

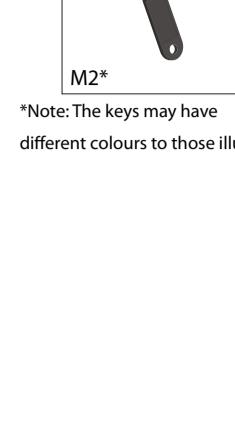
iButton System Manual Projetc - 2 Relays (R1/R2)

1. Introduction

Projetc thanks you for purchasing this Access Control - iButton.

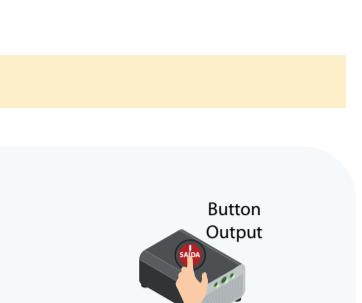
This system was developed for practical and secure access control for gates/conveyor /shutters, controlled by an electric motor with intelligent actuation by two alternating relays.

Authentication and security through iButton keys (DS1990A / 1-Wire).



This model works with:

- 1 Main Master Key (M1) - System Administrator
- 1 Secondary Master Key (M2) - Group Master
- Up to 26 user keys, each one associated with the master that registered it:
 - Users of M1
 - Users of M2



Each master can only manage its own users.

*Note: The keys may have different colours to those illustrated

2. Components and Visual Indicators

LED Lights:

- Green + confirms actions / success.
- Red = Error / Access denied

Components:

- **Button:** works as the "key"
- **Reader:** Where you place the iButton keys
- **Sound:** Makes a "beep" to confirm actions



Initial Preparation (only done once)

3. Starting from Scratch - Total Reset

⚠ Warning: This procedure erases EVERYTHING (masters and users)

1. Switch off the power
2. Press and hold the button
3. Switch on the power (still with the button pressed)
4. Continue holding for 10 seconds
5. The system confirms with a sequence of green and red LEDs and beeps
6. Release the button only after 10 seconds.

✓ Ready! The system is clean and ready to use.

4. Creating Your Main Key (M1)

The M1 is the most important key - it is the system administrator.

1. After cleaning the system (or if it's new), place any key on the reader
2. This key automatically becomes the Main Master Key (M1)
3. The green LED lights up and you hear a beep



⚠ IMPORTANT: Keep this key safe! Only it can control the entire system.

4.1 Creating and Managing the Second Master Key (M2)

The M2 is an optional master key, useful for having a second administrator with limited powers or for adding keys for tenants, employees... to their own group of users.

What is the M2 for?

- To give a key to an employee
- Give control to a shift manager
- Manage users of a specific area



4.2 How to Create the M2

⚠ IMPORTANT: Only M1 can create or delete M2!

1. Enter programming mode with M1:

- o Place M1 to enter programming mode.
- o Click the button once (no need to hold).
- o The system enters "M2 registration mode" (confirms with short beeps).
2. Place the key you wish to transform into M2.
3. The system saves M2 and confirms (green/beep)
4. To exit programming mode, place M1 again.



✓ Ready! Now you have two master keys:

- M1 - Can manage everything (including M2)
- M2 - Can add/remove only its own users

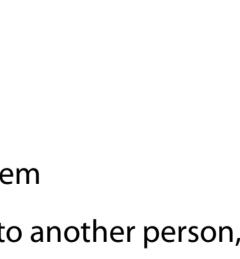
⚠ Note: If you place a key and you want to change M2 later, repeat the process and replace it.

5. How to Use Day-to-Day

Access with User Key

*Note: The keys may have different colours to those illustrated

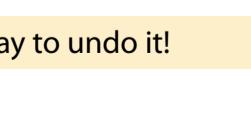
1. Place your key on the reader
2. If the key is registered:
 - o Green LED lights up
 - o You hear a "beep"
 - o The current relay (R1 or R2) activates immediately
 - o It remains on whilst the key is placed



3. When removing the key:
 - o The relay switches off
 - o The system automatically alternates to the other relay on the next use (R1 → R2 → R2 → R1...)



4. If the key is NOT registered:
 - o Red LED flashes
 - o Does not activate any relay.



Automatic Relay Alternation

Alternation is useful when:

- o One relay activates "Open" and the other "Close"
- o Two different devices need to be actuated alternately

The switch always happens after release (removing the key / releasing the button).

6. Adding New User Keys

Only Master keys (M1 or M2) can add user keys!

1. Enter programming mode:
 - o Place your Master key (M1 or M2)
 - o You see the green LED flash 1x + beep



2. Add the new key:
 - o Place the key you wish to add
 - o The green LED flashes 1x + 1 beep
 - o Key added!

3. Repeat step 2 for each key

4. Exit programming mode:
 - o Place your Master key again
 - o The green LED flashes 2x + 2 beeps
 - o Finished!

6.1 Removing User Keys

Removing a Specific Key

1. Enter programming mode (place the Master)

2. Place the key you want to remove

3. Confirms with red LED

4. Key removed!

5. Exit programming mode (place the Master again)

6.2 Removing ALL Keys at Once

Useful when there is some necessary change

1. Enter programming mode (place the Master)

2. Press and hold the button

3. Place the same Master (still with the button pressed)

4. Continue holding for 10 seconds

5. The red LED flashes rapidly

6. Release when you hear the long beeps

7. All keys of that group have been erased!

⚠ Note: If you use M1 it only erases M1 users. If you use M2, it only erases M2 users.

6.3 How to Use M2 Day-to-Day

M2 works exactly like M1 for adding and removing users, but only manages its own group:

- Enter programming mode with M2

- Add users (they become associated with M2)

- Remove only M2 users

- Cannot see M1 users

- Cannot modify M1 users

- Cannot see M2 users

- Cannot modify M2 users

- Cannot see M1/M2 users

- Cannot modify M1/M2 users

- Cannot see User keys

- Cannot modify User keys

- Cannot see M1/M2/User keys

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