Monarch

User Guide

Elevator Destination Group Control System

User Guide

INOVANCE

A01
Data code 19010967

Preface

Thank you for purchasing the integrated elevator destination group control system developed by Suzhou Monarch.

This product can work with the NICE series integrated elevator controllers to implement intelligent dispatch of elevator groups in buildings.

The guide provides users with instructions on model selection, installation, parameter setting, on-site commissioning, and maintenance. In order to correctly use this product, read this guide carefully before use, and keep the guide carefully for future reference.

Notes
◆ For illustration purpose, the drawings in this guide are sometimes shown without covers or protective guards. Remember to install the covers or protective guards as specified before using the product, and perform operations in accordance with the instructions.
◆ The drawings in this guide are for illustration only. Actual products may vary.
◆ The instructions are subject to change, without notice, due to product upgrade, specification modification as well as efforts to increase the accuracy and convenience of the user guide.
◆ Contact the regional agents or customer service center of Inovance if you have problems during use.

Contents

Preface 1
Introduction 4
Revision History 7
Safety Instructions 8
Safety Precautions 8
Safety Levels and Definitions 8
Safety Instructions 8
Safety Signs 12
Chapter 1 Product Information 13
1.1 System Components 13
1.2 System Principle 14
1.3 Model Number 15
1.3.1 Group Control Board 15
1.3.2 Floor Selector 15
1.3.3 Touchscreen-Type Floor Selector Bracket 15
1.3.4 IC Card Options 15
1.3.5 Car Display 16
1.4 Technical Data 16
1.4.1 Group Control Board 16
1.4.2 Car Display 16
1.4.3 Floor Selector 17
Chapter 2 Mechanical and Electrical Installation 18
2.1 Installation Environment Requirements 18
2.2 Group Control Board 18
2.2.1 Dimensions 18
2.2.2 Terminal Description 19
2.3 Floor Selector 21
2.3.1 Function Description 21
2.3.2 Installing the 10.4-Inch Wall-Mounted Touchscreen 21
2.3.3 Installing the 10.4-Inch Vertical Touchscreen 23
2.3.4 Installing the 15-Inch Wall-Mounted Touchscreen 25
2.3.5 Installing the 15-Inch Vertical Touchscreen 27
2.3.6 Installing the Keypad-Type Floor Selector 28
2.3.7 Terminal Description 30
2.4 Car Display 31
2.4.1 Dimensions 31

2.4.2 Terminal Description....31
2.4.3 Function Description....31
2.5 Wiring of the Elevator Destination Group Control System 33
Chapter 3 System Commissioning.... 34
3.1 LED Operating Panel.... 34
3.2 Operations of the MCTC-DDS-T Series Floor Selector.... 37
3.2.1 Interface Description 37
3.2.2 Key Description....37
3.2.3 Parameter Settings 37
3.2.4 Elevator Calls....38
3.3 Operations of the MCTC-DDS-K1 Series Floor Selector 39
3.3.1 Introduction to the Floor Selector 39
3.3.2 Description of Keys....40
3.3.3 Parameter Settings 41
3.3.4 Elevator Calls....42
3.3.5 Selecting a Destination Floor by the Disabled....43
3.4 Quick System Commissioning.... 44
Chapter 4 Parameters 46
4.1 Parameters of the Group Control Board 46
4.2 Parameters of the Floor Selector 60
Chapter 5 Parameter Description.... 64
5.1 Description of Group Control Board Parameters 64
Group F0: Basic Parameters 64
Group F1: Terminal Parameters 67
Group F2: Zoning Parameters 68
Group F3: Traffic Time Setting Parameters 70
Group FU: System Monitoring Parameters 76
Group FP: User Parameters 89
5.2 Description of Floor Selector Parameters.... 89
Group F0: Display Parameters....89
Group F1: Basic Parameters 90
Group F2: Floor Display Parameters....92
Group FP: Protection Parameters....93
Chapter 6 Maintenance.... 95
6.1 Daily Maintenance 95
6.2 Periodic Inspection.... 95
6.3 Storage 95
Warranty Agreement.... 96

Introduction

1) Product introduction

The elevator destination group control system with an integration of the intelligent chip and intelligent group control algorithm works with the NICE series integrated elevator controller to implement intelligent dispatch of elevator groups in buildings.

2) Features

■ Group control for all destination floors

A destination floor selector is installed on each floor.

■ Group control of multiple elevators

Group control can be implemented for up to eight elevators.

■ Highly-efficient and safe group control system developed based on the CAN bus.

The group control system is safe and stable, and can respond to calls more quickly.

■ Reduced elevator system cost of a building

Zoned elevator control effectively reduces the waiting and travel time of passengers as well as the total number of elevators required in a building.

■ Energy-saving

Highly-efficient elevator dispatch reduces the number of operation times of elevators in a building, thereby saving electric energy.

■ Flexible

This system is equipped with multiple transportation modes, and with the functions of traffic mode time setting and intelligent traffic mode learning. These flexible configurations can meet the requirements of various application scenarios in buildings.

■ User-friendly

This system is equipped with real-time guidance function. The floor selector can quickly display the ID and direction of the assigned elevator upon receiving a valid elevator call.

■ Intelligent

This system is equipped with automatic traffic mode learning function. Based on the historical traffic data, the system forecasts the traffic mode appropriate for the following moment.

■ Performance evaluation

The performance evaluation function allows you to accurately evaluate the performance of the group control system.

3) Function list

Function	Description
Dispersed elevator waiting	When the group control system detects that the waiting time of an elevator has reached the specified value, it instructs the elevator to return to the main floor. Elevator waiting modes: ◆ Main floor elevator waiting: Users can specify three main floors and set the number of waiting elevators for each of the floors. ◆ Zoned elevator waiting: If users set the zones by themselves, the system instructs the elevators that have reached the maximum idle time to wait in these zones. Otherwise, the system automatically calculates the number and length of zones based on the number of elevators and the height of a building, and instructs the elevators that have reached the maximum idle time to wait in these zones.
VIP function	If a call from a VIP floor is received and the VIP switch is active, the VIP input is valid and the related elevator runs in VIP mode. The group control system does not send other calls to the elevator, ensuring that the elevator serves only for VIP personnel.
Operation limit with backup power supply	When the main power supply of a building fails and the system is powered by the backup power supply, the number of operational elevators is limited. Users can set the number of operational elevators by themselves.
Traffic mode time setting	The traffic mode within a specified period of time can be set in two methods: ◆ Set by users. ◆ Set through automatic traffic mode learning.
User-defined traffic mode	Users can set the traffic mode for each of the 10 periods per day. For a week, they can set the mode for 70 periods in total.
Automatic traffic mode learning	The system is equipped with automatic traffic mode learning. Based on the parameters of each period in each day of each week stored in SD card as well as the historical data, the system forecasts the traffic mode for the next moment. The large amount of historical data makes the forecast more intelligent and accurate.

Function	Description	
Multiple traffic modes	Energy-saving mode	When the traffic is light, the system enters the energy-saving mode. Based on the group control rule, fewer elevators are running to save energy within the allowable range of waiting time.
	Up peak mode	After the system enters the up peak mode, if an elevator has no call to respond, it returns to the peak service floor to ease the up traffic jam on this floor.
	Down peak mode	This mode is available if zones are defined, so as to better ease the down traffic jam. When an elevator is idle, it returns to the terminal floor that is away from the down peak floor in that zone. If zones are not defined, the software automatically sets the zones.
	Normal traffic mode	When the traffic is normal and elevator calls do not differ greatly across floors, the system works in this mode.
	Sudden peak hour mode	You can set the floors for the sudden peak hour service and the number of elevators for these floors. If more than three calls are received from a peak floor and no elevator is available on the floor, the system sends the preset number of elevators to that floor to better provide services for the floor.
Disability service	This function enables the system to assign an accessible elevator when there is a call. In addition, a voice prompt is given when keys are pressed.	
Real-time guidance	After a call from a floor is received, the floor selector displays the ID of the assigned elevator in real time.	
Group control output	Parameters can be used to view some indicators of the group control system in a certain period of time, including the average waiting time, average travel time, full-load rate, and long-time waiting rate.	
Zoned service	Service zones are defined for elevators based on the building height and number of floors. Zones can be defined automatically or manually.	
Grouping	When multiple passengers need to take elevators at the same time to the same floor, enter the number of passengers and the destination floor. The system then automatically sets the number of elevators that provide services for the passengers.	

Revision History

Date	Version	Change Description
April 2019	A00	First release.
Sep. 2020	A01	Made minor corrections.

Safety Instructions

Safety Precautions

1) Before installing, using, and maintaining this equipment, read the safety information and precautions thoroughly, and comply with them during operations.
2) To ensure the safety of humans and equipment, follow the signs on the equipment and all the safety instructions in this user guide.
3) "CAUTION", "WARNING", and "DANGER" items in the manual do not indicate all safety precautions that need to be followed; instead, they just supplement the safety precautions.
4) Use this equipment according to the designated environment requirements. Damage caused by improper usage is not covered by warranty.
5) Inovance shall take no responsibility for any personal injuries or property damage caused by improper usage.

Safety Levels and Definitions

 DANGER	indicates that failure to comply with the notice will result in severe personal injuries or even death.
 WARNING	indicates that failure to comply with the notice may result in severe personal injuries or even death.
 CAUTION	indicates that failure to comply with the notice may result in minor personal injuries or damage to the equipment.

Safety Instructions

Unpacking
 CAUTION ◆ Check whether the packing is intact and whether there is damage, water seepage, damp, and deformation. ◆ Unpack the package by following the package sequence. Do not hit the package with force. ◆ Check whether there are damage, rust, or injuries on the surface of the equipment or equipment accessories. ◆ Check whether the number of packing materials is consistent with the packing list.
 WARNING ◆ Do not install the equipment if you find damage, rust, or indications of use on the equipment or accessories. ◆ Do not install the equipment if you find water seepage, component missing or damage upon unpacking. ◆ Do not install the equipment if you find the packing list does not conform to the equipment you received.

Storage and Transportation

- Store and transport this equipment based on the storage and transportation requirements for humidity and temperature.
- Avoid transporting the equipment in environments such as water splashing, rain, direct sunlight, strong electric field, strong magnetic field, and strong vibration.
- Avoid storing this equipment for more than three months. Long-term storage requires stricter protection and necessary inspections.
- Pack the equipment strictly before transportation. Use a sealed box for long-distance transportation.
- Never transport this equipment with other equipment or materials that may harm or have negative impacts on this equipment.

- Use professional loading and unloading equipment to carry large-scale or heavy equipment.
- When carrying this equipment with bare hands, hold the equipment casing firmly with care to prevent parts falling. Failure to comply may result in personal injuries.
- Handle the equipment with care during transportation and mind your step to prevent personal injuries or equipment damage.
- Never stand or stay below the equipment when the equipment is lifted by hoisting equipment.

Installation

- Thoroughly read the safety instructions and user guide before installation.
- Do not modify this equipment.
- Do not rotate the equipment components or loosen fixed bolts (especially those marked in red) on equipment components.
- Do not install this equipment in places with strong electric or magnetic fields.
- When this equipment is installed in a cabinet or final equipment, protection measures such as a fireproof enclosure, electrical enclosure, or mechanical enclosure must be provided. The IP rating must meet IEC standards and local laws and regulations.

- Equipment installation, wiring, maintenance, inspection, or parts replacement must be performed by only professionals.
- Installation, wiring, maintenance, inspection, or parts replacement must be performed by only experienced personnel who have been trained with necessary electrical information.
- Installation personnel must be familiar with equipment installation requirements and relevant technical materials.
- Before installing equipment with strong electromagnetic interference, such as a transformer, install an electromagnetic shielding device for this equipment to prevent malfunctions.

Wiring

- Equipment installation, wiring, maintenance, inspection, or parts replacement must be performed by only professionals.
- Never perform wiring at power-on. Failure to comply will result in an electric shock.
- Before wiring, cut off all equipment power supplies. Wait at least 10 minutes before further operations because residual voltage exists after power-off.
- Make sure that the equipment is well grounded. Failure to comply will result in an electric shock.
- During wiring, follow the proper electrostatic discharge (ESD) procedures, and wear an antistatic wrist strap. Failure to comply will result in damage to internal equipment circuits.

- Never connect the power cable to output terminals of the equipment. Failure to comply may cause equipment damage or even a fire.
- When connecting a drive with the motor, make sure that the phase sequences of the drive and motor terminals are consistent to prevent reverse motor rotation.
- Wiring cables must meet diameter and shielding requirements. The shielding layer of the shielded cable must be reliably grounded at one end.
- After wiring, make sure that no screws are fallen and cables are exposed in the equipment.

Power-on

- Before power-on, make sure that the equipment is installed properly with reliable wiring and the motor can be restarted.
- Before power-on, make sure that the power supply meets equipment requirements to prevent equipment damage or even a fire.
- At power-on, unexpected operations may be triggered on the equipment. Therefore, stay away from the equipment.
- After power-on, do not open the cabinet door and protective cover of the equipment. Failure to comply will result in an electric shock.
- Do not touch any wiring terminals at power-on. Failure to comply will result in an electric shock.
- Do not remove any part of the equipment at power-on. Failure to comply will result in an electric shock.

Operation

- Do not touch any wiring terminals during operation. Failure to comply will result in an electric shock.
- Do not remove any part of the equipment during operation. Failure to comply will result in an electric shock.
- Do not touch the equipment shell, fan, or resistor for temperature detection. Failure to comply will result in heat injuries.
- Signal detection must be performed by only professionals during operation. Failure to comply will result in personal injuries or equipment damage.

- Prevent metal or other objects from falling into the device during operation. Failure to comply may result in equipment damage.
- Do not start or stop the equipment using the contactor. Failure to comply may result in equipment damage.

Maintenance

- Equipment installation, wiring, maintenance, inspection, or parts replacement must be performed by only professionals.
- Do not maintain the equipment at power-on. Failure to comply will result in an electric shock.
- Before maintenance, cut off all equipment power supplies and wait at least 10 minutes.

- Perform daily and periodic inspection and maintenance for the equipment according to maintenance requirements and keep a maintenance record.

Repair

- Equipment installation, wiring, maintenance, inspection, or parts replacement must be performed by only professionals.
- Do not repair the equipment at power-on. Failure to comply will result in an electric shock.
- Before inspection and repair, cut off all equipment power supplies and wait at least 10 minutes.

WARNING

- Require for repair services according to the product warranty agreement.
- When the equipment is faulty or damaged, require professionals to perform troubleshooting and repair by following repair instructions and keep a repair record.
- Replace quick-wear parts of the equipment according to the replacement guide.
- Do not operate damaged equipment. Failure to comply may result in worse damage.
- After the equipment is replaced, perform wiring inspection and parameter settings again.

Disposal

WARNING

- Dispose of retired equipment by following local regulations or standards. Failure to comply may result in property damage, personal injuries, or even death.
- Recycle retired equipment by following industry waste disposal standards to avoid environmental pollution.

Safety Signs

For safe equipment operation and maintenance, comply with safety signs on the equipment, and do not damage or remove the safety labels. The following table describes the safety signs.

Safety Sign	Description
	◆ Read the user guide before installation and operation. Failure to comply will result in an electric shock. ◆ Do not remove the cover at power-on or within 10 minutes after power-off. ◆ Before maintenance, inspection, and wiring, cut off input and output power, and wait at least 10 minutes until the power indicator is off.

Chapter 1 Product Information

1.1 System Components

The destination group control system groups multiple elevators (up to eight elevators). After a passenger enters the destination floor number using the floor selector, the system assigns one of the elevators to the passenger based on the current operating status of the elevators.

The system is composed of a group control board (GCB), floor selectors, and a multi-elevator control system. The following figure shows the system components.

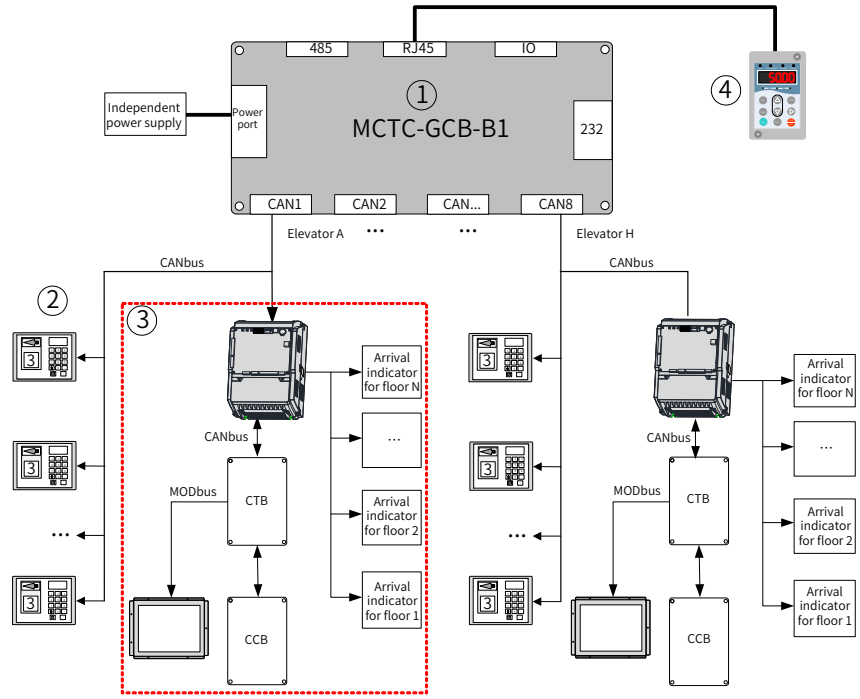


Figure 1-1 System components

NOTE

◆ The preceding figure shows a group control example of eight elevators (elevators A, B, C, D, E, F, G, and H).

Table 1-1 Name and models of system components

SN	Name	Model	Description
①	GCB	MCTC-GCB-B1	Standard
②	Floor selector	MCTC-DDS-T1 MCTD-DDS-T2 MCTC-DDS-K1	Standard (select at least one from the three models)

SN	Name		Model	Description
③	Elevator control system	Car display	MCTC-HCB-T3-DDS	Standard (dedicated to destination group control)
		Integrated elevator controller	NICE series	For details, see the user guides of NICE series integrated elevator controllers.
		Car top board (CTB)	MCTC-CTB	
		Car call board (CCB)	MCTC-CCB-A	Optional (See the user guides of NICE series integrated elevator controllers)
		Hall arrival indicator	MCTC-HCB-B and related options	Optional (For details, consult Inovance).
④	LED operating panel		MDKE	Optional External LED operating panel, connected to RJ45 port.

1.2 System Principle

The GCB is the core computing unit. The floor selector is the collection unit of registered destination floor information. The integrated elevator controller is the transportation control unit that implements all control and operation functions of an elevator. The car display is the unit that displays the next stop floor, current floor, and elevator running direction.

The GCB communicates with the floor selector through the CAN bus to collect passengers' calls entered using the floor selector. In addition, the GCB exchanges data with the NICE series integrated elevator controllers through the CAN bus. The GCB performs computation and comparison to identify the optimum elevator for a passenger's call. Then, it drives the elevator to take the passenger and sends the ID of the elevator to corresponding floor selector accordingly. The floor selector displays the ID of the elevator to take and makes a corresponding voice prompt.

After receiving the elevator dispatch command sent by the GCB, the integrated elevator controller immediately performs the operation logic control and drives an elevator to take the passenger. After the elevator arrives at the floor where the passenger waits and the passenger enters the car, the controller records the destination floor number automatically and takes the passenger to the destination floor. In addition, the next stop floor, current floor, and elevator running direction are displayed on the car display board. Based on this logic, the destination group control system controls the coordinated operation of each component to complete the transportation task.

