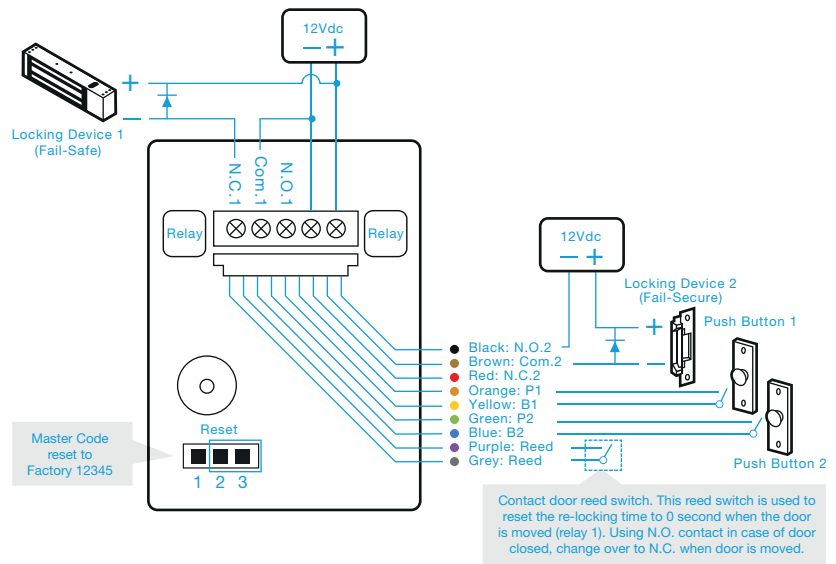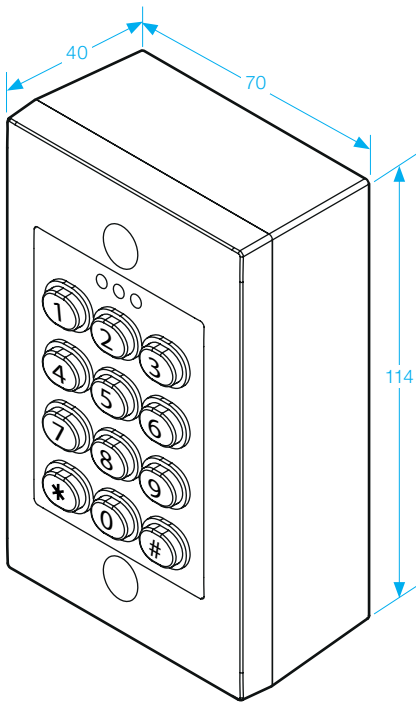# DG-101WI   WHITE
DG-101BA   BLACK
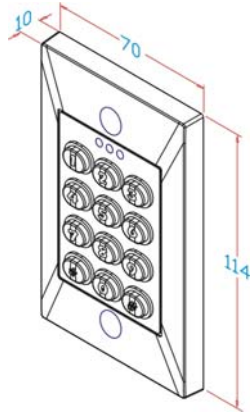
GEM®

Standalone Keypad Access

- Operating voltage 12~24Vdc
- ABS plastic
- Allows up to 49+50 PIN codes
- Dual relays output for multi control
- Fully programmable via keypad and master code
- 5 digit codes only
- 3 LED displays with audible indication

40
70
114

12Vdc

Locking Device 1 (Fail-Safe)

N.C.1
Com.1
N.O.1

Relay   Relay

12Vdc

Locking Device 2 (Fail-Secure)

Push Button 1

Black: N.O.2
Brown: Com.2
Red: N.C.2
Orange: P1
Yellow: B1
Green: P2
Blue: B2
Purple: Reed
Grey: Reed

Push Button 2

Master Code reset to Factory 12345

Reset
1   2   3

Contact door reed switch. This reed switch is used to reset the re-locking time to 0 second when the door is moved (relay 1). Using N.O. contact in case of door closed, change over to N.C. when door is moved.

SPECIFICATION

- Current draw: Pull in: 60mA/12Vdc; Holding: 15mA/12Vdc.
- Output: Dual relays, N.O./N.C/Com.
- Relays rating: 2A@30Vdc., 0.4A@120Vac.

- Memory volume: 49+50 PIN codes.
  Relay 1 is controlled by 001~049 user slots.
  Relay 2 is controlled by 050~099 user slots.

