

OPAL

Elevator No Touch Panel

Installation and setup guide for OPAL smart no-touch keyboard

Thank you for choosing the OPAL no-touch keyboard device.

This manual includes essential information on how to install the settings and to troubleshoot.

Please read the manual carefully before installation.

Contents

- Introduction
- Features
- Physical specifications and appearance
- Installation and setup map
- Settings



MT-lift.com



-Introduction and product description

Opal is the most luxurious touch-free keyboard that has been designed to protect you from touching the elevator or floor push-buttons and has two parts including floor and cabin opal. Opal contain a smart powerful core with an internal settings feature to be used in the elevator industry.

It can be connected to other devices via the CAN-RS485 port and WiFi.

Thousands of people have been afflicted by the Coronavirus across the world. Governments quarantine people who are believed to be infected with the virus for several days to ensure their health. To this end, certain preventive measures need to be taken in enclosed spaces such as elevators to avoid being infected:

Elevators are normally for public use; therefore, they are potentially contaminated with viruses and bacteria.

In Diagnosis and Treatment for COVID-19 (fourth version), it has been mentioned that the new coronavirus is transferred mainly via aerosols (very fine droplets of liquid or solid particles) and touch.

An elevator car is a small confined space. If you happen to be in the elevator with someone who carries the virus, you are likely to be infected by the virus from his/her saliva droplets produced by coughing, sneezing, and speaking.

If the droplets reach the pushbuttons or the elevator wall, the virus is also likely to be transferred to other people via touching. In this case, if a second person touches his/her mouth, nose or eyes, s/he is going to be infected.

The present product was presented to prevent the spread of these types of viruses inside and outside elevators or any other place where there is a need to touch pushbuttons for using elevators.

In elevators with semi-automatic doors, to avoid touching door handles, use the foot-operated lever; you only need to pull the lever toward yourself using your feet.

Features:

- Body input via the Enter key
- Command input activation by holding a finger close to the button for the specified time
- Command input and output by the Modbus protocol and CanOpen CIA 417 protocol
- Supporting 100 outputs as floors for elevator use and output as IO
- Two relay outputs for activating the alert and cabin fan
- Two relay outputs for opening and closing the elevator door
- WiFi connection with the internal server for inputting commands via smart phones
- A password-protected settings menu
- Saving the settings in EEPROM
- Debounce Time settings
- Authorized input settings for command input and output (serial port, WiFi or CAN)
- Defining maximum floors in the elevator mode
- Defining buttons for underground floors for the purpose of minus floor numbering
- Defining activation periods for outputs
- Adjusting the intensity of lights under the buttons
- Displaying the elevator direction in the elevator mode
- Online display of the current floor in the elevator mode
- LED activation for each pushbutton by placing a finger inside of it at a distance of 2 centimeters