1.3 Model Number

1.3.1 Group Control Board

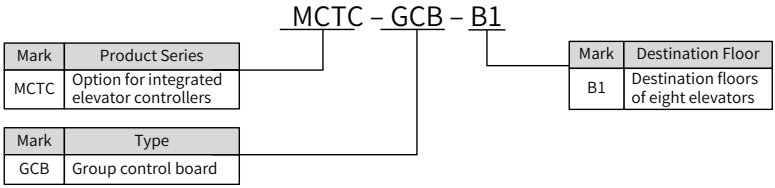


Figure 1-2 Model number of the GCB

1.3.2 Floor Selector

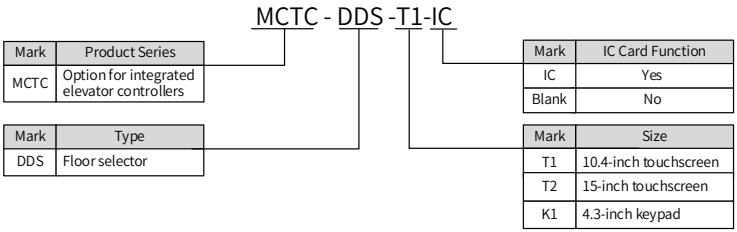


Figure 1-3 Model number of the floor selector

1.3.3 Touchscreen-Type Floor Selector Bracket

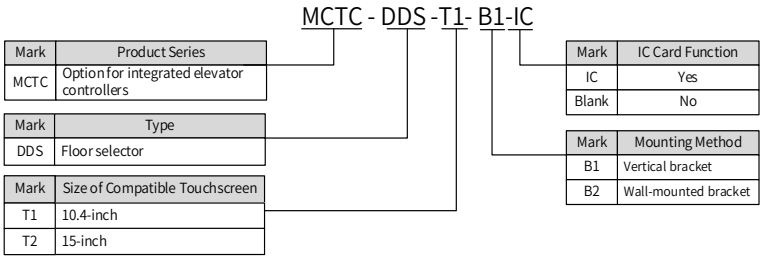


Figure 1-4 Model number of the touchscreen-type floor selector bracket

1.3.4 IC Card Options

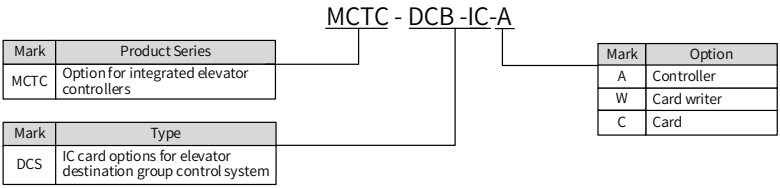


Figure 1-5 Model number of IC card options

1.3.5 Car Display

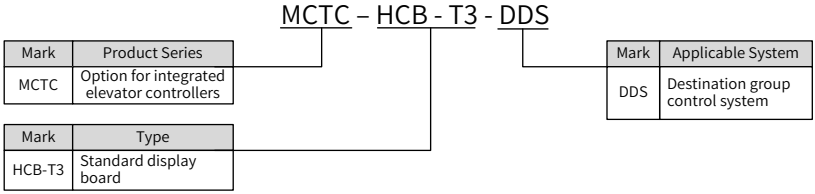


Figure 1-6 Model number of the car display

1.4 Technical Data

1.4.1 Group Control Board

Table 1-2 System technical data

Item		Specifications
Basic performance parameters	Input voltage	24 VDC (-10% to +10%)
	Communication mode	CAN communication
	Number of elevators supported	Maximum: eight elevators
	Number of floor selectors supported	Each CAN communication port supports 56 floor selectors. The maximum total number of floor selectors is 56 × 8.
	Communication distance	Above 1000 m

1.4.2 Car Display

Table 1-3 Technical data of the MCTC-HCB-T3-DDS car display

Item		Specifications
Basic performance parameters	Power supply	24 VDC (-10% to +10%)
	Display mode	True-color display
	Physical dimensions	250 x 194 x 32 (unit: mm)
	Valid display range	197 x 148 (unit: mm)
	Resolution	1024 x 768
	Communication mode	485 communication
	Power consumption	⩽ 6 W
	Operating ambient temperature	-20°C to +70°C
	Operating ambient humidity	Less than 95%RH, non-condensing
	Function	Horizontal display, elevator running status display, and destination floor number display

1.4.3 Floor Selector

The floor selector is a key interface for information exchange between users and the control system. It can receive user calls at a hall. The following table shows the main technical data.

Table 1-4 Parameters of the floor selector

Model	MCTC-DDS-T1	MCTC-DDS-T2	MCTC-DDS-K1
Size of the display screen	10.4-inch	15-inch	4.3-inch
Power supply voltage	18–36 VDC	18–36 VDC	18–36 VDC
Equipment power consumption	⩽ 7.5 W	⩽ 15 W	⩽ 12 W
Valid display range (W x H)	159.5 mm × 212.5 mm	305 mm × 229 mm	95 mm × 54 mm
Type of LCD	a-Si, LED backlit	a-Si, LED backlit	TFT VGA color display
Display resolution (W x H)	800 × 600 dot	1024 × 768 dot	480 × 272 dot
Horizontal viewing angle	-70° to +70°	-70° to +70°	-70° to +70°
Vertical viewing angle	-70° to +40°	-70° to +70°	-70° to +40°
Operating ambient temperature	-10°C to +60°C	-10°C to +60°C	-20°C to 70°C
Operating ambient humidity	10%RH to 90%RH, non-condensing	10%RH to 90%RH, non-condensing	10%RH to 90%RH, non-condensing

The models of the touchscreen-type floor selector bracket are shown in the following table.

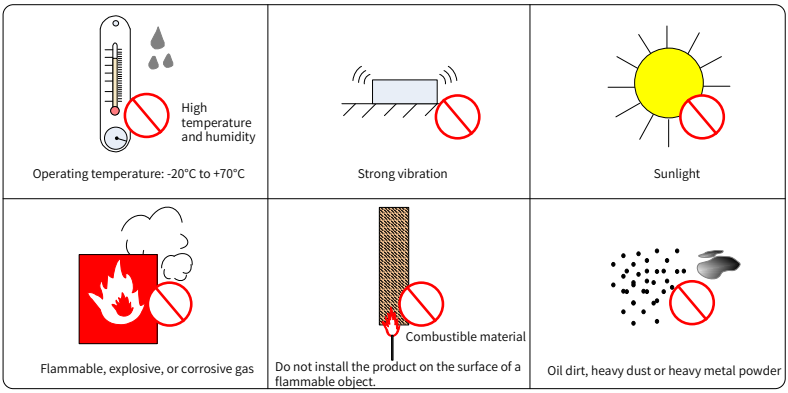
Table 1-5 Parameters of the floor selector bracket

Model	Description	Max. Dimensions (unit: mm)
MCTC-DDS-T1-B1	10.4-inch touchscreen-type floor selector (vertical)	260.5 × 239 × 1020.6
MCTC-DDS-T1-B2	10.4-inch touchscreen-type floor selector (wall-mounted)	260.5 × 171.32 × 254.67
MCTC-DDS-T2-B1	15-inch touchscreen-type floor selector (vertical)	343.4 × 230.28 × 1075.26
MCTC-DDS-T2-B2	15-inch touchscreen-type floor selector (wall-mounted)	343.4 × 224.52 × 436.55

Chapter 2 Mechanical and Electrical Installation

2.1 Installation Environment Requirements

- Ambient temperature: -20°C to +70°C
- Install it in a place free from vibration.
- Install it in a place free from direct sunlight, high humidity and condensation.
- Install it in a place free from corrosive, flammable, or explosive gas.
- Install it in a place free from oil dirt, heavy dust and heavy metal powder.

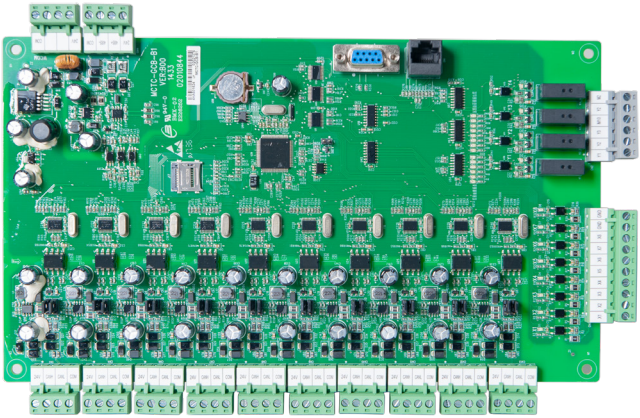


2.2 Group Control Board

2.2.1 Dimensions

The MCTC-GCB-B1 is the core component of the group control system. It has eight digital input (DI) terminals and four digital output (DO) terminals.

The following figure shows the appearance and dimensions of the MCTC-GCB-B1.



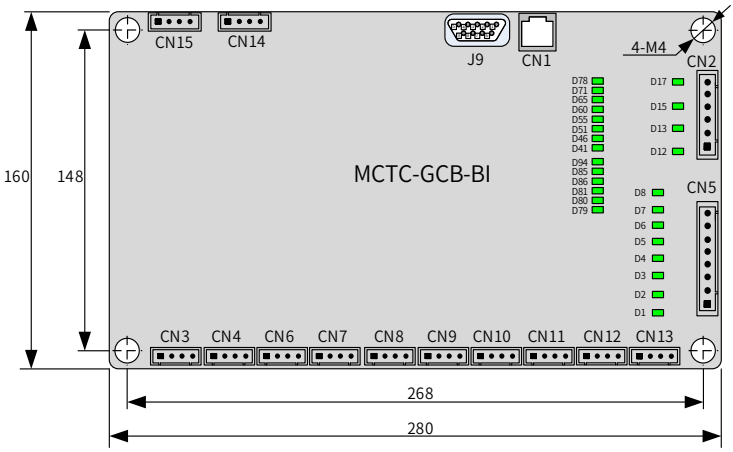
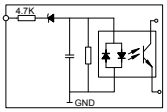
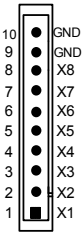
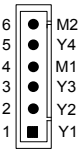
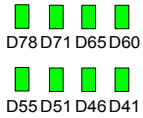


Figure 2-1 Appearance and dimensions of the MCTC-GCB-B1 (unit: mm)

2.2.2 Terminal Description

Table 2-1 Description of GCB terminals

Type	Mark	Functions Description	Remarks
CN15	24V/GND	24 V power input of the GCB	+24V GND 1 2 3 4
CN3-CN4 CN6-CN13	24V/COM	Isolated CAN communication power supply	+24V CANH CANL COM 1 2 3 4
	CANH/CANL	Isolated CAN communication port	
CN14	24V/GND	Isolated 485 communication power supply	+24V 485+ 458- GND 1 2 3 4
	485+/485-	Isolated 485 communication port	
J9	DB9 port	232 host controller communication port	
CN1	RJ45 port	Connected to the LED operating panel to set and view the parameters of the GCB.	

Type	Mark	Functions Description	Remarks
CN5	X1-X8/GND	Used for DI: 1. Photocoupler input 2. Input impedance: 4.7 kΩ 3. Voltage range upon level input: 10–30 VDC 4. Max. input current: 5 mA  (DI terminals)	
CN2	Y1-Y4, M1, M2	Relay output Y1 to Y4 Normally open (NO) contact output of the relay: 5 A, 250 VAC/28 VDC	
D1 to D8	DI indicators	These indicators becomes ON (green) when the external input signal is active.	
D12 to D17	Relay output indicators	These indicators becomes ON (green) when there is a system output.	
D78, D71, D65, D60, D55, D51, D46, and D41	CAN communication indicators	These indicators indicate the CAN communication status of elevators 1 to 8. Flashing: Indicating that the elevator is in the automatic running state, with normal CAN communication. Steady ON: Indicating that the elevator is not in the automatic running state, but the CAN communication is normal. Steady OFF: Indicating that CAN communication of the elevator is interrupted.	
D85, D86, D81 and D80	Reserved	-	-
D79	24 V power indicator	This indicator becomes ON after the GCB is powered up.	
D94	Fault indicator	This indicator becomes ON if an elevator runs out of the group control or there is a communication error.	

NOTE

- To prevent external communication interference, use the shielded twisted pair (STP) as communication cables and avoid laying them in parallel.
- The GCB must be powered by an independent 24 V power supply, and cannot share the 24 V power supply with the elevator system.

2.3 Floor Selector

2.3.1 Function Description

Table 2-2 Function description of the floor selector

Function	Description
Parameter setting	It can be used to set the floor selector parameters.
Disability function	It collects the calls from disabled passengers.
Destination floor information collection	It collects the destination floor information entered by passengers using buttons.
LCD display	It displays the entered destination floor.
Buzzer prompt	It tweets when keys are pressed.
IC card function	It supports the call registration by swiping IC card.
Elevator indication	It notifies passengers of the ID of the elevator to wait.
Voice announcement	It supports the voice announcement function (applicable only to the touchscreen-type floor selectors).

Floor selection touch button: Passengers can select their destination floor by touching the floor buttons, and then the selected buttons light up.

Available elevator indication: After a passenger selects the destination floor, the floor selector display the ID of the assigned elevator for the passenger to take, reducing waiting time.

Soft and clear female voice announcement: After a passenger selects the destination floor, a soft and clear female voice prompts the passenger to take the available elevator, enhancing the riding comfort.

Date and week displays: The current date and week are displayed in real time, and you can calibrate them using the touchscreen.

Customization: After entering the correct password, the administrator can set various floor selector parameters, such as the floor selector display and function parameters, floor display parameters, and system parameters.

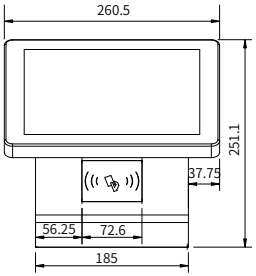
2.3.2 Installing the 10.4-Inch Wall-Mounted Touchscreen

1) Product appearance

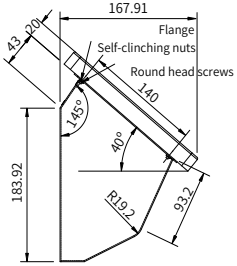
Notes:

1) The floor selector consists of a touchscreen (MCTC-DDS-T1-IC) and a wall-mounted bracket (MCTC-DDS-T2-B2-IC).
2) If no IC card reader is equipped, install a black acrylic plate in the position reserved for the card reader.
3) Errors in the physical dimensions or differences in the surface textures of different batches of products may exist. The physical dimensions and surface textures are subject to the actual product.

2) Dimensions

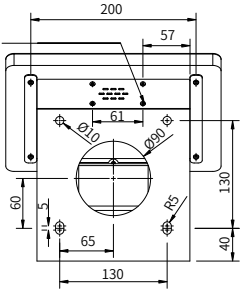


Front view

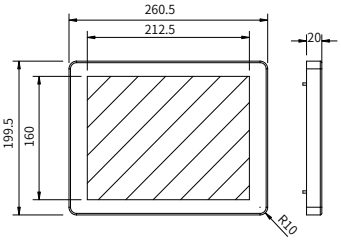


Side view

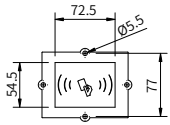
Four M3x8 countersunk head screws and four M3 hexagon nuts with flange



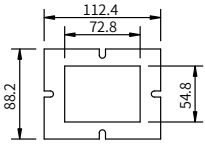
Rear view



Touchscreen dimensions

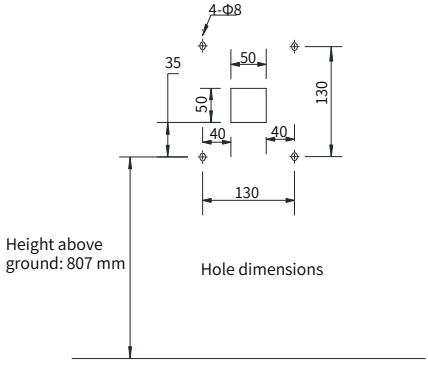


Dimensions of an IC card

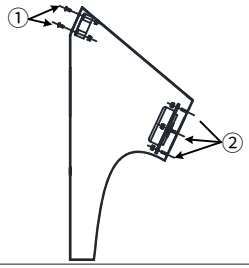
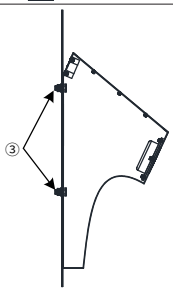
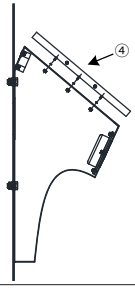


Dimensions of a black acrylic plate

3) Installation procedure

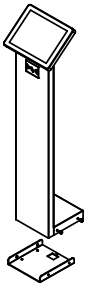


Hole dimensions

Step	Diagram
Step 1: Punch holes in the wall, and install the horn. Options: four M3x8 countersunk head screws and four M3 hexagon nuts with flange	
Step 2: Install the IC card reader (optional). A black acrylic plate has been installed in the position reserved for the card reader before delivery. Options: four M3 hexagon nuts with flange	
Step 3: Install the bracket. Method 1: Install the bracket on the solid slab wall (by default). Options: four M8 bolts (standard) Method 2: Install the bracket on the metal slab wall. Options: four M8x16 bolts, four M8 washers, and four M8 nuts (prepared by users)	
Step 4: Install the floor selector. Options: six M3 hexagon nuts with flange	

2.3.3 Installing the 10.4-Inch Vertical Touchscreen

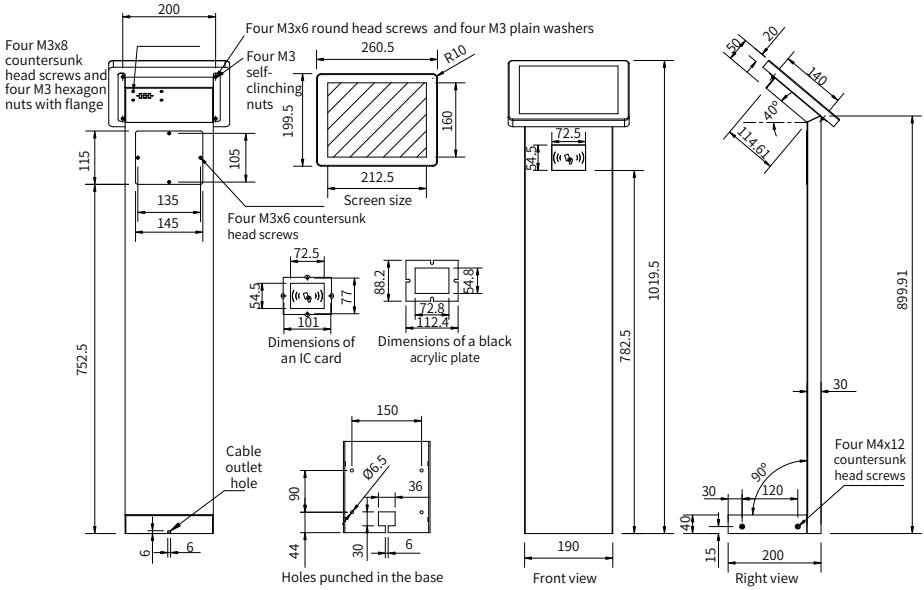
1) Product appearance



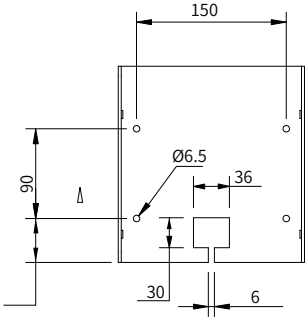
Notes:

1) The floor selector consists of a touchscreen (MCTC-DDS-T1-IC) and a vertical bracket (MCTC-DDS-T1-B1-IC).
2) If no IC card reader is equipped, install a black acrylic plate in the position reserved for the card reader.
3) Errors in the physical dimensions or differences in the surface textures of different batches of products may exist. The physical dimensions and surface textures are subject to the actual product.

