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1.0 SAFETY WARNING

Electrical Hazard Warning Symbol – Failure to observe this warning could result in electrical shock or electrocution.

Operational Hazard Warning Symbol – Failure to observe this warning could result in dangerous or unsafe conditions.

Installation Note: This product should be installed and serviced by a qualified elevator technician familiar with its operation and hazards involved. Proper safety procedures must be followed when working with this controller during installation and with control under power. Proper shielding and grounding of this product is necessary to reduce the emissions of radio frequency interference (RFI) which may adversely affect sensitive electronic equipment.

Electrical Wiring: Wire controller in accordance with the National Electrical Code, Canadian Electrical Code, European Norms and/or any other local codes that apply.

General Contractor Note: A separate fuse disconnect switch is required for the door controllers. See job specific wiring diagrams for disconnect and fuse requirements.

Enclosure Conduit Connections

TYPE 1, 4 & 4X
(Indoor Use Only)

CAUTION
Non-metallic enclosure does not provide grounding between conduit connections. Use grounding bushing and jumping wires.

WARNING
Do not mount controller on or above a combustible surface.

The conduit hubs are to be connected to the conduit before being connected to the enclosure. To maintain the environmental rating of this enclosure, install in any openings only listed or recognized conduit hubs with the same environmental ratings as required, in compliance with the installation instructions of the device.
2.0 LANDING DOOR CONTROLLER INSTALLATION

2.1 LANDING DOOR CONTROLLER MOUNTING

Mount the Landing door Controller to the hoistway wall. Use 1/4” inch hardware.
2.2 LANDING DOOR WIRING LAYOUT - STANDARD OPERATORS (OPTION)

POWER

HOISTWAY TROUGH

EUD

Landing Door Controller

Hall Pushbuttons

Operator

Encoder

Interlock

Landing Door Junction Box or Trough

Door lock contact (DI) and Door Close Contact (DC) connect to elevator controller

Guide No. 254-EN
VERSION:
WIRELESS CONTROLLER & BRIDGE INSTALLATION & INTERFACE GUIDE
Date: Mar 25 / 2019
2.3 LANDING DOOR WIRING LAYOUT - EXTRA HIGH TORQUE OPERATORS

- **Operator**
- **Encoder**
- **Interlock**
- **Landing Door Controller**
- **Junction Box or Trough**
- **Slave Controller**
- **Hall Pushbuttons**
- **Door lock contact (DI) and Door Close Contact (DC)** connect to elevator controller

**Diagram:**

- **Power**
- **Operator**
- **Encoder**
- **Interlock**
- **Landing Door Controller**
- **Junction Box or Trough**
- **Hall Pushbuttons**
- **Door lock contact (DI) and Door Close Contact (DC)** connect to elevator controller
2.4 LANDING DOOR POWER CONNECTIONS

Connect controllers in accordance with local electrical codes. Power branch circuit should come from machine room disconnect 10 amp circuit for each line of doors. Use #14AWG [2mm] copper wire for power connection.

- ON/OFF switch disconnects both lines
- If neutral is not used, main disconnect must break both lines.

**WARNING**

HIGH VOLTAGES
Read Safety Warning before attempting to use this controller

CONDUIT AND SHIELD GROUNDING LUG

The enclosure supplied is non-metallic and does not provide grounding between conduit connections. Use grounding bushings or jumper wires.
2.5 LANDING DOOR ENCODER

Install and wire encoder same side as the controller. Do not extend the encoder wire.
2.6 LANDING DOOR OPERATORS - STANDARD OPERATORS

Wire both door motors in parallel. Use #18AWG [1mm] wire in conduit for motor connection. Do not combine motor wires with control wires in same conduit.

Note: Low speed winding is not used. Cap black wires separately (R4-R5).
2.7 LANDING DOOR OPERATORS - EXTRA HIGH TORQUE (OPTION)

Use #18AWG [1mm] wire in conduit for motor connection. Do not combine motor wires with control wires in same conduit. Connect CAN and COMM wires between controllers.

