

# A. Package content

■ Controller X 1, Accessory kit X 1 (Plastic screw X 2, Fastening screw X 2, 1N4004 X 1), Cable (2pin X 1, 4pin X 1, 5pin X 1, 6pin X 1, 8pin X 1), CD X 1, Warranty card X 1, Installation Guide X 1

■ SPECIFICATIONS

Voltage range: 9-24V DC

# **B.** Installation

- Preparation
- 1. Wipe dust and wet from the wall.
- 2. Fasten the waterproof plastic plate on the wall.
- 3. Drill the holes indicating on the plastic plate.
- 4. Fasten the plate with plastic screws to each holes.
- Using the line hole under side
- 1. Use the screw driver to open the back cover of host.
- 2. Install the back cover by using the screws which attached inside.
- 3. Please refer to process C to finish the installation.
- 4. Pass the cable through the line hole under side.
- 5. Combine the machine body, and then fix the screw under the machine.
- Using the line hole at back cover
- 1. Use the screw driver to open the back cover of host.
- 2. Pass the cable through the line hole at the back cover.
- 3. Install the back cover by using the screws which attached inside.
- 4. Please refer to process C to finish the installation.
- 5. Combine the machine body, and then fix the screw under the machine.
- Physical Dimension: 80 X 120 X 25 (mm)
- RECOMMENDED
- Cable with shielded, Linear DC power supply, Network cable.
- Notice
- Do not connect other cable to the power unit except the power cable.
- Do not apply any unverified power supply to the unit or the hardware system may be damaged or cause system to an unstable condition.

# Current max, Average: 600 mA Max distance for Wiegand is 80M Max distance for RS-485 is 1000M Line hole $\bigcirc$ Waterproof fastening plate Line hole Wall

# C. System Connection

### ■ Connector Cable

	Cable			LAN Cable	
	1	TX+	BLACK	ORANGE WHITE	
J1	2	тх-	RED	ORANGE	RJ-45
	3	RX+	GREEN	GREEN WHITE	KJ-45
	4	RX-	YELLOW	GREEN	
	1	485 <b>—</b>	GREY	485	
	2	485+	BROWN	405	

<b>J</b> 9	1	485 <b>—</b>	GREY	485	
	2	485+	BROWN	465	
	3	FGND	ORANGE	GND	
	4	OD0	RED WHITE	WIEGAND OUT	
	5	OD1	BLACK WHITE		
	6	GND	ORANGE	GND	
	7	OUT	YELLOW WHITE	TTL(5V) output	
	8	IN	BLUE WHITE	FIRE ALARM INPUT	

	1	WID0	VIOLET WHITE	WIEGAND IN	
	2	WID1	GREEN WHITE	WIEGAND IN	
J3	3	GND	ORANGE	GND	
	4	BUZZ	BLUE BLACK	Control LED and Buzzer	
	5	LED	YELLOW BLACK		

#### SENR BLUE **SENSOR** 2 **ORANGE** GND **GND** 3 DOOR **VIOLET EXIT BUTTON** 4 NC YELLOW 5 COM **GREEN** DOOR RELAY

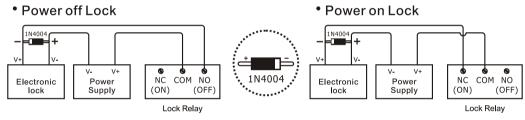
J8	1	VIN-	BLACK	POWER
5	2	VIN+	RED	POWER

WHITE

6

NO

# **X** Door Relay Connect.

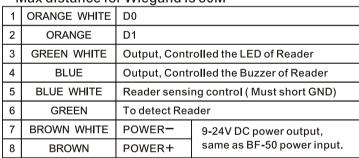


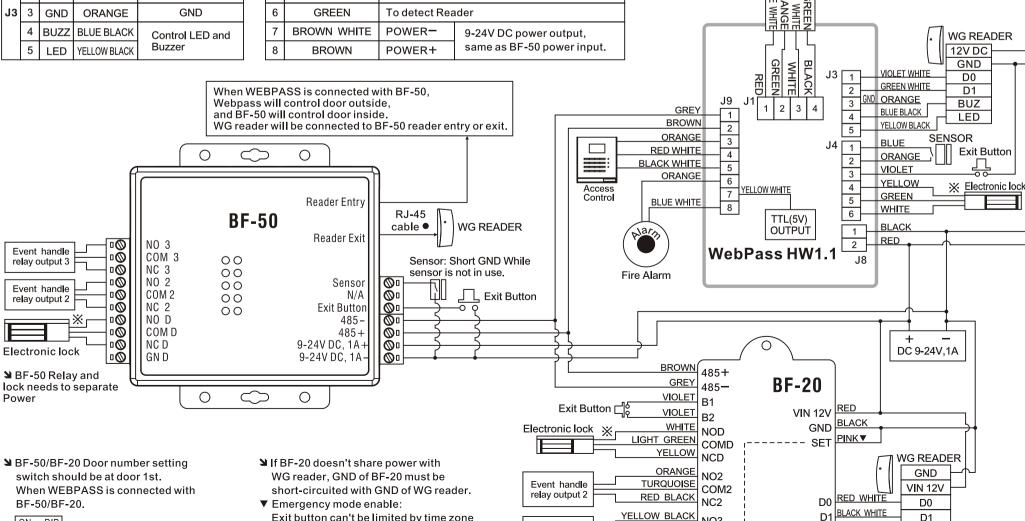
**RJ-45** 

TCP/IP

Ethernet

 BF-50 RJ-45 Cable Color for Connection Max distance for Wiegand is 80M





■ BF-50/BF-20 Door number setting



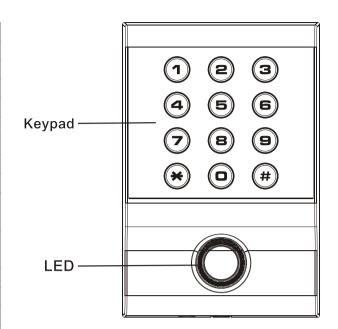
Exit button can't be limited by time zone setting when RS-485 disconnect, door still can be opened.