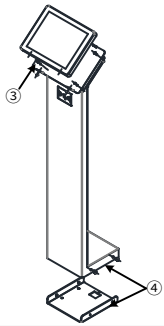
2) Dimensions



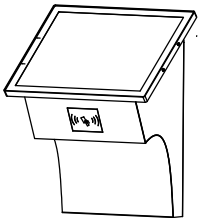
3) Installation procedure



Holes punched in the base

<table>
<tr><th>Step</th><th>Diagram</th></tr>
<tr><td>Step 1: Punch holes in the base, and install the horn.
Options: four M3x8 countersunk head screws and four M3 hexagon nuts with flange</td><td rowspan="2"> 
</td></tr>
<tr><td>Step 2: Install the IC card reader (optional).
A black acrylic plate has been installed in the position reserved for the card reader before delivery.
Options: four M3 hexagon nuts with flange</td></tr>
<tr><td>Step 3: Install the floor selector.
Options: four M3x8 cross recessed screws, four M3 washers, and four M3x8 countersunk head screws.</td><td rowspan="2"> 
</td></tr>
<tr><td>Step 4: Install the bracket.
Options: four M4x12 countersunk head screws</td></tr>
</table>

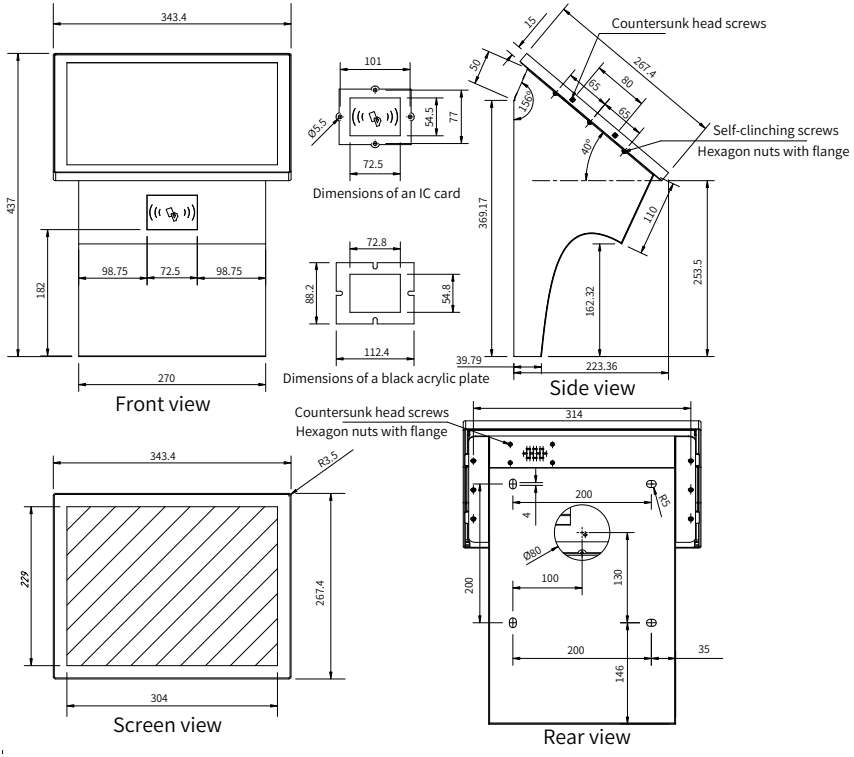
2.3.4 Installing the 15-Inch Wall-Mounted Touchscreen



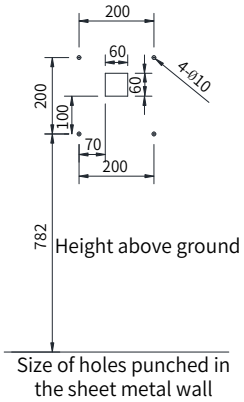
Notes:

1) The floor selector consists of a touchscreen (MCTC-DDS-T2-IC) and a vertical bracket (MCTC-DDS-T2-B2-IC).
2) If no IC card reader is equipped, install a black acrylic plate in the position reserved for the card reader.
3) Errors in the physical dimensions or differences in the surface textures of different batches of products may exist. The physical dimensions and surface textures are subject to the actual product.

1) Dimensions



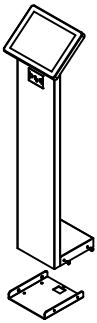
2) Installation procedure



For details, see the installation of MCTC-DDS-T1 in section "2.3.2 Installing the 10.4-Inch Wall-Mounted Touchscreen".

2.3.5 Installing the 15-Inch Vertical Touchscreen

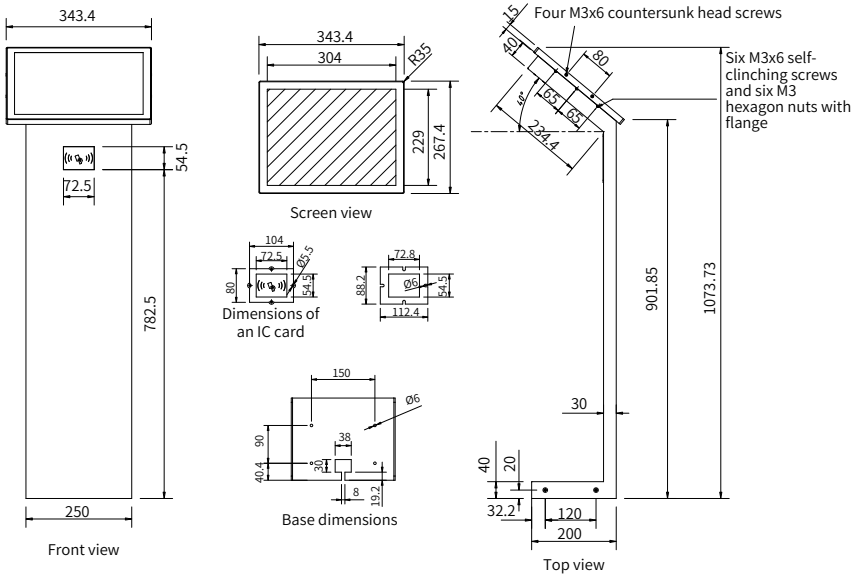
1) Product appearance



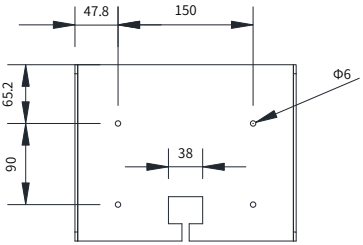
Notes:

1) The floor selector consists of a touchscreen (MCTC-DDS-T2-IC) and a vertical bracket (MCTC-DDS-T2-B1-IC).
2) If no IC card reader is equipped, install a black acrylic plate in the position reserved for the card reader.
3) Errors in the physical dimensions or differences in the surface textures of different batches of products may exist. The physical dimensions and surface textures are subject to the actual product.

2) Dimensions



3) Installation procedure



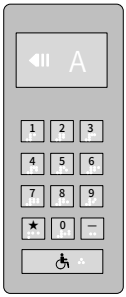
Dimensions of holes punched in the base

For details, see the installation of MCTC-DDS-T1 in section"2.3.3 Installing the 10.4-Inch Vertical Touchscreen".

2.3.6 Installing the Keypad-Type Floor Selector

■ MCTC-DDS-K1 (the keypad-type floor selector, without IC card function)

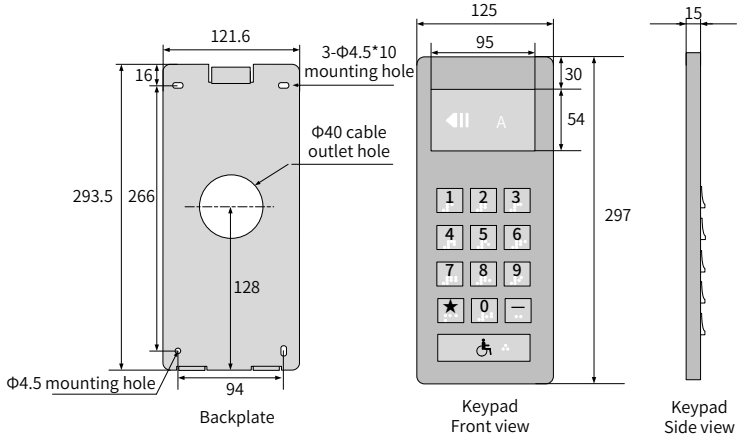
1) Product appearance



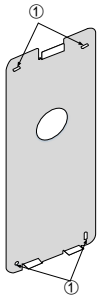
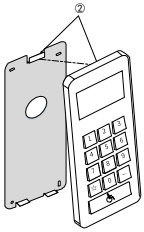
Notes:

1) There are floor buttons and a button specialized for disabled passengers.
2) The elevator direction display indicates the location of the assigned car.
3) Braille numbers are embossed on the buttons of the keypad.
4) Errors in the physical dimensions or differences in the surface textures of different batches of products may exist. The physical dimensions and surface textures are subject to the actual product.

2) Dimensions



3) Installation procedure

Step	Diagram
Step 1: Install the backplate. Options: four M4.5x10 countersunk head screws	
Step 2: Punch holes in the upper part of the floor selector back and insert the upper hooks of the backplate into these holes.	
Step 3: Punch holes in the lower part of the floor selector back and insert the lower supports of the backplate into these holes.	

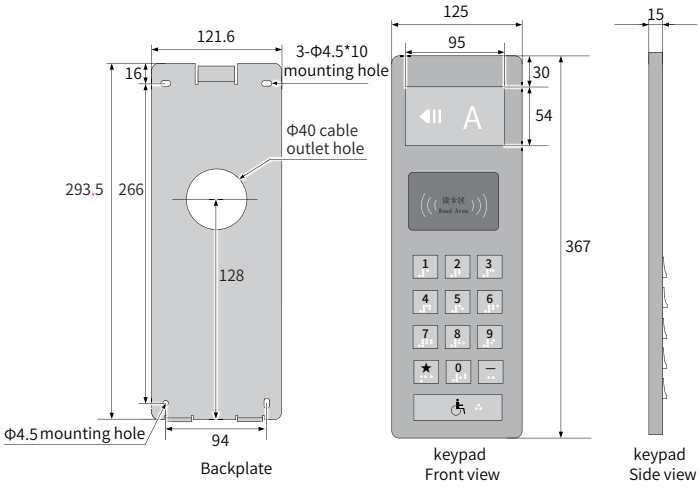
■ MCTC-DDS-K1-IC (the keypad-type floor selector, with IC card function)

1) Product appearance

Notes:

1) There are floor buttons and a button specialized for disabled passengers.
2) The elevator direction display indicates the location of the assigned car.
3) Braille numbers are embossed on the buttons of the keypad.
4) Errors in the physical dimensions or differences in the surface textures of different batches of products may exist. The physical dimensions and surface textures are subject to the actual product.

2) Dimensions



3) Installation procedure

For details, see the installation procedure in section"MCTC-DDS-K1 (the keypad-type floor selector, without IC card function)".

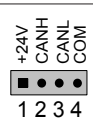
2.3.7 Terminal Description

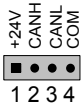
The floor selector uses CAN communication, and VH3.96-4P terminals are used for wiring. The type and function of these terminals are shown as follows.

Table 2-3 Description of VH3.96-4P terminals

Terminal Mark	Function Description	Remarks
1	24 V	
2	CANH	
3	CANL	
4	GND	

Table 2-4 Description of floor selector terminals

Terminal Mark	Function Description	Remarks
Keypad-type floor selector		
+24V/GND	Power interface	
CANH/CANL	CAN communication port used for communication with the GCB	

Terminal Mark	Function Description	Remarks
Touchscreen-type floor selector		
+24V/GND	Power interface	
CANH/CANL	CAN communication port used for communication with the GCB	

2.4 Car Display

2.4.1 Dimensions

The following figure shows the dimensions of the car display.

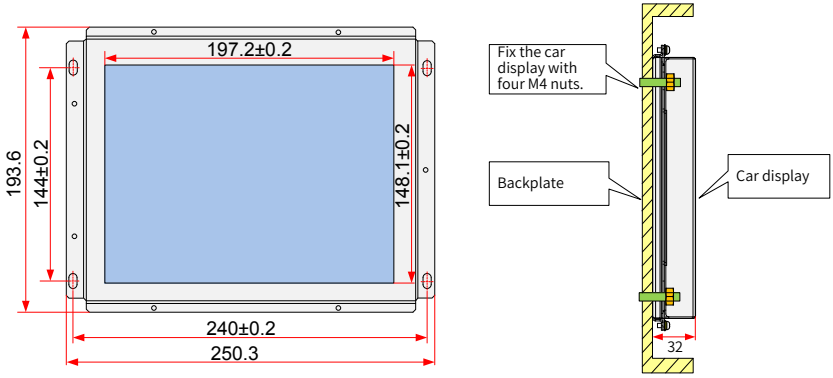
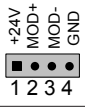


Figure 2-2 Mounting diagram of the car display (unit: mm)

2.4.2 Terminal Description

Table 2-5 Description of the car display input/output terminals

Terminal Name	Function	Wiring
CN1	Modbus communication and power supply terminals; Pins 2 and 3 are for Modbus communication, and pins 1 and 4 are for power supply.	

2.4.3 Function Description

The functions of the car display are described as follows:

1) It displays all status information of an elevator, including the running direction, current floor, and overload/full-load information.

2) It displays the destination floors of an elevator to arrive in real time. A maximum of eight nearest stops can be displayed.

NOTE

◆ A maximum of eight destination floors can be displayed. If there are more than eight destination floors, the first destination floor display is removed upon arrival, and then the ninth destination floor is displayed.

The following figure shows the car display interface.

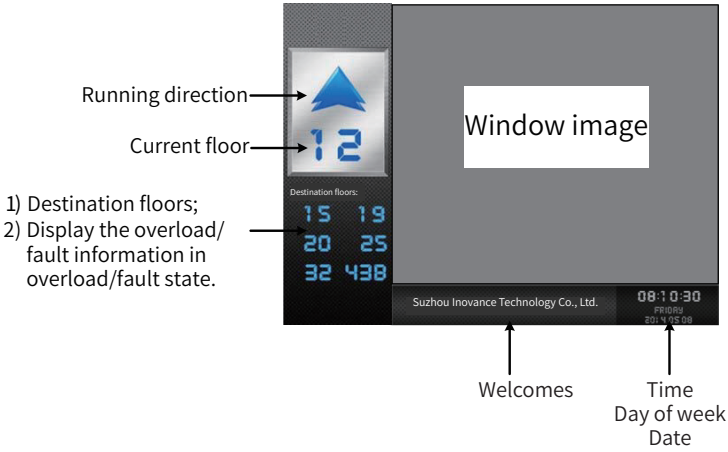


Figure 2-3 Car display interface diagram

NOTE

◆ The window image, time, day of week, and date can be modified. For details, consult Inovance.

The following figure shows the car display information in overload or fault state.

Figure 2-4 Examples of the car display interface

2.5 Wiring of the Elevator Destination Group Control System

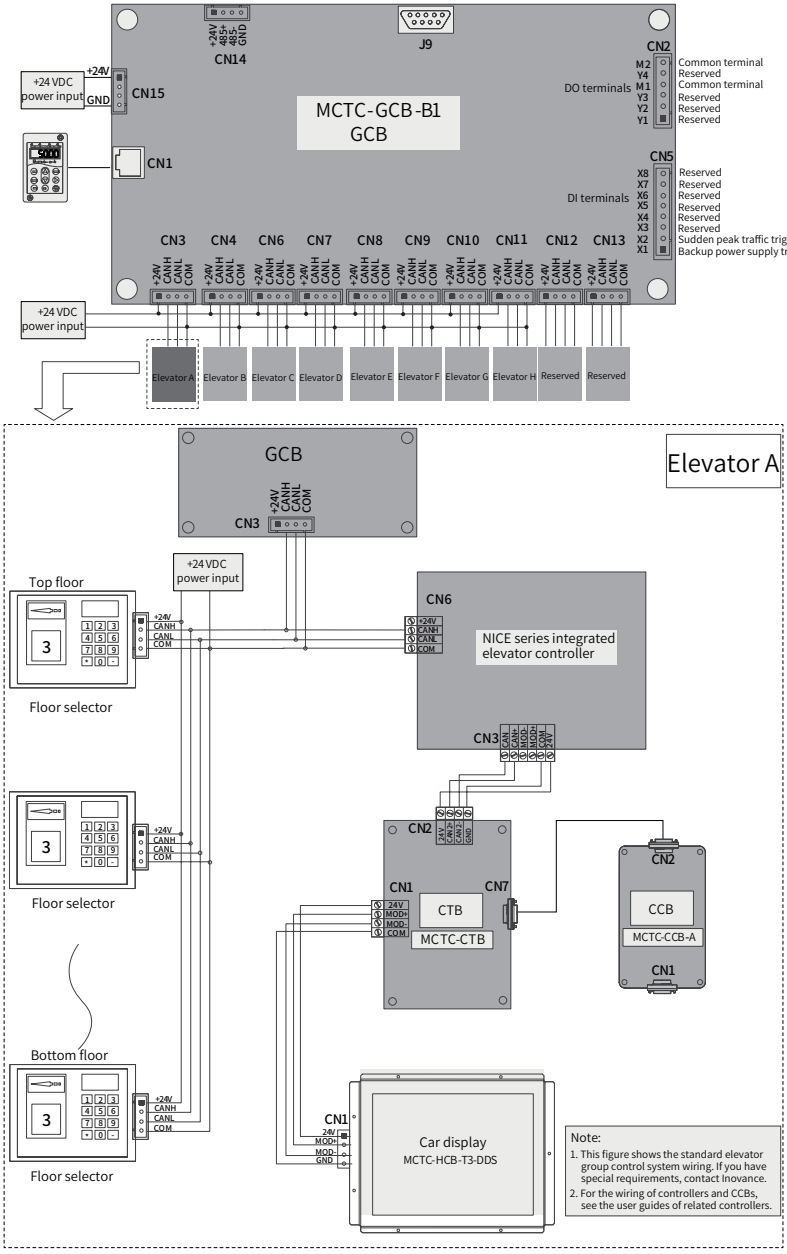


Figure 2-5 Wiring diagram of the elevator destination group control system

Chapter 3 System Commissioning

3.1 LED Operating Panel

The LED operating panel can be used to modify parameters, monitor the status and perform other operations to the GCB.

1 Panel introduction

The following figure shows the appearance and function zones of the LED operating panel.