The DG-101 Digital Keyless Entry system
Operation User's Manual

This series of request to exit can be mounted directly in ANSI electrical box (Flush mount)
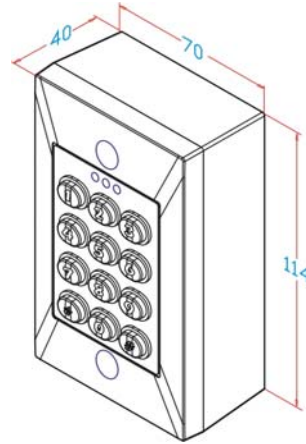
Surface mounting Installation: SMB-750 housing is optional for surface mount.

1. Product Characteristic:
◆ Allows up to 49+50 PIN codes
◆ Dual relays programmable On/Off or pulsed or latched mode
◆ Fully Programmable via keypad and master code
◆ Door Reed Switch Input for Anti-Trailing
◆ 3 LED display with audible indication
◆ Non-Volatile Memory
◆ Invalid PIN Lock-out
◆ ABS housing
◆ With vandal resistant screws
◆ ABS or optional luminous keypads

2. Specifications:
◆ Operating Voltage: 12~24 Vdc
◆ Current Draw: Average 15mA, Peak 60mA @ 12Vdc
◆ Input: request-to-exit、Door Reed
◆ Output: Dual relays, N.O./N.C./Com. Output (free voltage contact)
◆ Relays Electric Current: 2A MAX @30Vdc ；0.4A @ 120Vac
◆ Relay Activation Time: （＊100、＊200）
  ■ Strike Time: 1~99 seconds（adjustable）
  ■ Strike mode: Access Timer or Latch
◆ Memory Volume: 49+50 PIN codes
  ■ Relay 1 is controlled by 001~049 user slots
  ■ Relay 2 is controlled by 050~099 user slots
◆ PIN codes: 5 digit codes only
◆ Operating Temperature: -20~+70℃
◆ Ambient Humidity: 5~95% relative humidity non-condensing
◆ Factory Master Code: 12345
◆ Invalid PIN Lock-out: The system will shut down for 60 seconds while 32 codes of incorrectly Master Codes enrolled or PIN codes attempted.
◆ EPROM: Non-volatile memory, System will retain all programs and codes after a total loss of power.

3. The indicator signal chart:

Sound and LED indicator:

LED signal	Green LED	Power on, stand-by
	Red LED	Relay 1 activated
	Yellow LED	Relay 2 activated
Sound signal	1 Beep	Effective PIN codes
	2 Beeps	Entering 、Exiting from the Program mode
	3 Beeps	Data computing error 、 other operation mistakes
	5 Beeps	Master Code reset to Factory （12345）

4. Operation Instruction:

◆ **Enter Program Mode:**
1. Compose twice the master code (Factory master is 「12345」)
   → 2 beeps → you are now in the "programming mode".
2. After 60 seconds if you have not entered any codes or data, the system will automatically exit from the programming mode. After 32 wrong codes attempts at the master code the lockout facility will operate.

◆ **Exiting from the program mode:**
1. Press 「#」 to exit from the programming mode.
2. After 60 seconds if you have not entered any codes or data, the system will automatically exit from the programming mode. After 32 wrong codes attempts at the master code the lockout facility will operate.

◆ **Add PIN codes**
Enter the Programming mode, Enter the slot position code 「＊001~＊099」 →?????
Input 5 digit PIN codes→ (beep) enrolled → （repeat）
Press 「#」 to exit from the programming mode, or program other operating.
Note 1: The codes 「00000」, 「12345」 or master code are not be used for PIN code.
Note 2: Relay 1 is controlled by 001~049 user slots, Relay 2 is controlled by 050~099 user slots

◆ **To Delete a User Code：**
Enter the Programming mode→ Press the slot position code of your choice to delete (example "06") →Press 「＊006」 → 「00000」 → （beep）→delete→Press 「#」 to exit from the programming mode, or programming other operating.

