

# Automatic Door Controller Manual

BESTKOREA Co.,Ltd.

## 1. specifications

|                         |                            |
|-------------------------|----------------------------|
| Model                   | BJA-N100                   |
| Input voltage           | AC180V ~ 265V(50 ~ 60Hz)   |
| Motor                   | DC24V / 60W BRUSH DC MOTOR |
| Temperature             | -20 ~ +45°C                |
| Output voltage/current  | DC24V/1A                   |
| Sensor interface        | Voltage-free input signal  |
| Safety sensor interface | Voltage-free input signal  |

## 2. Features

With accurate position control using microprocessors, the design was less error-prone and power was introduced in SMPS, making it lighter and less space. Also, it can produce a maximum output of 250W, so there is no significant amount of door opening and closing.

## 3. Operation description

- ① When the product is installed and powered on, it slowly closes and opens to measure the opening distance of the door.
- ② After distance setting, perform normal operation according to the set value.
- ③ If the open sensor or safety sensor is illuminated, the door will not close and the installation shall be verified.

## 4. Menu setting method

- ① All menu settings can only be set during closing settings or when the door is closed, but not during other operations.
- ② Because the setting method varies repeatedly from 1 to 7 when the SET button is pressed, adjust the value using the UP/DOWN button when the desired menu value is released.
- ③ If you do not press for more than 3 seconds, you can save automatically and leave the menu mode. Press SET button again if you need to set it again.
- ④ The left of the two numbers is the menu number, the right is the set value, and the point is displayed in the middle when setting.

## 5. Menu Functions Description

|   |                              |   |  |
|---|------------------------------|---|--|
| 0 | Open speed setting           | 0 ~ 9   | You can set from 0 to 9, and the higher the number, the faster.  |
| 1 | Closing speed setting        | 0 ~ 9   | You can set from 0 to 9, and the higher the number, the faster.  |
| 2 | Open waiting time            | 0 ~ 9   | The wait time after the door has been opened. The set value is in seconds.   |
| 3 | Acceleration pattern setting | 0 ~ 4   | Set the acceleration at startup.<br>Depending on the weight of the door, the number is higher and faster.                            |
| 4 | Closing final speed          | 0 ~ 9   | It is slow speed when the door is almost closed.<br>You can set from 0 to 9, and the higher the number, the faster.                  |
| 5 | Return strength setting      | 0 ~ 9   | Set the push force when the door is jammed or bumped.<br>You can set from 0 to 9, and the higher the number, the stronger the force. |
| 6 | Special functions 1          | 0 ~ 9   | 1 becomes the basic lock when set to and turn the power on/off.  |
| 7 | Special functions 2          | (See Lower 6 Yield)   |  |
|   | Switching direction setting  | The direction of the machine opening when facing it. If the direction is changed, Power must be cycled. |  |

## 6. Special Function 2 Setting Method

| Set value   | Function 1              | Function 2   | etc.  |
|---|-------------------------|--|---|
| 1   | 100% OPEN / NORMAL OPEN | The special terminal output is [ON] when the function is closed and [OFF] when entering the OPEN signal. | Function 2 does not work if the setting of menu 6 is set to 1 and the controller lock is set to 1.            |
| 2   | 100% OPEN / ONE-TOUCH   |  |   |
| 3   | 50% OPEN / NORMAL OPEN  |  |   |
| 4   | 50% OPEN / ONE-TOUCH    |  |   |
| 5   | 100% OPEN / NORMAL OPEN | The special terminal output is [ON] when the door is closed and [OFF] when entering the OPEN signal.     | It is possible to set from 5 to 8, and function 2 operates even if menu 6 is set to 1 to the controller lock. |
| 6   | 100% OPEN / ONE-TOUCH   |  |   |
| 7   | 50% OPEN / NORMAL OPEN  |  |   |
| 8   | 50% OPEN / ONE-TOUCH    |  |   |
| After changing the above setting, you must cycle the power. |                         |  |   |

## 7. Display Form

|    |  |
|----|--|
| CA | The upper case CA means that it is currently closed and the right number may be different    |
| P8 | The upper case P8 means that it is currently open and the right number can be any value.     |
| t1 | t1 indicates that an open sensor signal is on, and at the same time, the green LED on the u  |
| t2 | t2 indicates that the safety sensor signal is on, and at the same time, the amber LED on the |

## 8. Error code

|  |   |
|--|---|
| E1   | It occurs when there is a jam when the door is opened. solve a problem that takes place                                 |
| E2   | The value of the encoder on the motor is an error. Check encoder, controller, motor.                                    |
| E3   | Not Applicable  |
| E4   | This is when the motor does not move or the distance is set too short. Check the door, controller, motor.               |
| E5   | This is when the speed of the regulation has been exceeded. It can also occur if you push it with your hands at random. |
| In the event of an error, the red lamp is turned on and the automatic setting mode is 2 more times. Do not operate the machine until the cause is removed and the power is cycled. |   |