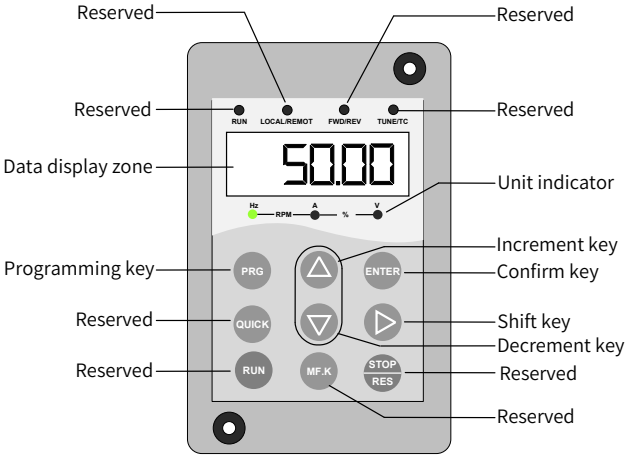


Figure 3-1 LED operating panel

1) Description of function indicators

- RUN: reserved
- LOCAL/REMOT: reserved
- FWD/REV: reserved
- TUNE/TC: reserved

2) Description of unit indicators (● indicates on; ○ indicates off)

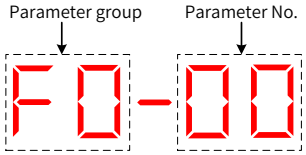
Hz ○—RPM— A ●—%— V ●

%: percentage

These indicators are used to display the unit of the value in the LED display zone. If an indicator is on, the corresponding unit is used. If two indicators are on, the unit between them is used.

3) Description of the LED display zone

It is a five-digit LED display, which can display various monitoring data and parameters.



4) Description of keys

Table 3-1 Functions of keys

Key	Key Name	Function
PRG	Programming	Enter or exit Level I menu
ENTER	Confirm	Enter the menu interfaces level by level, and confirm the parameter settings.
△	Increment	Increase data or parameter.
▽	Decrement	Decrease data or parameter.
▷	Shift	Select the digit to be modified when modifying a parameter value.
RUN	Reserved	-
STOP RES	Reserved	-
MF.K	Reserved	-
QUICK	Reserved	-

2 Viewing and Modifying Parameters

The operating panel of the GCB adopts a three-level menu to perform parameter setting and other operations.

The three-level menu consists of parameter group (Level I), parameter (Level II), and parameter setting value (Level III). Figure 3-2 shows the operation procedure.

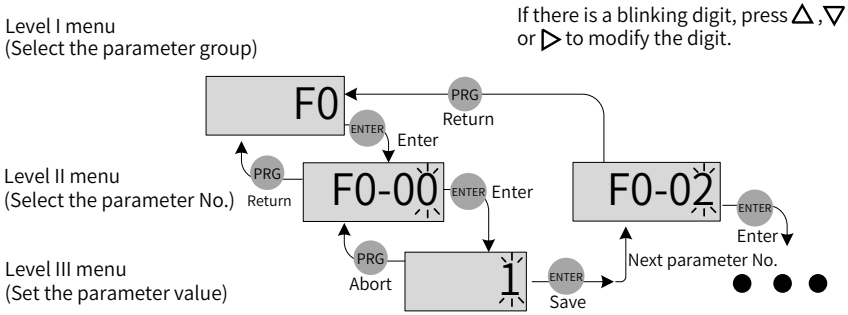


Figure 3-2 Operation flowchart of the three-level menu

Note:

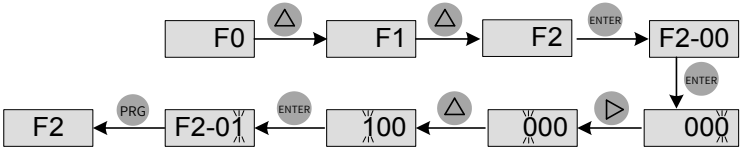
You can return to Level II menu from Level III menu by pressing PRG or ENTER .

The difference between the two is as follows:

After you press ENTER , the system saves the parameter setting, goes back to Level II menu and automatically shifts to the next parameter.

After you press PRG , the system does not save the parameter setting, but directly goes back to Level II menu and remains at the current parameter.

Example: Change the value of F2-00 from 0 to100.



In Level III menu, if a parameter has no blinking digit, it indicates that the parameter cannot be modified. This may be because such a parameter is only readable, such as an actually-detected parameter or version display parameter.

3 Password Setting

The GCB provides a password protection function. When FP-00 (User password) is set to a non-zero value, it is a user password. The password takes effect after you exit the parameter editing state. After you press PRG , "-----" is displayed. You must enter the correct user password to enter level I menu.

To cancel the password protection function, enter the menu with correct password and then set FP-00 (User password) to 0. If FP-00 (User password) is a non-zero value upon power-on, the parameters are protected by a password.

3.2 Operations of the MCTC-DDS-T Series Floor Selector

3.2.1 Interface Description

The display zone of the touchscreen-type floor selector can display the destination floor number, ID and location of a system-assigned elevator, and parameters.

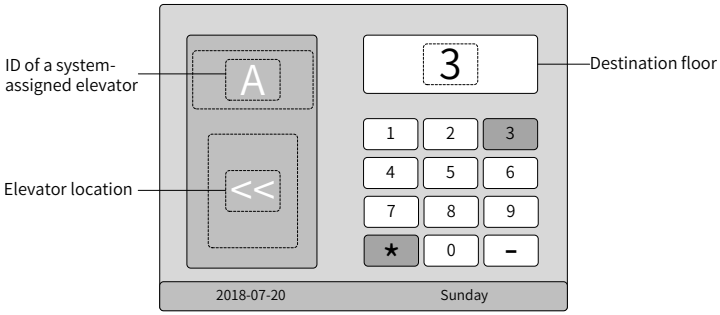


Figure 3-3 Main interface of the touchscreen-type floor selector

3.2.2 Key Description

Table 3-2 Key function table

Key		Definition	Function
Function keys	★	Cancel	◆ Return to the previous menu. ◆ This key implements different functions in different situations. Set the needed functions in F1-05.
	–	OK	◆ Enter the selected function. ◆ This key implements different functions in different situations. Set the needed functions in F1-06.

3.2.3 Parameter Settings

Press the time display area on the bottom of the interface for 3s, and enter the default password 888888. Then, press Enter to enter the system setting interface, on which four parameter groups are displayed. They are:

- Group F0: Display parameters
- Group F1: Basic parameters
- Group F2: Floor display parameters
- Group FP: System parameters

Press the parameter group to be selected for 2s to set the parameters in this group.

Take the setting of display parameters as an example: Long-press the time bar on the main interface to enter the parameter group interface, and click the parameter group to be selected. Then, you can switch to the parameter setting interface. Set F0-00 (Floor address of the floor selector) to 45 and F0-01 (Front and rear door settings of the floor selector) to 1, and click the icon on the upper left corner to save the settings.

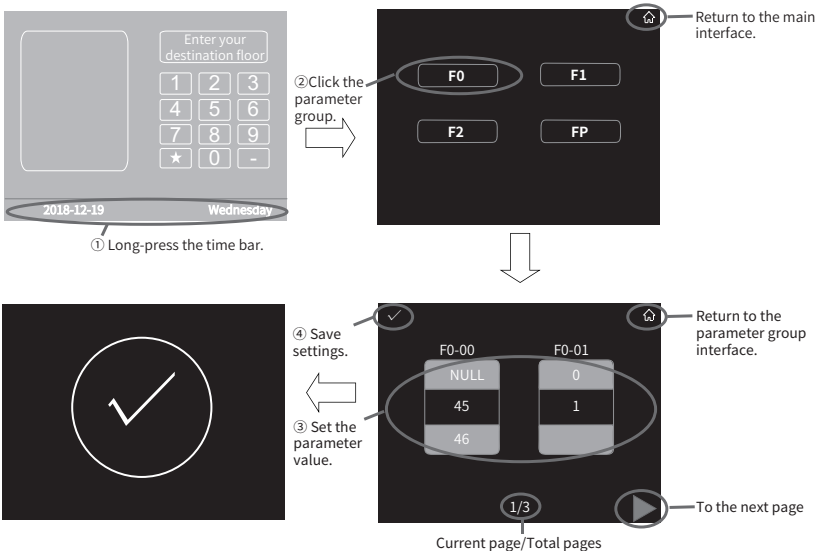
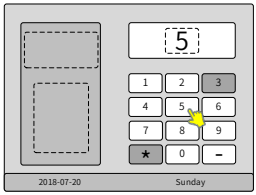
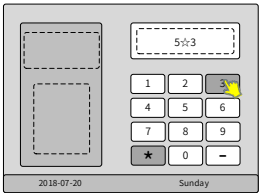
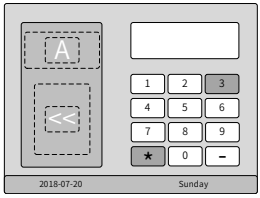
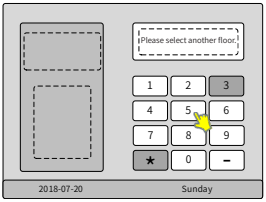


Figure 3-4 Parameter setting procedure

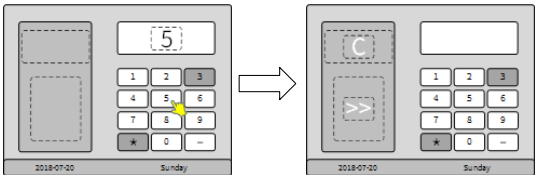
3.2.4 Elevator Calls

The floor selector can be operated in two modes.

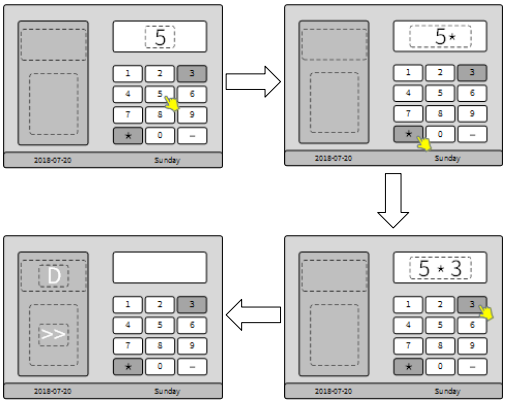
Mode	Display of the Floor Selector
Mode 1: Enter the destination floor directly. Note: During floor selection, the interval between two keys are pressed must be smaller than the input delay time specified by F1-00 (Key pressing interval for non-disabled people). If no key is pressed within the interval specified by F1-00 (Key pressing interval for non-disabled people), the earlier input is regarded as the destination floor.	
Mode 2: If a large number of passengers need to take an elevator at the same time, enter the destination floor numbers, ★ and the number of passengers successively. That is, enter the "destination floor numbers + ★ + the number of passengers". Note: ★ must be pre-set as the grouping key.	
Operation result 1: After a passenger enters a valid floor number, the floor selector displays the ID and direction of an assigned elevator for a period specified in F1-02 (ID display time of an assigned elevator). As shown in the figure on the right, the system assigns elevator A and the elevator A is on the left side.	

Mode	Display of the Floor Selector
Operation result 2: If a passenger enters an invalid floor number, the floor selector gives a prompt"Please select another floor". Note: An invalid floor may be the current floor or a non-service floor of the GCB.	

Example 1: A passenger needs to take an elevator to floor 5 and presses 5 on the floor selector. Then, "C>>" is displayed on the screen to instruct the passenger to wait for elevator C on the right side, as shown in the following figure.



Example 2: Three passengers need to take an elevator to floor 5 and press 5 on the floor selector. After that, they press the grouping key " ☆ " and enter the number of passengers "3". Then, "D>>" is displayed on the screen to instruct the passengers to wait for elevator D on the right side, as shown in the following figure.



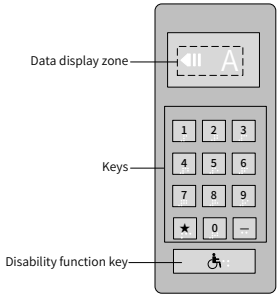
NOTE

◆ If there are eight or less passengers, one elevator is assigned. If there are more than eight passengers, multiple elevators can be assigned based on the actual situation.

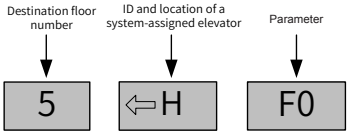
3.3 Operations of the MCTC-DDS-K1 Series Floor Selector

3.3.1 Introduction to the Floor Selector

The display zone of the keypad-type floor selector can display the destination floor number, elevator location, and parameters.



Data display zone can display the destination floor number, ID and location of a system-assigned elevator, and parameters, as shown in the following figure.



3.3.2 Description of Keys

Table 3-3 Description of key functions

Key		Definition	Function
Function keys	★	Enter or exit the menu mode.	◆ Enter the menu mode: Hold down this key for 5s to set parameters. ◆ Exit the menu mode: Short-press this key to exit the menu mode. You can also exit the menu mode if there is no operation for 30s. ◆ Returns to the previous menu: Short-press this key. ◆ Cancel the data input. ◆ This key implements different functions in different situations. Set the needed functions in F1-05 (Function selection of the special function key in the lower left corner).
	-	OK	◆ Enter a selected function. ◆ Enter the editing state when viewing the data. ◆ Save the data input. ◆ This key implements different functions in different situations. Set the needed functions in F1-06 (Function selection of the special function key in the lower right corner).
Direction keys	2	Up	◆ Move the item up by 1 in the menu mode. ◆ Increases the current value by 1 when entering the data.
	8	Down	◆ Move the item down by 1 in the menu mode. ◆ Decrease the current value by 1 when entering the data.
	4	Left	◆ Move the item up by 10 in the menu mode. ◆ Move the cursor to the left when entering the data.
	6	Right	◆ Move the item down by 10 in the menu mode. ◆ Move the cursor to the right when entering the data.

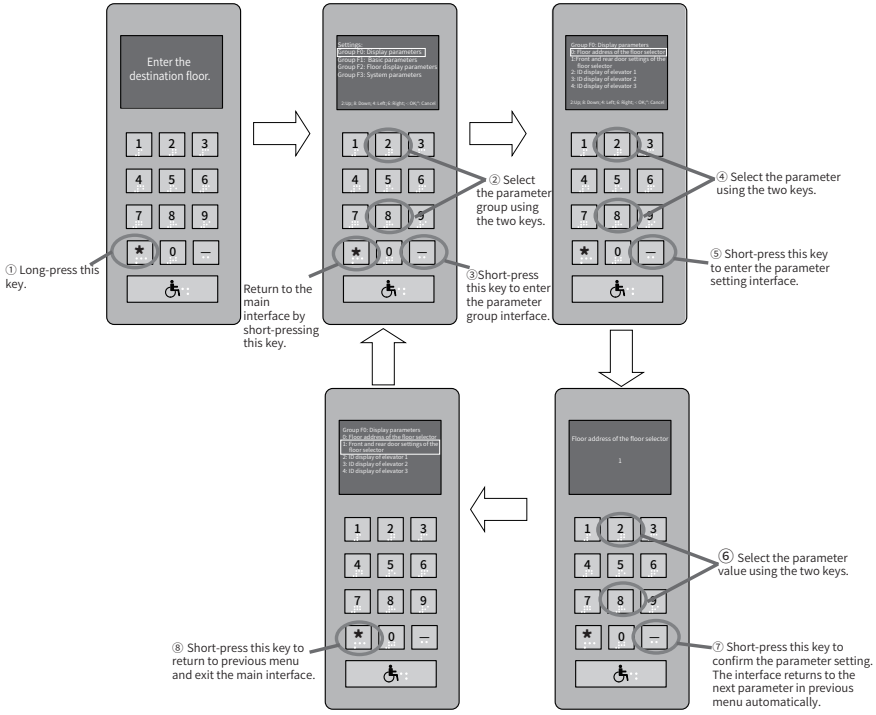
3.3.3 Parameter Settings

Press ★ key on the lower left corner for 3s to enter the system setting interface, on which four parameter groups are displayed. They are:

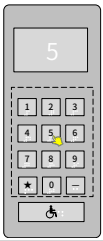
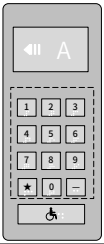
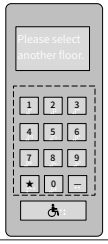
- Group F0: Display parameters
- Group F1: Basic parameters
- Group F2: Floor display parameters
- Group FP: System parameters

Press the parameter group to be selected for 2s to set the parameters in this group.

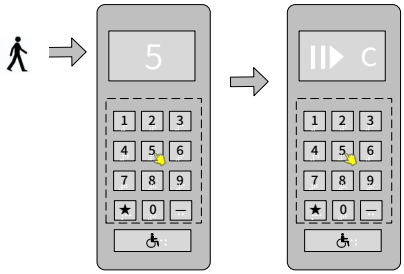
Take the setting of display parameters as an example: Long-press ★ key on the lower left corner of the main interface to enter the system setting interface. Select the parameter groups and parameters using 2 or 8 keys. Then, short-press - key to enter the parameter setting interface. Set F0-00 (Floor address of the floor selector) to 1 using 2 or 8 keys, and save the setting by pressing - key on the lower right corner.



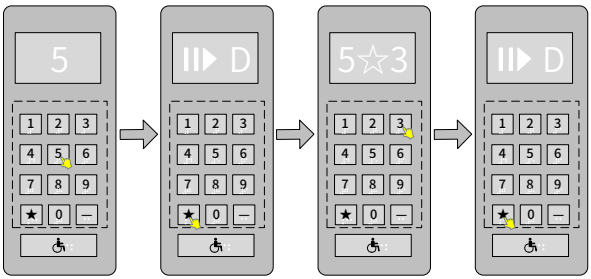
3.3.4 Elevator Calls

Mode	Display of the Floor Selector
Mode 1: Enter the destination floor directly. Note: The interval between two keys are pressed must be smaller than the input delay time specified by F1-00 (Key pressing interval for non-disabled people). If no key is pressed within the interval specified by F1-00 (Key pressing interval for non-disabled people), the earlier input is regarded as the destination floor.	
Mode 2: If a large number of passengers need to take an elevator at the same time, enter the destination floor numbers, ★ and the number of passengers successively. That is, enter the "destination floor numbers + ★ + the number of passengers". Note: ★ must be pre-set as the grouping key.	
Operation result 1: After a passenger enters a valid floor number, the floor selector displays the ID and direction of an assigned elevator for a period specified in F1-02 (ID display time of an assigned elevator). As shown in the figure on the right, the system assigns elevator A and the elevator A is on the left side.	
Operation result 2: If a passenger enters an invalid floor number, the floor selector prompts "Please select another floor". Note: An invalid floor may be the current floor or a non-service floor of the GCB.	

Example 1: A passenger needs to take an elevator to floor 5 and presses 5 on the floor selector. Then, "C>>" is displayed on the screen to instruct the passenger to wait for elevator C on the right side, as shown in the following figure.



Example 2: Three passengers need to take an elevator to floor 5 and press 5 on the floor selector. After that, they enter" ★ " and the number of passengers"3". Then,"D>>" is displayed on the screen to instruct the passengers to wait for elevator D on the right side, as shown in the following figure.



3.3.5 Selecting a Destination Floor by the Disabled

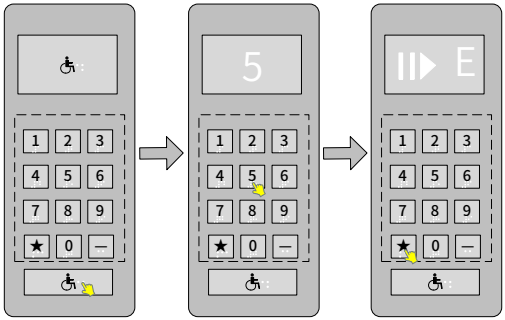
Step 1: Press the disability key on the floor selector and the screen displays the international symbol of access wheelchair symbol .

