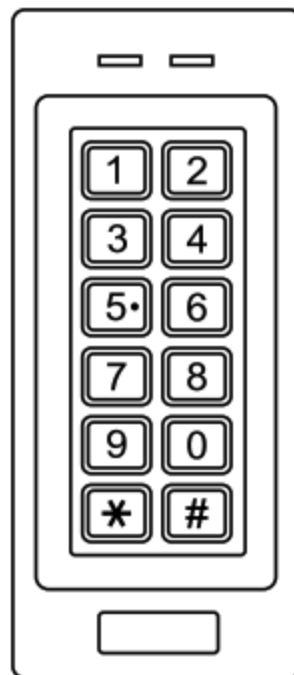


# DG1000 Keypad

(Outdoor)



User Manual

## INTRODUCTION

DG1000 is a single entry standalone Access Control with integrated keypad and card reader. It is an easy to install and operate device, designs in as less as 6 wires for mounting, with user-friendly programming. The compact design makes it a good choice for door access.

DG1000 is housed in a strong Zinc Alloy electroplated case. It supports up to 1000 users in multiple access configurations (Card Only, Card or PIN, or Card + PIN). The built in card reader supports EM 125KHz frequency cards.

### Two Versions Optional:

- 1) Indoor, nonwaterproof
- 2) Outdoor, Waterproof(IP66)

### Features

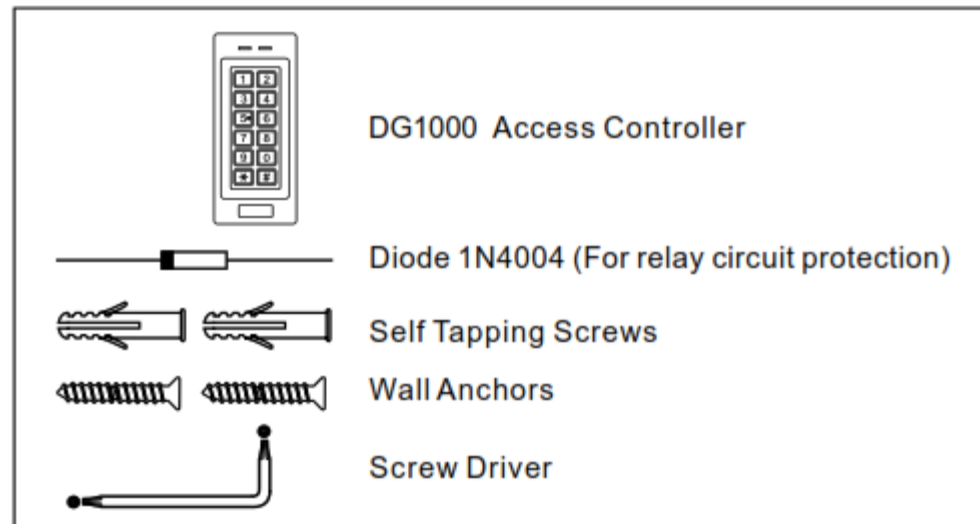
- > Waterproof, conforms to IP66
- > Vandal Resistant Enclosure
- > Backlit Keypad
- > Multi-color LED status display
- > One Programmable Relay Output
- > 1000 Users (Card/PIN/Card+PIN)
- > Low power consumption (50mA)
- > Anti-Tamper Alarm
- > Latch Mode to hold door or gate open
- > 12Vdc Power input

### Specifications

User Capacity	1000 Cards/PINs
<b>Operating Voltage</b>	<b>12Vdc</b>
Idle Current	50mA
Active Current	80mA
<b>Keypad</b>	<b>12 Key</b>
<b>Proximity Card Reader</b>	<b>EM</b>
Radio Technology	125 KHz Industry Standard Proximity Card
Read Range	3-6cm
Wiring Connections	Relay Output, Exit Button
<b>Relay</b>	<b>One (NO, NC, Common)</b>
Adjustable Relay Output Time	0-99 Seconds (5 seconds default)
Lock Output Load	3 Amp Maximum
<b>Environment</b>	<b>Meets IP66</b>
Operating Temperature	-40°C~60°C, -40°F~140°F
Operating Humidity	10%-90% Non-condensing

