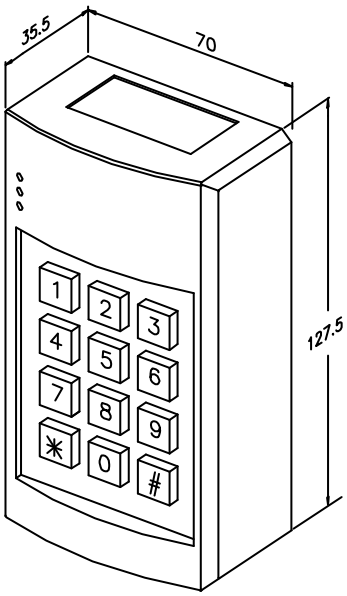
GEM® GIANNI INDUSTRIES, INC.

DG-30 Digital Keypad / Proximity Entry system
Operation User's Manual

1. Product Characteristic:



Unit:mm

- Allows up to 150 Proximity cards / tokens or PIN codes
- Tamper Switch Included
- Door Reed Switch Input for Anti-Trailing
- Fully Programmable via keypad and master code
- Extendable from keypad only to proximity controller
- Supports 26 or 34-bit Wiegand auxiliary reader
- Logical memory to prevent duplication
- Non-Volatile Memory
- Invalid PIN Lock-out

2. Specifications:

- Operating Voltage: 12 Vdc
- Current Draw: 60mA Max @12VDC
- Input: request-to-exit, time out reed switch contact, auxiliary reader
- Relays Electric Current: 2A MAX @30Vdc ；0.4A @ 120Vac
- Memory Volume: 150 PIN codes or 100 Proximity cards/tokens and 50 PIN codes
- Format: 26 or 34-bit Wiegand hexadecimal.
- Relay 1 is controlled by 001~100 user slots（Cards or PIN codes）
- Relay 2 is controlled by 101~150 user slots（PIN codes）
- PIN codes: 5 digit codes only
- Case Material: ABS （UL94V0）
- Operating Temperature: -20~+70℃
- Ambient Humidity: 5~95% relative humidity non-condensing
- Visual Signals:
  - Red: Power on
  - Green: Relay activated
  - Tri-color LED:
    - Yellow: Program Mode
    - Red: The slot is registered、Lock-out
    - Green: This slot may register the card or PIN codes.
- 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.
- Output: Dual relay, N.O./N.C./Com. Output (free voltage contact) 、Tamper switch
- Relay Activation Time: （＊10、＊20）
  - Strike Time: 1~99 seconds（adjustable）
  - Strike mode: Access Timer or Latch
- Color: Dark gray/ Beige White

3. The indicator signal chart:

Sound and LED indicator:

LED signal	Red LED	Power on
	Green LED	Relay activated
	Tri-color-Yellow	Entering the Program mode
	Tri-color-Red	Slot position is registered
	Tri-color-Green	Slot position is ready to register
Sound signal	1 Beep	Slot position is ready to register、Effective card（PIN codes）、Exit from the Program mode
	2 Beeps	Entering the Program mode
	3 Beeps	Slot position is registered 、Data computing error 、 other operation mistakes、 duplicate card
	5 Beeps	Master Code reset to Factory （12345）

Factory Parameter list：

Format	26 bits
Card register	None
Master Codes	12345 (5 digits)
Strike Time	1 seconds
Pressed key delay time (Time Out)	5 seconds
Program mode delay time	60 seconds
Invalid PIN Lock-out time	60 seconds

4. Operation Instruction:

◆ Enter Program Mode:

1. Compose twice the master code (Factory master is 「12345」)
   → 2 beeps and the Yellow LED will light up
   → you are now in the "programming mode".
2. Note: After 60 seconds if you have not entered any codes or data, the system will automatically exit from the programming mode. After 6 wrong attempts at the master code the lockout facility will operate.

◆ Exiting from the program mode:

1. Press「#」 to exit from the programming mode.
2. Note: After 60 seconds if you have not entered any codes or data, the system will automatically exit from the programming mode. After 6 wrong attempts at the master code the lockout facility will operate.

◆ Selecting The User Format

Enter the Programming mode, Press「 * 30」

◆ Followed By「01」：This will set the system to be used as :Wiegand 26-bit；Slots 001~100 for cards/tokens and slots 01~150 for PIN codes

OR

◆ Followed By 「02」：This will set the system to be used as : Wiegand 34-bit, Slots 001~100 for cards/tokens and slots 01~150 for PIN codes

OR

- Followed By 「03」：This will set the system to be used as : Slots 001~150 for PIN codes only

Note: When system format has the change, there's a possibility the card stored would be invalid. Please reset the system and input all cards /tokens.

◆ Add card and deletion

Enter the Programming mode, Enter the slot position code 「001~100」

A. Green light comes on: This slot position is ready to register the card
   1. Present card in front of the reader→Yellow LED blinks (beep) → enrolled completed → (repeat)
   2. Present card in front of the reader→ (3 audible beeps) another card has already been input (duplicate card).