Notes
1. Low speed winding is not used. Cap black wires separately (R4-R5)
2. Use shielded wire or separate conduit for CAN bus connection slave

Attention!
- Shielded or separate conduit

Extra High Torque
Landing Door Operator
2.8 LANDING DOOR EMERGENCY UNLOCKING DEVICE (EUD)

The Emergency Unlocking Device is located on the landing side and contains a toggle switch which must be wired to the controller.

NOTE: Only in jurisdictions not requiring unlocking devices, a jumper needs to be added in lieu of the EUD switch.

The EUD indicator will flash ON all controllers in that channel to indicate there is a SET EUD at another floor.

The EUD and input indicator 4 will go ON solid when the EUD switch is in the SET position (activated) for the door connected to that controller.

For automatic door operation, ALL the EUD switches have to be in the RESET position as shown.

(RESET is normally closed)

Attention!
Three quick buzzer outputs (from car controller) indicates the EUD is set on that channel.

Attention!
When EUD is SET (at any floor) Doors on the same channel will not run.
2.9 LANDING DOOR ZONE SWITCH (ZNS)

The landing door Zone Switch located in top of interlock box activates the controller for the Landing door at which the elevator car is located.

The ZONE indicator will go ON solid when the ZNS contact is made for the door connected to that controller when elevator is at the landing with retiring cam extended.

ZONE turns OFF when the retiring cam lifts. When the retiring cam lifts the ZNS contact is open and the ZONE indicator turns off.

The input indicator 3 will go ON solid when the ZNS contact is made for the door connected to that controller.

Attention!
The ZONE must be made for automatic door operation. If ZONE is not made doors will not run.
2.10 LANDING DOOR HALL PUSHBUTTONS

HALL DOOR OPEN BUTTON (HDO) 1
Where provided, wire landing station door OPEN pushbuttons as shown. When elevator car is within landing ZONE, pushbutton inputs will be transmitted to the Car Door controller for connection to elevator control.

HALL DOOR CLOSE BUTTON (HDC) 2
Where provided, wire landing station door CLOSE pushbutton as shown. When elevator car is within floor ZONE, pushbutton inputs will be transmitted to the Car Door controller for connection to elevator control.

DOOR STOP BUTTON (STOP) 5
Where provided, wire landing station door STOP pushbutton as shown. The door STOP button should be normally open (NO). If normally closed (NC) set parameter 96 to 01. See DOOR STOP output for connection to elevator control.

The input indicators 1, 2, and 5 will go ON when the pushbutton is activated for the door connected to that controller.
2.11 LANDING DOOR LIGHT CURTAIN (OPTIONAL)

Install and wire Landing Door Light Curtain where provided. Note: V+ to RE contact must close when beams are blocked.

**Diagram:**
- Landing Door Controller
- Power
- Use N.C. contact
- To landing box or trough
- Light Curtain Controller
- See job specific wiring schematic
- Landing Door
- Landing Door Light Curtain
3.0 CAR DOOR (GATE) CONTROLLER INSTALLATION

3.1 CAR DOOR LOCATION AND WIRING LAYOUT

Mount the Car Door Controller to the car door rail spreader. Mount to same side as the Encoder. Use 1/4” Hardware.
3.2 CAR DOOR POWER CONNECTIONS

Connect controllers in accordance with local electrical codes. Power branch circuit should come from machine room disconnect 10 amp circuit for each line of doors. Use #14AWG [2mm] copper wire for power connection.

- ON/OFF switch disconnects both lines
- If neutral is not used, main disconnect must break both lines.

