Recessed Access Control

User Manual
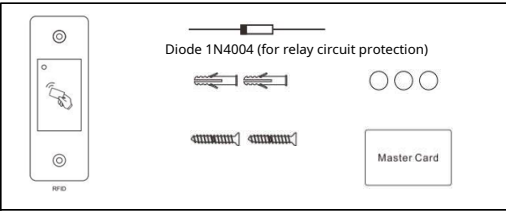
INTRODUCTION

Standalone built-in access control with 125KHz EM cards (**TW-E1**). It's an ideal option for door frame installation. It's also suitable for outdoor use thanks to its IP66 waterproof rating. It supports a master card for easy programming.
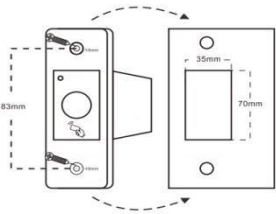
Features:
> Small size built-in.
> Metal and waterproof case, IP66 protection.
> User capacity: 3000 cards.
> Card Type: 125KHz EM Card.
> Closing mode to keep the door open.
> Tri-color LED status.

Specifications:

User capacity	3000 cards
Operating voltage Idle current Active current	**9~24V DC** ≤25mA ≤100
Proximity card reader Radio technology Reading range	**IN** 125KHz 2cm Proximity Card
Wiring diagram	Relay output, Exit button
Relay Adjustable relay output time Lock output load	**One (NO, NC, Common)** 0-99 seconds (default at 5 seconds) 2 Amp maximum

Environment	Complies with IP66
Temperature of operation	TW-E1: -40°C~60°C (-40°F~140°F) TW-EF1: -25°C~60°C (-13°F~140°F)
Humidity of operation	20% RH-98% RH
Material	**Zinc alloy plate**
Color	Silver and black
Dimensions	W115xL40xH30 (mm)
Unit weight	TW-E1: 105g | TW-EF1: 115g

Diode 1N4004 (for relay circuit protection)

Master Card

INSTALLATION
● Drill the holes for the screws and one for the device body.

● Place the device.
● Firmly fix the device to the wall with 2 screws.
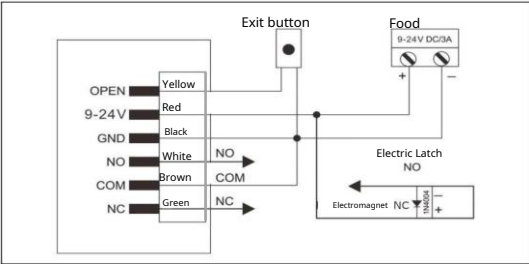● Cover the screws with the stickers.

Wire color

Cable color	Function	Definition
Yellow	OPEN	Exit Button Input (Rex)
Red	+ V	9- Regulated Power Input 24V DC
Black	GND	Grounding
White	NODE	Normally open relay output
Brown	WITH	Common connection for relay output
Green	NC	Normally closed relay output

Sound and light

Operating status	LED	Doorbell
Standby	Bright red light	-
Enter master addition mode	Bright yellow light	A beep
Enter programming mode	Bright yellow light	Two beeps
Operation error	-	Three beeps
Exit programming mode	Bright red light	A beep
Open the lock	Bright green light	A beep

Connection diagram
Power Supply Common:

Exit button — Food 9-24V DC/3A

OPEN Yellow
9-24V Red
GND Black
NO White NO
COM Brown COM
NC Green NC

Electric Latch NO

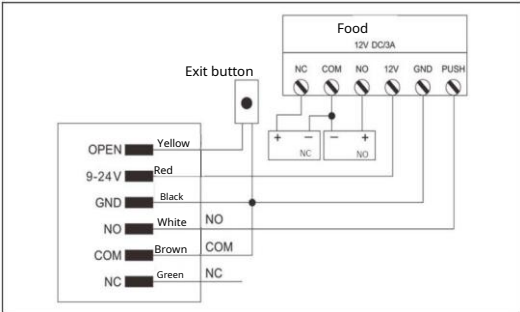Electromagnet NC 1N4004

Attention: Install a 1N4004 diode or equivalent when using a common power supply, otherwise the device may be damaged (the 1N4004 is included in the order).

Access Control Power Supply:

Food 12V DC/3A

Exit button

NC COM NO 12V GND PUSH

OPEN Yellow
9-24V Red
GND Black
NO White NO
COM Brown COM
NC Green NC

GENERAL PROGRAMMING INFORMATION Add
Master Card: 1. Turn off the power,

2. Press and hold the output button and turn on the power, you will hear a beep
3. When you release the exit button, you will hear a long beep and the LED light will change to yellow.
4. Present any EM card, which will become the Master Card.

Observation: Only one Master Card is supported.
A Master Card is included in the package. If you need to change your Master Card, read the instructions for adding a Master Card. The new Master Card will automatically replace the previous card.

Add User Card:
1. Present the Master Card.
2. Swipe the user's card **three times (Green LED)**.
3. Present the Master Card again.

Delete User Card:
1. Present the Master Card **TWICE**.
2. Present the User Card once.
3. Present the Master Card again.

Note: You can add/remove users continuously, just repeat step 2

Relay configuration
To turn off the power, press and hold the output button and turn on the power. You will hear a beep. Hold the button down and wait for the second beep. Release the output button. You will hear a long beep and the LED will change to yellow. You will then be in Relay Configuration Mode.

Latch Mode (mode changes the current state at each presentation):
1. After entering the **relay configuration menu**
2. Press the exit button and hear three beeps,
3. Release the exit button.
(After this action the device automatically exits the configuration menu)

Pulse Mode (open for a certain time):
1. After entering the **relay configuration menu**
2. Press the exit button continuously until you hear three beeps, continue pressing, you will soon hear one beep per second, each beep represents 1 second, release the button when you have the desired number of beeps;
"X" beeps represents the opening time of 1~99 seconds, for example, 10 beeps, release the exit button, and the opening time is 10s. The default time is 5s.

(After this action the device automatically exits the configuration menu)

Restore factory settings:
Turn off the device, press the exit button continuously and turn on, you will hear a beep, continue pressing, then you will hear two beeps, continue pressing until you hear a third beep and then release the exit button.
The Led light will change to yellow.
Press the exit button again for 10 seconds, you will hear a long beep and the LED light will change to Red. The device has been successfully restored.

Observation: When you reset the device, all user information will be erased. **Use with caution.**