

# DGS

## Touch Keypad & 13.56MHz Card Reader Access System



# KONTAL

# CE



Be sure to read the user manual before you start using your device. Pay attention to the installation, electrical connection and initial start-up sections and carry out the specified items step by step. After this stage, the product owner/user must keep this user manual in a known and visible place throughout the life of the product.

- Keep the product in a dry environment. Otherwise, the product may malfunction.
- In battery-powered products, the battery is not covered by the warranty. Likewise, in products that have exceeded their shelf life, failures caused by battery discharge or leakage are not covered by the warranty.
- All service and repair operations may only be carried out by the Kontal Elektronik technical service. No intervention on the product should be made by any other person.
- The operating voltage of each product is specified on its label. Do not supply the product from any source other than this voltage value.



- ✓ Using the product contrary to the items stated above may cause fire, serious personal injury, or damage to the product or the structure it is mounted on. Kontal Elektronik San. ve Tic. Ltd. Şti. accepts no liability for such situations caused by the user.
- ✓ This symbol will be used for important points in the following sections.



- ✓ Do not touch the power supply terminals of the product with bare hands.
- This symbol will be used for voltage-related warnings in the following sections.



- This symbol on the label indicates that the supply voltage of the product is DC.



- This symbol on the label indicates that the product has reinforced insulation.



- This symbol on the product or its packaging indicates that this product must not be treated as household waste. Instead, it must be handed over to a collection point designated for the recycling of electronic equipment. Improper disposal of the product may harm the environment and human health.



- The responsibility for and legal ownership of this document and its revisions belong to KONTAL ELEKTRONİK SAN. VE TİC. LTD. ŞTİ. Unauthorized alteration or modification of this document is prohibited.



- Make sure that the system is grounded so that the product operates properly.

# 1. DESCRIPTION

DGS is a touch access system that grants access either by entering a password on its capacitive touch keys or by presenting a 13.56 MHz RFID card. The device provides a dry contact relay output to activate the trigger input of a door, turnstile or compatible system.

## 1.1 Box Contents

|                                                            |                                                |
|------------------------------------------------------------|------------------------------------------------|
| 1x DGS - Touch Keypad & 13.56MHz Card Reader Access System | 1x 4-Core Internal Cable<br>1x DGS User Manual |
|------------------------------------------------------------|------------------------------------------------|

## 2. TECHNICAL SPECIFICATIONS

|                        |                                              |                  |
|------------------------|----------------------------------------------|------------------|
| Model                  | DGS                                          |                  |
| Product Code           | K014-01                                      |                  |
| Operating Voltage      | 15/24V DC                                    |                  |
| Operating Current      | 45mA @ 24V DC                                |                  |
| Operating Frequency    | 13,56MHz                                     |                  |
| Operating Temperature  | -20 °C +55 °C                                |                  |
| Number of Channel      | 2                                            |                  |
| Contact Type           | Lock Relay                                   | Doorbell Relay   |
|                        | Dry Contact (NO / NC)                        | Dry Contact (NO) |
| Contact Capacity       | 30V DC 1A / 125V AC 0.3A                     |                  |
| Contact Response Time  | 0.4sn (min.) / 99sn (max.) <b>Adjustable</b> |                  |
| Card Capacity          | 2000                                         |                  |
| Password Capacity      | 1000                                         |                  |
| Weight                 | 157gr                                        |                  |
| Dimensions (W x H x D) | 77,7 x 137 x 25,5 mm                         |                  |

### Device Setup and Card / Password Registration

To register a new card, delete an existing card, or add/delete passwords on the DGS system, you must log in to the device's **Settings Menu** with the administrator password.

All card and password management operations are carried out only through this menu.

- **Default Administrator Password:** The factory default administrator password of the device is **1234**.
- **Security Warning:** For the security of your system, be sure to change the default administrator password after the device installation is completed.