**WARNING**

HIGH VOLTAGES
Read Safety Warning before attempting to use this controller

CONDUIT AND SHIELD GROUNDING LUG

The enclosure supplied is non-metallic and does not provide grounding between conduit connections. Use grounding bushings or jumper wires.
3.3 CAR DOOR ENCODER

Install and wire encoder. Do not extend the encoder wire.
3.4 CAR DOOR (GATE) OPERATOR

Use #18AWG [1mm] wire in conduit for motor connection.
Do not combine motor wires with control wires in same conduit.
Note: Low speed winding is not used. Cap black wires separately (T8-T9).

On large car doors where provided wire opposite car door operator in parallel.
3.5 RETIRING CAM MOTOR

Use #18AWG [1mm] wire in conduit for motor connection.
Do not combine motor wires with control wires in same conduit.

Attention!
220 Volt 3 Ø Retiring Cam Motors Only
For 110 Volt 1 Ø Retiring Cam Motors for battery lowering see elevator control panel

Where provided on wide landing doors, wire opposite side retiring cam motor in parallel.
3.6 CAR DOOR REVERSING EDGE (OPTIONAL)

Wire reversing edge as shown where provided.

⚠️ Note V+ to RE contact closes when reversing edge is obstructed.

See job specific wiring schematic
3.7 SINGLE LIGHT CURTAIN (OPTION)

For Single Light Curtain option, you must add a jumper from V+ to DCM

Wire light curtain RD1 output as shown use normally open (NO) signal from light curtain controller. Wire V+ to Input 4.

See job specific wiring schematic

Inside the Car

Light Curtain #1

Car Door Panel

Light Curtain Power Supply

Power In

L1  N  100-240 VAC

Add Jumper

LC#1 PLUG

COM ON

V+ V-

AUX2

DC

D0 DC SE DCM RC

1 2 3 4 5

Inside the Car
3.8 DUAL LIGHT CURTAINS (OPTION)

- **Light Curtain #1 (SE)**
  - Wire light curtain RD1 output as shown. Use normally open (NO) signal from light curtain controller.

- **Light Curtain #2 (DCM)**
  - Wire light curtain RD2 output as shown. Use normally open (NO) signal from light curtain controller.

- **Light Curtain Test Output (User 1)**
  - Wire light curtain test as shown for dual light curtains. Use normally open (NO) from USER 1 relay output.

- **Note:** You must set parameter 65 to 07.
3.9 WARNING BUZZER

Install and wire door close warning buzzer as shown. See parameter 94 for constant or pulsing tone.

Attention!
Warning Buzzer is mounted in Auxiliary strobe controller (27465) if strobe light is provided.
3.10 CAR STATION DOOR PUSHBUTTONS

CAR DOOR OPEN BUTTON (DO) 1
Wire car station door OPEN pushbutton as shown.

CAR DOOR CLOSE BUTTON (DC) 2
Wire car station door CLOSE pushbutton as shown.

CAR DOOR STOP BUTTON (RC) 5
Where provided, wire car station door STOP pushbutton as shown. The car door STOP button should be normally open (NO). If normally closed (NC) set parameter 96 to 01. See DOOR STOP output on bridge controller for connection to elevator control.

The input indicators 1, 2, or 5 will go ON when the pushbutton is activated.
4.0 BRIDGE CONTROLLER INSTALLATION

4.1 BRIDGE CONTROLLER LOCATION AND WIRING LAYOUT

MACHINE ROOM
4.2 BRIDGE POWER CONNECTIONS

Connect controllers in accordance with local electrical codes. Power branch circuit should come from machine room disconnect 10 amp circuit for each line of doors. Use #14AWG [2mm] copper wire for power connection.

- ON/OFF switch disconnects both lines
- If neutral is not used, main disconnect must break both lines.

---

WARNING
HIGH VOLTAGES
Read Safety Warning before attempting to use this controller

CONDUIT AND SHIELD GROUNDING LUG

ON OFF
Power

The enclosure supplied is non-metallic and does not provide grounding between conduit connections. Use grounding bushings or jumper wires.
4.3 BRIDGE TO CAR DOOR CONNECTION

CAN BUS WIRING
Wire Bridge Controller to the Car Door Controller in series as shown. Use (2) shielded twisted pair in travel cable.

