# **Transponder Access Control**

# Set 1 / 2 / 3

# Manual

The RFID Transponder Access Control allows activating an electric door opener by a potential free relais contact. The approval is effected by 125 kHz RFID Transponder and / or a 6-digit access code.

The system consists of a controller and an external reader. As the controller itself has also a RFID antenna the use of the external reader is optional. The Controller can be mounted only in water protected surroundings. For application in wet surrounding, higher protection against vandalism or to increase the security level by separated mounting of reader and door relais, different kinds of readers are included.

#### Versions:

#### Set 1

Controller with keypad (IP20)
RFID reader without keypad (IP65)
10 pcs of RFID-cards and keyfobs each.

#### Set 2

Controller with keypad (IP20) RFID reader with keypad (IP20) 10 pcs of RFID-cards and keyfobs each.

#### Set 3

Controller with keypad (IP20)
RFID reader with metal housing, without keypad (IP65)
10 pcs of RFID-cards and keyfobs each.

Transponder Zutrittskontrolle Set 1, Conrad Best.-Nr.: 001082695 Transponder Zutrittskontrolle Set 1, Conrad Best.-Nr.: 001082696 Transponder Zutrittskontrolle Set 1, Conrad Best.-Nr.: 001082697

#### **Status Indication**

Instruction	Red light	Green light	Buzzer
Working	On		
Program mode		flash	
Program mode sub-menu		On	
Presenting unregistered card	On		Make long sound "di"
Presenting registered card&		'On' time be identical	Make two short sound "di di"
door open		with door open	
After Presenting the card and	Red light and green light are at		
need to input the passwords	interval flash		
Card and password mode	Flash every		
	0.5 second		
Password mode	Flash every 1		
	second		
Keyboard			Making one short sound "di"
Successful Setting			Making two short sound "di di"
Failure Setting			Making a long sound "di"
Invalid inputting			Making a long sound "di"
Alarm			Continuous sound "di di di
			di"

## **Operation Instruction**

#### 1. Enter Program mode

Press 'ENT" 4 times  $\rightarrow$  input password "123456"  $\rightarrow$  press "ENT" to save (enter the program mode successfully)

- "123456" is default password.
- If entering the program mode successfully, the buzzer will make two short sound "di di", otherwise, make a long sound "di".

#### 2. Function setup

(All the following steps should begin with Entering Program Mode)

#### (1) Key "0": modify program password

Press "0"  $\rightarrow$  input new password  $\rightarrow$  press "ENT"  $\rightarrow$  input the new password again  $\rightarrow$  press "ENT"  $\rightarrow$  press "9" to exit

- If add successfully, the buzzer will make two short sound "di di", otherwise, make a long sound "di".
- The password is 6-digits one.

#### (2) Key "1": register cards in continuous way

Press "1"  $\rightarrow$  continuously presenting the unregistered card  $\rightarrow$  press "ENT" to confirm  $\rightarrow$  press "9" to exit

- The system will give a number to each card. The original password is "888888". Such password can only be used for Card and Password Mode.
- If there is no card in the system, the card number will start from "0001" and increase gradually. The largest number cannot exceed "6399".
- If the registered already exist, the number will increase from the number of previous registered cards (including the deleted cards).
- If add successfully, the buzzer will make two short sound "di di", otherwise, make a long sound "di".
- To be able to delete cards without presenting it is strongly recommended to write this number on the card or make a similar notice.

#### (3) Key "2": register a single card (allow registering card continuously)

Press "2"  $\rightarrow$  present the card  $\rightarrow$  input the 4-digit user number  $\rightarrow$  press "ENT"  $\rightarrow$ present another card  $\rightarrow$ input the 4-digit user number  $\rightarrow$  press 'ENT" (.....continuously register cards)  $\rightarrow$  press "ENT"  $\rightarrow$ press "9" to exit

- The system will give a default password "888888" to each card. This password can only be used in the Card and Password Mode.
- If the card has already existed, the buzzer will make a long sound "di". Then you can present another card. If the inputted number has already existed, the buzzer will make a long sound "di". Then you can input another number.

