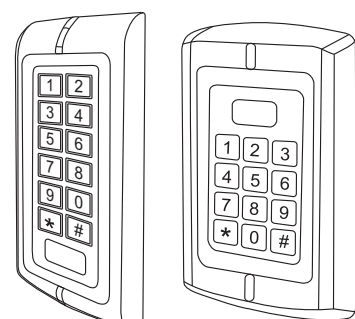


Waterproof Keypad/Reader/Controller



W1-C

W3-C

User Manual

1. Packing List

Name	Quantity	Remark
Digital Keypad W1-C/W3-C	1	
User Manual	1	
Screw Driver	1	
Rubber Bung	4	6*27mm, used for fixing
Self Tapping Screws	4	3.5*27mm, used for fixing
Manager Card	2	Manager Add Card & Manager Delete Card

Please ensure that all the above contents are correct. If any are missing please notify the supplier of the W1-C/W3-C.

2. Description

(W1-C/W3-C are in the same function, only different in shape.)
The W1-C/W3-C is single door multifunction standalone access controller or a Wiegand output keypad or card reader. It is suitable for mounting either indoor or outdoor in harsh environments. It is housed in a strong, sturdy and vandal proof zinc alloy electroplated case. The electronics are fully potted so the W1-C/W3-C is waterproof and conforms to IP68.
The W1-C/W3-C supports up to 2,000 users in either a Card, 4-8 digits PIN, or a Card + PIN option. The inbuilt card reader supports EM 125KHz frequency cards/tags. The W1-C/W3-C has many extra features including block enrollment, wiegand 26 bits interface, and backlit keypad...etc.

These features make W1-C/W3-C an ideal choice for door access not only for small shops and domestic households but also for commercial and industrial applications such as factories, warehouses, laboratories, banks and prisons.

3. Features

- > Waterproof, conforms to IP68
- > Strong zinc alloy electroplated anti-vandal case
- > Full programming from the keypad
- > 2,000 users, supports Card, PIN, Card + PIN
- > Can be used as a standalone keypad, PIN length 4-8 digits

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- > Backlight keypad
- > Wiegand 26 bits input & output
- > One programmable Relay output, NO, NC, COM
- > Adjustable door output time, alarm time, door open time
- > Block enrollment, can enroll maximum 2000 consecutive card within 2 minutes
- > Very low power consumption (< 60mA)
- > Easy to install and program
- > Built in light dependent resistor (LDR) for anti tamper
- > Built in buzzer
- > Red, yellow and green LED display the working status
- > 12-24V DC/12-18V AC
- > Two-year warranty

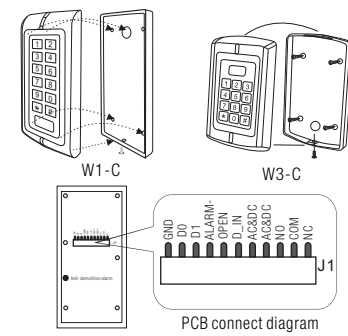
4. Specifications

Operating Voltage	12-24V DC/12-18V AC
User Capacity	2,000
Keypad	12 keys, 2 x 6 digits (W1-C) 12 keys, 3 x 4 digits (W3-C)
Card Type	EM 125 KHz card
Card Reading Distance	3-6 cm
Active Current	< 80mA
Idle Current	< 40mA
Lock Output Load	Max 2A
Alarm Output Load	Max 20A
Operating Temperature	-40°C - 60°C
Operating Humidity	5% - 95% RH
Environment	Conforms to IP68
Adjustable Door Relay time	0-99 seconds
Adjustable Alarm Time	0-3 minutes
Wiegand Interface	Wiegand 26 input & output
Wiring Connections	Electric Lock, Exit Button, DOTL, External Alarm
Dimensions	L135xW58xH26 mm (W1-C) L128xW52xH28 mm (W3-C)
Net Weight	550 g
Gross Weight	700 g

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5. Installation

- > Remove the back cover from the keypad using the supplied security screwdriver
- > Drill 4 holes on the wall for the screws and 1 hole for the cable
- > Fix the back cover firmly on the wall with 4 flat head screws
- > Thread the cable through the cable hole
- > Attach the keypad to the back cover

