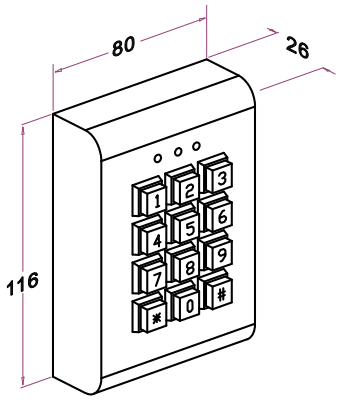
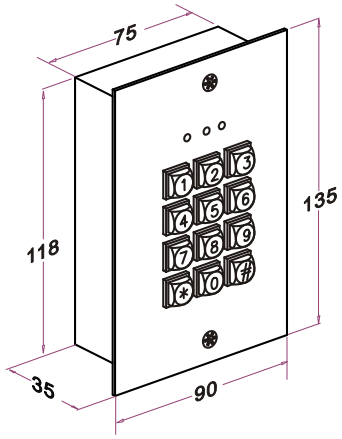
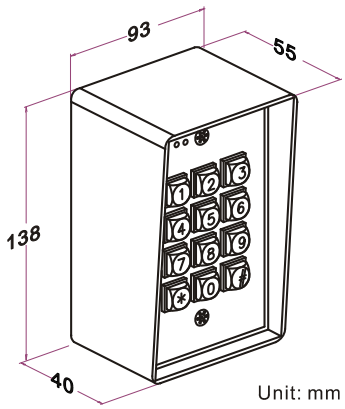
DG-25/26/27/101 Series Digital Keypad
Operation Manual



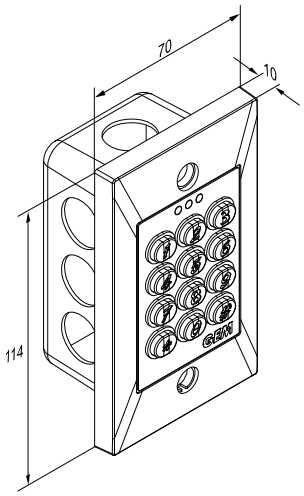
DG-25 series



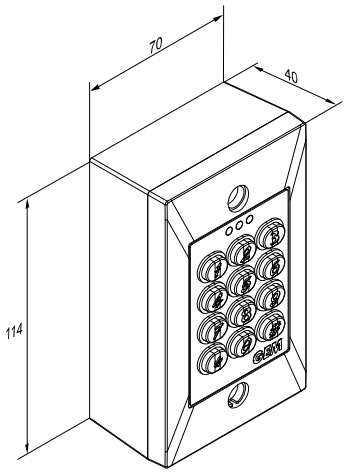
DG-26 series



DG-27 series



It can be mounted directly in ANSI electrical box (mortise mount)



DG-101

With SMB-500 (optional) for surface mount.

I. Features

1. Memory volume up to 49+50 PINs, 5-digit codes
2. Dual relays to control door lock and other security devices
3. Additional input for anti-tailgating function to ensure high security access control
4. 3 LED indicator & buzzer for status indication
5. Fully programmable via 4X3 matrix keypad
6. Non-volatile memory allows remaining all setting codes in the event of total power failure
7. Lockout function
8. DG-25/26/27series are stainless steel casing with vandal resistant screws for enhanced safety and durability.
9. DG-101 are ABS casing and can be mounted directly in ANSI electrical box (mortise mount) or with SMB-500 for surface mount.

