DG-15LD

Standalone Keypad Access

GEM®

- Operating voltage 12~24Vdc

- Die-cast Aluminium

- Allows up to 20+1 PIN codes

- Backlit keypad

- Dual relays output for multi-control

- Weather resistant

- Vandal resistant

- 3 LED displays with audible indication

WEATHER RESISTANT

VANDAL RESISTANT

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77   64

123

55

Power Supply + −

INPUT
12~24VDC
N.O.1
COM.1
N.C.1
PB
PB

Electric Lock 1
Fail-Safe Mode
(MUST install a Varistor)

Dry Contact

Power Supply + −

N.O.2   • Blue
COM.2   • Green
N.C.2   • Yellow
REED   • Brown
REED   • Brown

4 or 5   Reset

Electric Lock 2
Fail-Secure Mode
(MUST install a Diode)

N.C. contact output:
opened status

N.O. contact output:
closed status
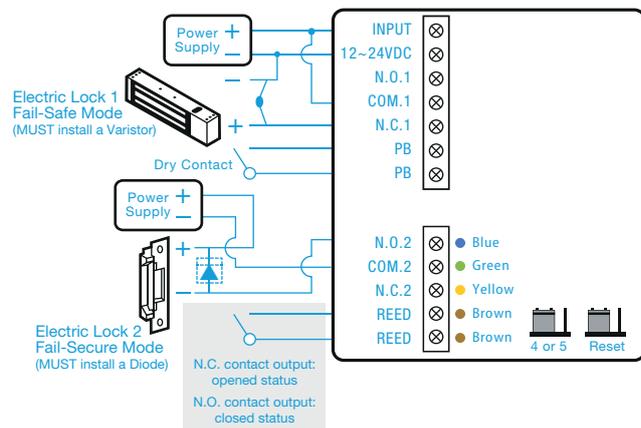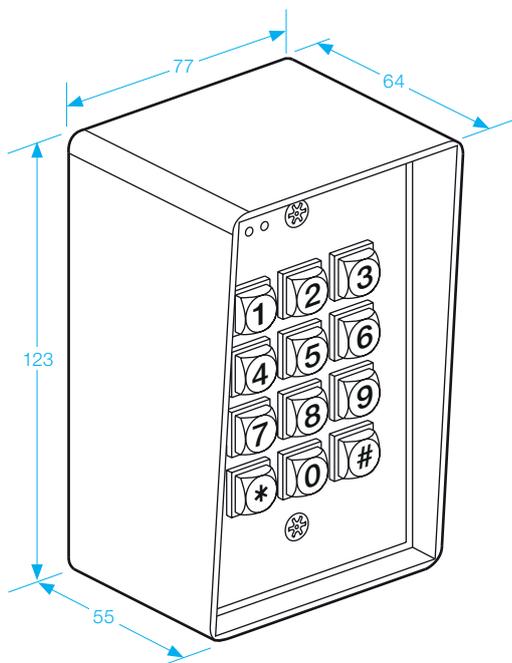
DG-15LD

The door strike or relay must have a varistor or a diode across the door strike terminals to suppress the back EMF of the strike-failure to do so will damage the relay contacts and electronic components, or even burns the controller.

For AC/DC

For DC use only
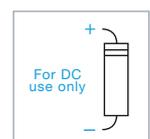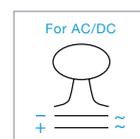
SPECIFICATION

- Current draw: Average 15mA, Peak 100mA@12Vdc.
- Input: 2 x Request-to-exit, time out reed switch contact.
- Output: Dual relays, N.O./N.C/Com. Output *(volt free contact)*.
- Relays Rating: 2A MAX@30Vdc., 0.4A@120Vac.
- Fully programmable via keypad and master code.
- Factory master code: 12345.

- Memory Volume: 20+1 PIN codes.

  Relay 1 is controlled by *01~*20 user slots.
  Relay 2 is controlled by *21 user slots.

- Invalid PIN Lock-out: The system will shut down for 60 seconds while 30 codes of incorrectly Master Codes enrolled or Pin codes attempted *(None beeper signal of keypad activations)*.

DG-15LD
Digital Keypad
Operation Manual

I. Specifications

Operating Voltage		
	DG-15LD	12~24 VDC
Current Draw		
	DG-15LD	Pull in: 70 mA Holding: 40mA /12VDC
		Pull in: 100 mA Holding: 60mA /24VDC
Keypad	12 buttons (0~9,＊,＃)	
LED Status Indication	3 LED indicators display (Red/Yellow/Green)	
Input	1 contact for Request-To-Exit button	
	1 contact for door reed switch	
Output	2 relays (Dry contacts: N.O./N.C./Com.)	
Relay Strike Time	01~99 seconds or Toggle Mode (00)	
Relay Electric Current	3A/120VAC , 3A/24VDC	
Memory Volume	20+1 PINs (＊01~＊021)	
	Relay 1 is controlled by user ＊01~＊20	
	Relay 2 is controlled by user ＊21	
	Sign: Relay1(＊30); Relay2(＊31)	
EPROM	Non-volatile memory allows remaining all setting codes in the event of total power failure.	
Ambient Humidity	0%~95% (Non-condensing)	
Operating Temperature	-20°C~+70°C	