Step 2: Enter the destination floor.

- During floor selection, the interval between two keys are pressed must be smaller than the input delay time specified by F1-01 (Key pressing interval for disabled people). The earlier input and the later input together forms the number of a floor. If no key is pressed within the time specified by F1-01 (Key pressing interval for disabled people), the earlier input is regarded as the destination floor.
- If a passenger enters an invalid floor number, the floor selector gives a voice prompt "Please select another floor". An invalid floor may be the current floor or a non-service floor of the GCB.

Step 3: After a passenger selects a valid floor, the floor selector displays the ID and location of the assigned elevator.

For example, when a disabled passenger needs to take an elevator to floor 5, the passenger presses and number "5" on the floor selector. Then, "E>>" is displayed on the screen to instruct the passenger to wait for elevator E on the right side, as shown in the following figure.



3.4 Quick System Commissioning

The parameters of GCB units have been set to the optimum before delivery, which enables the GCB to meet the requirements of most applications. Generally, you only need to set the working modes as required.

The system commissioning method is described based on the working modes.

The following figure shows the procedure for quick system commissioning.

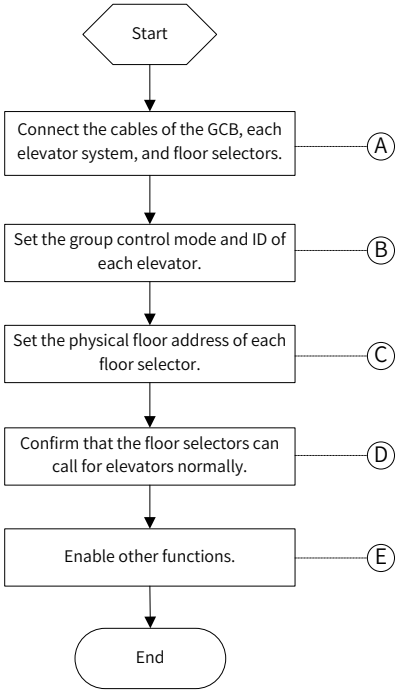


Figure 3-5 System commissioning flowchart

The detailed commissioning procedure is as follows:

A - Before using the system, ensure that the GCB, an elevator, the floor selector, and other hardware are correctly wired and the elevator can run at normal speed.

B - Set the group control mode and ID of each elevator.

■ Set parameters F6-07, F6-08 and F6-09 on the NICE series integrated elevator controllers to enable the group control function. The value setting of these parameters is as follows:

F6-07: total number of elevators connected to the group control system;

F6-08: the elevator controlled by corresponding controller (For example, set No.2 elevator to 2 when there are four elevators, and connect the elevator to the second CAN communication port of the GCB);

F6-09: Set Bit3 to 1 and Bit15 to 1 to enable the group control function.

NOTE

◆ F6-08 is the elevator ID, whose value must be consistent with the CAN communication channel ID of the GCB.

C - Set the floor addresses of a floor selector.

■ The MCTC-DDS-T1, MCTC-DDS-T2, and MCTC-DDS-K1 series floor selectors provide the parameter setting function.

■ F0-00 is used to set the physical floor address of a floor selector. For example, if a floor selector is used to call an elevator from the front door on floor 5, set F0-00 to 5 and F0-01 to 0. After the floor address of all floor selectors are set, view the GCB parameters in group FU to verify that the floor selectors are connected properly.

D - Use a floor selector to call for an elevator.

■ The group control system works normally.

E - The parameters of MCTC-GCB-B1 have been set to the default before delivery. You can use them directly. The group control system provides multiple functions, and you can enable the required functions by setting the function parameters of the MCTC-GCB-B1.

Chapter 4 Parameters

4.1 Parameters of the Group Control Board

When FP-00 (User password) is set to a non-zero value, the password protection function is enabled. You must enter the correct password to enter the parameter menu. To cancel the password protection, set FP-00 (User password) to 0.

Symbols in the parameter table are described as follows:

☆ : The parameter value can be modified when the group control system is in either stop or running state.

● : The parameter is the actually measured value and cannot be modified.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
Group F0: Basic Parameters					
F0-00	Elevator dispatch method in normal traffic mode	0: Comprehensive consideration 1: Efficiency first	0	-	☆
F0-01	Intelligent traffic mode	1: Enabled 0: Disabled	0	-	☆
F0-02	Maximum waiting time	5–100	60	s	☆
F0-03	Maximum waiting time in energy-saving mode	5–100	90	s	☆
F0-04	Maximum travel time	5–100	40	s	☆
F0-05	Door open timeout	30–1000	60	s	☆
F0-06	Parking time	0–10	2	min	☆
F0-07	Parking floor 1	0–56	0	-	☆
F0-08	Number of elevators on parking floor 1	1–8	1	-	☆
F0-09	Parking floor 2	0–56	0	-	☆
F0-10	Number of elevators on parking floor 2	1–8	1	-	☆
F0-11	Parking floor 3	0–56	0	-	☆
F0-12	Number of elevators on parking floor 3	1–8	1	-	☆
F0-13	VIP floor 1	0–56	0	-	☆
F0-14	VIP floor 2	0–56	0	-	☆
F0-15	Maximum number of elevators that can be powered by the backup power supply	Maximum number of operational elevators when the backup power supply is used: 0–65535	1	-	☆

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F0-16	Number of elevators for a sudden traffic peak	0–8	0	-	☆
F0-17	Main floor	0–56	1	-	☆
F0-18	Reserved	-	0	-	☆
F0-19	Reserved	-	0	-	☆
F0-20	Reserved	-	0	-	☆
Group F1: Terminal Parameters					
F1-00	Reserved	-	0	-	☆
F1-01	X1 function selection	0: Unused 1: Reserved 2: Reserved 3: Reserved 4: Elevator running feedback when the backup power supply is used 5: VIP input 0–32: Normally open (NO) input Over 100: Normally closed (NC) input	0	-	☆
F1-02	X2 function selection		0	-	☆
F1-03	X3 function selection		0	-	☆
F1-04	X4 function selection		0	-	☆
F1-05	X5 function selection		0	-	☆
F1-06	X6 function selection		0	-	☆
F1-07	X7 function selection		0	-	☆
F1-08	X8 function selection		0	-	☆
F1-09	Y1 function selection	Reserved	0	-	☆
F1-10	Y2 function selection		0	-	☆
F1-11	Y3 function selection		0	-	☆
F1-12	Y4 function selection		0	-	☆
F1-13	Reserved	-	0	-	☆
F1-14	Reserved	-	0	-	☆
F1-15	Reserved	-	0	-	☆
Group F2: Zoning Parameters					
F2-00	Zoning function enabling in different traffic modes	0–65535 Bit0: Energy-saving mode Bit1: Normal traffic mode Bit2: Up peak mode Bit3: Down peak mode Bit4: Sudden peak hour mode Bit5 to Bit15: Reserved	0	-	☆
F2-01	Zoning function setting	0: User-defined zoning 1: Intelligent zoning	0	-	☆
F2-02	Reserved	-	0	-	☆
F2-03	Start floor of zone 1	0–56	0	-	☆
F2-04	End floor of zone 1	0–56	0	-	☆
F2-05	Start floor of zone 2	0–56	0	-	☆

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F2-06	End floor of zone 2	0–56	0	-	☆
F2-07	Start floor of zone 3	0–56	0	-	☆
F2-08	End floor of zone 3	0–56	0	-	☆
F2-09	Start floor of zone 4	0–56	0	-	☆
F2-10	End floor of zone 4	0–56	0	-	
F2-11	Zone selection for elevator 1	0: All 1: Zone1 2: Zone 2 3: Zone 3 4: Zone 4 5: Odd-number floors 6: Even-number floors 7: One-direction collective selective (up collective selective in up peak hours, and down collective selective in down peak hours)	0	-	☆
F2-12	Zone selection for elevator 2		0	-	☆
F2-13	Zone selection for elevator 3		0	-	☆
F2-14	Zone selection for elevator 4		0	-	☆
F2-15	Zone selection for elevator 5		0	-	☆
F2-16	Zone selection for elevator 6		0	-	☆
F2-17	Zone selection for elevator 7		0	-	☆
F2-18	Zone selection for elevator 8		0	-	☆
F2-19	Reserved	-	0	-	☆
F2-20	Reserved	-	0	-	☆
F2-21	Reserved	-	0	-	☆
F2-22	Reserved	-	0	-	☆
F2-23	Reserved	-	0	-	☆
F2-24	Reserved	-	0	-	☆
F2-25	Reserved	-	0	-	☆
Group F3: Traffic Time Setting Parameters					
F3-00	Day of week	1: Monday 2: Tuesday 3: Wednesday 4: Thursday 5: Friday 6: Saturday 7: Sunday	1	-	☆
F3-01	Start time of period 1	Start time of period 1 in traffic mode	00.00	-	☆
F3-02	End time of period 1	End time of period 1 in traffic mode	00.00	-	☆

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F3-03	Traffic mode setting for period 1	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-04	Floors with peak traffic in period 1	0–56	1	-	☆
F3-05	Start time of period 2	Start time of period 2 in traffic mode	00.00	-	☆
F3-06	End time of period 2	End time of period 2 in traffic mode	00.00	-	☆
F3-07	Traffic mode setting for period 2	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-08	Floors with peak traffic in period 2	0–56	1	-	☆
F3-09	Start time of period 3	Start time of period 3 in traffic mode	00.00	-	☆
F3-10	End time of period 3	End time of period 3 in traffic mode	00.00	-	☆
F3-11	Traffic mode setting for period 3	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-12	Floors with peak traffic in period 3	0–56	1	-	☆
F3-13	Start time of period 4	Start time of period 4 in traffic mode	00.00	-	☆
F3-14	End time of period 4	End time of period 4 in traffic mode	00.00	-	☆
F3-15	Traffic mode setting for period 4	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-16	Floors with peak traffic in period 4	0–56	1	-	☆
F3-17	Start time of period 5	Start time of period 5 in traffic mode	00.00	-	☆
F3-18	End time of period 5	Start time of period 5 in traffic mode	00.00	-	☆

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F3-19	Traffic mode setting for period 5	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-20	Floors with peak traffic in period 5	0–56	1	-	☆
F3-21	Start time of period 6	Start time of period 6 in traffic mode	00.00	-	☆
F3-22	End time of period 6	Start time of period 6 in traffic mode	00.00	-	☆
F3-23	Traffic mode setting for period 6	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-24	Floors with peak traffic in period 6	0–56	1	-	☆
F3-25	Start time of period 7	Start time of period 7 in traffic mode	00.00	-	☆
F3-26	End time of period 7	Start time of period 7 in traffic mode	00.00	-	☆
F3-27	Traffic mode setting for period 7	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-28	Floors with peak traffic in period 7	0–56	1	-	☆
F3-29	Start time of period 8	Start time of period 8 in traffic mode	00.00	-	☆
F3-30	End time of period 8	Start time of period 8 in traffic mode	00.00	-	☆
F3-31	Traffic mode setting for period 8	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-32	Floors with peak traffic in period 8	0–56	1	-	☆
F3-33	Start time of period 9	Start time of period 9 in traffic mode	00.00	-	☆
F3-34	End time of period 9	Start time of period 9 in traffic mode	00.00	-	☆

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F3-35	Traffic mode setting for period 9	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-36	Floors with peak traffic in period 9	0–56	1	-	☆
F3-37	Start time of period 10	Start time of period 10 in traffic mode	00.00	-	☆
F3-38	End time of period 10	Start time of period 10 in traffic mode	00.00	-	☆
F3-39	Traffic mode setting for period 10	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-40	Floors with peak traffic in period 10	0–56	1	-	☆
F3-41	Reserved	-	0	-	☆
F3-42	Reserved	-	0	-	☆
F3-43	Reserved	-	0	-	☆
F3-44	Reserved	-	0	-	☆
F3-45	Reserved	-	0	-	☆
Group F4: Function Selection Parameters					
F4-00	Clock: year	2010–2100	2013	YYYY	☆
F4-01	Clock: month and day	0–1231	1	MM.DD	☆
F4-02	Clock: hour and minute	0–2359	1	HH.MM	☆
F4-03	Day of week	1–7	1	-	●
F4-04	Version 1	0–65535	0	-	●
F4-05	Version 2	0–65535	0	-	●
F4-06	Version 3	0–65535	0	-	●
F4-07	Reserved				
F4-08	Reserved	-	0	-	☆
F4-09	Reserved	-	0	-	☆
F4-10	Reserved	-	0	-	☆

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F4-11	Group control function selection 1	0–65535 Bit0: Dispersed elevator waiting function enabled Bit1: Zoned elevator waiting function enabled Bit2: Processing of elevator door open timeout disabled Bit3: No redispatch after an elevator enters the fault state in destination floor mode Bit4: Traffic statistics collection selection (0: Collection of call statistics by the GCB; 1: Collection of analog statistics of an elevator) Bit5: Period setting for the traffic mode Bit6 to Bit15: Reserved	0	-	☆
F4-12	Reserved	-	0	-	☆
F4-13	Reserved	-	0	-	☆
F4-15	Reserved	-	0	-	☆
F4-16	Reserved	-	0	-	☆
F4-17	Reserved	-	0	-	☆
F4-18	Reserved	-	0	-	☆
F4-19	Reserved	-	0	-	☆
F4-20	Reserved	-	0	-	☆
Group FU: System Monitoring Parameters					
FU-00	CAN communication quality 1 of elevators under group control	LED 1: Communication quality of elevator 1 LED 2: Communication quality of elevator 2 LED 3: Communication quality of elevator 3 LED 4: Communication quality of elevator 4 LED 5: Communication quality of elevator 5	0	-	●

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-01	CAN communication quality 2 of elevators under group control	LED 1: Communication quality of elevator 6 LED 2: Communication quality of elevator 7 LED 3: Communication quality of elevator 8 LED 4: Reserved LED 5: Reserved	0	-	●
FU-02	Monitoring of elevators under group control	Monitoring of elevators under group control	0	-	●
FU-03	Current traffic mode	Ones: Traffic status display, 0–4 Tens: Zone status display, 0–1	0	-	●
FU-04	Average waiting time (read only)	Average waiting time	0	s	●
FU-05	Average travel time (read only)	Average travel time	0	s	●
FU-06	Long waiting time rate (read only)	Long waiting time rate: 0–100	0	%	●
FU-07	Full-load rate (read only)	Full-load rate: 0–00	0	%	●
FU-08	Reserved	-	0	-	●
FU-09	Reserved	-	0	-	●
FU-10	Reserved	-	0	-	●
FU-11	Reserved	-	0	-	●
FU-12	Reserved	-	0	-	●
FU-13	Reserved	-	0	-	●
FU-14	Reserved	-	0	-	●
FU-15	Reserved	-	0	-	●
FU-16	Reserved	-	0	-	●
FU-17	Reserved	-	0	-	●
FU-18	Reserved	-	0	-	●
FU-19	Reserved	-	0	-	●
FU-20	Reserved	-	0	-	●
FU-21	Communication status of floor selectors connected to CAN1 channel	Communication status of floor selectors on floors 1 to 16 (front door)	0	-	●
FU-22	Communication status of floor selectors connected to CAN1 channel	Communication status of floor selectors on floors 17 to 32 (front door)	0	-	●

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-23	Communication status of floor selectors connected to CAN1 channel	Communication status of floor selectors on floors 33 to 48 (front door)	0	-	●
FU-24	Communication status of floor selectors connected to CAN1 channel	Communication status of floor selectors on floors 49 to 56 (front door)	0	-	●
FU-25	Communication status of floor selectors connected to CAN1 channel	Communication status of floor selectors on floors 1 to 16 (rear door)	0	-	●
FU-26	Communication status of floor selectors connected to CAN1 channel	Communication status of floor selectors on floors 17 to 32 (rear door)	0	-	●
FU-27	Communication status of floor selectors connected to CAN1 channel	Communication status of floor selectors on floors 33 to 48 (rear door)	0	-	●
FU-28	Communication status of floor selectors connected to CAN1 channel	Communication status of floor selectors on floors 49 to 56 (rear door)	0	-	●
FU-29	Communication status of floor selectors connected to CAN2 channel	Communication status of floor selectors on floors 1 to 16 (front door)	0	-	●
FU-30	Communication status of floor selectors connected to CAN2 channel	Communication status of floor selectors on floors 17 to 32 (front door)	0	-	●
FU-31	Communication status of floor selectors connected to CAN2 channel	Communication status of floor selectors on floors 33 to 48 (front door)	0	-	●
FU-32	Communication status of floor selectors connected to CAN2 channel	Communication status of floor selectors on floors 49 to 56 (front door)	0	-	●
FU-33	Communication status of floor selectors connected to CAN2 channel	Communication status of floor selectors on floors 1 to 16 (rear door)	0	-	●

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-34	Communication status of floor selectors connected to CAN2 channel	Communication status of floor selectors on floors 17 to 32 (rear door)	0	-	●
FU-35	Communication status of floor selectors connected to CAN2 channel	Communication status of floor selectors on floors 33 to 48 (rear door)	0	-	●
FU-36	Communication status of floor selectors connected to CAN2 channel	Communication status of floor selectors on floors 49 to 56 (rear door)	0	-	●
FU-37	Communication status of floor selectors connected to CAN3 channel	Communication status of floor selectors on floors 1 to 16 (front door)	0	-	●
FU-38	Communication status of floor selectors connected to CAN3 channel	Communication status of floor selectors on floors 17 to 32 (front door)	0	-	●
FU-39	Communication status of floor selectors connected to CAN3 channel	Communication status of floor selectors on floors 32 to 48 (front door)	0	-	●
FU-40	Communication status of floor selectors connected to CAN3 channel	Communication status of floor selectors on floors 49 to 56 (front door)	0	-	●
FU-41	Communication status of floor selectors connected to CAN3 channel	Communication status of floor selectors on floors 1 to 16 (rear door)	0	-	●
FU-42	Communication status of floor selectors connected to CAN3 channel	Communication status of floor selectors on floors 17 to 32 (rear door)	0	-	●
FU-43	Communication status of floor selectors connected to CAN3 channel	Communication status of floor selectors on floors 32 to 48 (rear door)	0	-	●
FU-44	Communication status of floor selectors connected to CAN3 channel	Communication status of floor selectors on floors 49 to 56 (rear door)	0	-	●

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-45	Communication status of floor selectors connected to CAN4 channel	Communication status of floor selectors on floors 1 to 16 (front door)	0	-	●
FU-46	Communication status of floor selectors connected to CAN4 channel	Communication status of floor selectors on floors 17 to 32 (front door)	0	-	●
FU-47	Communication status of floor selectors connected to CAN4 channel	Communication status of floor selectors on floors 32 to 48 (front door)	0	-	●
FU-48	Communication status of floor selectors connected to CAN4 channel	Communication status of floor selectors on floors 49 to 56 (front door)	0	-	●
FU-49	Communication status of floor selectors connected to CAN4 channel	Communication status of floor selectors on floors 1 to 16 (rear door)	0	-	●
FU-50	Communication status of floor selectors connected to CAN4 channel	Communication status of floor selectors on floors 17 to 32 (rear door)	0	-	●
FU-51	Communication status of floor selectors connected to CAN4 channel	Communication status of floor selectors on floors 33 to 48 (rear door)	0	-	●
FU-52	Communication status of floor selectors connected to CAN4 channel	Communication status of floor selectors on floors 49 to 56 (rear door)	0	-	●
FU-53	Communication status of floor selectors connected to CAN5 channel	Communication status of floor selectors on floors 1 to 16 (front door)	0	-	●
FU-54	Communication status of floor selectors connected to CAN5 channel	Communication status of floor selectors on floors 17 to 32 (front door)	0	-	●
FU-55	Communication status of floor selectors connected to CAN5 channel	Communication status of floor selectors on floors 33 to 48 (front door)	0	-	●

