1. Port Definition and Class

Name	Port No.	Definition	Description	Port Class
J1	J1-1	24V Input	Power and COMM Port	150mA
	J1-2	24V Input GND		
	J1-3	CAN BUS H		
	J1-4	CAN BUS L		
J2	J2-1	Up Call Answer	Up landing call Input/Answer	OC、DC24V/20mA
	J2-2	24V		
	J2-3	24V		
	J2-4	Up Call Input		Voltage Divider
J3	J3-1	Down Call Answer	Down landing call Input/Answer	OC
	J3-2	24V		
	J3-3	24V		
	J3-4	Down Call Input		Voltage Divider
J4	J4-1	24V	Serial Electronic Lock Input	Voltage Divider
	J4-2	Serial E-lock Input		
	J4-3	24V	Serial Fire-signal Input	
	J4-4	Serial Fire Input		Voltage Divider
S1	CAN BUS Terminal Resistor Jumper			
AN	Set Button			
JC	Testing Jumper			
EN	E-lock/Fire input enable jumper. SC this jumper at correspond floor when enable E-lock and fire input.			
J5	J5-1	24V Output		150mA
	J5-2	24V Output GND		
	J5-3	Display: Decimal 7|BCD Code High 3|Grey Code 7		OC Output DC24V/20mA
	J5-4	Display: Decimal 6|BCD Code High 2|Grey Code 6		
	J5-5	Display: Decimal 5|BCD Code High 1|Grey Code 5		
	J5-6	Display: Decimal 4|BCD Code High 0|Grey Code 4		
	J5-7	Display: Decimal 3|BCD Code High 3|Grey Code 3		
	J5-8	Display: Decimal 2|BCD Code High 2|Grey Code 2		
	J5-9	Display: Decimal 1|BCD Code High 1|Grey Code 1		
	J5-10	Display: Decimal 0|BCD Code High 0|Grey Code 0		
	J5-11	Run Up [Note 1]		
	J5-12	Run Down [Note 1]		
	J5-13	Run [Note 1]		
	J5-14	Over Load [Note 1]		
	J5-15	Full Load [Note 1]		
	J5-16	Fire [Note 1]		
	J5-17	Inspection [Note 1]		
	J5-18	Parking [Note 1]		
	J5-19	Special Use [Note 1]		
	J5-20	Landing Signal Output [Note 1][Note 2]		

Note 1: Output Signal can be changed through setting.
Note 2: Current floor arrival Signal output for LOP display, arrival Gong output for COP display.

2. Output Display

There are 3 coding protocols for floor display: Decimal, BCD code and Grey code. Customer can change between these codes through setting.

Choose floor display mode:

a. Actual floor No. + Offset output;

b. Controller floor No. + Offset output;

c. Actual floor No. + coding table (from display manufacturer) output;

d. Controller floor No. + coding table (from display manufacturer) output;

Actual Floor No.: Elevator with N stops, 0 for bottom floor, 1 for second to bottom floor, N-1 for top floor.

Offset: 0-9 number, can change through setting.

Controller Floor No.: Refers to the floor display character/figures set on controller.

Example 1: Set offset 1; Elevator stop at 2nd floor (with 2 level basement), actual floor number is 3 (0, 1, 2, 3); controller floor number is 2 (B2, B1, 1, 2). For output with Actual floor No. + offset: 3+1=4;

Example 2: Set offset 1; Elevator stop at 2nd floor (with 2 level basement), actual floor number is 3 (0, 1, 2, 3); controller floor number is 2 (B2, B1, 1, 2). For output with Controller floor No. + offset: 2+1=3;

Example 3: Elevator stop at basement 1 (with 2 level basement), actual floor number is 1 (0, 1); controller floor number is B1 (B2, B1); In coding table TB (1) =60, and for Actual floor No. + coding table output= 60;

Example 4: Elevator stop at 13th floor; Controller floor number is 12A (86 in coding table), and for controller floor No. + coding table output= 86;