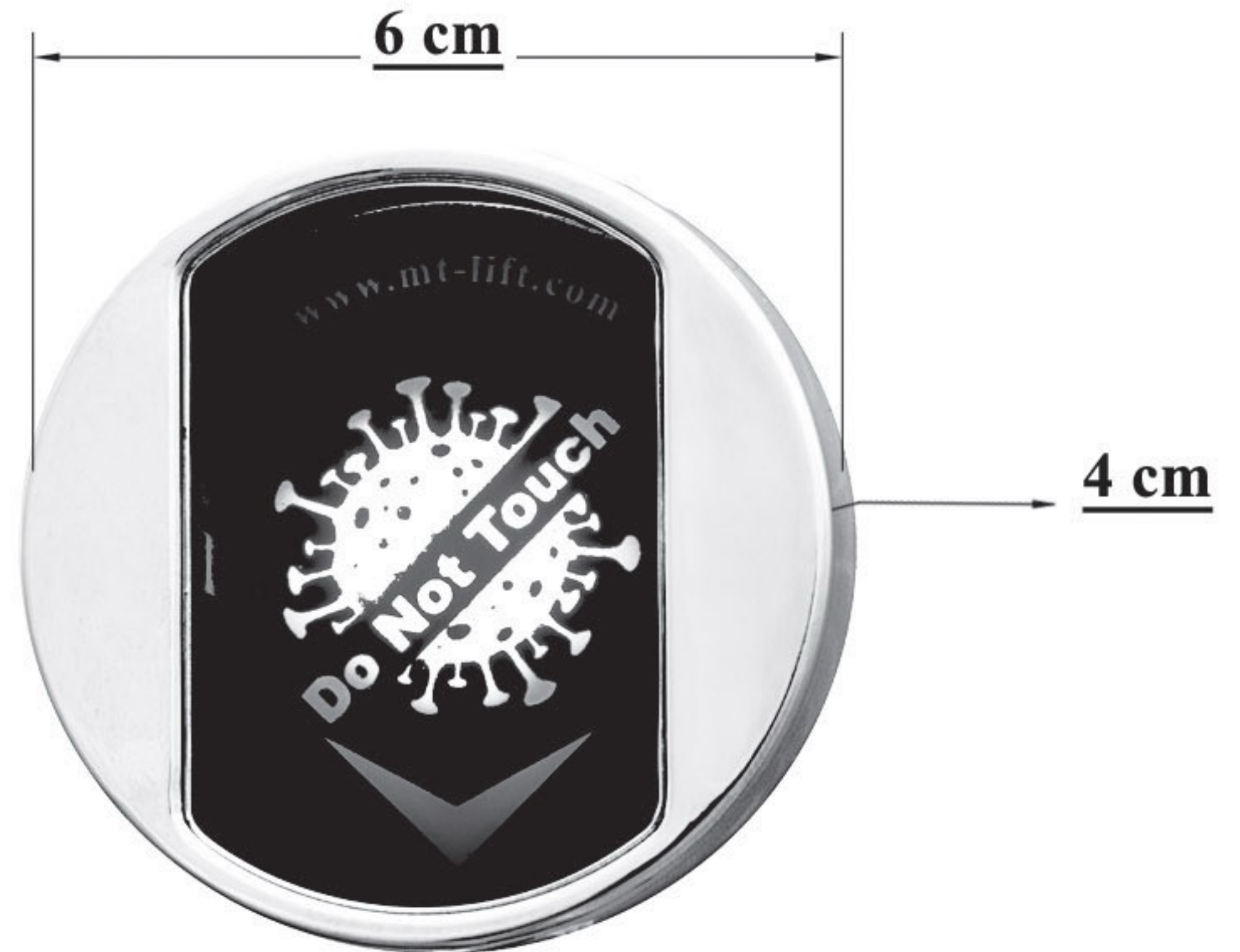


- Physical specifications and appearance

OPAL Floor panel

Diameter of 6 centimeters and height of 4 centimeters

Weight: 50 grams



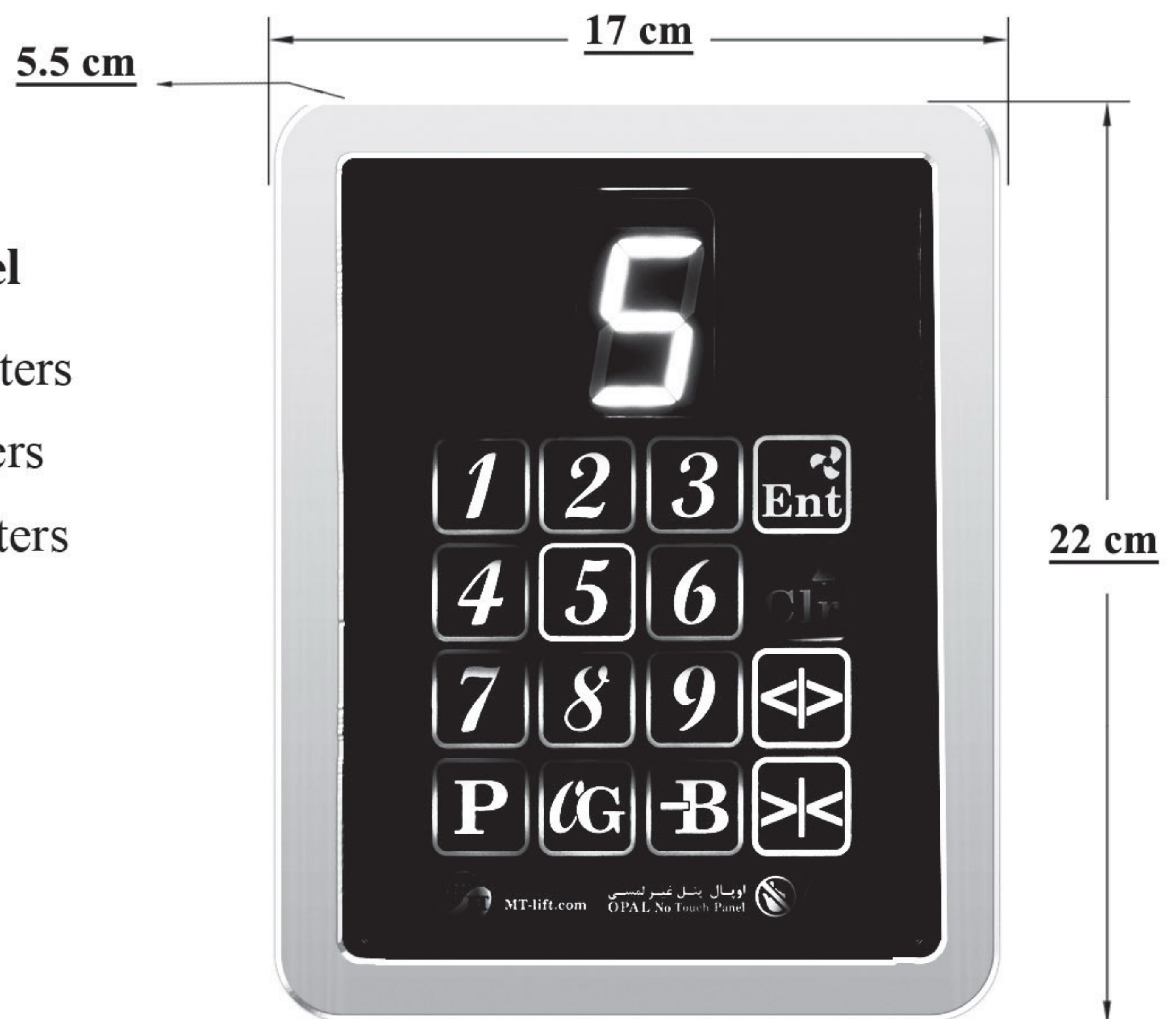
OPAL Cabin panel

Length: 22 centimeters

width: 17 centimeters

height: 5.5 centimeters

weight: 580 grams



- **Installation and setup**

Cut off the elevator panel and direct electricity to the cabin.

A) Wiring the OPAL floor panel

A-1. Put the OPAL floor panel next to the floor pushbutton at a minimum distance and install the screen behind the OPAL panel using double-sided adhesive or a screw. (See Figure 1 for the suggested installation positions of the floors panel.)

