

BC-2200

Digital Keypad

User Manual

1. Packing List

Name	Quantity	Remarks
Digital Keypad BC-2200	1	
User manual	1	
Screw driver	1	
Rubber bungs	4	Φ6mm×28 mm, used for fixing
Self tapping screws	4	Φ4mm×25 mm, used for fixing
Diode	1	1N4004

Please ensure that all the above contents are correct. If any are missing please notify the supplier of the BC-2200

2. Description

BC-2200 is a digital keypad for single door; it is housed in a strong, sturdy and vandal proof zinc alloy electroplated structure.

The BC-2200 use the American Atmel MCU, can be easily programmed with 200 PIN users, PIN length 4~6 digits. And it has many extra features includes Pulse mode & Toggle mode, Safe mode...ect.

These features make the BC-2200 an ideal choice for door access not only for small shops and domestic household but also commercial and industrial applications such as factories, warehouses, laboratories, banks and prisons.

3. Features

- > Strong zinc alloy electroplated anti-vandal structure
- > Full programming from the keypad
- > 200 PIN users, PIN length: 4~6 digits
- > Backlight keypad
- > One programming relay output, NC, NO, COM
- > Pulse mode, Toggle mode
- > Red, yellow, green LED display the working status
- > Built in Buzzer
- > Adjusted door output time, alarm time, door open time
- > Operating Temperature: -40~60°C
- > Two-year warranty

4. Specification

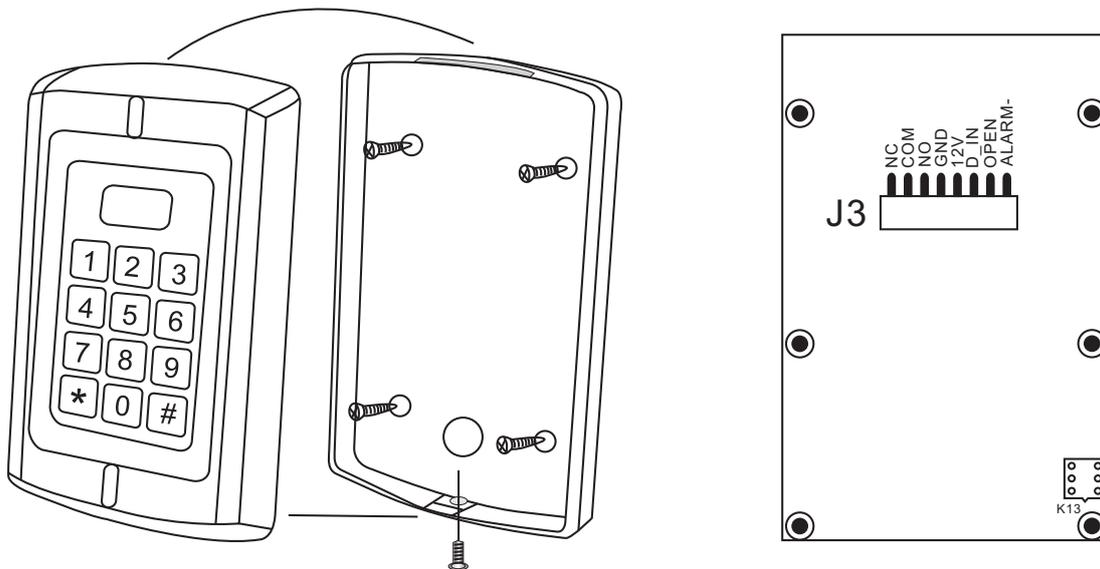
Operating Voltage	12V DC
User Capacity	200
Keypad	12 keys, 3 x 4 digits
Active Current	<80mA
Idle Current	<15mA
Lock Output Load	Max 3A



Alarm Output Load	Max 3A
Operating Temperature	-40~60°C
Adjustable Door Relay time	1 ~ 99 seconds
Adjustable Alarm Time	0 ~ 3 minutes
Wiring Connections	Electric Lock, Exit Button, DOTL, External Alarm
Dimensions	L128 x W82 x H28 mm
Net Weight	300 g
Gross Weight	450 g

