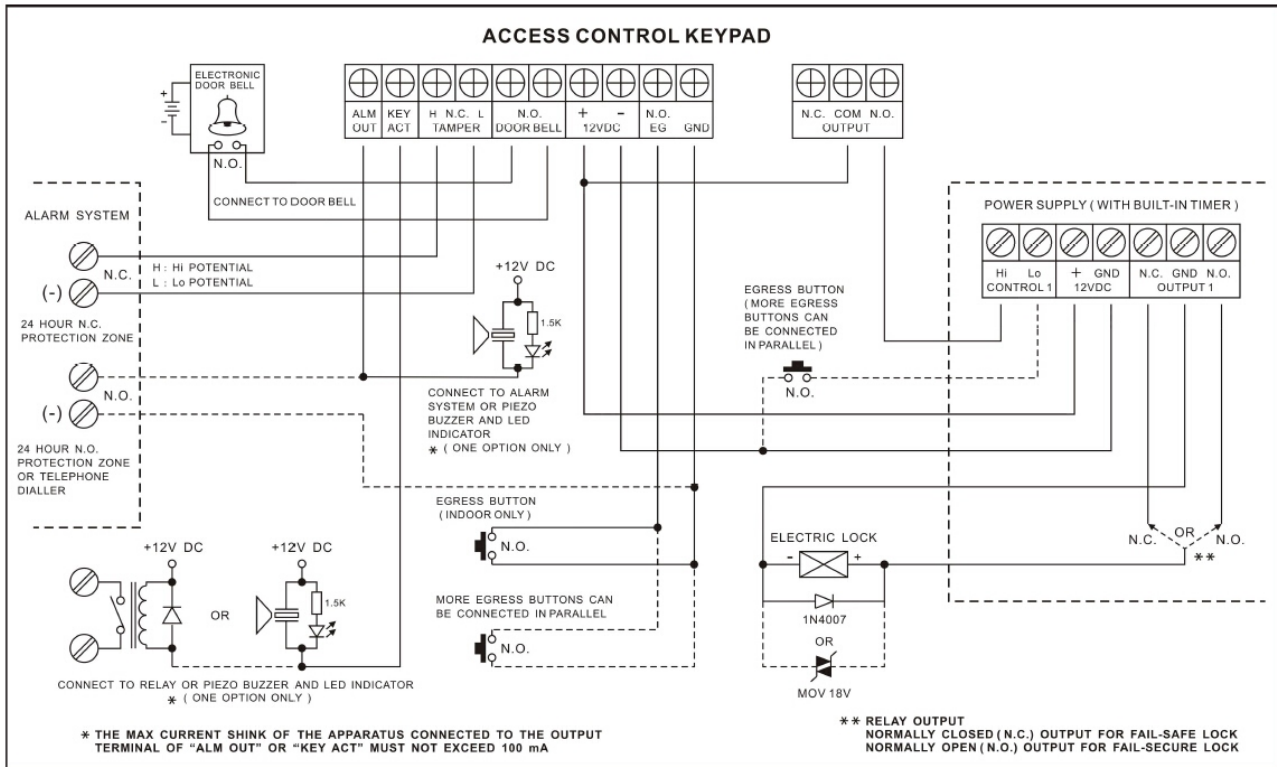(6) The default programming code 1234 is restored.

NOTE : The restoring operations only restore the default programming code 1234, the recorded Data or Settings will not be changed or deleted.

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NOTICE TO INSTALLER

(1) Around the access control keypad in 50 CM distance, there must be no any apparatus with 100-150 KHZ frequency sources (In order that no interference is appeared).

(2) In the installation, the distance of 2 access control keypads, or one access control keypad and other card readers, should over 50 CM.

(3) For safety purpose, the power supply for Access Control Keypad must provide over current protection device such as a Fuse or Thermal Cut-out of 3 Amp current rating. A readily accessible disconnect device shall be incorporated external to the equipment.