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II. Specifications

Operating Voltage	12~24VDC	
Current Draw	DG-101/25/25WP/26/26WP/27/27WP	
	Holding:10mA, Pull in: 40mA /12VDC	
	Holding:10mA, Pull in: 40mA /24VDC	
	DG-25LD/26LD/27LD	
	Holding:40mA, Pull in: 70mA /12VDC	
	Holding:60mA, Pull in: 90mA /24VDC	
Keypad	12 buttons (0~9, ＊, ＃)	
LED Status Indication	3 LED indicator display (Red/Yellow/Green)	
Input	1 contact for Request-To-Exit button (N.O.) 1 contact for door reed switch	
Output	2 relays（Dry contacts: N.O./N.C./Com.）	
Relay Strike Time	Sign: Relay 1（＊100）, Relay 2（＊200） 01~99 seconds or Toggle Mode (00)	
Relay Electric Current	0.4A/120VAC or 2A/30VDC	
Memory Volume	49+50 PINs（＊001~＊099） Relay 1 is controlled by user＊001~＊049（＊100） Relay 2 is controlled by user＊050~＊099（＊200）	
EPROM	Non-volatile memory allows remaining all setting codes in the event of total power failure.	
Casing material	DG-25/26/27 Series: brushed stainless steel	DG-101: ABS V0
Ambient Humidity	0%~95% (Non-condensing)	
Operating Temperature	-20°C~+70°C	

III. Status Indication

LED	Green On	Power on, Standby
	Red On	First relay active
	Yellow On	Second relay active
Beep	1 Beep	Valid key press
	2 Beeps	Enter, exit setting mode
	3 Beeps	Incorrect operation
	5 Beeps	Master Code back to 12345

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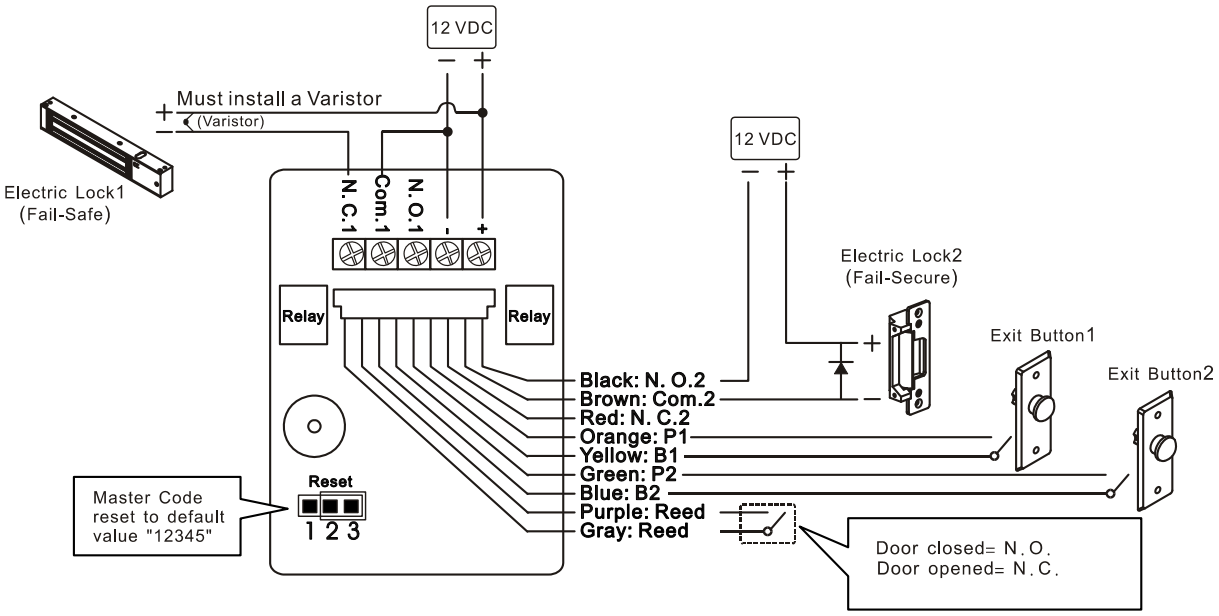
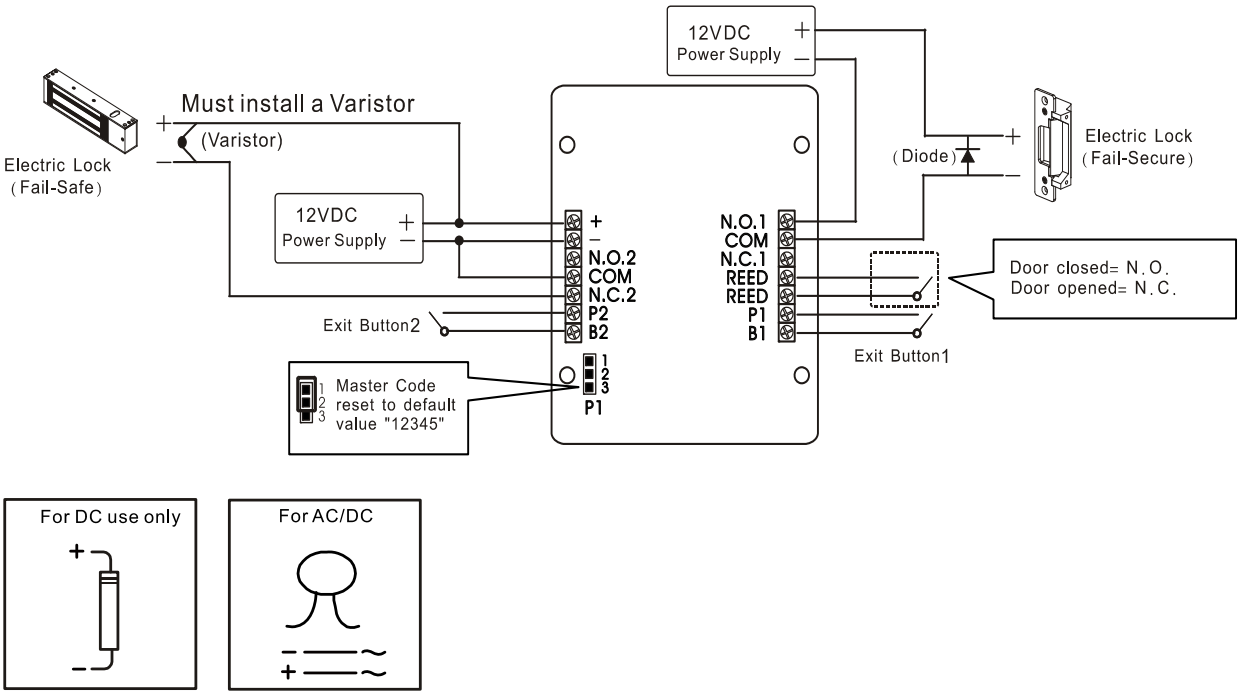
IV. **Wiring Diagram**