To access the **Settings Menu**, follow the steps below in order:

| Step | Action / Key Combination                                                                                                                                                                                                                                                                                                                                                | Description                                                                                            |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| 1    |  Press the key 3 times.                                                                                                                                                                                                                                                              | The system indicator LEDs flash 3 times to indicate that menu login mode has been entered.             |
| 2    | Press the     keys in order | Enter the default administrator password (if you have changed your password, enter your new password). |
| 3    |  Press the key.                                                                                                                                                                                                                                                                      | Confirms the entered administrator password.                                                           |

## LED Indications and Warnings

When the Settings Menu is entered successfully;

- **Successful Login (Blue LED):** When the password is entered correctly, the LED indicator lights up BLUE and stays on steadily as long as you remain in the menu.

When the administrator password is entered incorrectly;

- **Failed Login (Red LED):** If the password is entered incorrectly, the LED indicator flashes RED and access is denied.

When no action is taken for 10 seconds;

- **Automatic Timeout:** If no key is pressed for **10 seconds** while in the menu, the device automatically exits the menu for security reasons and returns to normal operating mode.

## 3. DGS – ADDING A USER PASSWORD / CARD



To perform these steps, you must first log in to the Settings Menu successfully. Follow the required steps to log in to the Settings Menu.

### 3.1 Adding a User Password

| Step | Action / Key Combination                                                                        | Description                                                      |
|------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| 1    | ⑦ and 🔒 Press in order.                                                                         | Password adding mode is entered.                                 |
| 2    | For the password, enter the <b>user number (1-1000)</b> and press the 🔒 key.                    | Sets the memory location (ID) where the password will be stored. |
| 3    | Set your new password using the digits 0-9, with a minimum of 4 and a maximum of 12 characters. | The user password is set.                                        |
| 4    | 🔒 Press the key to save the password.                                                           | The password is saved and the operation is completed.            |

### Batch Registration Mode;

You do not need to exit the menu to add multiple user passwords one after another:

- **Step 4**, after entering the password and pressing the **[Lock]** key, you can return directly to **Step 3** and continue entering a new user number and password (up to 1000 users in total).

## LED Indications and Warnings

- **Successful Registration:** When the password is saved correctly, the audible indicator (buzzer) **beeps 4 times**.
- **Failed Operation:** When an **incorrect** or invalid entry is made, the **RED LED** flashes and the operation is rejected.

### 3.2 Adding a User Card

| Step | Action / Key Combination                                                | Description                                                  |
|------|-------------------------------------------------------------------------|--------------------------------------------------------------|
| 1    | and  Press in order.                                                    | Card adding mode is entered.                                 |
| 2    | For the card, enter the <b>user number (1-2000)</b> and press the  key. | Sets the memory location (ID) where the card will be stored. |
| 3    | Present the card to register to the area shown on the device.           | The user card is recognized.                                 |
| 4    | Press the key to exit card registration mode.                           | The card registration operation ends.                        |

#### Batch Registration Mode;

You do not need to exit the menu to register multiple user cards one after another:

- **After Step 3**, you can register multiple cards back to back by presenting different cards in turn (up to 2000 cards). On each successful registration the device beeps and the BLUE LED turns off; on a failed registration the RED LED flashes.

## 4. DGS – DELETING A USER PASSWORD / CARD



To perform these steps, you must first log in to the Settings Menu successfully. Follow the required steps to log in to the Settings Menu.

### 4.1 Deleting a User Password

#### 4.1.1 Deleting All User Passwords

| Step | Action / Key Combination    | Description                     |
|------|-----------------------------|---------------------------------|
| 1    | Press the    keys in order. | All user passwords are deleted. |

#### 4.1.2 Deleting a Single User Password

| Step | Action / Key Combination                                                          | Description                                                        |
|------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------|
| 1    | Press the    keys in order.                                                       | Enters user password deletion mode.                                |
| 2    | Enter the user number (ID) of the password you want to delete and press the  key. | The password belonging to the entered user number (ID) is deleted. |

#### Batch Password Deletion;

- **In Step 2**, you can continue deleting the next user number (entered number +1) by pressing the “Lock” key again. The buzzer beeps 3 times on each deletion.