3. Port Signal Output

Please see below the output signal list

Table 3.1 Port signal output code list

<table>
<tr><th>Code</th><th>Output Signal</th><th>Code</th><th colspan="2">Output Signal</th></tr>
<tr><td>00</td><td>Parking</td><td>12</td><td colspan="2">Door interlock open</td></tr>
<tr><td>01</td><td>Inspection</td><td>13</td><td colspan="2">Door open</td></tr>
<tr><td>02</td><td>Fire</td><td>14</td><td colspan="2">Door close</td></tr>
<tr><td>03</td><td>Special Use</td><td>15</td><td colspan="2">Run up</td></tr>
<tr><td>04</td><td>Attendant</td><td>16</td><td colspan="2">Run down</td></tr>
<tr><td>05</td><td>Auto</td><td>17</td><td colspan="2">Running</td></tr>
<tr><td>06</td><td>Fault</td><td>18</td><td colspan="2">Stop (No running signal)</td></tr>
<tr><td>07</td><td>Over load</td><td>19</td><td colspan="2">Full load (LOP display)/ Over load (COP display_</td></tr>
<tr><td>08</td><td>Full load</td><td rowspan="2">20</td><td colspan="2" rowspan="2">Arrival Signal: Output 2s when receive change speed signal. Current floor arrival (LOP)/ Arrival Gong (COP)</td></tr>
<tr><td>09</td><td>Safety circuit/E-stop</td></tr>
<tr><td>10</td><td>Fire mode (Fire floor)</td><td>21</td><td>Up Arrival</td><td rowspan="2">Must satisfy: Landing zone have speed change signal/Landing zone door open + direction signal</td></tr>
<tr><td>11</td><td>Door interlock close</td><td>22</td><td>Down Arrival</td></tr>
</table>

4. Floor data Setting

Press setting button, after 2s 7-segment display current setting value, flash 3 times then enter floor address setting menu. Every time press setting button once, address will add 1 till 64 then rotate.

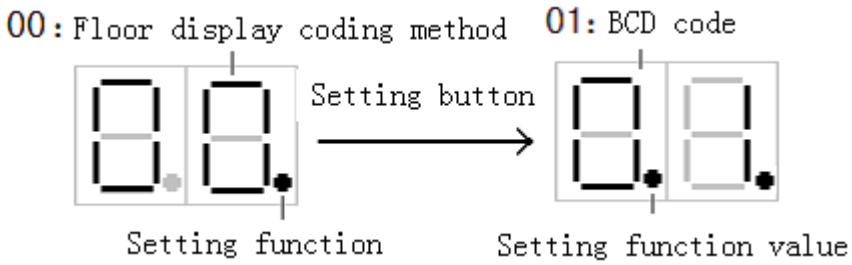
After setting the address, release the button for 2s, address value will flash and save setting, transfer board ready to work.

5. Function setting

5.1 Enter Function setting

Short circuit both jumper JC and jumper EN, power on the board to enter setting function. 7-segment display current customer number and program number. When display “U” it followed by current customer number, when display “P” it followed by current program number. Press setting button or up/down call button to enter function setting.

In this menu, system use “dots” in 7-segment to display setting function status and value. The right 7-segment dot “on” refers to current setting function status; both 7-segements dot “on” refers to current setting function value. Examples see below:



Press the setting button to switch between “Setting function /Setting function value”, press up/down calling button to change the current value.

5.2 Exit Display setting

Remove jumper JC and EN, transfer board enters normal condition.

If remove the jumper before saving parameters, all functions will not be changed,

5.3 Function setting list

a. Setting function: 00-Floor display coding method

Setting value: 0- Decimal Coding

1- BCD coding

2- Grey coding

Default value is 0

b. Setting function: 01- Floor display mode

Setting value: 0- Actual floor No. + Offset output;

1- Controller floor No. + Offset output;

2- Actual floor No. + coding table (from display manufacturer) output;

3- Controller floor No. + coding table (from display manufacturer) output;

Default value is 0

c. Setting function: 02- Floor display offset

Setting value: 0-9; default value is 1

d. Setting function: 03- Up/Down arrival signal output setting

Setting value: 0- When arrive, output with 0.5s break pulse signal

1- When arrive, output continuous signal

Default value is 0

e. Setting function: 04- Save parameters

In setting function value mode, press both up/down calling button, after 2s 7-segment display start to flash, flash 3 times means saving parameter succeed.

f. Setting function: N- Port signal output Setting

N: 11-20 refers to J5-11 to J5-20 port

Setting value: 0-22 refers to **table 3.1** signal output

6. Program Description

For transfer board, different programs have 2 main differences:

a. Different COMM protocol;

b. J5 port default definition is different.

6.1 General Program 507_50.gsp / Special Program 507_51.208

J5 Port	Port Definition
J5-1	24V Output
J5-2	24V Output GND
J5-3	Display: Decimal 7|BCD Code High 3|Grey Code 7
J5-4	Display: Decimal 6|BCD Code High 2|Grey Code 6
J5-5	Display: Decimal 5|BCD Code High 1|Grey Code 5
J5-6	Display: Decimal 4|BCD Code High 0|Grey Code 4
J5-7	Display: Decimal 3|BCD Code High 3|Grey Code 3
J5-8	Display: Decimal 2|BCD Code High 2|Grey Code 2
J5-9	Display: Decimal 1|BCD Code High 1|Grey Code 1
J5-10	Display: Decimal 0|BCD Code High 0|Grey Code 0
J5-11	Run Up[Note 1]
J5-12	Run Down [Note 1]
J5-13	Run [Note 1]
J5-14	Over Load [Note 1]
J5-15	Full Load [Note 1]
J5-16	Fire [Note 1]
J5-17	Inspection [Note 1]
J5-18	Parking [Note 1]
J5-19	Special Use [Note 1]
J5-20	Landing Signal Output [Note 1][Note 2]
Note 1: Output Signal can be changed through setting. Note 2: Current floor arrival Signal output for LOP display, arrival Gong output for COP display.	