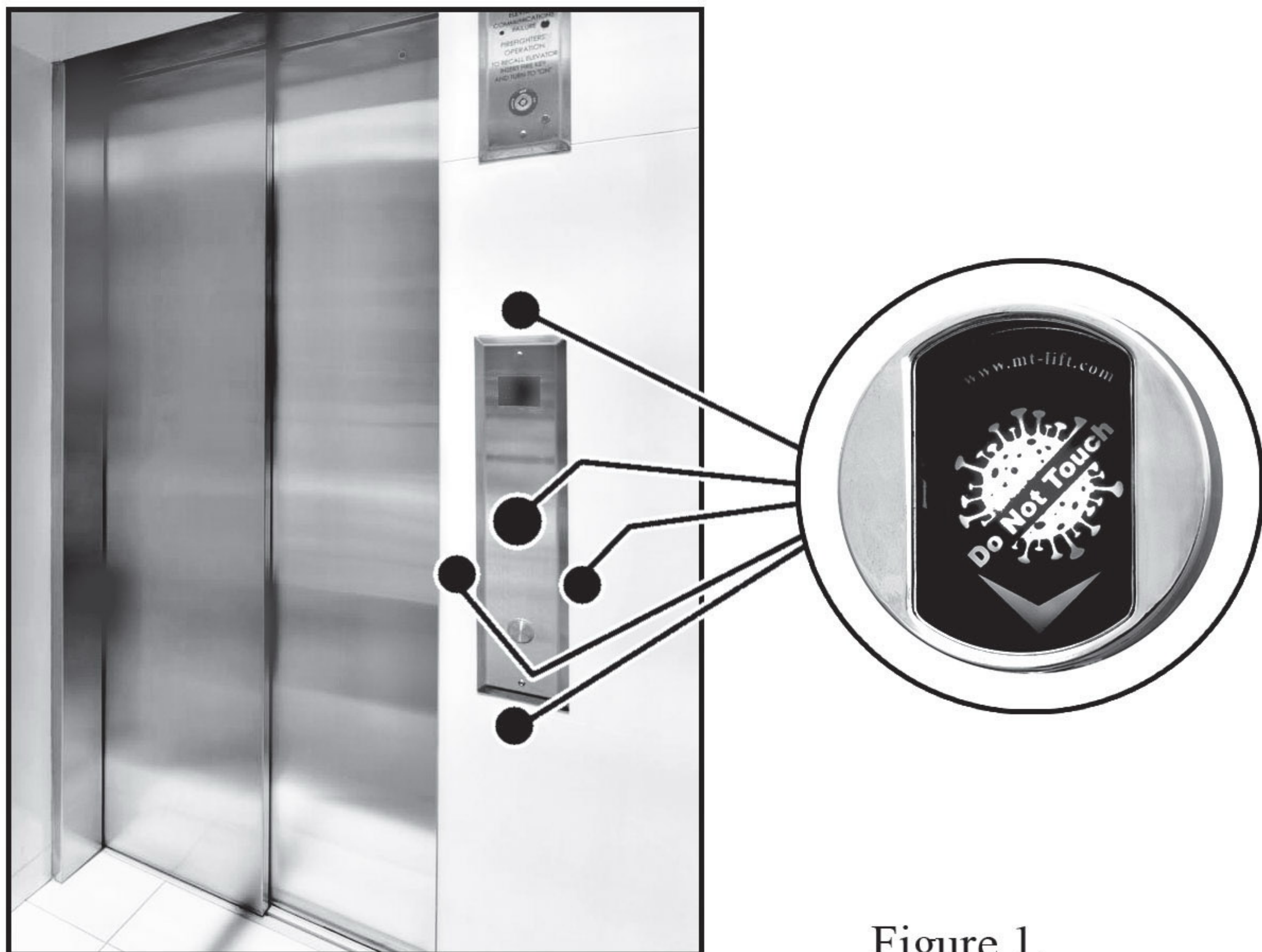