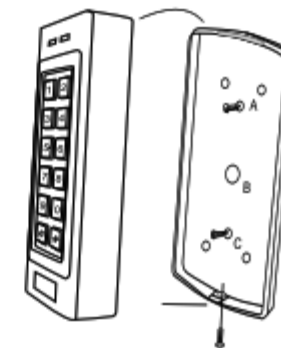
Physical	Zinc-Alloy Enclosure
Surface Finish	Powder Coat
Dimensions	L120 X W76 X H25 (mm) (K1) L130 X W56 X H23 (mm) (K4)
Unit Weight	500g(K1)/470g(K4)
Shipping Weight	550g(K1)/520(K4)

### Carton Inventory



## INSTALLATION

- > Remove the back cover from the unit
- > Drill 2 holes(A,C) on the wall for the screws and one hole for the cable
- > Knock the supplied rubber bungs to the screw holes(A,C)
- > Fix the back cover firmly on the wall with 4 flat head screws
- > Thread the cable through the cable hole(B)
- > Attach the unit to the back cover.

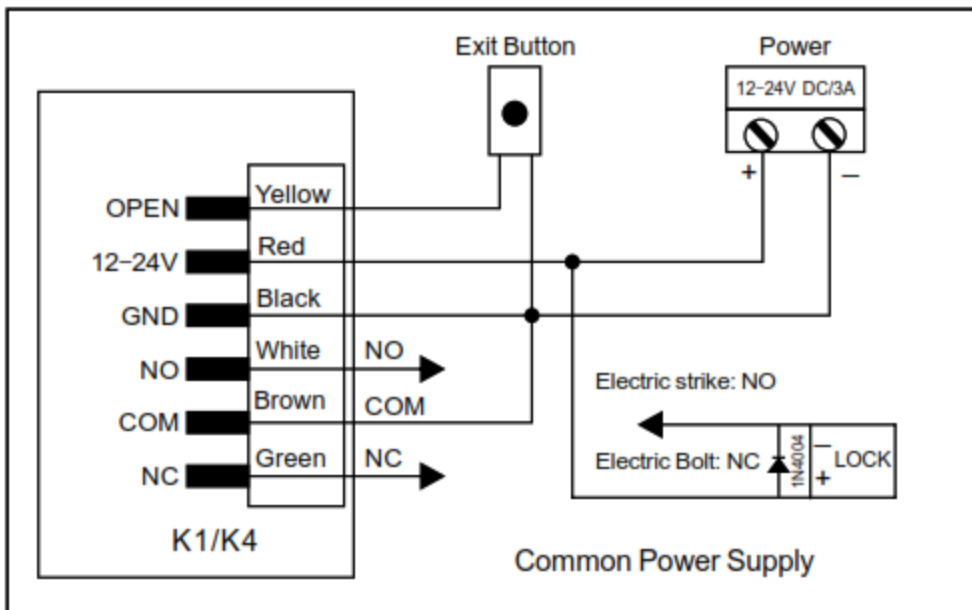


## Wiring

Wire Insulation Colour	Function	Notes
Yellow	OPEN	Request to Exit input(REX)
Red	Power +	12~24 VDC Regulated Power Input
Black	GND	Ground
White	NO	Normally Open Relay Output
Brown	COM	Common Connection for Relay Output
Green	NC	Normally closed Relay Output

