

DCD300

Waterproof multifunction keypad with two relays for standalone access control

English translation of the Spanish user manual
Document AIC6569 - 01/2021 - Rev. 00

1 - Introduction

This sealed, multifunction access controller has two outputs, an integrated keypad and a card reader. It is designed for indoor and outdoor use, including harsh weather conditions. It supports 999 users with card, PIN or card + PIN access. The reader accepts 125 kHz EM cards and tags.

Both onboard relays can operate in pulse mode for access control or toggle mode for switching alarms, lights, machinery and similar equipment on and off.

1.1 - Features

- IP66 waterproof rating; vandal-resistant metal housing.
- Modern design with all-metal buttons.
- Two relays and capacity for 999 users.
- PIN length: 1-8 characters; 125 kHz EM cards/tags.
- Multicolour status LED; alarm output and built-in buzzer with adjustable volume.
- Pulse and toggle relay modes.
- Light-dependent resistor (LDR) for tamper detection.
- Keypad backlight: always on, always off, or automatic shut-off after 60 seconds.
- Relay 2 supports an external doorbell.
- Low-temperature operation down to -40°C.
- Supply voltage: 12-28 V AC/DC.

Quick reference

Action	Key sequence
Enter programming mode	* (Master code) #
Default master code	888888
Exit programming mode	*
Change master code	0 (New master code) # (Repeat new code) #
Add card user	11 (User ID) # (Relay selection) # (Read card) #
Add PIN user	11 (User ID) # (Relay selection) # (PIN) #
Delete user	2 (Read card) # OR 2 (User ID) #

Relay selection: **1** = relay 1 only; **2** = relay 2 only; **12** = both relays together. See sections 4.1-4.5 for user limits and full procedures.

Translation note: The leaflet has been reorganised into numbered pages. Parentheses describe values or actions; do not type the parentheses. Source inconsistencies are identified where relevant. This is an English translation, not a manufacturer-issued English edition.

Specifications and installation

1.2 - Specifications

Item	Specification
Maximum users / PIN length	999 / 1-8 characters
Operating voltage / standby current	12-28 V AC/DC / <50 mA
Proximity reader	EM technology; 125 kHz; reading distance 2-6 cm
Connections	Relay output, exit button, alarm, door contact and doorbell
Relays	Two relays, each with NO, NC and common contacts
Adjustable relay output time	0-300 seconds; default 5 seconds
Output load	2 A maximum
Environment	IP66; -40°C to +60°C; 0-98% RH
Housing / colour	Zinc alloy / silver
Dimensions (L × W × D)	Wide: 114.5 × 75 × 22 mm; narrow: 134 × 55.5 × 21 mm
Unit weight	Wide: 360 g; narrow: 340 g
Gross weight	Wide: 440 g; narrow: 420 g

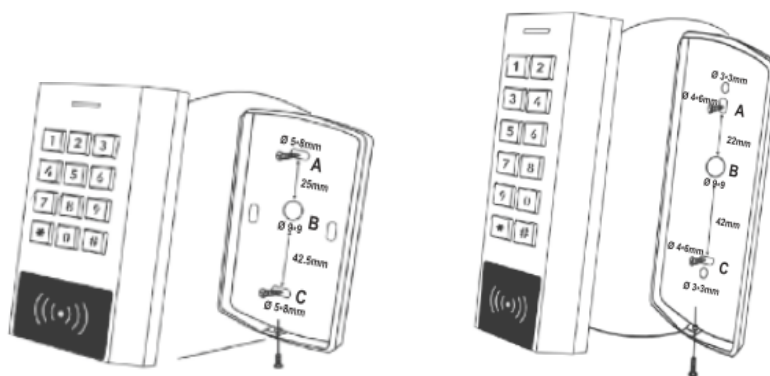
1.3 - Kit

The kit illustration shows the keypad, diode, wall plugs, 4 × 25 mm screws and a key. The kit labels the diode “1N40040”; the wiring diagram labels it “1N4004”. This discrepancy is present in the original.