### 4.2 Deleting a User Card

#### 4.2.1 Deleting All User Cards

| Step | Action / Key Combination    | Description                 |
|------|-----------------------------|-----------------------------|
| 1    | Press the    keys in order. | All user cards are deleted. |

### 4.2.2 Deleting a Card by User Number (ID)

| Step | Action / Key Combination                                                       | Description                                                    |
|------|--------------------------------------------------------------------------------|----------------------------------------------------------------|
| 1    | Press the ① ③ ④ keys in order.                                                 | Enters user card deletion mode.                                |
| 2    | Enter the user number (ID) of the card you want to delete and press the ④ key. | The card belonging to the entered user number (ID) is deleted. |

### 4.2.3 Deleting a Card by Presenting the Card

| Step | Action / Key Combination                                                                                                                           | Description                                              |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| 1    | Press the ① ④ ④ keys in order.                                                                                                                     | Enters card deletion by presenting mode.                 |
| 2    |  Present the card(s) you want to delete to the device one by one. | User cards are deleted by presenting them to the device. |

The buzzer beeps 3 times on each deletion. To exit the menu, press the “Bell” key or take no action for 10 seconds.

## 5. DGS – OPERATING MODES & SYSTEM SETTINGS



To perform these steps, you must first log in to the Settings Menu successfully. Follow the required steps to log in to the Settings Menu.

| Action                 | Keys | Description                                                                      |
|------------------------|------|----------------------------------------------------------------------------------|
| Mode: Card or Password | ① ④  | The user can gain access with a card or a password (factory setting).            |
| Mode: Password Only    | ② ④  | Access is possible only with a password.                                         |
| Mode: Card Only        | ③ ④  | Access is possible only with a card.                                             |
| Mode: Password + Card  | ④ ④  | First the password is entered and “Lock” is pressed, then the card is presented. |
| Mode: Direct Access    | ⑤ ④  | Pressing any key triggers the relay.                                             |

| Action                              | Keys  | Description                                                                    |
|-------------------------------------|-------|--------------------------------------------------------------------------------|
| Changing the Administrator Password | ⑥ ④   | Then enter the new administrator password (0-9, 4-12 digits) and press “Lock”. |
| Changing the Relay Activation Time  | ⑨ ④   | Then enter the new time (0-9, up to 99 seconds) and press “Lock”.              |
| Restoring Factory Settings          | ⑨ ⑨ ④ | Deletes all user passwords/cards and settings, returns to Mode 1.              |



If you forget the administrator password: disconnect the power, then reconnect it while holding down the “Reset” button on the back. After 4 long beeps, the administrator password returns to the factory default “1 2 3 4”.

## 6. DGS – LED & BUZZER STATUS TABLE

| LED & Buzzer Status                              | Diagnosis                                                            |
|--------------------------------------------------|----------------------------------------------------------------------|
| BLUE LED on, buzzer beeped once                  | Password/card read correctly, relay triggered.                       |
| RED LED on                                       | Password/card incorrect.                                             |
| RED LED flashes + buzzer beeps at 15 s intervals | 5 consecutive incorrect password entries; system temporarily locked. |

| LED & Buzzer Status               | Diagnosis                                                 |
|-----------------------------------|-----------------------------------------------------------|
| RED and BLUE LEDs on together     | Bell relay active.                                        |
| LEDs flashed 3 times              | Waiting for Settings Menu login (administrator password). |
| LED steadily BLUE                 | System is in the Settings Menu.                           |
| LED steadily BLUE, buzzer 4 beeps | Add/change operation successful.                          |
| LED flashing RED (in menu)        | Add/change operation failed.                              |
| Buzzer sounded 4 long beeps       | Administrator password reset to default via reset button. |

## 7. DGS – BASIC OPERATION

### 7.1 Operation with Password

The default user password is “0000”. If you have changed it, log in with the password you have set.

| Step | Function Keys                                                                                                                                                                                                                                                                                                                           | Description                                                      |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| 1    |     | Enter the user password.                                         |
| 2    |                                                                                                                                                                                                                                                        | Press the “Lock” key to trigger the lock relay; your door opens. |

Correct password: BLUE LED lights up, door-open relay is triggered. Incorrect password: RED LED lights up. After 5 consecutive incorrect entries, the system locks for 15 seconds.