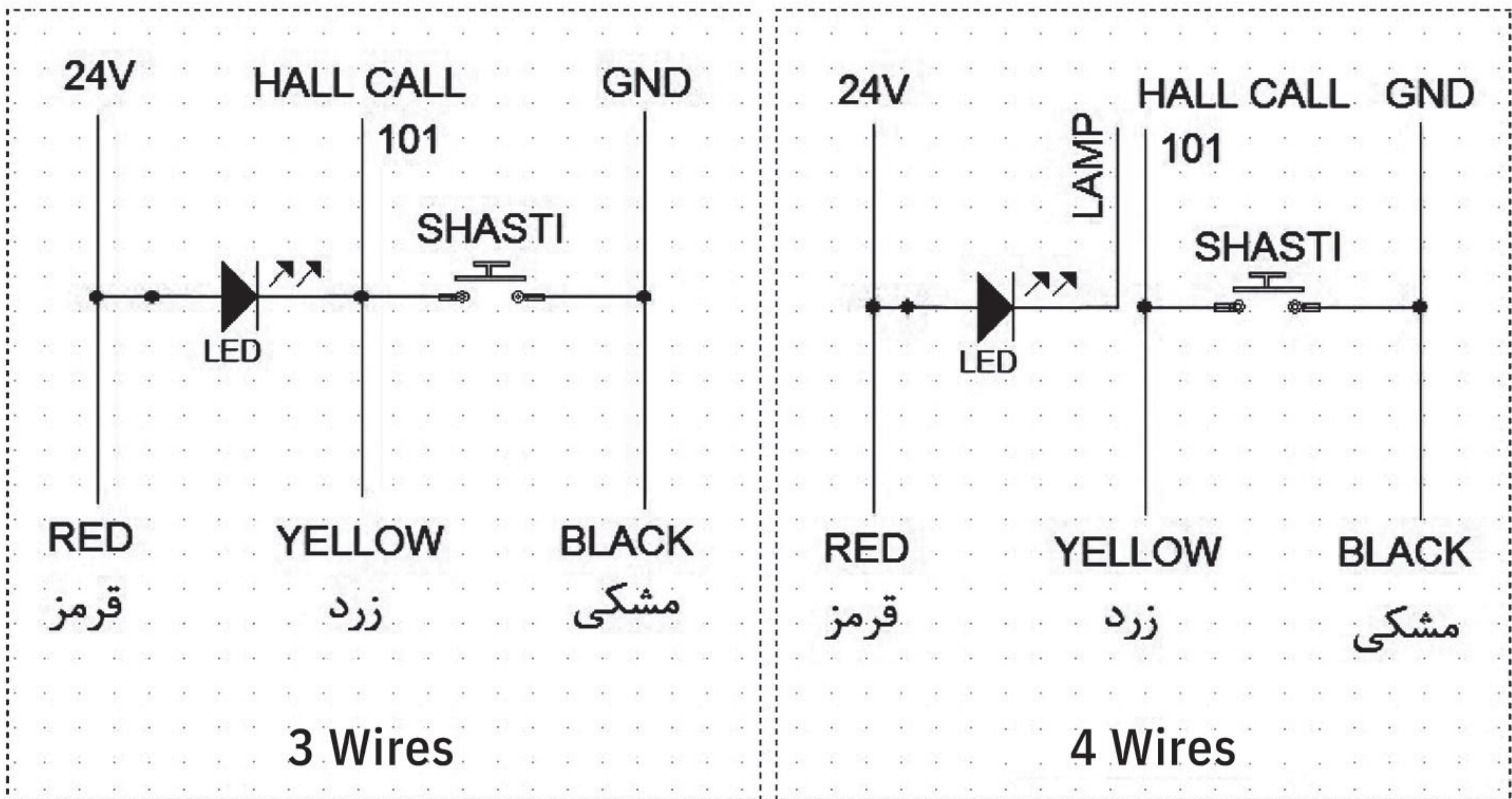