TERMINATING JUMPERS
For elevators with front doors only, do NOT remove terminating jumper. For front & rear doors remove terminating jumper on Front Car Door Controller only.
4.4 ELEVATOR TO BRIDGE CONTROLLER INPUT CONNECTIONS

CONTROLLER INTERFACE

Inputs to the Bridge controller are the only interface to the elevator control for door operation. A single Bridge Controller is used for front doors or for front and rear door arrangement.

INPUT COM

Add jumper to the INPUT COM from V- when car door controller V+ is used for the input voltage.

Where elevator control voltage is used, connect INPUT COM to elevator controller according to elevator control prints. Do not use V+ or V-.
<table>
<thead>
<tr>
<th></th>
<th>ELEVATOR TO BRIDGE CONTROLLER INPUT CONNECTIONS CONTINUED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>DO - Front Door Open</strong></td>
</tr>
<tr>
<td></td>
<td>Momentary front signal required to open doors</td>
</tr>
<tr>
<td>2</td>
<td><strong>DC - Front Door Close</strong></td>
</tr>
<tr>
<td></td>
<td>Constant signal required to close doors</td>
</tr>
<tr>
<td>3</td>
<td><strong>SE - Front Inspection</strong></td>
</tr>
<tr>
<td></td>
<td>Constant signal required for front door operation</td>
</tr>
<tr>
<td>4</td>
<td><strong>DCM - Front Door Close Momentary</strong></td>
</tr>
<tr>
<td></td>
<td>Momentary signal required to initiate Auto Close sequence</td>
</tr>
<tr>
<td>5</td>
<td><strong>RC - Retiring Cam</strong></td>
</tr>
<tr>
<td></td>
<td>Input required to lift cam and move car. Signal should be low whenever car is stopped.</td>
</tr>
<tr>
<td>6</td>
<td><strong>X11 - Fire Service Phase 1 Recall</strong></td>
</tr>
<tr>
<td></td>
<td>Input required when Fire Service Phase 1 Recall is on.</td>
</tr>
<tr>
<td>7</td>
<td><strong>X12 - Designated Landing Door</strong></td>
</tr>
<tr>
<td></td>
<td>Input required when elevator is at designated landing</td>
</tr>
<tr>
<td>8</td>
<td><strong>DOR - Rear Door Open</strong></td>
</tr>
<tr>
<td></td>
<td>Momentary signal to open doors</td>
</tr>
<tr>
<td>9</td>
<td><strong>DCR - Rear Door Close</strong></td>
</tr>
<tr>
<td></td>
<td>Constant Signal required to close doors</td>
</tr>
<tr>
<td>10</td>
<td><strong>INSR - Rear Inspection</strong></td>
</tr>
<tr>
<td></td>
<td>Constant signal required for rear door operation</td>
</tr>
<tr>
<td>11</td>
<td><strong>DCMR - Rear Door Close Momentary</strong></td>
</tr>
<tr>
<td></td>
<td>Momentary signal required to initiate Auto Close sequence</td>
</tr>
<tr>
<td>12</td>
<td><strong>X13 - Phase 2 “ON”</strong></td>
</tr>
<tr>
<td></td>
<td>Constant signal required in phase 2 operation</td>
</tr>
<tr>
<td>13</td>
<td><strong>X14 - Phase 2 “HOLD”</strong></td>
</tr>
<tr>
<td></td>
<td>Constant signal required in phase 2 “HOLD” operation</td>
</tr>
<tr>
<td>14</td>
<td><strong>X18 - Phase 2 “OFF”</strong></td>
</tr>
<tr>
<td></td>
<td>Constant signal required in phase 2 “OFF” operation (until recall)</td>
</tr>
<tr>
<td>15</td>
<td><strong>HDB - Hall Door Button Disable</strong></td>
</tr>
<tr>
<td></td>
<td>Constant signal required to enable hall buttons</td>
</tr>
</tbody>
</table>
4.5 BRIDGE CONTROLLER TO ELEVATOR OUTPUT CONNECTIONS