### 7.2 Operation with Card

| Step | Function Keys                                                                      | Description                                                                        |
|------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| 1    |  | Hold a card registered in the system close to the card reading area on the device. |

Valid card: BLUE LED lights up, door-open relay is triggered. Unregistered card: RED LED lights up.

### 7.3 Bell Function

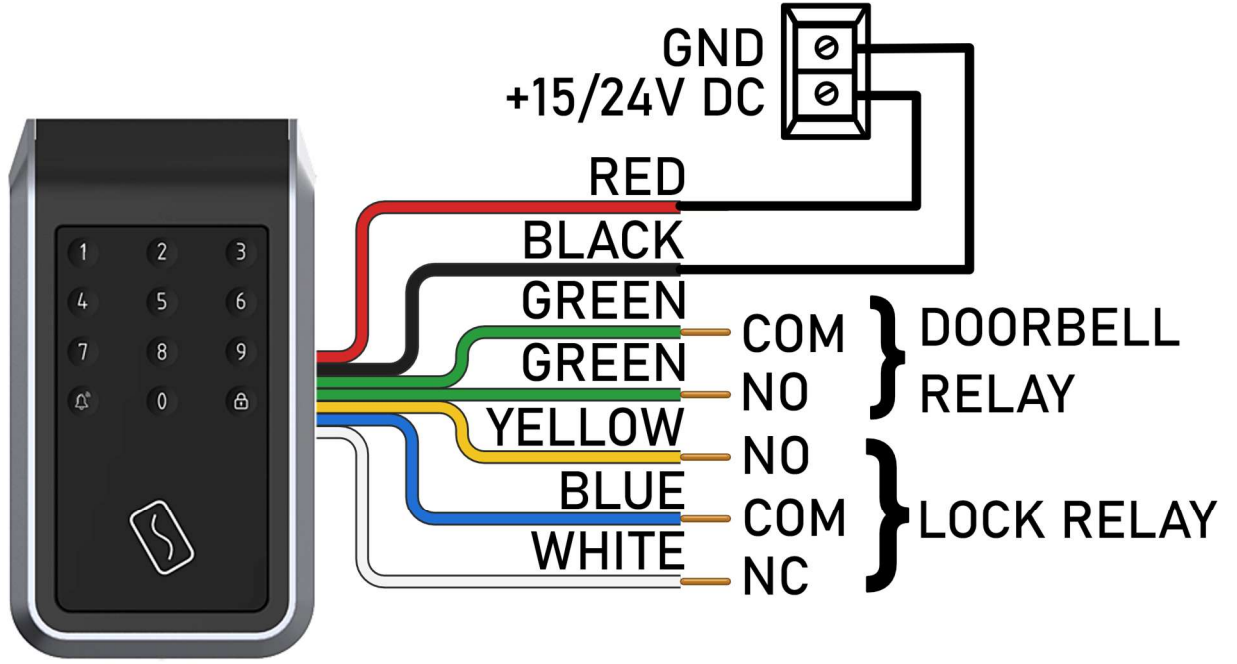
| Step | Function Keys                                                                       | Description                                                                                                         |
|------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| 1    |  | Press the “Bell” key to activate the bell relay. When the relay is active, the RED and BLUE LEDs light up together. |