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



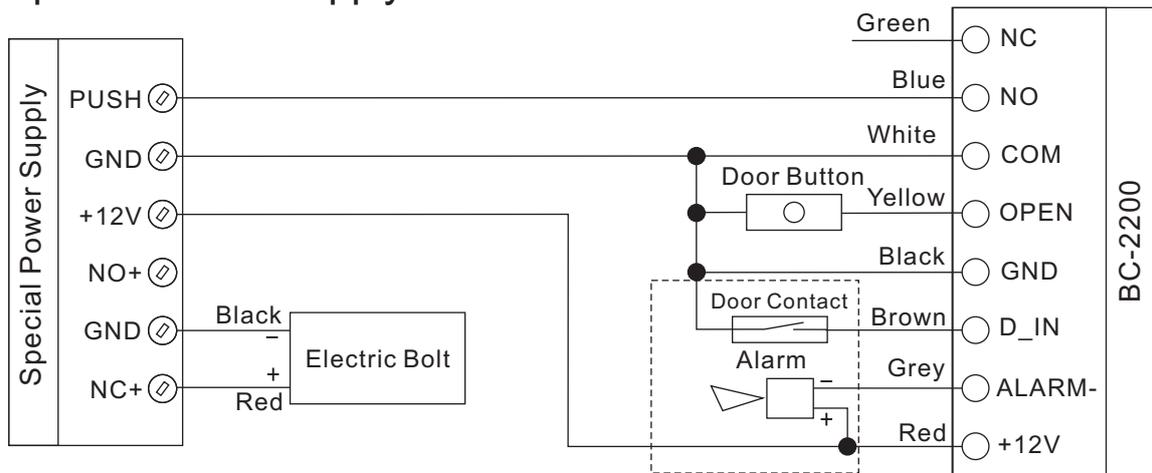
6. Wiring

Color	Function	Description
Orange	NC	Relay NC
Purple	COM	Relay COM
Blue	NO	Relay NO
Brown	D_In	Door Contact
Red	+12V	12V power input
Black	GND	GND
Yellow	OPEN	Request to Exit Button
Grey	Alarm -	Alarm Negative

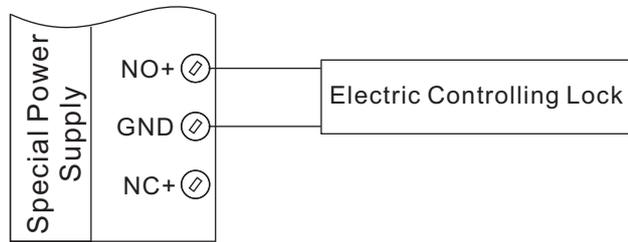
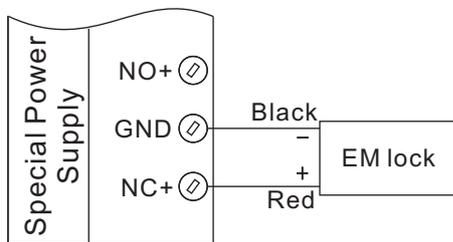


Connection Diagram

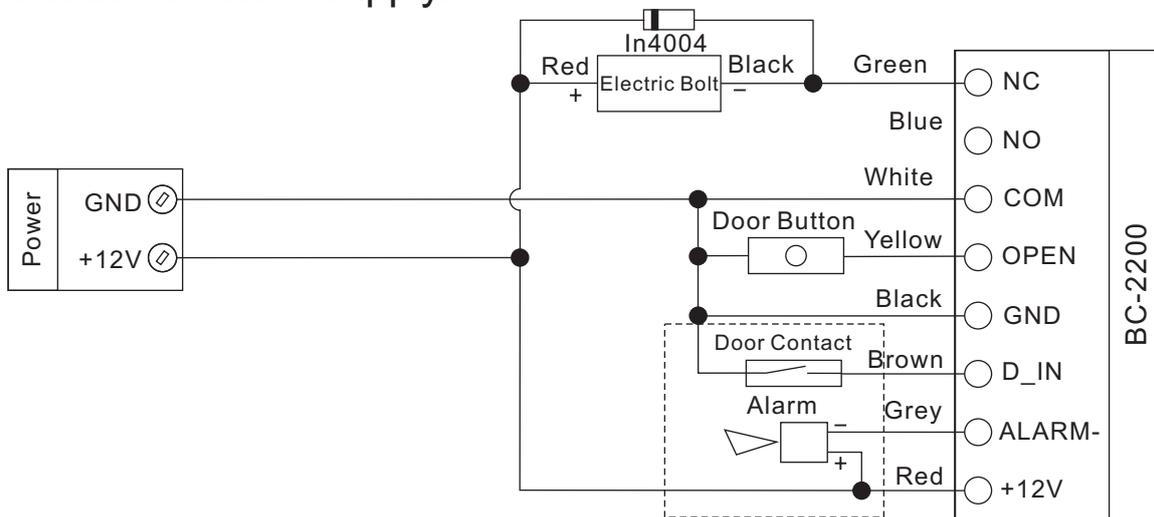
Special Power Supply:



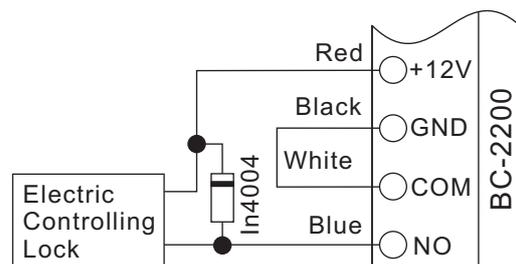
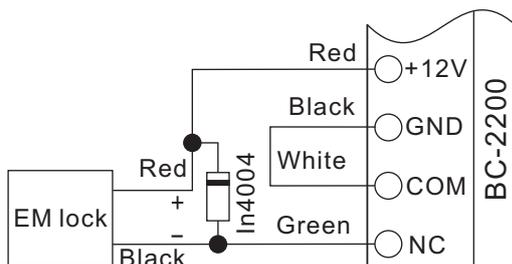
Here are some lock wirings based on different locks



Common Power Supply:



Here are some lock wirings based on different locks



7. Relay Operation (Pulse mode and Toggle mode)

Relay can operate in Pulse Mode (suitable for access control) or Toggle Mode (suitable for arming/disarming alarms, switching lights, machines....etc)

Everything time read a valid tag/card or input a valid PIN in Pulse Mode, the relay will operate, for the pre-set relay pulse time.

Everything time read a valid tag/card or input a valid PIN in Toggle Mode, the relay changes state, which will not turn back until read card or input PIN again.

8. Reset to Factory Default

To reset to factory default, power off, press *****, hold it and power on, release it until hear two beeps, and the LED will turn into red, means reset to factory default successfully.

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

9. Sound and Light Indication

Operation status	Red Light	Green 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	–	Long Ring
In the programming mode	–	–	–
Exit from the programming mode	Bright	–	Short Ring
Open the door	–	Bright	Short Ring
Alarm	Bright	–	Alarm

10. Detailed Programming Guide

10.1 User Settings

To enter the programming mode	* Master code # 9999 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 4-8 digits
To add a PIN user	1 User ID number # PIN # The ID number is any number between 0 ~ 199. The PIN is any 4~6 digits between 0000 ~ 999999. Users can be added continuously without exiting from programming mode as follows: 1 User ID number 1 # PIN # User ID number 2 # PIN #



To delete a PIN user	2 <input type="text"/> User ID number <input type="text"/> # 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)	* <input type="text"/> User ID number <input type="text"/> # <input type="text"/> Old PIN <input type="text"/> # <input type="text"/> New PIN <input type="text"/> # <input type="text"/> New PIN <input type="text"/> #
To delete ALL users	2 <input type="text"/> 0000 <input type="text"/> # Note that this is a dangerous option so use with care
To unlock the door	Enter the PIN then press #

10.2 Relay Setting (Pulse mode, Toggle mode)

Pulse mode - Door relay time setting	4 <input type="text"/> 1~99 <input type="text"/> # (Factory default setting: 5s)
Toggle mode	4 <input type="text"/> 0 <input type="text"/> #

10.3 Door, Alarm, LED Settings

Alarm output time	
To set the alarm output time (0-3 minutes) Factory default is 1 minute	5 <input type="text"/> 0~3 <input type="text"/> #
<p>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.</p> <p>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.</p>	
To disable door open detection (Factory default setting)	6 <input type="text"/> 0 <input type="text"/> #
To enable door open detection	6 <input type="text"/> 1 <input type="text"/> #
<p>Keypad Lockout & Alarm Output Options. If there are 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.</p>	
Normal status: No keypad lockout or alarm	7 <input type="text"/> 0 <input type="text"/> # (Factory default setting)
Keypad Lockout	7 <input type="text"/> 1 <input type="text"/> #
Alarm Output	7 <input type="text"/> 2 <input type="text"/> #
Red LED light - The red LED light can be set on or off.	
OFF	8 <input type="text"/> 0 <input type="text"/> #
Normal status: On	8 <input type="text"/> 1 <input type="text"/> # (Factory default setting)
To remove the alarm	
To reset the Door Forced Open warning	<input type="text"/> Input Valid PIN <input type="text"/> or <input type="text"/> Master Code <input type="text"/> #
To reset the Door Open Too Long warning	Close the door or <input type="text"/> Input Valid PIN <input type="text"/> or <input type="text"/> Master Code <input type="text"/> #