6.2 Special Program 507_52.208，based on customer requirement

Display coding table															
Code	0	1	2	3	4	5	6	…	…	…	40	41	42	43	44
Disp	0	1	2	3	4	5	6	…	…	…	40	41	42	43	44
Code	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Disp	45	46	47	48		-1	-2	-3	-4						
Code	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
Disp	B1	B2	B3	B4						B	G				

Code	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89
Disp														3A	12A
Code	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104
Disp	12B	13A	17 A	17 B	5A	G1	G2	G3	F						
Code	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119
Disp	D1	D2	D3	D4	D	1F	2F	3F	4F						
Code	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134
Disp	1B	2B	3B	4B	1A	2A	4A								6A
Code	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149
Disp	6B	7A	7B	5B		23 A	24 A	25 A		15A	13B				
Code	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164
Disp														19 A	
Code	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179
Disp					L1	L2	L3								
Code	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194
Disp								14 A	14 B		15B	16 A	16 B	22 A	22B
Code	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209
Disp	E1	E2				E3	E4								

J5 Port	Port Definition
J5-1	24V Output
J5-2	24V Output GND
J5-3	Display: Decimal 7|BCD Code High 3|Grey Code 7
J5-4	Display: Decimal 6|BCD Code High 2|Grey Code 6
J5-5	Display: Decimal 5|BCD Code High 1|Grey Code 5
J5-6	Display: Decimal 4|BCD Code High 0|Grey Code 4
J5-7	Display: Decimal 3|BCD Code High 3|Grey Code 3
J5-8	Display: Decimal 2|BCD Code High 2|Grey Code 2
J5-9	Display: Decimal 1|BCD Code High 1|Grey Code 1
J5-10	Display: Decimal 0|BCD Code High 0|Grey Code 0
J5-11	Run Up [Note 1]
J5-12	Run Down [Note 1]
J5-13	Run [Note 1]
J5-14	Over Load [Note 1]
J5-15	Full Load [Note 1]
J5-16	Fire [Note 1]
J5-17	Inspection [Note 1]
J5-18	Parking [Note 1]
J5-19	Special Use [Note 1]
J5-20	Landing Signal Output [Note 1][Note 2]

Note 1: Output Signal can be changed through setting.
Note 2: Current floor arrival Signal output for LOP display, arrival Gong output for COP display.

6.3 Special Program 507_53.208, based on customer requirement

Decimal Code	Display character
0X00	No Display
0X01-0X20	1、2、3…、32　　Special Requirement:　Output 0x04 when display 3F
0X21-0X25	-1、-2、-3、-4、-5
0X26-0X2A	B1、B2、B3、B4、B5
0X2B-0X3E	J、B、G、M、M1、M2、M3、P、P1、P2、P3、R、R1、R2、R3、L、H、H1、H2、H3
0X3F	Exit

J5 Port	Port Definition
J5-1	24V Output
J5-2	24V Output GND
J5-3	Display: Decimal 7|BCD Code High 3|Grey Code 7
J5-4	Display: Decimal 6|BCD Code High 2|Grey Code 6
J5-5	Display: Decimal 5|BCD Code High 1|Grey Code 5
J5-6	Display: Decimal 4|BCD Code High 0|Grey Code 4
J5-7	Display: Decimal 3|BCD Code High 3|Grey Code 3
J5-8	Display: Decimal 2|BCD Code High 2|Grey Code 2
J5-9	Display: Decimal 1|BCD Code High 1|Grey Code 1
J5-10	Display: Decimal 0|BCD Code High 0|Grey Code 0
J5-11	Run Up [Note 1]
J5-12	Run Down [Note 1]
J5-13	Run [Note 1]
J5-14	Over Load [Note 1]
J5-15	Full Load [Note 1]
J5-16	Fire [Note 1]
J5-17	Inspection [Note 1]
J5-18	Parking [Note 1]
J5-19	Special Use [Note 1]
J5-20	Landing Signal Output [Note 1][Note 2]

Note 1: Output Signal can be changed through setting.
Note 2: Current floor arrival Signal output for LOP display, arrival Gong output for COP display.