II. Status Indication

LED	**Red On**	Power on, Stand by
	Green On	Relay 1 active
	Yellow On	Relay 2 active
Beep	1 Beep	Valid key press
	2 Beeps	Enter, exit setting mode
	3 Beeps	Incorrect operation
	5 Beeps	Master Code back to 12345 (Cleared settings)

III. Operation Instruction

◆ **Jumper Setting**
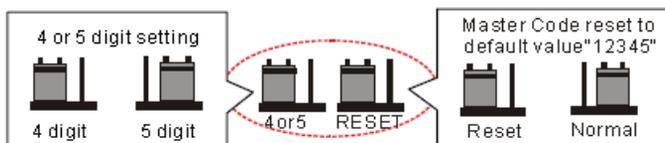
1. Default value: "1234" for 4 digits, "12345" for 5 digits
   It's suggested to clear all stored codes prior to new setting.
2. Master Code reset to default value"12345":
   a. Insert the jumper into 1-2 (5 beeps)
   b. Master Code reset to default value

  c. Insert the jumper into 2-3
 3. Clear all PINs:
  a. Reset Master Code to default value (5 beeps, clearing all PINs)
  b. Insert the jumper into 2-3

◆ **Enter Setting Mode**
 Enter the master code twice (Default value: "1234" or "12345) to enter setting mode (2 beeps)
 Note: 1. After 60 seconds if no data entered, it will automatically exit the setting mode.
   2. The controller will be locked for 60 seconds upon 30 consecutive master codes
    attempt.

◆ **Add new PINs (In setting mode)**
 1. Enter Master code twice (2 beeps)
 2. Slot position ✳01~✳21
 3. Enter the PINs (1 beep)
 4. Repeat, or press "#" to exit setting mode

 Relay 1 is controlled by the slot position ✳01~✳20
 Relay 2 is controlled by the slot position ✳21
 Note: "00000", "1234", "12345" and master code cannot be used for PINs.

◆ **Set the Relay Strike Time (In setting mode)**
 1. Enter the master code twice (2 beeps)
 2. Press ✳30 (or ✳31)
 3. Press 05 (01~99) (1 beep)
  Press 05 will set the relay strike to 5 seconds, relay set to toggle mode by press "00"
 4. Press "#" to exit setting mode
 Note: In Toggle mode, the relay will switch between N.C. contact and N.O. contact by input
   PIN once.


◆ **Delete PINs (In setting mode)**
 1. Enter the master code twice (2 beeps)
 2. Press ✳06 (e.g. code to delete)
 3. Press 0000 (or 00000) (1 beep)
 4. Press "#" to exit setting mode

◆ **Change Master Code (In setting mode)**
 1. Enter the master code twice (2 beeps)
 2. Press✳00
 3. Enter new master code (1 beep)
 4. Press "#" to exit setting mode

IV. Wiring Diagram
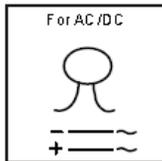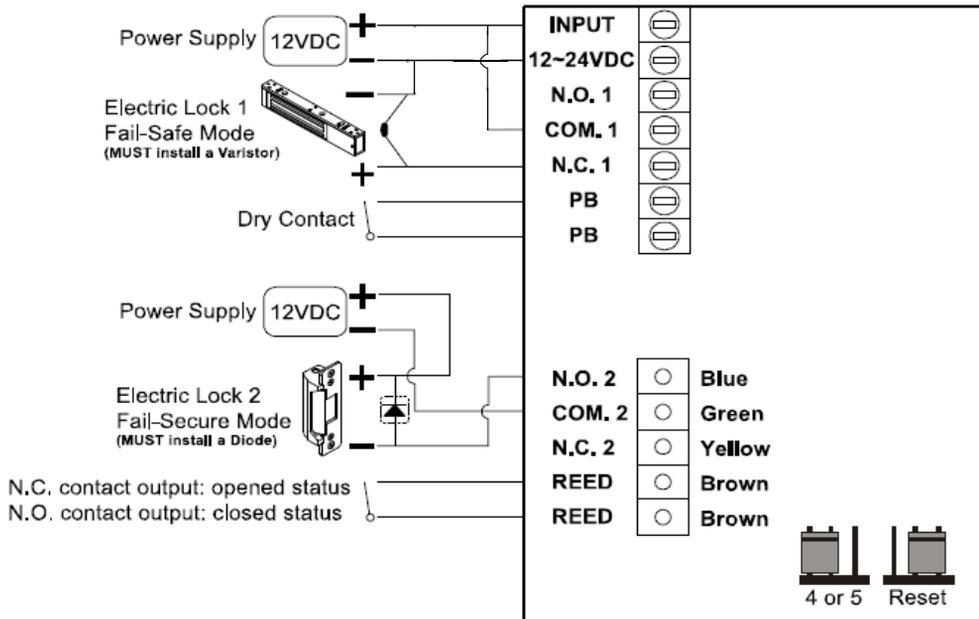
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Note

Additional input for anti-tailgating function to ensure high security access control. The function is unavailable for Toggle Mode (00).

Warranty

The product is warranted against defects in material and workmanship while used in normal service for a period of 1 year from the date of sale to the original customer. The GEM policy is one of continual development and improvement; therefore GEM reserves the right to change specifications without notice.