#### (4) Key "3": delete the registered card

<u>Delete card by presenting:</u> Press 3,  $0 \rightarrow$  present the card  $\rightarrow$ present another card (Continuously present the card that need to be deleted)  $\rightarrow$  press "ENT"  $\rightarrow$  press "9" to exit

<u>Delete by user number:</u> Press 3, 1 → input the user number → press "ENT" → input another one → press "ENT" (continuously delete many user numbers) → press "ENT" → press "9" to exit

<u>Delete all cards:</u> Press 3, 2  $\rightarrow$  input "9999"  $\rightarrow$  press "ENT"  $\rightarrow$ press "9" to exit

#### (5) Key "4": Door open mode setting

<u>Card or password</u>: Press 4, 0  $\rightarrow$  press "ENT"  $\rightarrow$  press "9" to exit (that is the factory default mode)

<u>Card and password:</u> Press 4, 1  $\rightarrow$  press "ENT"  $\rightarrow$  press "9" to exit <u>Password only:</u> Press 4, 2  $\rightarrow$  press "ENT"  $\rightarrow$  press "9" to exit

#### (6) Key "5": Door open time setting

Press "5"  $\rightarrow$  input time  $\rightarrow$  press "ENT"  $\rightarrow$  press "9" to exit

• The time format is "\*\*", e.g. "03" represents that the open time is 3 seconds.

When time is set as 99 seconds; the open method is trigger mode (presenting card and the door open. Presenting the card again, then the door close.

# (7) Key "6": setup the door open password (the factory default open password is blank)

<u>Door open password setting:</u> Press "6"  $\rightarrow$  input the new password  $\rightarrow$  press "ENT"  $\rightarrow$  input password again  $\rightarrow$ press "ENT"  $\rightarrow$  press "9" to exit

Blank password setting: Press "6" → press "ENT" → press "ENT" → press "9" to exit

- This password can be used in Card or Password Mode and Password Mode.
- It must have 6 digits.
- If it is blank password setting, the password mode can not be used. (Can not open the door via password).

#### 3. The exit key is "9"

#### 4. The doorbell key is "DOORBELL"

#### 5. Modify card password (should operate in the Card and Password Mode)

Press "9" (the red light is off and the green light is on)  $\rightarrow$  present the card (must be authorized cards)  $\rightarrow$  input the original password (the original password is 888888)  $\rightarrow$  press "ENT"  $\rightarrow$  input new password  $\rightarrow$  press "ENT"  $\rightarrow$  input password again  $\rightarrow$  press 'ENT"

- This password is only valid in Card and Password Mode.
- If modify successfully, the buzzer makes 2 "di-di" short sounds, then it will exit the Program Mode.

#### 6. Restore to factory default setting

(only restore the program passwords and parameter settings. Authorized cards will not be deleted)

With power off, short the JP1 jumper to 2 and 3 position. Then with power on, after hearing 2 "di-di" sounds, short the JP1 jumper to 1 and 2 positions. Then modify successfully.

### **Operation Example**

#### 1. Setting New program password '789000'

Firstly, enter the program mode press "ENT" 4 times  $\rightarrow$  input password "123456"  $\rightarrow$  press "ENT" again( green light flashes)  $\rightarrow$  press "0"  $\rightarrow$  input the program password "789000"  $\rightarrow$  press "ENT"  $\rightarrow$  input the password "789000" again

Then press "9" to exit, the default password "123456" turns to "789000".

Please remember the modified program password. It has to be used to enter the program mode later.

#### 2.Continuously presenting cards to register

Firstly, enter the program mode press the "ENT" 4 times  $\rightarrow$  input password "123456"  $\rightarrow$  press "ENT" again( green light flashes)  $\rightarrow$  press "1"  $\rightarrow$  present new cards(after presenting all the needed cards  $\rightarrow$  press "ENT"

**Then press "9" to exit,** the registered card can open the door now.

#### 3. Continuously register two cards, "0088" "0099"

(allowing register many cards continuously)

**Firstly, enter the program mode** press the "ENT" 4 times  $\rightarrow$  input password "123456"  $\rightarrow$  press "ENT" again( green light flashes)  $\rightarrow$  press "2"  $\rightarrow$  present the new cards  $\rightarrow$  input the number "0088"  $\rightarrow$  press "ENT"  $\rightarrow$  present the second card  $\rightarrow$  input the number "0099"  $\rightarrow$  press "ENT"  $\rightarrow$  press 'ENT' once again

**Then press "9" to exit**, card "0088" and card "0099" can open the door.

# 4. Delete cards according the card number, e.g. delete the card "0088" and the card "0099"

**Firstly, enter the program mode** press the "ENT" 4 times  $\rightarrow$  input password "123456"  $\rightarrow$  press "ENT" again (green light flashes)  $\rightarrow$  press "3"  $\rightarrow$  press "1"  $\rightarrow$  input "0088"  $\rightarrow$  press "ENT"  $\rightarrow$  input '0099'  $\rightarrow$  press "ENT"  $\rightarrow$  press 'ENT' once again

**Then press "9" to exit,** card "0088" and card "0099" cannot open the door now. (Deleting multiple cards means that you can input number one by one. Then, press "ENT". In this case, you can delete multiple cards. After confirming, press the "ENT" once again.)