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-56	Communication status of floor selectors connected to CAN5 channel	Communication status of floor selectors on floors 49 to 56 (front door)	0	-	●
FU-57	Communication status of floor selectors connected to CAN5 channel	Communication status of floor selectors on floors 1 to 16 (rear door)	0	-	●
FU-58	Communication status of floor selectors connected to CAN5 channel	Communication status of floor selectors on floors 17 to 32 (rear door)	0	-	●
FU-59	Communication status of floor selectors connected to CAN5 channel	Communication status of floor selectors on floors 33 to 48 (rear door)	0	-	●
FU-60	Communication status of floor selectors connected to CAN5 channel	Communication status of floor selectors on floors 49 to 56 (rear door)	0	-	●
FU-61	Communication status of floor selectors connected to CAN6 channel	Communication status of floor selectors on floors 1 to 16 (front door)	0	-	●
FU-62	Communication status of floor selectors connected to CAN6 channel	Communication status of floor selectors on floors 17 to 32 (front door)	0	-	●
FU-63	Communication status of floor selectors connected to CAN6 channel	Communication status of floor selectors on floors 33 to 48 (front door)	0	-	●
FU-64	Communication status of floor selectors connected to CAN6 channel	Communication status of floor selectors on floors 49 to 56 (front door)	0	-	●
FU-65	Communication status of floor selectors connected to CAN6 channel	Communication status of floor selectors on floors 1 to 16 (rear door)	0	-	●
FU-66	Communication status of floor selectors connected to CAN6 channel	Communication status of floor selectors on floors 17 to 32 (rear door)	0	-	●

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-67	Communication status of floor selectors connected to CAN6 channel	Communication status of floor selectors on floors 33 to 48 (rear door)	0	-	●
FU-68	Communication status of floor selectors connected to CAN6 channel	Communication status of floor selectors on floors 49 to 56 (rear door)	0	-	●
FU-69	Communication status of floor selectors connected to CAN7 channel	Communication status of floor selectors on floors 1 to 16 (front door)	0	-	●
FU-70	Communication status of floor selectors connected to CAN7 channel	Communication status of floor selectors on floors 17 to 32 (front door)	0	-	●
FU-71	Communication status of floor selectors connected to CAN7 channel	Communication status of floor selectors on floors 33 to 48 (front door)	0	-	●
FU-72	Communication status of floor selectors connected to CAN7 channel	Communication status of floor selectors on floors 49 to 56 (front door)	0	-	●
FU-73	Communication status of floor selectors connected to CAN7 channel	Communication status of floor selectors on floors 1 to 16 (rear door)	0	-	●
FU-74	Communication status of floor selectors connected to CAN7 channel	Communication status of floor selectors on floors 17 to 32 (rear door)	0	-	●
FU-75	Communication status of floor selectors connected to CAN7 channel	Communication status of floor selectors on floors 33 to 48 (rear door)	0	-	●
FU-76	Communication status of floor selectors connected to CAN7 channel	Communication status of floor selectors on floors 49 to 56 (rear door)	0	-	●
FU-77	Communication status of floor selectors connected to CAN8 channel	Communication status of floor selectors on floors 1 to 16 (front door)	0	-	●

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-78	Communication status of floor selectors connected to CAN8 channel	Communication status of floor selectors on floors 17 to 32 (front door)	0	-	●
FU-79	Communication status of floor selectors connected to CAN8 channel	Communication status of floor selectors on floors 33 to 48 (front door)	0	-	●
FU-80	Communication status of floor selectors connected to CAN8 channel	Communication status of floor selectors on floors 49 to 56 (front door)	0	-	●
FU-81	Communication status of floor selectors connected to CAN8 channel	Communication status of floor selectors on floors 1 to 16 (rear door)	0	-	●
FU-82	Communication status of floor selectors connected to CAN8 channel	Communication status of floor selectors on floors 17 to 32 (rear door)	0	-	●
FU-83	Communication status of floor selectors connected to CAN8 channel	Communication status of floor selectors on floors 33 to 48 (rear door)	0	-	●
FU-84	Communication status of floor selectors connected to CAN8 channel	Communication status of floor selectors on floors 49 to 56 (rear door)	0	-	●
FU-85	Input state 1	0–65535	0	-	●
FU-86	Input state 2	0–65535	0	-	●
FU-87	Output state 1	0–65535	0	-	●
FU-88	Reserved	-	0	-	●
FU-89	Reserved	-	0	-	●
Group FP: User Parameters					
FP-00	User password	0–65535	0	-	☆
FP-01	Parameter update	0: No operation 1: Restore default settings	0	-	☆
FP-02	User-defined parameter checking	0–1	0	-	☆
FP-03	Reserved	-	0	-	☆
FP-04	Reserved	-	0	-	☆
FP-05	Reserved	-	0	-	☆
FP-06	Reserved	-	0	-	☆

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FP-07	Reserved	-	0	-	☆
FP-08	Reserved	-	0	-	☆
FP-09	Reserved	-	0	-	☆
FP-10	Reserved	-	0	-	☆

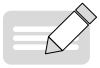
4.2 Parameters of the Floor Selector

When FP-00 (Protection password) is set to a non-zero value, the password protection function is enabled. You must enter the correct password to enter the parameter menu. To cancel the password protection, set FP-00 (Protection password) to 0.

Symbols in the parameter table are described as follows:

☆ : The parameter value can be modified.

● : The parameter is the actually measured value and cannot be modified.


NOTE

◆ When the floor selector is in floor selection mode, press ★ key for 5s to enter the parameter menu. On the parameter group Fx interface, you can press ★ key to exit the parameter setting and return to the floor selection mode, or wait 30s for the system to automatically exit the parameter setting and return to the floor selection mode.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
Group F0: Display Parameters					
F0-00	Floor address of the floor selector	0–56	0	-	☆
F0-01	Front and rear door settings of the floor selector	Touchscreen-type: Keypad-type 0: Front door: Front door 1: Rear door: Rear door	0	-	☆
F0-02	ID display of elevator 1	Touchscreen-type: Keypad-type 0: No display: Null 1: Display"A": A 2: Display"B": B 3: Display"C": C 4: Display"D": D Display in alphabetic order: ... 26: Display"Z": Z	1	-	☆
F0-03	ID display of elevator 2		2	-	☆
F0-04	ID display of elevator 3		3	-	☆
F0-05	ID display of elevator 4		4	-	☆
F0-06	ID display of elevator 5		5	-	☆
F0-07	ID display of elevator 6		6	-	☆
F0-08	ID display of elevator 7		7	-	☆
F0-09	ID display of elevator 8		8	-	☆

<table>
<tr><th>Parameter No.</th><th>Parameter Name</th><th>Setting Range</th><th>Default</th><th>Unit</th><th>Property</th></tr>
<tr><td>F0-10</td><td>Location of elevator 1</td><td rowspan="8"><table><tr><th>Touchscreen-type</th><th>Keypad-type</th></tr><tr><td>  </td><td>Left</td></tr><tr><td>  </td><td>Right</td></tr><tr><td>  </td><td>Rear left</td></tr><tr><td>  </td><td>Rear right</td></tr><tr><td></td><td>No direction</td></tr></table></td><td>0</td><td>-</td><td>☆</td></tr>
<tr><td>F0-11</td><td>Location of elevator 2</td><td>0</td><td>-</td><td>☆</td></tr>
<tr><td>F0-12</td><td>Location of elevator 3</td><td>0</td><td>-</td><td>☆</td></tr>
<tr><td>F0-13</td><td>Location of elevator 4</td><td>0</td><td>-</td><td>☆</td></tr>
<tr><td>F0-14</td><td>Location of elevator 5</td><td>0</td><td>-</td><td>☆</td></tr>
<tr><td>F0-15</td><td>Location of elevator 6</td><td>0</td><td>-</td><td>☆</td></tr>
<tr><td>F0-16</td><td>Location of elevator 7</td><td>0</td><td>-</td><td>☆</td></tr>
<tr><td>F0-17</td><td>Location of elevator 8</td><td>0</td><td>-</td><td>☆</td></tr>
<tr><td>F0-18</td><td>Reserved</td><td>0–65535</td><td>0</td><td>-</td><td>☆</td></tr>
<tr><td colspan="6">Group F1: Basic Parameters</td></tr>
<tr><td>F1-00</td><td>Key pressing interval for non-disabled people</td><td>1–3</td><td>1</td><td>s</td><td>☆</td></tr>
<tr><td>F1-01</td><td>Key pressing interval for disabled people</td><td>1–5</td><td>3</td><td>s</td><td>☆</td></tr>
<tr><td>F1-02</td><td>ID display time of an assigned elevator</td><td>2–10</td><td>7</td><td>s</td><td>☆</td></tr>
<tr><td>F1-03</td><td>Voice volume adjustment of the touchscreen</td><td><table><tr><th>Touchscreen-type</th><th>Keypad-type</th></tr><tr><td>Turn on and off</td><td>Reserved parameter, cannot be set.</td></tr></table></td><td>0</td><td>-</td><td>☆</td></tr>
<tr><td>F1-04</td><td>Voice announcement selection</td><td>Turn on and off</td><td>0</td><td>-</td><td>☆</td></tr>
<tr><td>F1-05</td><td>Function selection of the special function key in the lower left corner</td><td>0: No function
1–26: Letters from A to Z
27: Display "-"
28: Reserved
29: Door switching function</td><td>1</td><td>-</td><td>☆</td></tr>
<tr><td>F1-06</td><td>Function selection of the special function key in the lower right corner</td><td>0–29
0: No function
1–26: Letters from A to Z
27: Display "-"
28: Reserved
29: Door switching function</td><td>28</td><td>-</td><td>☆</td></tr>
<tr><td>F1-07</td><td>Program function selection</td><td>-</td><td>0</td><td>-</td><td>☆</td></tr>
</table>

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
Group F2: Floor Display Parameters					
F2-00	Reserved	0–65535	0	-	☆
F2-01	Code of floor 1	0000–4040 For floor code setting, the medium bits (two high bits) and low bits (two low bits) are set separately. The available codes include: 00–09: Display "0" to "9" 10–35: Display "A" to "Z" 36: Display "-" 37–40: Reserved	0001	-	☆
F2-02	Code of floor 2		0002	-	☆
F2-03	Code of floor 3		0003	-	☆
F2-04	Code of floor 4		0004	-	☆
F2-05	Code of floor 5		0005	-	☆
F2-06	Code of floor 6		0006	-	☆
F2-07	Code of floor 7		0007	-	☆
F2-08	Code of floor 8		0008	-	☆
F2-09	Code of floor 9		0009	-	☆
F2-10	Code of floor 10		0100	-	☆
F2-11	Code of floor 11		0101	-	☆
F2-12	Code of floor 12		0102	-	☆
F2-13	Code of floor 13		0103	-	☆
F2-14	Code of floor 14		0104	-	☆
F2-15	Code of floor 15		0105	-	☆
Display of floors 16 to 50			…		
F2-51	Code of floor 51		0501	-	☆
F2-52	Code of floor 52		0502	-	☆
F2-53	Code of floor 53		0503	-	☆
F2-54	Code of floor 54		0504	-	☆
F2-55	Code of floor 55		0505	-	☆
F2-56	Code of floor 56		0506	-	☆
F2-57	Reserved	-	-	-	-
F2-58	Reserved		-	-	-
F2-59	Reserved		-	-	-
F2-60	Reserved		-	-	-
F2-61	Reserved		-	-	-
Group FP: Protection parameters					
FP-00	Protection password	0–65535	0	-	☆
FP-01	Parameter update	No: No function Yes: Restore default settings	0	-	☆
FP-02	Language selection	Chinese English	0	-	☆
FP-03	Voice volume of the touchscreen	0–10 A larger number indicates a higher volume.	8	-	●

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FP-04	Brightness of the touchscreen	0–10 A larger number indicates a higher brightness.	8	-	●
FP-05	Energy-saving time of the touchscreen	0–60	1	min	●
FP-11	Date and time settings of the touchscreen	Manual setting	-	-	☆

Chapter 5 Parameter Description

5.1 Description of Group Control Board Parameters

Group F0: Basic Parameters

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F0-00	Elevator dispatch method in normal traffic mode	0: Overall consideration 1: Efficiency first	0	-	☆

0: Overall consideration based on the travel time, waiting time, and crowding degree in the car

1: Waiting time first

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F0-01	Intelligent traffic mode	0: Disabled 1: Enabled	1	-	☆

0: The intelligent traffic mode is disabled.

1: The intelligent traffic mode is enabled. In this mode, an SD card is required. The system uses the learned traffic modes.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F0-02	Maximum waiting time	5–100	60	s	☆

It is used when the group control system assigns elevators. When the waiting time exceeds the time specified by F0-02, the system assigns a call to other elevators first.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F0-03	Maximum waiting time in energy-saving mode	5–100	90	s	☆

In energy-saving traffic mode, the system assigns one of the operational elevators to respond to a call so that the waiting time is shorter than that specified by F0-03.

If the waiting time is longer than the value set in F0-03, a non-operational elevator is assigned to respond to the call.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F0-04	Maximum travel time	5–100	40	s	☆

It is used when the group control system assigns elevators. Based on the current elevator assignment and operation conditions, the system assigns the call to other elevators first if the system calculates that the travel time corresponding to a call is longer than the value set in F0-04.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F0-05	Door open timeout	30–1000	60	s	☆

If the door open time of an elevator is longer than the value set in F0-05, the system determines that a door open timeout occurs (because the light curtain is blocked or the door open button is held down for a long time). Then, the system assigns a call to other elevators first.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F0-06	Parking time	0–10	2	min	☆

When the group control system detects that the idle time of an elevator exceeds the value set in F0-06, it assigns the elevator to implement dispersed parking.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F0-07	Parking floor 1	0–56	0	-	☆
F0-08	Number of elevators on parking floor 1	1–8	1	-	☆
F0-09	Parking floor 2	0–56	0	-	☆
F0-10	Number of elevators on parking floor 2	1–8	1	-	☆
F0-11	Parking floor 3	0–56	0	-	☆
F0-12	Number of elevators on parking floor 3	1–8	1	-	☆

The parameters F0-07 and F0-08, F0-09 and F0-10, and F0-11 and F0-12 work together in pairs. When the system implements dispersed parking, it assigns a specified number of idle elevators to each parking floor.

To enable this function, set Bit0 of F4-11 to 0.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F0-13	VIP floor 1	0–56	0	-	☆
F0-14	VIP floor 2	0–56	0	-	☆

If a floor is set as a VIP floor, calls from this floor are VIP calls. If an elevator responds to a VIP call, the system does not assign this elevator to respond to other calls.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F0-15	Maximum number of elevators that can be powered by the backup power supply	Maximum number of operational elevators when the backup power supply is used: 0–65535	1	-	☆

When the elevators are powered by the backup power supply, the number of operational elevators must be limited to prevent power shortage.

F0-15 is used to set the maximum number of operational elevators when the backup power supply is used.

A 16-bit binary number is used to specify whether an elevator can be started. Bit0 is the lowest bit and Bit15 is the highest bit (Bit8 to Bit15 are reserved). Bit0 to Bit7 indicate elevators 1 to 8 respectively. If a bit is set to 0, it indicates that the elevator cannot be started. If a bit is set to 1, it indicates that the elevator can be started. The specific meanings of bit values are shown in the following table.

Bit	Meaning		Bit	Meaning	
Bit0	0	Elevator 1 cannot be started.	Bit4	0	Elevator 5 cannot be started.
	1	Elevator 1 can be started.		1	Elevator 5 can be started.
Bit1	0	Elevator 2 cannot be started.	Bit5	0	Elevator 6 cannot be started.
	1	Elevator 2 can be started.		1	Elevator 6 can be started.
Bit2	0	Elevator 3 cannot be started.	Bit6	0	Elevator 7 cannot be started.
	1	Elevator 3 can be started.		1	Elevator 7 can be started.
Bit3	0	Elevator 4 cannot be started.	Bit7	0	Elevator 8 cannot be started.
	1	Elevator 4 can be started.		1	Elevator 8 can be started.
Bit8 to Bit15	Reserved				

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F0-16	Number of elevators for a sudden traffic peak	0–8	0	-	☆

It specifies the number of elevators that return to the floor with sudden traffic peak after completing service in sudden peak hour mode.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F0-17	Main floor	0–56	1	-	☆

It is the lobby floor of a building. After the system enters the energy-saving mode, if the parking time of an elevator exceeds the time set in F0-06, the elevator returns to the main floor to wait for calls.

Group F1: Terminal Parameters

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F1-01	X1 function selection	0: Unused 1: Reserved 2: Reserved 3: Reserved 4: Elevator running feedback when the backup power supply is used 5: VIP input Range: 0–132 (0–32: NO input; Over 100: NC input)	0	-	☆
F1-02	X2 function selection		0	-	☆
F1-03	X3 function selection		0	-	☆
F1-04	X4 function selection		0	-	☆
F1-05	X5 function selection		0	-	☆
F1-06	X6 function selection		0	-	☆
F1-07	X7 function selection		0	-	☆
F1-08	X8 function selection		0	-	☆

X1 to X8 are DI terminals and the available parameters range from 0 to 32.

The code for the same function cannot be reused.

During usage, if the voltage of an X terminal input signal is 24 V, the terminal has an input signal.

Each function is indicated by its corresponding code:

0: Unused

The system does not respond even if there is an input signal. You can allocate no function to unused terminals to prevent misoperations.

1: Reserved

2: Reserved

3: Reserved

4: Elevator running feedback input when the backup power supply is used

5: VIP input

0 to 32:

The 32 parameters set the input terminals corresponding to 01 to 32 as normally open, and set the input terminals corresponding to 101 to 132 as normally closed.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F1-09	Y1 function selection	0–16: Reserved	0	-	☆
F1-10	Y2 function selection		0	-	☆
F1-11	Y3 function selection		0	-	☆
F1-12	Y4 function selection		0	-	☆

The system output is relay output, which can be allocated to different functions among 0 to 16.

0: Unused, indicating that the output terminal has no function

1 to 16: Reserved.

Group F2: Zoning Parameters

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F2-00	Zoning function enabling in different traffic modes	0–65535 Bit0: Energy-saving mode Bit1: Normal traffic mode Bit2: Up peak mode Bit3: Down peak mode Bit4: Sudden peak hour mode Bit5 to Bit15: Reserved	0	-	☆

The zoning function can be used in various traffic modes. In each mode, one binary bit is used to specify whether the zoning function is enabled. The value 1 indicates that the zoning function is enabled, and 0 indicates that the zoning function is disabled.

Bit	Function	Description	
Bit0	Energy-saving mode	0	Zoing function is disabled.
		1	Zoing function is enabled.
Bit1	Normal traffic mode	0	Zoing function is disabled.
		1	Zoing function is enabled.
Bit2	Up peak traffic	0	Zoing function is disabled.
		1	Zoing function is enabled.
Bit3	Down peak traffic	0	Zoing function is disabled.
		1	Zoing function is enabled.
Bit4	Sudden peak hour	0	Zoing function is disabled.
		1	Zoing function is enabled.
Bit5 to Bit15	Reserved		

Parameter No.	Name	Setting Range	Default	Property	Unit
F2-01	Zoning function setting	0: User-defined zoning 1: Intelligent zoning	0	-	☆

It is used to set the zoning function.