● DG-101



● DG-25/26/27 Series



Note:

- 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.
- Additional input for anti-tailgating function to ensure high security access control. If the relay strike time set to 10 seconds and the door is closed in 3 seconds, the 7 seconds will be cut off automatically.

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V. Operation Instruction

- Enter Setting Mode
  Enter the master code twice (Default value: “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 lockout for 60 seconds upon 32 consecutive master codes or invalid PINs attempt.

- Exit Setting Mode
  Press # to exit setting mode

- Add new PINs (In setting mode)
  1. Enter the master code twice (2 beeps)
  2. Press＊001(slot position ＊001~＊099)
  3. Enter 5-digit PINs (1 beep)
  4. Repeat, or press “#” to exit setting mode

  Relay 1 is controlled by the slot position ＊001~＊049
  Relay 2 is controlled by the slot position ＊050~＊099
  Note: “00000”, “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＊100 (or ＊200)
  3. Press 05 (01~99) (1 beep)
  Press 05 will set the relay strike to 5 seconds, relay set to toggle mode
  4. Press “#” to exit setting mode
  In Toggle mode, the relay will switch between N.C. contact and N.O. contact upon enter PIN once.

- Delete PINs (In setting mode)
  1. Press ＊006 (e.g. code to delete)
  2. Enter the master code twice (2 beeps)
  3. Press ＊006
  4. Press 00000
  5. Press “#” to exit setting mode

- Change Master Code (In setting mode)
  1. Enter the master code twice (2 beeps)
  2. Press ＊000
  3. Enter new 5-digit master code (1 beep)
  4. Press “#” to exit setting mode

- Master Code reset to default value “12345”
  1. Insert the jumper into 1-2 (5 beeps)
  2. Master Code reset to default value

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. GEM policy is one of continual development and improvement; therefore GEM reserves the right to change specifications without notice.

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