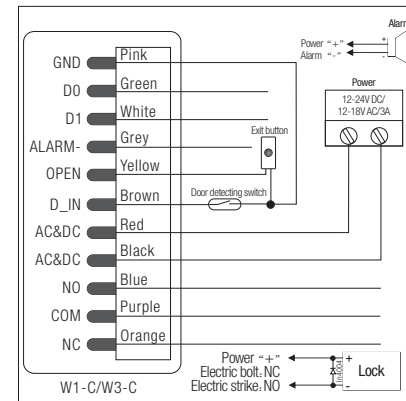


6. Wiring

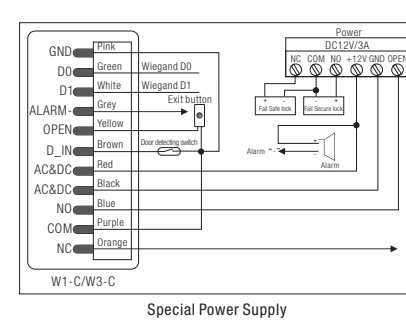
Colour	Function	Description
Green	DO	Wiegand Output DO
White	D1	Wiegand Output D1
Grey	Alarm -	Alarm Negative
Yellow	OPEN	Request to Exit Button
Brown	D_IN	Door Contact
Red	AC&DC	12-24V DC/12-18V AC Regulated Power Input
Black	AC&DC	12-24V DC/12-18V AC Regulated Power Input
Blue	NO	Relay NO
Purple	COM	Relay COM
Orange	NC	Relay NC
Pink	GND	W1-C/W3-C Negative

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Connection Diagram



Common Power Supply



Special Power Supply

Notes:
Connect the negative pole of the lock to NC is for Fail safe lock.
Connect the negative pole of the lock to NO is for Fail secure lock.

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7. To Reset to Factory Default

To reset to factory default, power off, press [0], hold it and power on, release it until hear two beeps and the LED shines in orange, then read any two EM cards, the LED will turn in red, means reset to factory default setting successfully. Of the two EM cards read, the first one is Manager Add card, the second one is Manager Delete card.

Remarks: Reset to factory default, the user's information is still retained.

9. Sound and Light Indication

Operation Status	Red Light	Green Light	Blue Light	Buzzer
Power on	Bright	-	-	Short Ring
Stand by	Bright	-	-	-
Press keypad	-	-	-	Short Ring
Operation successful	-	Bright	-	Short Ring
Operation failed	-	-	-	3 Short Rings
Enter into programming mode	Bright	-	-	Short Ring
In the programming mode	-	-	Bright	-
Exit from the programming mode	Bright	-	-	Short Ring
Open the door	-	Bright	-	Short Ring
Alarm	Bright	-	-	Alarm

10. W1-C/W3-C Detailed Programming Guide

10.1 User Settings

To enter the programming mode	[*] Master code # 888888 is the default factory master code
To exit from the programming mode	[*]
Note that to undertake the following programming the master user must be logged in	
To change the master code	[0] New code # New code # The master code is any 6 digits

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8. Anti Tamper Alarm

The W1-C/W3-C uses a LDR (light dependent resistor) as an anti tamper alarm. If the keypad is removed from the cover then the tamper alarm will operate.

Setting the working mode:

Set valid card only users	[3] 0 # Entry is by Card only
Set valid card and PIN users	[3] 1 # Entry is by Card and PIN together
Set valid card or PIN users	[3] 2 # Entry is by either Card or PIN (default)

To add and delete users in either card or PIN mode ([3] | 2 | #) (Default setting)

To add PIN users	[1] User ID number # PIN # The ID number is any number between 1-2000. The PIN is any 4-8 digits between 0000-99999999 with the exception of 1234 which is reserved. Users can be added continuously without exiting from programming mode as follows: [1] User ID No 1 # PIN # User ID No 2 # PIN #
------------------	--

To delete a PIN user	[2] User ID number # Users can be deleted continuously without exiting programming mode
----------------------	--

To change the PIN of a PIN user (Note: This step must be done out of programming mode)	[*] ID number # Old PIN # New PIN # New PIN #
--	---

To add a card user (Method 1) To add a card user (Method 1) This is a fast way to enter cards using ID number auto generation.	[1] Read Card # Cards can be added continuously without exiting programming mode
---	---

To add a card user (Method 2) This is the second way to enter cards using User ID Allocation. In this method a User ID is allocated to a card. Only one user ID can be allocated to a single card.	[1] ID number # Card #
---	--------------------------------

To add card user (Method 3) Add a series cards users-Block Enrollment	[5] ID number # 8 digits Card number # Card quantity # Card quantity is between 1-2,000 the 8 digits card number, is the last 8 digits on the card. Maximum 2,000 cards can be enrolled at a stretch within 2 minutes.
--	---