(4) Do not connect wires with power ON. Before apply power to the access control keypad, should confirm power voltage is 12V DC and the polarity (+ -) is correct.

WIRING DIAGRAM

The access control keypad controls the apparatus via power supply

ACCESS CONTROL KEYPAD

ELECTRONIC DOOR BELL

ALM OUT | KEY ACT | H N.C. L TAMPER | N.O. DOOR BELL | + − 12VDC | N.O. EG GND

N.C. COM N.O. OUTPUT

CONNECT TO DOOR BELL

ALARM SYSTEM

N.C. (-)
H : Hi POTENTIAL
L : Lo POTENTIAL

24 HOUR N.C. PROTECTION ZONE

N.O. (-)

24 HOUR N.O. PROTECTION ZONE OR TELEPHONE DIALLER

+12V DC

1.5K

CONNECT TO ALARM SYSTEM OR PIEZO BUZZER AND LED INDICATOR
* (ONE OPTION ONLY)

POWER SUPPLY (WITH BUILT-IN TIMER)

Hi Lo CONTROL 1 | + GND 12VDC | N.C. GND N.O. OUTPUT 1

EGRESS BUTTON (MORE EGRESS BUTTONS CAN BE CONNECTED IN PARALLEL)
N.O.

+12V DC   +12V DC
OR
1.5K

CONNECT TO RELAY OR PIEZO BUZZER AND LED INDICATOR
* (ONE OPTION ONLY)

EGRESS BUTTON (INDOOR ONLY)
N.O.

MORE EGRESS BUTTONS CAN BE CONNECTED IN PARALLEL
N.O.

ELECTRIC LOCK
1N4007
OR
MOV 18V

N.C. OR N.O.
**

* THE MAX CURRENT SHINK OF THE APPARATUS CONNECTED TO THE OUTPUT TERMINAL OF "ALM OUT" OR "KEY ACT" MUST NOT EXCEED 100 mA

** RELAY OUTPUT
NORMALLY CLOSED (N.C.) OUTPUT FOR FAIL-SAFE LOCK
NORMALLY OPEN (N.O.) OUTPUT FOR FAIL-SECURE LOCK

The access control keypad directly controls the connecting apparatus(Note: Max rating of relay contact current 2A/24VDC)

ACCESS CONTROL KEYPAD

ELECTRONIC DOOR BELL

ALM OUT | KEY ACT | H N.C. L TAMPER | N.O. DOOR BELL | + − 12VDC | N.O. EG GND

N.C. COM N.O. OUTPUT

CONNECT TO DOOR BELL

ALARM SYSTEM

N.C. (-)
H : Hi POTENTIAL
L : Lo POTENTIAL

24 HOUR N.C. PROTECTION ZONE

N.O. (-)

24 HOUR N.O. PROTECTION ZONE OR TELEPHONE DIALLER

+12V DC

1.5K

CONNECT TO ALARM SYSTEM OR PIEZO BUZZER AND LED INDICATOR
* (ONE OPTION ONLY)

12VDC POWER SUPPLY
+
−

N.C. OR N.O.
**

+12V DC   +12V DC
OR
1.5K

CONNECT TO RELAY OR PIEZO BUZZER AND LED INDICATOR
* (ONE OPTION ONLY)

EGRESS BUTTON (INDOOR ONLY)
N.O.

MORE EGRESS BUTTONS CAN BE CONNECTED IN PARALLEL
N.O.

ELECTRIC LOCK
1N4007
OR
MOV 18V

* THE MAX CURRENT SHINK OF THE APPARATUS CONNECTED TO THE OUTPUT TERMINAL OF "ALM OUT" OR "KEY ACT" MUST NOT EXCEED 100 mA

** RELAY OUTPUT
NORMALLY CLOSED (N.C.) OUTPUT FOR FAIL-SAFE LOCK
NORMALLY OPEN (N.O.) OUTPUT FOR FAIL-SECURE LOCK

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