2 - Installation

1. Remove the rear cover from the unit.
2. Drill two holes in the wall for the screws (A and C), and one hole for the cable.
3. Fit the rubber rings around screw holes A and C.
4. Secure the rear cover firmly to the wall with four countersunk screws.
5. Feed the cable through hole B.
6. Attach the unit to the rear cover.

Source note: The installation text specifies two screw holes but then says to use four screws; both statements have been retained.

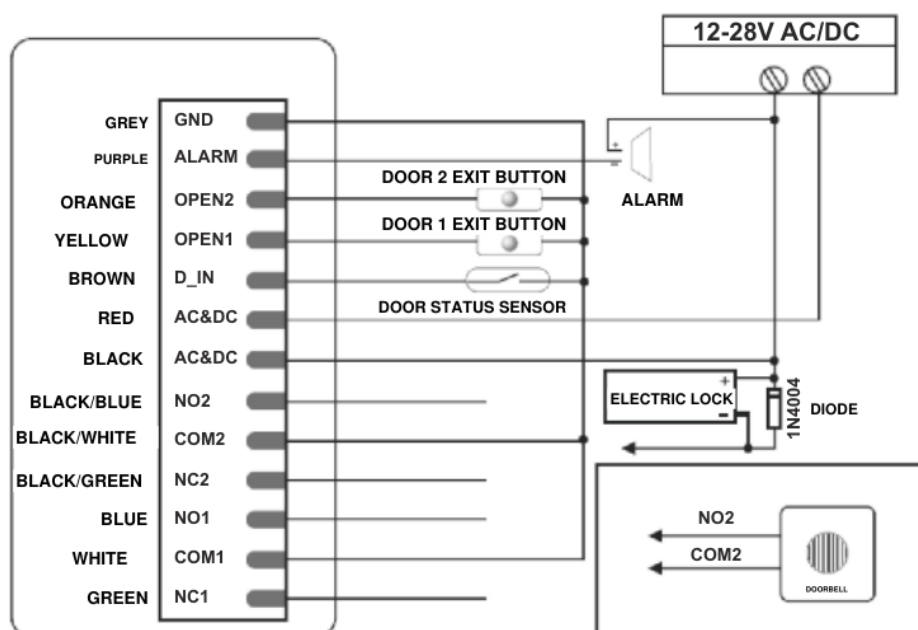


Wiring

2.1 - Connections

Wire colour	Function	Description
Red	AC/DC	Regulated 12-28 V AC/DC supply input
Black	AC/DC	Regulated 12-28 V AC/DC supply input
Green	NC1	Relay 1 normally closed output
White	COM1	Relay 1 common connection
Blue	NO1	Relay 1 normally open output
Yellow	OPEN1	Door 1 request-to-exit input (REX)
Grey	GND	Negative / ground
Green/black	NC2	Relay 2 normally closed output
White/black	COM2	Relay 2 common connection
Blue/black	NO2	Relay 2 normally open output
Orange	OPEN2	Door 2 request-to-exit input (REX)
Purple	Alarm -	Negative alarm output
Brown	D_IN	Door status detection input

2.3 - Wiring diagram



Original wiring drawing with English labels. The drawing reverses the order of the two colours on the striped wires; these correspond to the same wires listed above.

Relay 2 can operate the doorbell when a second door is not required. Connect the doorbell to NO2 and COM2. Press **0 #** to send a switching signal to the doorbell.

For a fail-safe lock, connect the electric lock's negative terminal to NC. For a fail-secure lock, connect the negative terminal to NO.

Status indications and operation

2.2 - Sound and light indications

Operating state	LED	Buzzer
Power connected	Blue on for 3 s	On for 3 s
Standby	Blue: 0.3 s on / 2 s off	Off
Awaiting master code after *	Yellow flashes at 0.5 s intervals; timeout 60 s	1 × 0.5 s
Programming mode	Yellow on	Off
Successful card read in programming mode	Green on: 1 × 0.5 s	1 × 0.5 s
Failed card read in programming mode	Red flashes: 5 × 0.2 s	5 × 0.2 s
Successful programming step	Green flashes: 2 × 0.5 s	2 × 0.5 s
Failed programming step	Red flashes: 5 × 0.2 s	5 × 0.2 s
Relay 1 activated	Green on for activation time	1 × 0.5 s
Relay 2 activated	Blue on for activation time	1 × 0.5 s
Relays 1 + 2 activated	Alternates green 1 s / blue 1 s for activation time	1 × 0.5 s
Card accepted; awaiting PIN in card + PIN mode	Blue: 1 s on / 1 s off; timeout 10 s	Off
Unregistered PIN or card	Red flashes: 5 × 0.2 s	5 × 0.2 s
Factory reset	Green flashes: 4 × 0.5 s	4 × 0.5 s
Alarm	Red flashes at 0.2 s intervals	Pulses at 0.2 s intervals