Hall Stop Buttons

**DSF - Front Door Stop - Relay COM1**
Contact closes when door stops during operation sequence

**DSR - Rear Door Stop - Relay COM1**
Contact closes when door stops during operation sequence

**Front Door Open - Relay COM2**
Normally open contact closes and normally closed contact opens, when landing and car doors are closed

**Front Door Closed**
**Relay COM3**
Normally open contact closes and normally closed contact opens, when landing and car doors are closed

**Rear Door Open**
**Relay COM4**
Normally open contact closes and normally closed contact opens when landing door and car door are open.

**Rear Door Closed**
**Relay COM5**
Normally open contact closes and normally closed contact opens when landing door and car door are closed

**USER 1 - Relay COM6**
Default: Normally open contact closes and normally closed contact opens when both landing door and car door are 3/4 open.
Option: see parameter 65

**USER 2 - Relay COM7**
Normally open contact closes and normally closed contact opens when both landing door and car door are 3/4 closed.
Option: see parameter 85

Attention!
See Parameter 97 for power-up mode relay condition.

Elevator controller interface connections to the Bridge Controller ONLY. No connection to landing door controller, or car door controller.
5.0 COMMISSIONING

5.1 CAR DOOR COMMISSIONING

Make sure all Landing Doors and Car Doors are adjusted and run freely by hand in the door guides without binding or sticking.

1. Turn power ON

2. Set AUTO<->IND switch to IND

3. Using the OPEN, CLOSE and RETCAM cam buttons, ensure the car door operator(s) and retiring cam motor(s) are phased for correct rotation. If a motor rotates in the wrong direction, switch any two of the three motor wires

4. To begin, cycle through parameters by pressing the - & + buttons. Once the desired parameter is displayed, press the ENTER button to access the setting for that parameter. Change the setting by pressing the - & + buttons. Once the desired setting is displayed, press the ENTER button to save the setting. Parameters can only be modified in IND mode.

5. Change parameter 02 to “Cd” setting.
   The LCD display should now read “CAR DOOR”.

6. Use parameter 03 default “CHANNEL 15” for the first car door. For each additional car door, change parameter 03 to a different channel. The LCD display will show what channel has been selected.

7. Change parameter 10 to “Lr” setting. Press ENTER to begin learn cycle. Prior to learn, car door can be in any position. The learn cycle will fully close and then fully open. Once the car door is fully open, the learn cycle is complete and the flashing “LEARN” indicator on the LCD will turn off.

Tweaks

If car door stalls before learn is complete, set parameter 12 to HD. Re-run the learn cycle. Adjust speeds to suit to ensure car door does not slam.

If car door stalls during operation (normal operation or nudging), set parameter 12 to HD. Adjust speeds to suit to ensure car door does not slam.

If retiring cam top assembly does not completely lift retiring cam bottom assembly, set parameter 70 to 10.
8. Set parameter 50 to “01” for CAN_Bridge Operation

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>01</td>
</tr>
</tbody>
</table>

9. Set parameter 52 to “00” for Front Car Door or “01” for Rear Car Door.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>00</td>
</tr>
</tbody>
</table>

10. Set parameter 65 to “07” for Dual Light Curtain Test Output setting. See section 3.8 on page 20.

- Note see output USER 1

11. Press and hold the CLOSE button to close the door.

12. Set AUTO<>IND switch to AUTO.
5.2 LANDING DOOR COMMISSIONING

- Ensure Landing Door interlock is mechanically unlocked. Ideally car is level at floor with retiring cam extended
- Ensure all EUD switches are set to the SET position

1. Turn power ON

2. Set AUTO<>IND switch to IND

3. Using the OPEN and CLOSE buttons, ensure the landing door operators are phased for correct rotation. If a motor rotates in the wrong direction, switch any two of the three motor wires.