#### 5. Setup the opening mode as presenting cards

Firstly, enter the program mode press the "ENT" 4 times  $\rightarrow$  input password "123456"  $\rightarrow$  press "ENT" again (green light flashes)  $\rightarrow$  press "4"  $\rightarrow$  press "0"  $\rightarrow$  press "ENT" Then press "9" to exit, the opening mode has been changed to Card or Password Mode.

#### 6. Setup the opening password as "147258"

Firstly, enter the program mode press the "ENT" 4 times → input password "123456" → press "ENT" again( green light flashes) → press "6" → input "147258" → press

"ENT" → press "147258" again → press "ENT" once again

**Then press "9" to exit,** press "147258", then press "ENT" to confirm, and you can open the door now.

# 7. Setting new password '88899' in Card and Password Mode (should operate it in the Card and Password Mode)

Press "9"  $\rightarrow$  presenting the card (previous registered card)  $\rightarrow$  input the original password "888888" (the original program password. If you have modified it, please use the modified one to operate the next step.) The red light and the green light flash one after another  $\rightarrow$  input the new password '888999'  $\rightarrow$  press "ENT"  $\rightarrow$  press '888999' again  $\rightarrow$  press "ENT"

### Special case and faults Judgment

#### 1. External readers

- 1: When use the external readers to register and delete cards, external readers have video and audio indication, so please take attention to that when presenting another card.
- 2: If the external reader has no above indication, please wait 2-3 seconds to present after the first one.
- 3: If have to set card number when register cards for external readers, you can only set serial number on the master controller.
- 4: Support external keyboard readers. You can also input password to open the door via it.

#### 2. Light change indication

1: According to the changes of the red light, you can know current opening mode, which can be divided into 3 cases:

Red light always on card or password mode

Red light flashes every 0.5 second card and password mode

Red light flashes every 1 second password mode

2: If red light and green light are on at the same time, it means that the relay is closed and the output is trigger mode.

# 3. Normal open/close under special conditions (presenting cards to open or close, the relay will have no auto response)

Enter the Program Mode, set 99 seconds opening time, the controller relay's output turns to trigger mode. That is to say, when presenting the card to open the door, the lock remains open. When presenting the cards again, the lock remains close.

#### 4. Only the card can open the door, or only the password can open the door

1: Only card can open the door

Firstly, set the opening mode as Card or Password Mode. Then set blank opening password.

2: Only password can open the door

Set the opening mode as Password Mode. There is no response when presenting the card

## **Faults Judgment**

#### 1: Cards cannot open the door

- Making sounds but the green light is off, please check the card is registered or not
- Making sounds but the green light and the red light flash at interval
- Check the Opening Mode Status
- Making sounds and the green light is on, Check wire connection

### 2: No response after presenting the card

- Check the card format, or whether the card has been damaged.
- Check the opening mode
- In Password Mode, there will be no reader function and no response after presenting cards.
- Check light indication
- When the red light is off and the green light on, it is door open status. There will be no response after presenting cards.

#### 3: No key response

- · Check the indication light
- When the red light is off and the green light on, it is door open status. There will be no key response.

# Wiring instruction

## 7-pin wire /external reader

purple	OPEN		Out button
Black	GND		
Red	+12VDC	External	
white	D1	reader	
green	D0		
blue	LED		
yellow	BEEP		

## 5-pin wire

Red	+12V	Power	
Black	GND		
gray	NC		
Black	COM	Relay signal output	
brown	NO		

## 2-pin wire

Yellow	Doorbell
Blue	Doorbeil

#### **Technical data**

Display	3 colour LED
Keypad	3 x 4 Flat membrane
Power	DC12V
Relais current	DC 12V, 3 A (door opener)
Frequency	125khz
Temperature	-10°C~70°C
Humidity	10%~90%RH
Dimensions	122 x 86 x 20 mm (Controller, Plastic-Housing)
	80 x 80 x 20 mm (Metal-Housing)
Weight (Controller only)	213g
Reading range	Within 10cm