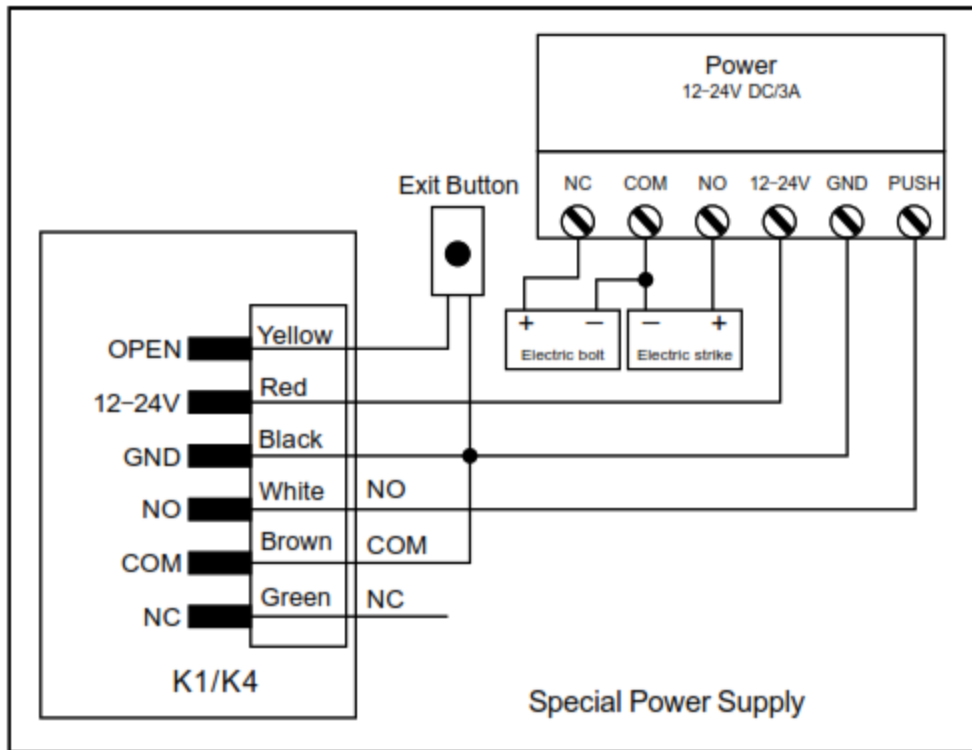
## Connection Diagram

Common power supply:



**Attention:** Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)

## Access Control Power Supply:



## PROGRAMMING

Programming will vary depending on access configuration. Follow the instructions according to your access configuration.

### Programming 1 ----- Configure the DG1000

Change the configure settings according to your application (optional). Multiple configuration settings can be changed at one time: enter program mode, change desired settings, then exit program mode.

#### Set Master Code

The 4-6 digit Master Code is used to prevent unauthorized access to the system. To interface with the K1/K4 the manager will need a Master Code (factory default code: 6666). We highly recommend immediate update and record of your Master Code.

Simplified Instruction	
Function Description	Operation
Enter the Programming Mode	<b>* (Master Code) #</b> (6666 is the default factory master code)
Change the Master Code	<b>0 (New Master Code) # (Repeat New Master Code) #</b> (code: 4-6 digits)
Add Card User	<b>1 (Read Card) #</b>
Add PIN User	<b>1 (User ID) # (PIN) #</b> The ID number is any number between 0 ~ 999. The PIN is any 4-6 digits between 0000 ~ 999999
Delete User	<b>2 (Read Card) #</b> <b>2 (User ID) #</b>
Exit from the programming mode	<b>*</b>
<b>How to be granted access.</b>	
Card User	<b>Read card</b>
PIN User	<b>Enter (PIN) #</b>

Programming Step	Keystroke Combination
1. Enter Program Mode	<b>* (Master Code) #</b>
2. Update Master Code	<b>0 (New Master Code) # (Repeat New Master Code) #</b>
3. Exit Program Mode	<b>*</b>

### Set Access Configuration

There are 3 types of access configurations for the DG1000

> **Card or PIN (Default):** The User must present a valid Card to the DG1000 or enter their PIN code followed by the # key, in order to be granted access.

> **Card Only:** The User must present a valid Card to the DG1000 in order to be granted access.

> **Card + PIN:** The User must first present a valid Card to the DG1000 and then enter their PIN code followed by the # key, in order to be granted access.

Programming Step	Keystroke Combination
1. Enter Program Mode	<b>* (Master Code) #</b>
2. Card or PIN OR 2. Card + PIN	<b>3 0 #</b> <b>3 1 #</b>
OR 2. Card only	<b>3 2 #</b>
3. Exit Program Mode	<b>*</b>

### Set Relay Configuration

The relay configuration sets the behaviour of the output relay on activation.

Programming Step	Keystroke Combination
1. Enter Program Mode	<b>* (Master Code) #</b>
2. Pulse Mode  OR 2. Latch Mode	<b>4 (1-99) #</b> The relay time is 1-99 seconds. (1 is 50mS.) Default is 5 seconds.  <b>4 0 #</b> Sets the relay to ON/OFF Latch mode
3. Exit	<b>*</b>

## Set Strike-out Alarm

The strike-out alarm will engage after 5 failed card/PIN attempts. Default is OFF. The strike-out alarm can be set to deny access for 10 minutes after engaging or it can be set disengage only after entering a valid card/PIN or Master code.