◆ **To Program Relocking Timer**
Enter the Programming mode,
A. Relay 1：Press 「＊100」 Followed by the number of seconds the relay should open→ 「05」 =5 seconds （01 ~99 = seconds）→ （beep）→enrolled → Press 「#」 to exit from the programming mode, or program other operating.
B. Enter 「00」 Sets the relay to latching mode. (Correct code entered opens the relay, and the relay stays open until the correct code is entered again).
C. Relay 2：Press 「＊200」 Followed by the number of seconds the relay should open） → 「05 =5 seconds (01 ~99 = seconds). → （beep）→enrolled → Press 「#」 to exit from the programming mode, or program other operating.
D. Enter 「00」 Sets the relay to latching mode. (Correct code entered opens the relay, and the relay stays open until the correct code is entered again).

◆ Changing the Master codes:
Enter the Programming mode, Enter 「＊000」 Followed by the new 5 digit master code→（beep）→enrolled→Enter 「#」 to exit from the programming mode, or program other operating.

◆ Master Code reset to Factory 「12345」
Insert the jumper P1→ 2-3 position→5 audible beeps→Reset successful→ Return Insert the jumper to 2-3 position.

5. Wiring diagram:
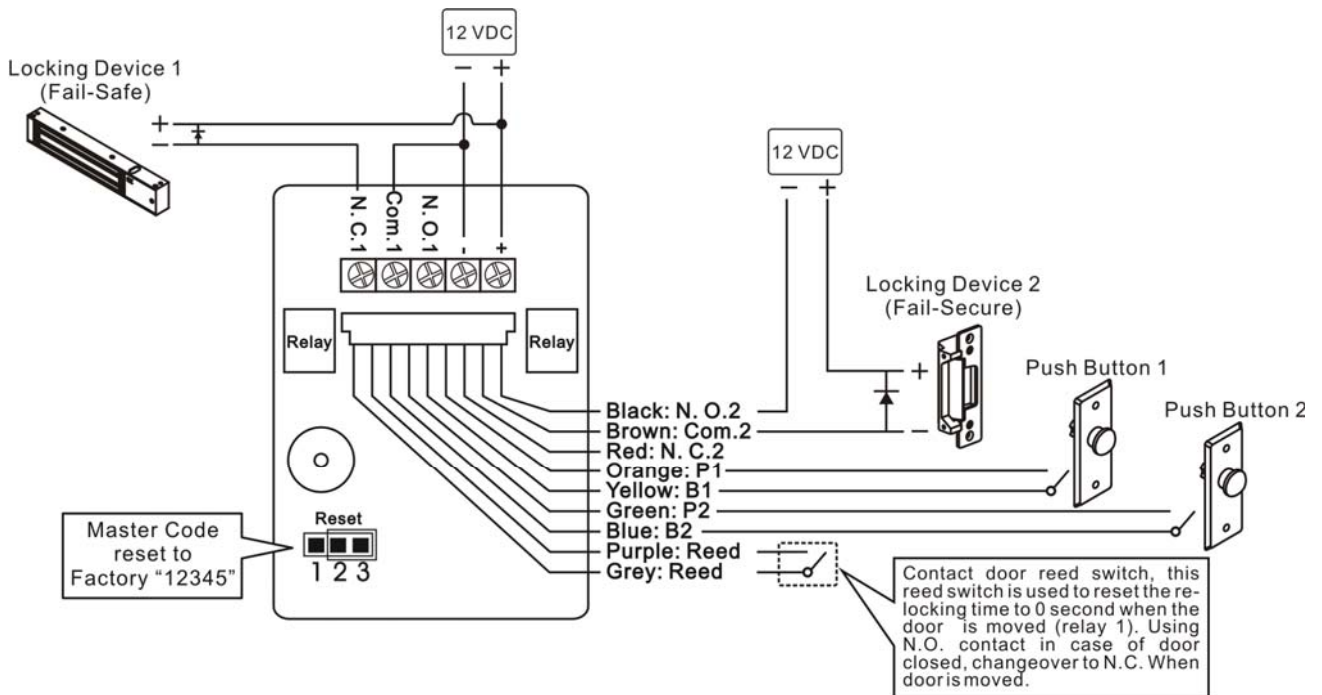
Note:
◆ The suggested wire gauge is #22~26 AWG.
◆ The varistor or diode must be connected across the lock terminal (electromagnet...) operated by the device. The vartistor controls the overload produced by the strike coil (EMP).
◆ Egresses switch should be N.O. type.