D1 BLACK WHITE YELLOW BLACK D1 NO3 BLUE GREEN BLACK Event handle S1 COM3 S2 BLUE relay output 3 WHITE BLACK Sensor: NC3 Short While sensor is not in use.



# **D. Function Setting and Operation Guide**LED Display & Buzzer Guide

Command	LED Indicators and Buzzer status	
Bootloader	Red & Blue Flash altogether per second	
System Ready	2 short beep, Blue Flash per second	
System ready for Dummy Reader (Disconnected with SEMAC)	Both LED flash altogether per second	
Security Active (To be SEMAC reader)	Red Flash per second	
Illegal card/password	1 long beep, Red Shine for 2 seconds	
Registered card/password	1 short beep, Blue Shine until door closed,	
Force open/ Non Lock	Blue Shine	
Force close	Red Shine	
IP Conflict	1 short +1 long beep Red Flash per second1 + Keypad flash per second	
Door open too long/Intrusion	Beep per second until door closed or Intrusion issue resolved, Red Flash per second	
Command mode	1 short beep, Both LED flash altogether per second	
Read card under command mode	Both LED flash alternatively per second	
Modification failed	1 long beep	
Device cover removed	Beep until cover installed, Blue Flash per second	
Waiting for next verification information (For example: Multiple verification Time zone, Card + Password)	keypad flashes per second (continus 10seconds)	



### **Command Mode**

Configuration Parameters	Action	Explanation
User ID Number	υυυυυυ	1~6 digits (standard version: 20,000)
Number of Cards you want to register in Webpass	QQQQQQ	1~6 digits
Password	РРРРРРР	4~8digits
Command	Action	Explanation
Enter to Command mode	*128456#	Default password: 123456, Buzzer long beeps after entered to command mode. On Command Mode: Blue and Red LEDs flash in the same time. After 10sec will back to Normal mode: Blue LED flashes per second. Command Error: 1 long beep
Door Open Relay configuration (Door close delay time)	<b>••••••••••••••••••••••••••••••••••••</b>	Time for relay can be: 1-65535secs/ Default:10sec
Door open waiting time(Door open delay time)	<b>□⑤</b> TTTTT <b>∅</b>	Time can be setting:1~65535 sec/Default:10sec
System Time setting	<b>□ 4</b> ★ HHMMSS <b>#</b>	HHMMSS=Hour/Minute/Second(24H)
System Date setting	<b>□ ⑤ ※</b> YYMMDDX <b>#</b>	YYMMDDX=Year/Month/Date/Weekday (YY=AD last two digit= 2009=09)
Password modification for entering Command Mode	☐ ☐ ❖ AAAAAA ❖ BBBBBB ❖ CCCCCC #	AAAAAA : Old password BBBBBB : New password CCCCCC : New password, likes BBBBBB ※ password is 4~6 digits
Setting for TID nr. (Terminal ID)	<b>□ 夕 ※</b> ТТТТТ <b>#</b>	TID nr. can be: 1 ~ 65535
Access Control Setting (Relay)	<b>0 3                                  </b>	T= 0/1/2 → Normal Open/ Normal Close/Back to Normal
Verification mode setting	<b>□②</b> ♥ ⊤ <b>#</b>	T =1~4 1: Card, Common Password, or personal Password 2: Card only 3: Common Password or Personal Password 4: Card and Personal password
Common Password setting	<b>10</b> ★ PPPPPPP #	☆Default is 1234, to cancel it, please go to web to remove it.
Add single user	<b>1 1 1 3 3 4 3 4 4 4 4 4 4 4 4 4 4</b>	Read card for registration (LED blue & red lighten)
Add Single card + password user	1 1 W UUUUU  PPPPPPP # read card	Read card for registration (LED blue & red lighten)
Add many Users: card numbers are continuous	<b>1∂</b> ₩ UUUUUU ₩ QQQQQQ # read card	Just Put the card with smallest card number to Reader
Add many Users: Card numbers are discontinuous	<b>1 3 3 3 3 4 4 4 4 4 4 4 5 4 4 4 4 4 4 4 4 4 4</b>	Put the cards one by one to Reader
Disable user account(User status : Cancel)	<b>14★</b> υυυυυυ <b>#</b>	
Enable user account (User status: Active)	<b>1⑤❸</b> ∪∪∪∪∪∪ <b>∅</b>	
User password modification	<b>1 ⑤</b> ❸ UUUUUU ❸ PPPPPPPP #	4~8 digits (Password)
Modify User Card Number	<b>17</b> ★ UUUUUU # read card	
Delete single user account	<b>213</b> 00000 <b>#</b>	
Delete many/continuous user accounts	<b>2</b> 2 € ∪∪∪∪∪∪	
Delete All user accounts	280290#	
Exit from Command Mode	<b>⊛</b> #	