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Strike-Out OFF OR 2. Strike-Out ON OR 2. Strike-Out ON  Set alarm time	6 0 # (factory default)  6 1 # Access will be denied for 10 minutes  6 2 # The buzzer alarms.  5 (0 ~ 30) #, Factory default is 1 minute.
3. Exit	*

## Programming 2 ----- Program Cards and PINS

Programming will vary depending on the access configuration. Follow the instructions according to your access configuration.

### GENERAL PROGRAMMING INFORMATION

- > **User ID Number:** Assign a user ID number to the access code in order to keep track of the users of access cards or PINS. The user ID number can be any number from 0~999. **IMPORTANT:** User IDs do not have to be proceeded with any leading zeros. Recording of User ID is critical. Modifications to user data require either the card or the User ID be available
- > **Proximity Card:** 125 KHz industry standard 26 bits EM Proximity Card.
- > **Keypad PIN:** The PIN can be any 4~6 digits between 0000~999999 (except 1234 which is reserved for factory testing).

## ACCESS CONFIGURATION: CARD OR PIN & CARD ONLY -----

### Add User Cards

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #

2. Add Card: Using Auto ID (Allows DG1000 to assign Card to next available User ID number) OR 2. Add Card: Select Specific ID (Allows manager to define a specific User ID to associate the card to)	<b>1 (Read Card) #</b> Cards can be added continuously.  <b>1 (User ID) # (Read Card) #</b> The user ID is any number from 0~999.
3. Exit Program Mode	*

### Delete User Cards

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Delete Card: By card OR 2. Delete Card: Select Specific ID	<b>2 (Read Card) #</b> Cards can be deleted continuously.  <b>2 (User ID) #</b> The user ID is any number from 0~999.
3. Exit	*

### Add or Delete a PIN

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Add a PIN Assigns PIN to user ID number OR 2. Delete a PIN Deletes the User ID number and associated PIN	<b>1 (User ID) # (PIN) #</b> PINS can be added continuously.  <b>2 (User ID) #</b> PINS can be deleted continuously.
3. Exit	*

## Change a PIN

This operation is executed from outside of Program Mode.

Programming Step	Keystroke Combination
1. Change a PIN	* (User ID #) (Old PIN #) (New PIN #) (New PIN #)

## ACCESS CONFIGURATION: CARD+PIN-----

### Add a Card+ PIN User

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Add a User Card by ID number	1 (User ID) # (Read Card) #
3. Exit Program Mode	*
4. Add PIN	* (Read Card) (1234#) (New PIN #) (New PIN #) This operation is executed from outside of Program Mode

## Change PIN

Allows card user to update the PIN for their card + PIN User ID. This operation is executed from outside of Program Mode.

Programming Step	Keystroke Combination
1. Change PIN using a Card OR 1. Change PIN using ID	* (Read Card) (Old PIN #) (New PIN #) (New PIN #)  * (User ID #) (Old PIN #) (New PIN #) (New PIN #)

## Delete Card by User ID

Deleting by ID number will clear cards and PINS

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Delete User Card by User ID	2 (User ID) #
3. Exit Program Mode	*

## OTHERS

### Reset to Factory Default:

This will reset the DG1000 to the factory default but all card/PIN information will still be retained.

1. Power the DG1000 off.
  2. Press and hold the \* button while power is restored to the DG1000
  3. There's two beeps, and release the button, then one beep.
- The DG1000 has been successfully reset.

### Erase all Users

This will delete ALL User data.

1. Enter Program Mode by press: \*(Master Code) #.
2. Press 20000 #
3. Exit: \*

All configuration data is retained.

### Reset Strike-Out Alarm

Enter Master Code or Valid Card/PIN to silence

### Sound and Light Indication

Operation Status	Red LED	Green LED	Sounds
Power on	Flashing		Short Single Beep
Stand by	Flashing		
Press Keypad	Flashing		Short Single Beep
Enter Master Code Entry Mode	ON		Short Single Beep
In program mode	ON	Single Flash	Short Single Beep
Entered Program Step Successfully	ON	Single Flash	Short Single Beep
Entered Program Step Incorrectly			Short Single Beep
Exit from the programming mode	Flashing		3 Short Beeps
Entry Granted		ON	Short Single Beep
Open lock	Green light bright		One beep
Alarm Mode Engaged	Flashing		Alarm
Alarm	Red light Shines quickly		Beeps
Pressing * Toggles Standby / Master Code Entry	ON/Flashing		Short Single Beep