Figure 1.

A-2 Make the wires of the OPAL panel parallel with the floor panel (input and command)



B) Wiring the OPAL cabin panel

B-1. Place the OPAL cabin panel at a minimum distance with the existing panel (the panel body already installed) inside the cabin.

For better visibility, install it at the height of 160-180 centimeters. (See Figure 1 for the suggested installation positions of the OPAL cabin panel)



B-2. Detach the plate behind the OPAL panel and install it flat on or next to the existing pushbutton panel based on the cable exit direction.

B-3. Pass the cable that comes with the convertor board from the middle box of the back plate and install the plate that is on the cabin wall flat on the wall using a screw (from the accessories).

B-4. Connect the cable to the OPAL panel and fix the panel in its place.

B-5. Install the convertor board with adhesive on both sides inside the cabin pushbutton panel.

B-6. Connect the OPAL flat cable with the convertor board and, then, according to the setup guide, follow the steps to wiring the convertor board.

B-7. Finally, connect the incoming power line to the convertor board and turn on the command panel.

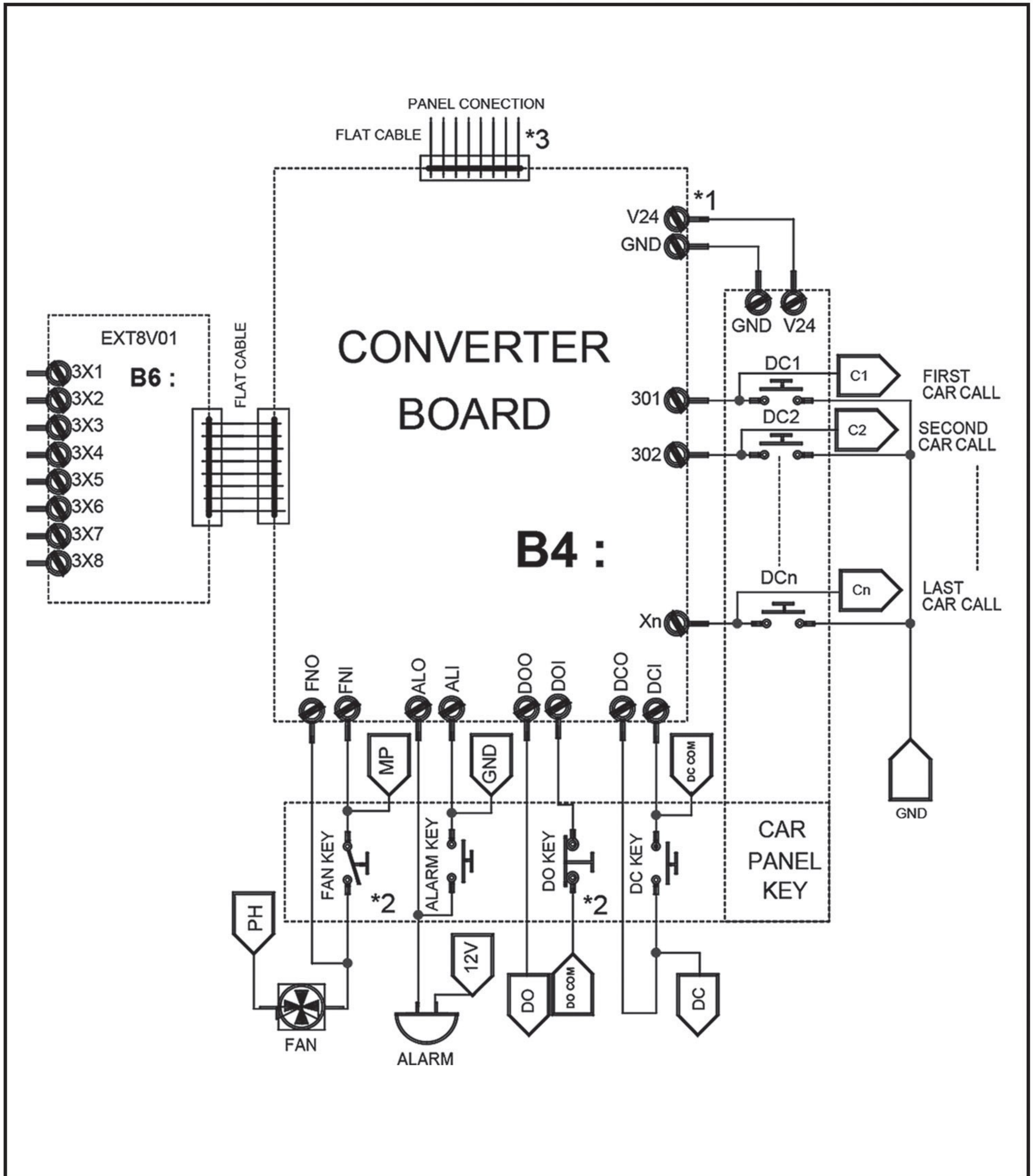
B-8. Install the manual label in its proper place within the sight.

Note:

Never turn off the OPAL panel by the convertor board flat cable because it may cause damage to the device. Use terminal v24 and GND of the convertor board input.



OPAL panel setup plan



Settings

By keeping your finger in front of the Clr/Enter for 10 seconds without touching it, the system will enter the settings mode. To enter, the device requires a password and will be displayed inside the pd segment. After entering the password, the button is activated and the LED light under it will remain on and will wait for pushing the Ent button after dialing 4 numbers. After pressing it, one of the following two possibilities will happen:

- 1) Wrong password, in which case the LED of the pressed buttons will go off and the device will wait for a new password.
- 2) Correct password, in which case the LED of the pushbutton will go off and you will enter the settings menu.

In the setting menu in segment 2, the signs __ will be displayed.

The menu starts from P1 and continues to P9 and further from B1 to B8.

B1 to B8 are related to the floors below Floor One.

By entering, for example, P1, the user will enter the P1 menu. In the following section, each menu will be described.

Selectable values - allowed values for applying the settings (adjustable range)

Default	Selectable values	Menu description	Menu
1	0 = without pressing ENT	Key selection (Command Confirmation)	P1
	1 = by pressing ENT		
0	0 = CONVERTER	Activating the output port	P2
	1 = MODBUS RS485		
	2 = CANOPEN		
0	0 = ELSA PROTOCOL	Activating the connection protocol	P3
	1 = CANOPEN PROTOCOL		
	2 = Reserved		
10*10 ms	1-10 seconds	Determining the time during which output is on	P4
3		Screen brightness	P5
10*10 ms		Button sensitivity	P6
1	0 = normal open	'Open' command operation	P7
	1 = normal closed		
1	*****	Number of stops	P8
*****	*****	Number of floors below Floor One	P9
*****	*****	Selected value for the first floor below Floor One	B1
*****	*****	Selected value for the second- seventh floor below Floor One	B2 B7
*****	*****	Selected value for the eighth floor below Floor One	B8
Advanced settings			
Enter the advanced settings by entering the password.		Access level settings	pb
		Activate pushbutton lock	P1
		Pushbutton lock code	P2
Change password		User password	P3