B. Red light comes on: This slot already has a code registered
   1. Press 「＊＊」(deletion) → Green light → Enter the slot position code again →Present the card in front of the reader →〔same as Step "A"〕
   2. Enter another slot card position

◆ Add PIN codes and deletion

Enter the Programming mode, Enter the slot position code 「101~150」

A. Green light comes on: This slot position code may register the PIN codes
   Input 5 digit PIN codes →Yellow LED blinks (beep) → enrolled → (repeat)

B. Red light comes on: This slot position code is registered
   1. Press 「＊＊」(deletion) → Green light → Press the slot position code again → Input 5 digit PIN codes →〔same as Step "A"〕
   2. Enter another slot card position

   Note 1: The codes"12345" or master code are not be used for PIN code.

   Note 2: PIN codes operate open door：「???????????＊＊＊＊＊＃」
   「???….」random codes,「＊＊＊＊＊」5 digit PIN codes,「＃」Enter

◆ To Program Relocking Timer

Enter the Programming mode,

A. Relay 1：Press 「＊10」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 「＊20」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 「＊00」Followed by the new 5 digit master code→（beep）→enrolled→Enter 「#」 to exit from the programming mode, or program other operating.

- Reset to Factory
  - Master Code reset to Factory 「12345」

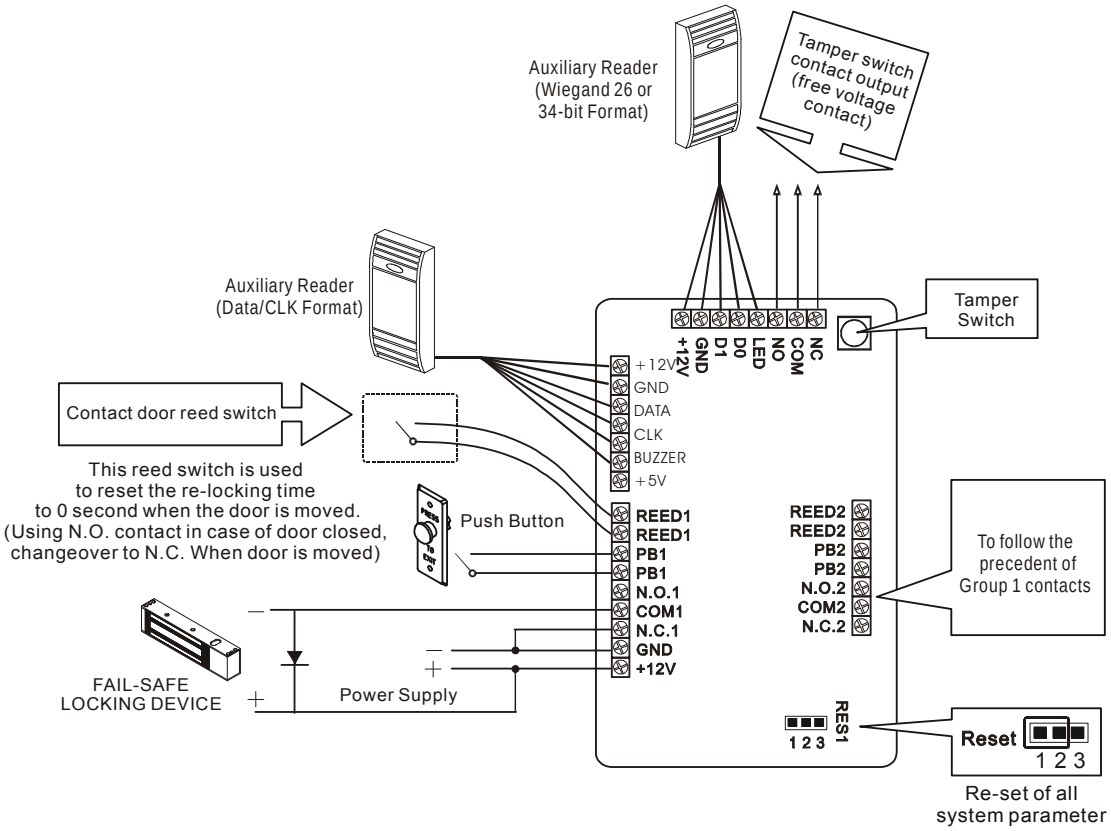
Insert the jumper RES1→ 1-2 position→5 audible beeps→Reset successful→ Return Insert the jumper to 2-3 position

  - Remove all stored information

Insert the jumper RES1→ 1-2 position→5 audible beeps→ Master Code reset to Factory 「12345」→ after 5 seconds→5 audible beeps→ Remove all stored information → Return Insert the jumper to 2-3 position.

Note: If you only wish to reset the Master Code to the Factory default, remove the jumper after exactly 5 audible beeps, otherwise all cards / codes will be deleted.

5. Wiring diagram:



Note:

- DG-30 controller and auxiliary reader distance must not exceed 20 meters; the data will not transmit beyond this. The suggested wire gauge is #22~26 AWG.
- Using a Linear supply power recommended, to prevent power reduction at the card reader.
- 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.