0: User-defined zoning

It works together with parameters F2-03 to F2-10 to define zones. The system uses the zones specified by parameters F2-03 to F2-10.

1: Intelligent zoning

The system calculates and defines zones automatically based on the data collected by SD card.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F2-03	Start floor of zone 1	0–56	0	-	☆
F2-04	End floor of zone 1	0–56	0	-	☆
F2-05	Start floor of zone 2	0–56	0	-	☆
F2-06	End floor of zone 2	0–56	0	-	☆
F2-07	Start floor of zone 3	0–56	0	-	☆
F2-08	End floor of zone 3	0–56	0	-	☆
F2-09	Start floor of zone 4	0–56	0	-	☆
F2-10	End floor of zone 4	0–56	0	-	☆

The start and end floors of user-defined zones are specified as follows:

F2-03 is the start floor of zone 1. F2-04 is the end floor of zone 1.

F2-05 is the start floor of zone 2. F2-06 is the end floor of zone 2.

F2-07 is the start floor of zone 3. F2-08 is the end floor of zone 3.

F2-09 is the start floor of zone 4. F2-10 is the end floor of zone 4.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F2-11	Zone selection for elevator 1	0: All 1: Zone 1 2: Zone 2 3: Zone 3 4: Zone 4 5: Odd-number floors 6: Even-number floors 7: One-direction collective selective (up collective selective in up peak hours, and down collective selective in down peak hours)	0	-	☆
F2-12	Zone selection for elevator 2		0	-	☆
F2-13	Zone selection for elevator 3		0	-	☆
F2-14	Zone selection for elevator 4		0	-	☆
F2-15	Zone selection for elevator 5		0	-	☆
F2-16	Zone selection for elevator 6		0	-	☆
F2-17	Zone selection for elevator 7		0	-	☆
F2-18	Zone selection for elevator 8		0	-	☆

0: All

The elevator provide services for all zones.

1: Zone 1

The elevator provides services only for zone 1 and responds only to the calls from zone 1.

2: Zone 2

The elevator provides services only for zone 2 and responds only to calls from zone 2.

3: Zone 3

The elevator provides services only for zone 3 and responds only to calls from zone 3.

4: Zone 4

The elevator provides services only for zone 4 and responds only to calls from zone 4.

5: Odd-number floors

The elevator provides services only for odd-number floors and responds only to calls from odd-number floors.

6: Even-number floors

The elevator provides services only for even-number floors and responds only to calls from even-number floors.

7: One-direction collective selective

During up peak traffic hours, up collective selective is implemented for each elevator and the elevators respond to up calls first. During down peak traffic hours, down collective selective is implemented for each elevator and the elevators respond to down calls first.

Group F3: Traffic Time Setting Parameters

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F3-00	Day of week	1: Monday 2: Tuesday 3: Wednesday 4: Thursday 5: Friday 6: Saturday 7: Sunday	1	-	☆

F3-00 is used to set the day of week. After a day of week is selected, parameters F3-01 to F3-40 specify 10 periods in the day. You can set seven days per week and 10 periods per day so that 70 periods are available for you to set.

Example:

If you need to set or view the periods on Monday, set F3-00 to 1. The values of F3-01 to F3-40 are 10 periods on Monday. You can set and use the 10 periods separately.

If you need to set or view the periods on Tuesday, set F3-00 to 2 (The periods previously set for Monday are stored automatically). The values of F3-01 to F3-40 are 10 periods on Tuesday. You can set and use the 10 periods separately. This rule also applies to other days of a week.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F3-01	Start time of period 1	Start time of period 1 in traffic mode	00.00	-	☆

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F3-02	End time of period 1	End time of period 1 in traffic mode	00.00	-	☆
F3-03	Traffic mode setting for period 1	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-04	Floors with peak traffic in period 1	0–56	1	-	☆
F3-05	Start time of period 2	Start time of period 2 in traffic mode	00.00	-	☆
F3-06	End time of period 2	End time of period 2 in traffic mode	00.00	-	☆
F3-07	Traffic mode setting for period 2	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-08	Floors with peak traffic in period 2	0–56	1	-	☆
F3-09	Start time of period 3	Start time of period 3 in traffic mode	00.00	-	☆
F3-10	End time of period 3	End time of period 3 in traffic mode	00.00	-	☆
F3-11	Traffic mode setting for period 3	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-12	Floors with peak traffic in period 3	0–56	1	-	☆
F3-13	Start time of period 4	Start time of period 4 in traffic mode	00.00	-	☆
F3-14	End time of period 4	End time of period 4 in traffic mode	00.00	-	☆
F3-15	Traffic mode setting for period 4	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	5	-	☆

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F3-16	Floors with peak traffic in period 4	0–56	1	-	☆
F3-17	Start time of period 5	Start time of period 5 in traffic mode	00.00	-	☆
F3-18	End time of period 5	Start time of period 5 in traffic mode	00.00	-	☆
F3-19	Traffic mode setting for period 5	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-20	Floors with peak traffic in period 5	0–56	1	-	☆
F3-21	Start time of period 6	Start time of period 6 in traffic mode	00.00	-	☆
F3-22	End time of period 6	Start time of period 6 in traffic mode	00.00	-	☆
F3-23	Traffic mode setting for period 6	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-24	Floors with peak traffic in period 6	0–56	1	-	☆
F3-25	Start time of period 7	Start time of period 7 in traffic mode	00.00	-	☆
F3-26	End time of period 7	Start time of period 7 in traffic mode	00.00	-	☆
F3-27	Traffic mode setting for period 7	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-28	Floors with peak traffic in period 7	0–56	1	-	☆
F3-29	Start time of period 8	Start time of period 8 in traffic mode	00.00	-	☆
F3-30	End time of period 8	Start time of period 8 in traffic mode	00.00	-	☆

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F3-31	Traffic mode setting for period 8	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-32	Floors with peak traffic in period 8	0–56	1	-	☆
F3-33	Start time of period 9	Start time of period 9 in traffic mode	00.00	-	☆
F3-34	End time of period 9	Start time of period 9 in traffic mode	00.00	-	☆
F3-35	Traffic mode setting for period 9	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-36	Floors with peak traffic in period 9	0–56	1	-	☆
F3-37	Start time of period 10	Start time of period 10 in traffic mode	00.00	-	☆
F3-38	End time of period 10	Start time of period 10 in traffic mode	00.00	-	☆
F3-39	Traffic mode setting for period 10	0: Energy-saving mode 1: Normal traffic mode 2: Up peak mode 3: Down peak mode 4: Sudden peak hour mode	1	-	☆
F3-40	Floors with peak traffic in period 10	0–56	1	-	☆

F3-01 to F3-40 are period parameters for the day set in F3-00.

F3-01: Start time of period 1.

F3-02: End time of period 1.

F3-03: Traffic mode for period 1 set by users. In the period specified by F3-01 and F3-02, the traffic mode set by users is used.

F3-04: Floors with peak traffic in period 1. In the up peak, down peak and sudden peak hour modes, F3-04 indicates the peak traffic floors. In other traffic modes, F3-04 is invalid.

F3-01 to F3-40 have the same functions as corresponding parameters for period 1.

To enable user-defined periods, you must set Bit5 of F4-11 to 1. The functions of Bit5 are described as follows:

If Bit5 is set to 1, the user-defined traffic modes is enabled. The system operates in the traffic mode set by users in user-defined periods.

If Bit5 is set to 0, the system does not operate in the traffic mode set by users.

Group F4: Function Selection Parameters

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F4-00	Clock: year	2010–2100	2013	YYYY	☆
F4-01	Clock: month and day	0–1231	1	MM.DD	☆
F4-02	Clock: hour and minute	0–2359	1	HH.MM	☆

These parameters are used to set current date and time.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F4-03	Day of week	1–7	1	-	●

It is used to set current day of week.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F4-04	Version 1	0–65535	0	-	●
F4-05	Version 2	0–65535	0	-	●
F4-06	Version 3	0–65535	0	-	●

These parameters are used to set GCB version number display.

F4-04 indicates a master version.

F4-05 indicates a customers' version.

F4-06 indicates a non-standard version.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F4-11	Group control function selection 1	0–65535 Bit0: Dispersed elevator waiting function enabled Bit1: Zone elevator waiting function enabled Bit2: Processing of elevator door open timeout disabled Bit3: No redispatch after an elevator enters the fault state in destination floor mode Bit4: Traffic statistics collection selection Bit5: Period setting for the traffic mode Bit6 to Bit15: Reserved	1	-	●

It is used for group control function selection.

Each bit of the parameter defines a function. If a bit is set to 1, the function indicated by this bit is enabled. If this bit is set to 0, the function is disabled.

The following table describes the functions defined by each bit.

F4-11: Group control function selection 1			
Bit	Function	Description	Default
Bit0	Dispersed elevator waiting	0: Dispersed elevator waiting enabled 1: Dispersed elevator waiting disabled	0
Bit 1	Zoned elevator waiting	This bit is effective only when Bit0 of F4-11 is set to 1. 0: Zoned elevator waiting function disabled 1: Zoned elevator waiting function enabled When the system detects that elevators are idle for a specified period, it assigns the elevators to different zones to wait for calls.	0
Bit 2	Processing of elevator door open timeout disabled	If the system detects that a door stays open or a light curtain is blocked for a time longer than that specified by F0-05, the system regards that light curtain blockage timeout occurs. 0: When light curtain blockage timeout occurs on an elevator, the system determines that the elevator is not suitable for responding to a new call and assigns suitable elevators to respond to the new call. 1: When light curtain blockage timeout occurs on an elevator, the system determines that the elevator is suitable for responding to a new call and assigns the elevator to respond to the new call.	0
Bit 3	No redispatch after an elevator enters the fault state in destination floor mode	0: When an elevator enters the fault state and cannot provide services, the group control system sends the call assigned to the elevator to another elevator. 1: When an elevator enters the fault state and cannot provide services, the group control system does not send the call assigned to the elevator to another elevator.	0
Bit 4	Traffic statistics collection selection	0: Collection of call statistics by the GCB In this case, traffic statistics are collected by floor selectors and the group control system obtains the statistics for calculation. 1: Collection of analog statistics of an elevator In this case, traffic statistics are collected by elevators and the group control system obtains the statistics for calculation.	0

F4-11: Group control function selection 1			
Bit	Function	Description	Default
Bit 5	Period setting for the traffic mode	It is used to set periods for the traffic mode. 1: User-defined traffic mode enabled. In this case, the time parameters specified by the parameters in group F3 are effective. 0: User-defined traffic mode disabled. In this case, the time parameters specified by the parameters in group F3 are ineffective.	0
Bit 6 to Bit15	Reserved		

Group FU: System Monitoring Parameters

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-00	CAN communication quality 1 of elevators under group control	LED 1: Communication quality of elevator 1 LED 2: Communication quality of elevator 2 LED 3: Communication quality of elevator 3 LED 4: Communication quality of elevator 4 LED 5: Communication quality of elevator 5	0	-	●
FU-01	CAN communication quality 2 of elevators under group control	LED 1: Communication quality of elevator 6 LED 2: Communication quality of elevator 7 LED 3: Communication quality of elevator 8 LED 4: Reserved LED 5: Reserved	0	-	●

FU-00 displays the communication quality of the GCB and elevators 1 to 5.

As shown in the following figure, five LEDs from right to left are numbered 1, 2, 3, 4, and 5.

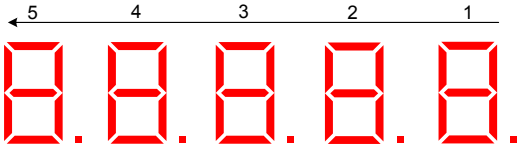


Figure 5-1 Example of communication quality of an elevator

5		4		3		2		1	
CAN5 communication quality		CAN4 communication quality		CAN3 communication quality		CAN2 communication quality		CAN1 communication quality	
0	High	0	High	0	High	0	High	0	High
↓	↑	↓	↑	↓	↑	↓	↑	↓	↑
9	Interrupted	9	Interrupted	9	Interrupted	9	Interrupted	9	Interrupted

Numbers 0 to 9 indicate the communication quality, where a larger value indicates stronger interference and lower communication quality.

LED 1: Quality of CAN communication between the GCB and elevator 1.

LED 2: Quality of CAN communication between the GCB and elevator 2.

LED 3: Quality of CAN communication between the GCB and elevator 3.

LED 4: Quality of CAN communication between the GCB and elevator 4.

LED 5: Quality of CAN communication between the GCB and elevator 5.

FU-01 displays the communication quality of channels CAN6 to CAN8.

5	4	3		2		1	
No Display	No display	CAN8 communication quality		CAN7 communication quality		CAN6 communication quality	
—	—	0	High	0	High	0	High
		↓	↑	↓	↑	↓	↑
		9	Interrupted	9	Interrupted	9	Interrupted

LED 1: Quality of CAN communication between the GCB and elevator 6.

LED 2: Quality of CAN communication between the GCB and elevator 7.

LED 3: Quality of CAN communication between the GCB and elevator 8.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-02	Monitoring of elevators under group control	Monitoring of elevators under group control	0	-	●

FU-02 displays the elevators under group control.

As shown in the following figure, A to DP indicate elevators 1 to 8 under group control respectively.

A: Group control status of elevator 1

If it is on, elevator 1 is under group control. If it is off, elevator 1 is not under group control.

B: Group control status of elevator 2

If it is on, elevator 2 is under group control. If it is off, elevator 2 is not under group control.

C: Group control status of elevator 3

If it is on, elevator 3 is under group control. If it is off, elevator 3 is not under group control.

D: Group control status of elevator 4

If it is on, elevator 4 is under group control. If it is off, elevator 4 is not under group control.

E: Group control status of elevator 5

If it is on, elevator 5 is under group control. If it is off, elevator 5 is not under group control.

F: Group control status of elevator 6

If it is on, elevator 6 is under group control. If it is off, elevator 6 is not under group control.

G: Group control status of elevator 7

If it is on, elevator 7 is under group control. If it is off, elevator 7 is not under group control.

DP: Group control status of elevator 8

If it is on, elevator 8 is under group control. If it is off, elevator 8 is not under group control.

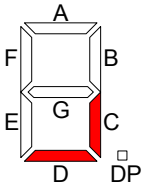


Figure 5-2 Example of elevator group control status

For example, if only segments C and D of the LEDs are on, it indicates that the elevators corresponding to these segments are under group control and other elevators are not under group control.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-03	Current traffic mode	LED 1 displays the current traffic status. The value range is 0 to 4. LED 2 displays the current zoning status. The value range is 0 to 1.	0	-	●

After users enter the FU-03 menu, the LEDs on the keyboard indicate the current traffic mode and zoning status. The two LEDs from right to left are numbered 1 and 2, as shown in the following figure.

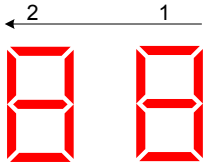


Figure 5-3 Example of traffic mode

LED 1 displays the current traffic mode. The value range is 0 to 4.

0: Energy-saving mode

1: Normal traffic mode

2: Up peak mode

3: Down peak mode

4: Sudden peak hour mode

LED 2 displays the current zoning status. The value range is 0 to 1.

0: The zoning mode is used.

1: The zoning mode is not used.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-04	Average waiting time (read only)	Average waiting time	0	s	●

If an SD card is available, the system calculates the calls received in the last 30 days to figure out the average waiting time in these days.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-05	Average travel time (read only)	Average travel time	0	s	●

If an SD card is available, the system calculates the calls received in the last 30 days to figure out the average travel time in these days.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-06	Long waiting time rate (read only)	0–100	0	%	●

If an SD card is available, the system calculates the calls received in the last 30 days to figure out the long waiting time rate in these days. (If the waiting time exceeds the maximum waiting time specified by F0-02, it is regarded as a long waiting time.)

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-07	Full-load rate (read only)	0–100	0	%	●

If an SD card is available, the system calculates the calls received in the last 30 days to figure out the full-load rate in these days.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-21	Communication status of floor selectors connected to CAN1 channel	Communication status of floor selectors on floors 1 to 16 (front door)	0	-	●
FU-22	Communication status of floor selectors connected to CAN1 channel	Communication status of floor selectors on floors 17 to 32 (front door)	0	-	●
FU-23	Communication status of floor selectors connected to CAN1 channel	Communication status of floor selectors on floors 33 to 48 (front door)	0	-	●
FU-24	Communication status of floor selectors connected to CAN1 channel	Communication status of floor selectors on floors 49 to 56 (front door)	0	-	●
FU-25	Communication status of floor selectors connected to CAN1 channel	Communication status of floor selectors on floors 1 to 16 (rear door)	0	-	●
FU-26	Communication status of floor selectors connected to CAN1 channel	Communication status of floor selectors on floors 17 to 32 (rear door)	0	-	●
FU-27	Communication status of floor selectors connected to CAN1 channel	Communication status of floor selectors on floors 33 to 48 (rear door)	0	-	●
FU-28	Communication status of floor selectors connected to CAN1 channel	Communication status of floor selectors on floors 49 to 56 (rear door)	0	-	●

The parameters are used to monitor the floor selector communication status of the elevator destination group control system. FU-21 to FU-28 show the communication status of floor selectors connected to CAN1 channel .

The following figure shows the communication status of a floor selector.

