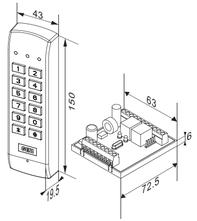
DG-150

Split Digital Keypad Entry System Operation Manual

- Up to 200+10 PINs
- Anti-tailgating function
- Aluminum alloy casing design
- Non-volatile memory
- Built-in tamper switch
- Epoxy sealed for waterproof
- Lockout function
- 29-digit PIN protected design
- Narrow deftly dimension
- Dual relays for multi-control
- Split off controller & keypad



Features

1. Allows up to 200+10 PINs
2. Split off controller and keypad for high security.
3. 29-digit-fuzzy code password protected design.
4. Narrow deftly dimension for narrow or wide jamb.
5. 3 LED indicators & buzzer for status indication. Keypad with beep sound.
6. Lockout function enables the controller to lockout for 60 seconds upon entering 5 times invalid PINs. (The keypad without beep sound during the period time).
7. Aluminum alloy casing designed with vandal resistant screws for enhanced safety and durability.
8. Epoxy sealed for waterproof function against extremely heavy weather & harsh environment.
9. Dual relays to control door lock and other security devices.
10. Non-volatile memory stores all code settings for a long time, even in the event of total power failure.
11. Additional input for anti-tailgating function to ensure high security access control.
12. Built-in tamper switch.

Specifications

Operating Voltage	12~24VDC/AC
Current Draw	＊Holding: 70mA, Pull in: 130mA@12VAC/DC ＊Holding: 50mA, Pull in: 100mA@24VAC/DC
Keypad	6x2 matrix backlit 12 -digit (0~9, ＊, ＃)
Input	1 contact for Request-To-Exit 1 contact for Door Reed Switch
Output	2 relays (N.O. / N.C. / Com. Dry contacts)
Relay Electric Current	Max. 12A@14VDC, 7A@120VAC
Memory Volume	200+10 PINs
Relay Strike Time	01~99 seconds or Toggle mode(00)
LED status Indication	3 LED indicators display (Green / Yellow / Red)
Ambient Humidity	5%~95% (Non-condensing)
Operating Temperature	-20°C~+70°C

Status Indication & Default Setting Parameters

	Mode	Status
LED	Green	First relay active
	Red	Second relay active
	Yellow	Normal (Power On)
Beep	1 short beep	Key in
	1 long beep	Valid PINs
	2 beeps	Enter / exit programming mode
	3 beeps	Incorrect input
	5 beeps	Reset master code to default value (12345), clear a PINs

Factory Default Setting

Master Code	12345 (5 digits)
Relay Strike Time (Time Delay Setting)	5 seconds
Pressed Key Time Delay	5 seconds (Fixed)
Programming Mode Time Delay	50 seconds (Fixed)

Operation Instruction

The master code comprises of a five-digit number and is used to access programming functions of the digital keypad and cannot be used for access i.e. It cannot be the same as other PINs. The default master code is set to 12345. Under normal operation the keypad is used for entering PIN to gain access. In the programming mode, the keypad can be used to add/delete PINs, set relay strike time and other operation functions.

1. Enter programming mode:

Enter the master code twice 12345 12345 to enter programming mode (1 beep, rapid yellow LED flash).

2. Setting the Relay Strike Time:

The relay strike time determines the amount of time that the door remains unlocked after a valid PIN is entered.

NOTE: Enter 00 will set the relay strike time to 0 second (relay set to toggle mode)

1. Enter programming mode
2. For Relay 1: Press ＊300 (rapid green LED flash)
   →Enter 00~99 (1 beep, green LED stay on)
   For Relay 2: Press ＊400 (rapid red LED flash)
   →Enter 00~99 (1 beep, red LED stay on)
3. Press # (1 beep) back to programming mode
4. Press # again (1 beep) back to standby mdoe (slow yellow LED flash)

3. Clear Relays' PIN Memory:

1. Enter programming mode
2. For Relay 1: Press ＊888 (green LED stay on)
   →Press 00 (rapid green LED flash, 3 beeps)
   For Relay 2: Press ＊999 (red LED stay on)
   →Press 00 (rapid red LED flash, 3 beeps)
3. Press # (1 beep) back to programming mode
4. Press # again (1 beep) back to standby mode (slow yellow LED flash)

4. Adding PINs to Relay 1:

a.
1. Enter programming mode to select slot position ＊001~＊200 (rapid green LED flash to indicate the slot position is available)
2. Enter new PIN (1 beep, green LED stay on)
3. Press # (1 beep) back to programming mode
4. Press # again (1 beep) back to standby mode (slow yellow LED flash)

b.
1. Enter programming mode to select slot position ＊001~＊200 (green LED stay on to indicate the slot position is unavailable)

2. Press 00000 (1 beep) indicating the data of the slot position is deleted (rapid green LED flash)
3. Repeat the steps of 4-a to add new PINs

5. Adding PINs to Relay 2:

a.
1. Enter programming mode to select slot position ＊201~＊210 (rapid red LED flash to indicate the slot position is available)
2. Enter new PIN (1 beep, red LED stay on)
3. Press # (1 beep) back to programming mode
4. Press # (1 beep) back to standby mode (slow yellow LED flash)

b.
1. Enter programming mode to select slot position ＊201~＊210 (red LED stay on to indicate the slot position is unavailable)
2. Press 00000 (1 beep) indicating the data of the slot position is deleted (rapid red LED flash)
3. Repeat the steps of 5-a to add new PINs

6. Change Master Code:

1. Enter programming mode
2. Press ＊000 + XXXXX (5-digit master code), 1 beep, yellow LED stay on
3. Press # (1 beep) back to programming mode
4. Press # again (1 beep) back to standby mode (slow yellow LED flash)

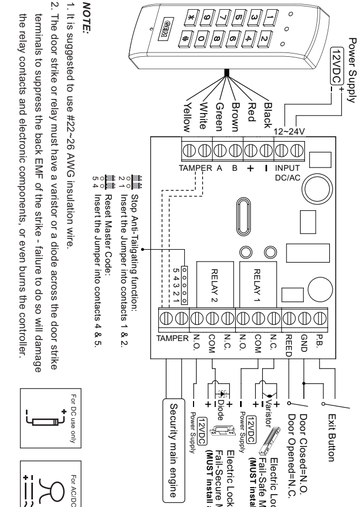
7. Change PIN length:

1. Enter programming mode
2. Press ＊555 + PIN (5~8-digit)

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.

Wiring Diagram:



NOTE:

1. It is suggested to use #22~26 AWG insulation wire.
2. 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.

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