In this manual, a flashing interval of 1 second means 1 second on, 1 second off, repeated.

3.1 - Relay operation: pulse and toggle modes

Pulse mode: Each time a valid card/tag is read or a correct PIN is entered, the relay activates for its configured pulse time. This mode is suitable for access control.

Toggle mode: Each time a valid card/tag is read or a correct PIN is entered, the relay changes state. It stays in that state until another valid card/tag is read or a correct PIN is entered. This mode is suitable for switching alarms, lights or machinery on and off.

3.2 - Tamper alarm

The device uses an LDR (light-dependent resistor) for tamper detection. Removing the keypad triggers the tamper alarm.

Programming: codes and users

4.1 - General programming information

User ID: Assign an ID from 1 to 999 to each access card/PIN and keep a record of it. User IDs must not begin with 0. The user ID is required for later changes to that user.

Proximity card: 125 kHz EM card/tag.

PIN: 1-8 characters, excluding 0 and 00000000.

4.2 - Entering and exiting programming mode

Action	Key sequence
Enter programming mode	* (Master code) #
Exit programming mode	*

Default master code: **888888**.

4.3 - Setting the master code

Enter programming mode with *** (Master code) #**. After making the setting, press ***** to exit.

Action	Key sequence
Update master code	0 (New master code) # (Repeat new code) #

The master code may contain 4-8 characters, except 00000000.

4.4 - Adding users

Enter programming mode with *** (Master code) #**. After making the setting, press ***** to exit.

Action	Key sequence
Add a card user by reading the card	11 (User ID) # (Relay selection) # (Read card) #
Add a card user by card number	11 (User ID) # (Relay selection) # (8-10 character card number) #
Add a PIN user	11 (User ID) # (Relay selection) # (PIN) #
Add card users in succession	12 (User ID) # (Relay selection) # (Read cards in succession) #
Add a card + PIN user	15 (User ID) # (Relay selection) # (PIN) # (Read card) / (8-10 character card number) #

Relay selection: **1** = relay 1 only; **2** = relay 2 only; **12** = relays 1 and 2 simultaneously. If doorbell-button mode is enabled, do not select relay 2.

In the card + PIN sequence, the slash separates the alternatives of reading the card or entering its number; it is not a key to press.

4.5 - Deleting users

Enter programming mode with *** (Master code) #**. After making the setting, press ***** to exit.

Action	Key sequence
Delete by reading card	2 (Read card)
Delete by card number	2 (8-10 character card number) #
Delete by user ID	2 (User ID) #
Delete ALL users	2 (00000000) #

Cards can be deleted in succession. **Source note:** Section 4.5 omits the final # for deletion by reading a card, while the quick reference includes it. Both forms are reproduced in their respective sections.

Programming: relays, doorbell and keypad

4.6 - Relay settings

The relay setting determines how each relay output behaves when activated.

Enter programming mode with * **(Master code)** #. After making the setting, press * to exit.

Action	Key sequence
Relay 1: pulse mode (default)	3 1 (1-300) #
Relay 2: pulse mode (default)	3 2 (1-300) #
Relay 1: toggle mode	3 1 0 #
Relay 2: toggle mode	3 2 0 #

The stated relay time is 1-300 seconds, with a default of 5 seconds. The source also specifies that a setting of **1 equals 500 ms**. Toggle mode switches the relay between ON and OFF.

Source note: The 500 ms exception is reproduced as printed; it differs from the general time range description.