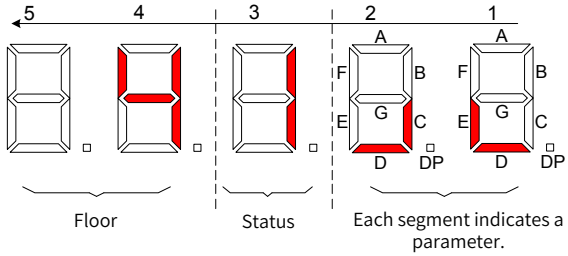


Figure 5-4 Communication status of a floor selector

As shown in the preceding figure, the five LEDs from right to left are numbered 1, 2, 3, 4, and 5. FU-21 indicates the CAN communication status of floor selectors on floors 1 to 16. LEDs 5 and 4 indicate the floor on which a floor selector is located. LED 3 indicates that the communication is normal (indicated by 1) or abnormal (indicated by 0). LEDs 1 and 2 use a 16-segment LED to indicate the status of floor selectors on 16 floors. As shown in Figure 5-4, LEDs 5, 4, and 3 indicate that the communication of the floor selector on floor 4 is normal (indicated by 1), and LEDs 1 and 2 indicate that the communication of the floor selectors on floors 5, 11, and 12 are also normal.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-29	Communication status of floor selectors connected to CAN2 channel	Communication status of floor selectors on floors 1 to 16 (front door)	0	-	●
FU-30	Communication status of floor selectors connected to CAN2 channel	Communication status of floor selectors on floors 17 to 32 (front door)	0	-	●
FU-31	Communication status of floor selectors connected to CAN2 channel	Communication status of floor selectors on floors 33 to 48 (front door)	0	-	●
FU-32	Communication status of floor selectors connected to CAN2 channel	Communication status of floor selectors on floors 49 to 56 (front door)	0	-	●
FU-33	Communication status of floor selectors connected to CAN2 channel	Communication status of floor selectors on floors 1 to 16 (rear door)	0	-	●

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-34	Communication status of floor selectors connected to CAN2 channel	Communication status of floor selectors on floors 17 to 32 (rear door)	0	-	●
FU-35	Communication status of floor selectors connected to CAN2 channel	Communication status of floor selectors on floors 33 to 48 (rear door)	0	-	●
FU-36	Communication status of floor selectors connected to CAN2 channel	Communication status of floor selectors on floors 49 to 56 (rear door)	0	-	●

FU-29 to FU-36 show the communication status of floor selectors connected to CAN2 channel. For status details, see the descriptions of floor selectors connected to CAN1 channel.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-37	Communication status of floor selectors connected to CAN3 channel	Communication status of floor selectors on floors 1 to 16 (front door)	0	-	●
FU-38	Communication status of floor selectors connected to CAN3 channel	Communication status of floor selectors on floors 17 to 32 (front door)	0	-	●
FU-39	Communication status of floor selectors connected to CAN3 channel	Communication status of floor selectors on floors 33 to 48 (front door)	0	-	●
FU-40	Communication status of floor selectors connected to CAN3 channel	Communication status of floor selectors on floors 49 to 56 (front door)	0	-	●
FU-41	Communication status of floor selectors connected to CAN3 channel	Communication status of floor selectors on floors 1 to 16 (rear door)	0	-	●
FU-42	Communication status of floor selectors connected to CAN3 channel	Communication status of floor selectors on floors 17 to 32 (rear door)	0	-	●

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-43	Communication status of floor selectors connected to CAN3 channel	Communication status of floor selectors on floors 33 to 48 (rear door)	0	-	●
FU-44	Communication status of floor selectors connected to CAN3 channel	Communication status of floor selectors on floors 49 to 56 (rear door)	0	-	●

FU-37 to FU-44 show the communication status of floor selectors connected to CAN3 channel. For status details, see the descriptions of floor selectors connected to CAN1 channel.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-45	Communication status of floor selectors connected to CAN4 channel	Communication status of floor selectors on floors 1 to 16 (front door)	0	-	●
FU-46	Communication status of floor selectors connected to CAN4 channel	Communication status of floor selectors on floors 17 to 32 (front door)	0	-	●
FU-47	Communication status of floor selectors connected to CAN4 channel	Communication status of floor selectors on floors 33 to 48 (front door)	0	-	●
FU-48	Communication status of floor selectors connected to CAN4 channel	Communication status of floor selectors on floors 49 to 56 (front door)	0	-	●
FU-49	Communication status of floor selectors connected to CAN4 channel	Communication status of floor selectors on floors 1 to 16 (rear door)	0	-	●
FU-50	Communication status of floor selectors connected to CAN4 channel	Communication status of floor selectors on floors 17 to 32 (rear door)	0	-	●
FU-51	Communication status of floor selectors connected to CAN4 channel	Communication status of floor selectors on floors 33 to 48 (rear door)	0	-	●

FU-52	Communication status of floor selectors connected to CAN4 channel	Communication status of floor selectors on floors 49 to 56 (rear door)	0	-	●

FU-45 to FU-52 show the communication status of floor selectors connected to CAN4 channel. For status details, see the descriptions of floor selectors connected to CAN1 channel.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-53	Communication status of floor selectors connected to CAN5 channel	Communication status of floor selectors on floors 1 to 16 (front door)	0	-	●
FU-54	Communication status of floor selectors connected to CAN5 channel	Communication status of floor selectors on floors 17 to 32 (front door)	0	-	●
FU-55	Communication status of floor selectors connected to CAN5 channel	Communication status of floor selectors on floors 33 to 48 (front door)	0	-	●
FU-56	Communication status of floor selectors connected to CAN5 channel	Communication status of floor selectors on floors 49 to 56 (front door)	0	-	●
FU-57	Communication status of floor selectors connected to CAN5 channel	Communication status of floor selectors on floors 1 to 16 (rear door)	0	-	●
FU-58	Communication status of floor selectors connected to CAN5 channel	Communication status of floor selectors on floors 17 to 32 (rear door)	0	-	●
FU-59	Communication status of floor selectors connected to CAN5 channel	Communication status of floor selectors on floors 33 to 48 (rear door)	0	-	●
FU-60	Communication status of floor selectors connected to CAN5 channel	Communication status of floor selectors on floors 49 to 56 (rear door)	0	-	●

FU-53 to FU-60 show the communication status of floor selectors connected to CAN5 channel. For status details, see the descriptions of floor selectors connected to CAN1 channel.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-61	Communication status of floor selectors connected to CAN6 channel	Communication status of floor selectors on floors 1 to 16 (front door)	0	-	●
FU-62	Communication status of floor selectors connected to CAN6 channel	Communication status of floor selectors on floors 17 to 32 (front door)	0	-	●
FU-63	Communication status of floor selectors connected to CAN6 channel	Communication status of floor selectors on floors 33 to 48 (front door)	0	-	●
FU-64	Communication status of floor selectors connected to CAN6 channel	Communication status of floor selectors on floors 49 to 56 (front door)	0	-	●
FU-65	Communication status of floor selectors connected to CAN6 channel	Communication status of floor selectors on floors 1 to 16 (rear door)	0	-	●
FU-66	Communication status of floor selectors connected to CAN6 channel	Communication status of floor selectors on floors 17 to 32 (rear door)	0	-	●
FU-67	Communication status of floor selectors connected to CAN6 channel	Communication status of floor selectors on floors 33 to 48 (rear door)	0	-	●
FU-68	Communication status of floor selectors connected to CAN6 channel	Communication status of floor selectors on floors 49 to 56 (rear door)	0	-	●

FU-61 to FU-68 show the communication status of floor selectors connected to CAN6 channel. For status details, see the descriptions of floor selectors connected to CAN1 channel.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-69	Communication status of floor selectors connected to CAN7 channel	Communication status of floor selectors on floors 1 to 16 (front door)	0	-	●

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-70	Communication status of floor selectors connected to CAN7 channel	Communication status of floor selectors on floors 17 to 32 (front door)	0	-	●
FU-71	Communication status of floor selectors connected to CAN7 channel	Communication status of floor selectors on floors 33 to 48 (front door)	0	-	●
FU-72	Communication status of floor selectors connected to CAN7 channel	Communication status of floor selectors on floors 49 to 56 (front door)	0	-	●
FU-73	Communication status of floor selectors connected to CAN7 channel	Communication status of floor selectors on floors 1 to 16 (rear door)	0	-	●
FU-74	Communication status of floor selectors connected to CAN7 channel	Communication status of floor selectors on floors 17 to 32 (rear door)	0	-	●
FU-75	Communication status of floor selectors connected to CAN7 channel	Communication status of floor selectors on floors 33 to 48 (rear door)	0	-	●
FU-76	Communication status of floor selectors connected to CAN7 channel	Communication status of floor selectors on floors 49 to 56 (rear door)	0	-	●

FU-69 to FU-76 show the communication status of floor selectors connected to CAN7 channel. For status details, see the descriptions of floor selectors connected to CAN1 channel.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-77	Communication status of floor selectors connected to CAN8 channel	Communication status of floor selectors on floors 1 to 16 (front door)	0	-	●
FU-78	Communication status of floor selectors connected to CAN8 channel	Communication status of floor selectors on floors 17 to 32 (front door)	0	-	●

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-79	Communication status of floor selectors connected to CAN8 channel	Communication status of floor selectors on floors 33 to 48 (front door)	0	-	●
FU-80	Communication status of floor selectors connected to CAN8 channel	Communication status of floor selectors on floors 49 to 56 (front door)	0	-	●
FU-81	Communication status of floor selectors connected to CAN8 channel	Communication status of floor selectors on floors 1 to 16 (rear door)	0	-	●
FU-82	Communication status of floor selectors connected to CAN8 channel	Communication status of floor selectors on floors 17 to 32 (rear door)	0	-	●
FU-83	Communication status of floor selectors connected to CAN8 channel	Communication status of floor selectors on floors 33 to 48 (rear door)	0	-	●
FU-84	Communication status of floor selectors connected to CAN8 channel	Communication status of floor selectors on floors 49 to 56 (rear door)	0	-	●

FU-77 to FU-84 show the communication status of floor selectors connected to CAN8 channel. For status details, see the descriptions of floor selectors connected to CAN1 channel.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FU-85	Terminal input status	0–65535	0	-	●
FU-86	Terminal input status	0–65535	0	-	●
FU-87	Terminal output status	0–65535	0	-	●

FU-85 to FU-87 indicate the system input/output status, as shown in the following figure.

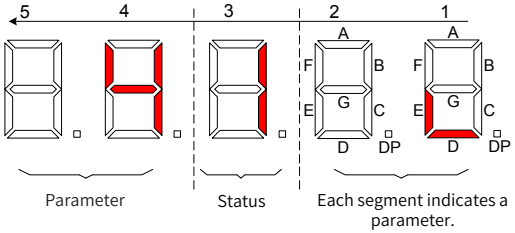


Figure 5-5 Example of input status

As shown in Figure 5-5, the five LEDs from right to left are numbered 1, 2, 3, 4, and 5 respectively. For FU-85 to FU-87, LEDs 5 and 4 indicate an input terminal parameter and an output terminal parameter respectively. LED 3 indicates that a parameter is valid (indicated by 1) or invalid (indicated by 0). LEDs 1 and 2 use a 16-segment LED to display the status of the 16 functions indicated by this parameter. As shown in the figure, LEDs 5, 4, and 3 indicate that function 4 (Reserved) is valid (indicated by 1). LEDs 1 and 2 indicate that function 5 (Reserved) is also valid.

Parameter No.	Function	Parameter No.	Function
FU-85: Input state 1			
0	Reserved	8	Reserved
1	Reserved	9	Reserved
2	Reserved	10	Reserved
3	Reserved	11	Reserved
4	Reserved	12	Reserved
5	Reserved	13	Reserved
6	Reserved	14	Reserved
7	Reserved	15	Reserved
FU-86: Input state 2			
16	Reserved	24	Reserved
17	Reserved	25	Reserved
18	Reserved	26	Reserved
19	Reserved	27	Reserved
20	Reserved	28	Reserved
21	Reserved	29	Reserved
22	Reserved	30	Reserved
23	Reserved	31	Reserved
FU-87: Output state 1			
0	Reserved	8	Reserved
1	Reserved	9	Reserved
2	Reserved	10	Reserved
3	Reserved	11	Reserved
4	Reserved	12	Reserved
5	Reserved	13	Reserved
6	Reserved	14	Reserved

Parameter No.	Function	Parameter No.	Function
7	Reserved	15	Reserved

Group FP: User Parameters

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FP-00	User password	0–65535	0	-	☆

It is used to set user password.

If FP-00 is set to a non-zero value, the password protection function is enabled. You can enter the parameter setting menu to view or modify parameters only after entering the correct password. The password protection function can be disabled by setting FP-00 to 00000.

NOTE

◆ Remember the password you set. If you set the password incorrectly or forget your password, contact Inovance to replace the GCB.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FP-01	Parameter initialization	0–1 0: No operation 1: Restore default settings	0	-	☆

It is used to reset system parameters.

The values are as follows:

0: No operation

1: Restore default settings

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FP-02	User-defined parameter checking	0–1	0	-	☆

It is used to view the parameters different from default parameters. If FP-02 is set to 1, you can view the parameters different from default parameters.

5.2 Description of Floor Selector Parameters

Group F0: Display Parameters

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F0-00	Floor address of the floor selector	0–56	0	-	☆

0: Invalid

Values 1 to 56 correspond to floors 1 to 56 respectively.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F0-01	Front and rear door settings of the floor selector	0: Front door 1: Rear door	0	-	☆

0: The floor selector is located at the front door.

1: The floor selector is located at the rear door.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F0-02	ID display of elevator 1	0–26 0: No display 1: Display"A" 2: Display"B" 3: Display"C" 4: Display"D" 5: Display"E" 6: Display"F" 7–24: G to X in alphabetic order 25: Display"Y" 26: Display"Z"	1	-	☆
F0-03	ID display of elevator 2		2	-	☆
F0-04	ID display of elevator 3		3	-	☆
F0-05	ID display of elevator 4		4	-	☆
F0-06	ID display of elevator 5		5	-	☆
F0-07	ID display of elevator 6		6	-	☆
F0-08	ID display of elevator 7		7	-	☆
F0-09	ID display of elevator 8		8	-	☆

These parameters are used to set the ID display of an elevator assigned by the GCB.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F0-10	Location of elevator 1	0–4 0: No direction 1: Left 2: Right 3: Rear left 4: Rear right	0	-	☆
F0-11	Location of elevator 2		0	-	☆
F0-12	Location of elevator 3		0	-	☆
F0-13	Location of elevator 4		0	-	☆
F0-14	Location of elevator 5		0	-	☆
F0-15	Location of elevator 6		0	-	☆
F0-16	Location of elevator 7		0	-	☆
F0-17	Location of elevator 8		0	-	☆

If the GCB assigns only one elevator, the direction arrow displayed on the screen indicates the location of the elevator. If the GCB assigns multiple elevators, no direction arrow is displayed.

Group F1: Basic Parameters

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F1-00	Key pressing interval for non-disabled people	1–3	1.0	s	☆

It specifies the key pressing interval of the floor selector. If no key is pressed after the interval specified by F1-00, the system regards that the previous input indicates a floor. Another input is allowed only after the current elevator assignment is completed.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F1-01	Key pressing interval for disabled people	1–5	3.0	s	☆

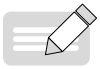
It specifies the key pressing interval of the floor selector for disabled people.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F1-02	ID display time of an assigned elevator	2–10	7.0	s	☆

It specifies the ID display time of an assigned elevator.

Parameter No.	Parameter Name	Setting Range		Default	Unit	Property
F1-03	Voice volume adjustment of the touchscreen	Touchscreen-type	Keypad-type	0	-	☆
		Turn on and off	Reserved parameter, cannot be set.			

After the voice announcement function is enabled, you can use this parameter to adjust the voice volume.

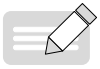


NOTE

◆ It is available only to the touchscreen-type floor selectors.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F1-04	Voice announcement selection	Turn on and off	0	-	☆

This parameter is used to select whether to enable the voice announcement function.



NOTE

◆ It is available only to the touchscreen-type floor selectors.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F1-05	Special function key in the lower left corner	0–29 0: No function 1–26: Letters from A to Z 27: Display "-" 28: Reserved 29: Door switching function	1	-	☆

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F1-06	Special function key in the lower right corner	0–29 0: No function 1–26: Letters from A to Z 27: Display "-" 28: Reserved 29: Door switching function	28	-	☆

These parameters are used for the function selection of special function keys in the lower left and lower right corner. Their values are displayed when you press the keys.

0: No function

1–26: Letters from A to Z

27: Display "-"

28: Reserved

29: Door switching function
By default, the front door on the destination floor is selected during floor selection. Before entering the destination floor number, you can press this key to switch from the front door to the rear door.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F1-07	Program function selection	-	0	-	☆

Group F2: Floor Display Parameters

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
F2-01	Code of floor 1	0000–4040 For floor code setting, the medium bits (two high bits) and low bits (two low bits) are set separately. The available codes include: 00–09: Display"0" to"9" 10–35: Display"A" to"Z" 36: Display"-" 37–40: Reserved	0001	-	☆
F2-02	Code of floor 2		0002	-	☆
F2-03	Code of floor 3		0003	-	☆
Display of floors 4 to 50			…		
F2-51	Code of floor 51		0501	-	☆
F2-52	Code of floor 52		0502	-	☆
F2-53	Code of floor 53		0503	-	☆
F2-54	Code of floor 54		0504	-	☆
F2-55	Code of floor 55		0505	-	☆
F2-56	Code of floor 56		0506	-	☆

The floor selector can display a maximum of two bits in a floor code. F2-01 to F2-56 are used to set the medium and low bits of codes of floors 1 to 56. The thousands position and hundreds position of a parameter value indicate the medium bits of the floor display. The tens position and ones position indicate the low bits of the floor display. The meaning of codes is as follows:

00–09: Display "0" to "9"

10–35: Display "A" to"Z"

36: Display "-"

37–40: Reserved

Group FP: Protection Parameters

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FP-00	Protection password	0–65535	0	-	☆

If FP-00 is set to a non-zero value, you can enter the parameter interface to view or modify parameters only after entering the correct password.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FP-01	Parameter update	No: No function Yes: Restore default settings	0	-	☆

If it is set to 1, the default settings of parameters are restored.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FP-02	Language selection	Chinese English	0	-	☆

If it is set to 0, the display language is Chinese. If it is set to 1, the display language is English.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FP-03	Voice volume of the touchscreen	0–10 A larger number indicates a higher volume.	8	-	☆
FP-04	Touchscreen brightness adjustment	0–10 A larger number indicates a higher brightness.	8	-	☆
FP-05	Energy-saving time of the touchscreen	0–60	1	min	☆

If there is no operation after the time specified in FP-05 (Energy-saving time of the touchscreen), the brightness of the touchscreen is reduced.

Parameter No.	Parameter Name	Setting Range	Default	Unit	Property
FP-11	Date and time settings of the touchscreen	Manual setting	-	-	☆

Chapter 6 Maintenance

6.1 Daily Maintenance

Ambient temperature, humidity, dust, and vibration may cause aging of components inside the destination group control system, leading to system faults or a shorter system service life. Therefore, it is necessary to implement daily and periodic maintenance.

Daily inspection:

- Check whether abnormal noise exists during system running;
- Check whether the system installation environment has changed;
- Check whether the system overheats.

Daily cleaning:

- Keep the system clean;
- Remove the dust from the system surface to prevent it from entering system units, especially metal powder.

6.2 Periodic Inspection

Perform periodic inspection on the items that are difficult to check during running.

Periodic inspection:

- Check whether the screws become loose;
- Check whether the system is corroded.

6.3 Storage

After purchasing the system, pay attention to following aspects for temporary and long-term storage:

- Pack the system with the original packing box provided by Inovance;
- Long-term storage degrades the electrolytic capacitor. Thus, the system must be energized once every two years, with each time lasting at least five hours.

INOVANCE Warranty Agreement

1) Inovance provides an 18-month free warranty to the equipment itself from the date of manufacturing for the failure or damage under normal use conditions.
2) Within the warranty period, maintenance will be charged for the damage caused by the following reasons:
   a. Improper use or repair/modification without prior permission
   b. Fire, flood, abnormal voltage, natural disasters and secondary disasters
   c. Hardware damage caused by dropping or transportation after procurement
   d. Operations not following the user instructions
   e. Damage out of the equipment (for example, external device factors)
3) The maintenance fee is charged according to the latest Maintenance Price List of Inovance.
4) If there is any problem during the service, contact Inovance' s agent or Inovance directly.
5) Inovance reserves the rights for explanation of this agreement.

Suzhou Inovance Technology Co., Ltd.

Address: No.16, Youxiang Road, Yuexi Town, Wuzhong District, Suzhou 215104, P.R. China

Website: http://www.inovance.com

Suzhou Inovance Technology Co., Ltd.
Add.: No. 16 Youxiang Road, Yuexi Town, Wuzhong District, Suzhou 215104, P.R. China
Tel: +86-512-6637 6666
Fax: +86-512-6285 6720
http: //www.inovance.com

Shenzhen Inovance Technology Co., Ltd.
Add.: Building E, Hongwei Industry Park, Liuxian Road, Baocheng No. 70 Zone, Bao'an District, Shenzhen
Tel: +86-755-2979 9595
Fax: +86-755-2961 9897
http: //www.inovance.com

19010967A01