4. To begin, cycle through parameters by pressing the - & + buttons. Once the desired parameter is displayed, press the ENTER button to access the setting for that parameter. Change the setting by pressing the - & + buttons. Once the desired setting is displayed, press the ENTER button to save the setting. Parameters can only be modified in IND mode.

5. Change parameter 02 to “Ld” setting.
   The LCD display should now read “landing door”.
   If you have “Extra High Torque Door Operators” (see pg 7)
   Set Slave controller to SL, no further commissioning of the slave controller is required.
   Commission the associated master controller normally.

6. Change parameter 03 to match the channel of the adjacent car door. All the landing doors for the front line must have the same channel as the front car door. The LCD display will show what channel has been selected.

7. Change parameter 04 to address the landing door. Use “ADDRESS 01” for the lowest door in a line of doors. Each additional landing door in line should be addressed in sequence (01, 02, 03 Etc). The LCD display will show what address has been selected.

8. Change parameter 10 to “Lr” setting. Press ENTER to begin learn cycle. Prior to learn, Landing Door can be in any position. The learn cycle will fully close and then fully open. Once the Landing Door is fully open, the learn cycle is complete and the flashing “LEARN” indicator on the LCD will turn off.

9. Press and hold the CLOSE button to close the door.

10. Set AUTO<>IND switch to AUTO.
5.3 OPERATION AND TESTING - FROM THE CAR DOOR CONTROLLER

With the CAN connection from the bridge controller removed, test the following Sequence of Operation using the OPEN, CLOSE and RETCAM buttons on the car door controller from the top of the car.

1. Remove the CAN connector to the controller
2. Make sure the controllers are set to AUTO
3. Use the OPEN, CLOSE and RETCAM buttons to test the door and car door and retiring cam sequence of operation.
4. Reconnect the CAN connector.

5.4 SEQUENCE OF OPERATION

<table>
<thead>
<tr>
<th>OPERATION</th>
<th>LANDING DOOR</th>
<th>CAR DOOR</th>
<th>WARNING BUZZER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OPENING</td>
<td>OPENING</td>
<td>BUZZER SOUNDING</td>
</tr>
<tr>
<td></td>
<td>CLOSING</td>
<td>CLOSING</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OUTPUTS</th>
<th>DOOR OPEN</th>
<th>DOORS AND GATES FULLY CLOSED</th>
<th>CLOSING</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR CONTROL OUTPUTS TO ELEVATOR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAR DOOR CLOSED</td>
<td>CLOSED</td>
<td></td>
<td>CLOSING</td>
</tr>
<tr>
<td>USER 1</td>
<td>3/4 OPEN</td>
<td></td>
<td>SEE NOTE 2</td>
</tr>
<tr>
<td>USER 2</td>
<td>3/4 CLOSED</td>
<td></td>
<td>3/4 CLOSED</td>
</tr>
</tbody>
</table>

For USER 1 and 2 options, see parameter 65 and 85

5.5 POWER UP MODE / LOSS OF POWER

After power-up with the elevator car at a landing, upon automatic initiation of either open or close, the landing door and car door will operate at learn speed until the final open or closed position is reached and held for 1 second. The control will reset the learned profile and initiate DOOR OPEN or DOOR CLOSED output. All un-zoned landing door controllers will power up to normal profile See Parameter 93.

Attention!
Landing door and Car door settings and speed profiles are retained by the controller when power is removed. It is not necessary to relearn the opening.
5.6 BRIDGE COMMISSIONING

Complete this commissioning after door operation testing, section 5.3

1. Turn power ON

2. Set AUTO<>IND switch to IND

3. Set FRONT<>REAR switch to desired setup. Both front and rear are commissioned independently.

4. To begin, cycle through parameters by pressing the - & + buttons. Once the desired parameter is displayed, press the ENTER button to access the setting for that parameter. Change the setting by pressing the - & + buttons. Once the desired setting is displayed, press the ENTER button to save the setting. Parameters can only be modified in IND mode.