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To delete card users by read cards Note: Users can be deleted continuously without exiting from programming mode	[2] Read Card #
To delete a Card users by user ID This option can be used when a user has lost their card	[2] User ID #
To add and delete users in card and PIN mode ([3] 1 #)	
To add a card and PIN user (The PIN is any 4-8 digits between 0000-99999999 with the exception of 1234 which is reserved)	Add the card as for a card user Press [0] to exit from the programming mode Then allocate the card a PIN as follows: [1] Read card 1234 # PIN # PIN #
To change a PIN in card and PIN mode (Method 1) Note that this is done outside programming mode so the user can undertake this themselves	[*] Read Card Old PIN # New PIN # New PIN #
To change a PIN in card and PIN mode (Method 2) Note that this is done outside programming mode so the user can undertake this themselves	[*] ID number # Old PIN # New PIN # New PIN #
To delete a Card and PIN user just delete the card	[2] User ID number #
To add a card user in card only mode ([3] 0 #)	The operating is the same as adding and deleting a card user in [3] 2 #
To add and delete a card user	
To delete ALL users	
To delete ALL users. Note that this is a dangerous option so use with care	[2] 0000 #
To set card users by Manager Card	
To add card user by Manager Add Card	Manager add card Read card Manager add card Cards can be added continuously.
To delete card user by Manager Delete Card	Manager delete card Read Card Manager delete card Cards can be deleted continuously.
To unlock the door	
For a PIN user	Enter the PIN then press #

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For a card user	[Read card]
For a card and PIN user	[Read card] then enter PIN #
10.2 Door Relay, Door Open Detection, Alarm, Facility code Settings	
Door relay time setting	
Door relay time setting	[4] 0-99 # The door relay time is between 0-99 seconds, the factory default setting is 5 seconds
Door Open Detection	
Door Open Too Long (DOTL) warning. When used with an optional magnetic contact or built-in magnetic contact of the lock, if the door is opened normally, but not closed after 1 minute, the inside buzzer will beep automatically to remind people to close the door and continue for 1 minute before switching off automatically.	
Door Forced Open warning. When used with an optional magnetic contact or built-in magnetic contact of the lock, if the door is forced open, or if the door is opened after 120 seconds of the electro-mechanical lock not closed properly, the inside buzzer and alarm output will both operate. The Alarm Output time is adjustable between 1-3 minutes with the default being 1 minutes	
To disable door open detection (Factory default setting)	[6] 0 #
To enable door open detection	[6] 1 #
Keypad Lockout & Alarm Output options. If there are 10 invalid cards or 10 incorrect PIN numbers in a 10 minute period either the keypad will lockout for 10 minutes or the alarm will operate, depending on the option selected below	
Normal status: No keypad lockout or alarm	[7] 0 # (Factory default setting)
Keypad Lockout	[7] 1 #
Alarm Output	[7] 2 #
Alarm Output time	
To set the alarm output time(1-3 minutes)Factory default is 1 minute	[9] 1-3 #
To remove the alarm	

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To reset the Door Forced Open warning	[Read valid card] or [Master Code #]
To reset the Door Open Too Long warning	Close the door or [Read valid card] or [Master Code #]
11. Interconnecting Two Devices	
11.1 W1-C/W3-C operating as a Wiegand Output Reader	
In this mode the W1-C/W3-C supports a Wiegand 26 bit output so the Wiegand data lines can be connected to any controller which supports a Wiegand 26 bit input. See figure 1.	

Figure 1

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◆ 2: Proximity Card Transmission	
The Reader will transmit the card data when it reads the Card. Format: Card Number (the last 8 digits of Card Number) Remarks: No matter the card or pin is valid or invalid, the data will be transmitted.	
11.2 W1-C/W3-C operating as a Controller	
In this mode the W1-C/W3-C supports a Wiegand 26 bit input so an external Wiegand device with a 26 bit output can be connected to the Wiegand input terminals on the W1-C/W3-C. Either an ID card reader (125KHz) or an IC card reader (13.56MHZ) can be connected to the W1-C/W3-C. Cards are required to be added at the external reader, except where an external EM reader is used, in this case cards can be added at either reader or controller. See figure 2.	

Figure 2

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W1-C/W3-C Quick Reference Programming Guide	
To enter the programming mode	[*] Master code # 888888 is the default factory master code
To exit from the programming mode	[*]
Note that to undertake the following programming the master user must be logged in	
To change the master code	[0] New code # New code # The master code is any 6 digits
To add a PIN user	[1] User ID number # PIN # The ID number is any number between 1 - 2000. The PIN is any 4-8 digits between 0000 - 99999999 with the exception of 1234 which is reserved. Users can be added continuously without exiting programming mode
To add a card user	[1] Read Card # Cards can be added continuously without exiting from programming mode
To delete a PIN or a card user	[2] User ID number # for a PIN user or [2] Read Card # for a card user Users can be deleted continuously without exiting from programming mode
To Unlock the door	
To Unlock the door for a PIN user	Enter the PIN then press #
To Unlock the door for a card user	Present the card

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