4.7 - Doorbell-button mode

Press **0 #** to activate relay 2 as a doorbell output.

Enter programming mode with * **(Master code)** #. After making the setting, press * to exit.

Action	Key sequence
Enable doorbell-button mode	4 1 # A #
Disable doorbell-button mode (default)	4 2 #

A = 1-300: output activation time in seconds. If relay 2 is assigned to users, doorbell-button mode cannot be enabled.

4.8 - Keypad backlight

Enter programming mode with * **(Master code)** #. After making the setting, press * to exit.

Action	Key sequence
Always ON (default)	5 1 1 #
Always OFF	5 1 2 #
Automatic OFF after 60 seconds	5 1 3 #

If the keypad light is off, pressing any button turns it on. That first button press is not counted as an entry.

4.9 - Buzzer volume

Enter programming mode with * **(Master code)** #. After making the setting, press * to exit.

Action	Key sequence
Set buzzer volume	6 1 (0-5) #

Default level: **3**. A setting of **0** disables the sound.

Source note for 4.8 and 4.9: A small “2” appears after the # in the printed always-on backlight and volume commands. Its purpose is not explained. It has not been treated as an additional keypress in this translation.

Programming: door and security alarms

For each setting below, enter programming mode with * **(Master code)** #, enter the required sequence, then press * to exit.

Alarm parameters

Parameter	Meaning
A	1-300 seconds. The type of duration depends on the alarm, as described below.
B = 1 / B = 2	Built-in buzzer ON / OFF while the alarm is active.
C = 1 / C = 2	External alarm output enabled / disabled while the alarm is active.

4.10 - Door-open-too-long detection

Must be used with an external magnetic contact.

Action	Key sequence
Enable detection	7 1 1 # A # B # C #
Disable detection (default)	7 1 2 #

A: preset time the door may remain open before the alarm sounds, in seconds.

Reset the alarm: close the door or present valid user credentials.

4.11 - Forced-door-open detection

Must be used with an external magnetic contact.

Action	Key sequence
Enable detection	7 2 1 # A # B # C #
Disable detection (default)	7 2 2 #

A: alarm duration in seconds.

Reset the alarm: close the door after the programmed alarm time has expired, or present valid user credentials.

4.12 - Maximum-attempts alarm

The alarm activates after 10 consecutive failed PIN/card attempts within 10 minutes.

Action	Key sequence
Enable maximum-attempts alarm	7 3 1 # A # B # C #
Disable maximum-attempts alarm (default)	7 3 2 #

A: lockout and alarm duration in seconds.

Reset the alarm: after the programmed alarm time has expired.

Source note: The setting rows literally say "Alarm Cancellation ON/OFF". The English labels above follow the section heading and its description of the failed-attempt alarm.

4.13 - Tamper alarm

Action	Key sequence
Enable tamper alarm	7 4 1 # A # B # C #
Disable tamper alarm (default)	7 4 2 #

A: alarm duration in seconds.

Reset the alarm: close the door after the programmed alarm time has expired, or present valid user credentials. This reset wording is retained from the original tamper-alarm section.

User operation and factory reset

5.1 - Opening the door

Access method	Operation
Card/tag	Present a valid card/tag to the reader.
PIN	Enter a valid user PIN, followed by #.
Card/tag + PIN	Present a valid card/tag, then enter its associated user PIN followed by #.

5.2 - Restoring factory defaults

1. Disconnect power from the device.
2. Press and hold * while restoring power.
3. Keep holding it until the green LED flashes four times for 0.5 seconds each and the buzzer sounds four times for 0.5 seconds each.

Result	Indication
Successful operation	Green LED: 4 × 0.5 s; buzzer: 4 × 0.5 s.
Failed operation	Red LED: 10 × 0.2 s; buzzer: 10 × 0.2 s.

The source does not specify whether this factory-reset procedure also deletes registered users. Deleting all users is described separately in section 4.5.

Manufacturer contact details

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Source document

DCD300 Spanish user manual, code AIC6569, January 2021, revision 00. Source filename: AIC6569_DCD300_SP.pdf. All numbered sections and the quick reference are included in this translation. Original diagrams have been retained; wiring labels are translated.