## 8. DGS – QUICK REFERENCE CHART

### DGS – 13.56 MHZ MIFARE + TOUCH ACCESS SYSTEM

|                               |                          |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                       |
|-------------------------------|--------------------------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Registering Password and Card | Password Registration    | Single User    | 3x  Admin Password  7  User Number  New User Password                                                                                                                                                                                 |  |
|                               |                          | Batch          | 3x  Admin Password  7  User Number  New User Password New User Password ...                                                                                                                                                           |  |
|                               | Card Registration        | Single User    | 3x  Admin Password  8  User Number  New User Card                                                                                                                                                                                                                                                                          |  |
|                               |                          | Batch          | 3x  Admin Password  8  User Number  New User Card New User Card ...                                                                                                                                                                                                                                                        |  |
| Deleting Password and Card    | Password Deletion        | Single User    | 3x  Admin Password  12  User Number                                                                                                                                                                                                                                                                                        |  |
|                               |                          | Batch          | 3x  Admin Password  12  User Number  User Number  ...  ...  |  |
|                               |                          | All Users      | 3x  Admin Password  10                                                                                                                                                                                                                                                                                                                                                                                        |  |
|                               | Card Deletion            | Single User    | 3x  Admin Password  13  User Number                                                                                                                                                                                                                                                                                        |  |
|                               |                          | Batch          | 3x  Admin Password  13  User Number  User Number  ...  ...  |  |
|                               |                          | All Users      | 3x  Admin Password  11                                                                                                                                                                                                                                                                                                                                                                                        |  |
|                               |                          | Delete by Card | 3x  Admin Password  14  User Card... User Card ...                                                                                                                                                                                                                                                                                                                                                            |  |
| Setting the Operating Modes   | Password or Card         |                | 3x  Admin Password  1                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                       |
|                               | Password Only            |                | 3x  Admin Password  2                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                       |
|                               | Card Only                |                | 3x  Admin Password  3                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                       |
|                               | Password + Card          |                | 3x  Admin Password  4                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                       |
|                               | Direct Access            |                | 3x  Admin Password  5                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                       |
| Administrator                 | Administrator Password   |                | 3x  Admin Password  6  New Admin Password                                                                                                                                                                                                                                                                                 |                                                                                       |
| Relay                         | Relay Activation Time    |                | 3x  Admin Password  9  New Relay Activation Time                                                                                                                                                                                                                                                                         |                                                                                       |
| Factory Settings              | Restore Factory Settings |                | 3x  Admin Password  99                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                       |

## 9. DGS – WIRING DIAGRAM



Pay attention to the “+” and “-” polarities when making the product's power connections!

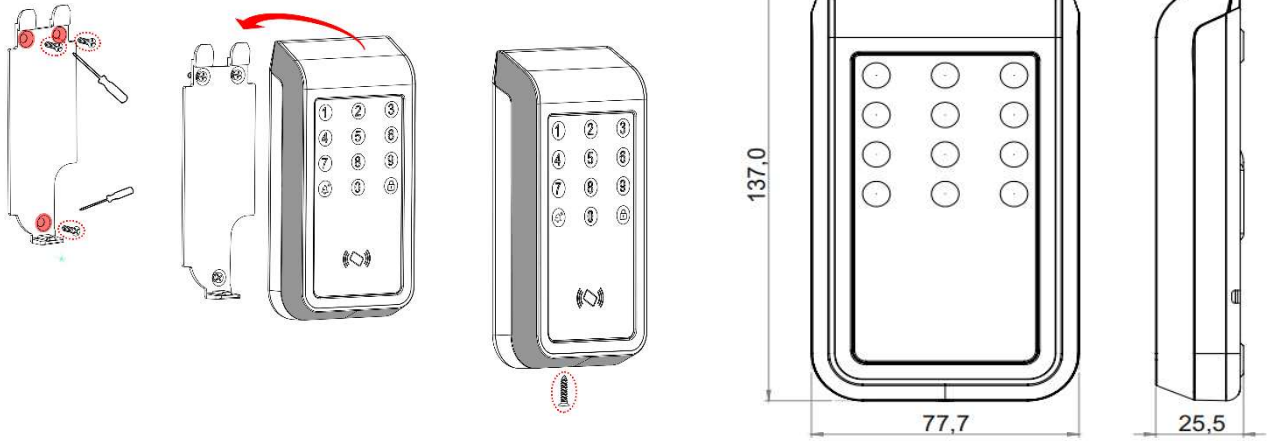


Do not supply the product with power outside the specified operating voltage. Otherwise, the device may be damaged!



For the device to operate correctly and stably, it is recommended to use a power supply with an output power of at least 1W on the supply line.

## DGS – MOUNTING



**KONTAL**  
CE

Kontal Elektronik San. Ve Tic. Ltd. Şti.  
Çorapçılar Sanayi Sitesi A Blok NO: 1-2 İkitelli OSB  
İSTANBUL / TÜRKİYE  
+90 212 485 61 11  
[info@kontal.com.tr](mailto:info@kontal.com.tr)  
[www.kontal.com](http://www.kontal.com)