5. Set parameter 15 to desired Auto Close time. Setting "00" Auto Close is disabled.
   • Auto Close set times: 30, 45, 60, 90, 120, 150, 180, 300 seconds.

6. Set parameter 16 to elevator code jurisdiction.
   • New York City RS18 = “01”
   • All others = “00”

7. Set parameter 17 for single or dual light curtains.
   • Single Light Curtain = “00”
   • Dual Light Curtains (2010 code compliance) = “01”
   
   Also make sure to change your Car Door Controller Parameters 65 to “07” for dual light curtains.

8. If required select USER1 or USER2 for desired relay output. See section Bridge Parameters, and elevator control prints.
   • USER 1 = Parameter 18
   • USER 2 = Parameter 19

9. Set AUTO<>IND switch to AUTO.

10. Using the OPEN, CLOSE and RETCAM cam buttons, ensure the doors are functioning from the Bridge Controller.
5.7 LANDING AND CAR DOOR INTERLOCKING CIRCUITS

Wiring
Note: The following interlock safety circuit wiring is for reference only.
REFER TO THE ELEVATOR PRINTS FOR PROPER INTERLOCK WIRING.

Elevator Control Operation
1) All DC (hoistway door closed) and GC (car gate closed) contacts should be connected in series and that the contacts be made when the doors and gates are closed.
2) All DI (hoistway door lock) contacts should be connected in series and the contacts be made when all doors are locked.

When the elevator controller is signaled, “all doors closed” through the DC and GC circuits, the elevator controller may initiate retiring cam operation (see Retiring Cam Initiation Contact). Initiation will cause the retiring cam face to retire (lift). When the interlock roller is no longer depressed by retiring cam, hoistway door locking action takes place and the elevator controller is signaled, “all doors locked” through the DI circuit. The elevator controller shall not allow the elevator car to run unless all DC (hoistway door closed) and GC (gate closed) and DI (hoistway door locking) contacts are made.

Sequence of Operation

<table>
<thead>
<tr>
<th>INTERLOCK SAFETY CIRCUIT AND RETIRING CAM INITIATION</th>
<th>CAR DOOR (GATE) CLOSED CIRCUIT</th>
<th>LANDING DOOR CLOSED CIRCUIT</th>
<th>RETIRING CAM INITIATION</th>
<th>LANDING DOOR LOCKED CIRCUIT</th>
<th>ELEVATOR CAR MOVEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR DOOR (GATE) CLOSED CIRCUIT</td>
<td>GC (X1-X2/X7)</td>
<td>DC (X3-X4/X5)</td>
<td>RC [INPUT 5]</td>
<td>DI (X5-X6/X9)</td>
<td>ELEVATOR STOPPED</td>
</tr>
<tr>
<td>OPEN</td>
<td>OPEN</td>
<td>OPEN</td>
<td>DROPPED</td>
<td>UNLOCKED</td>
<td>ELEVATOR STOPPED</td>
</tr>
<tr>
<td>LANDING DOOR CLOSED CIRCUIT</td>
<td>LANDING DOORS CLOSED</td>
<td></td>
<td>RETIRING CAM LIFTS</td>
<td>LANDING DOORS LOCKED</td>
<td>ELEVATOR CAR MOVING</td>
</tr>
<tr>
<td>OPEN</td>
<td>OPEN</td>
<td></td>
<td>DROPPED</td>
<td>UNLOCKED</td>
<td>ELEVATOR STOPPED</td>
</tr>
<tr>
<td>LOT RETIRING CAM FACE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELEVATOR STOPPED</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Guide No. 254-EN
VERSION: WIRELESS CONTROLLER & BRIDGE INSTALLATION & INTERFACE GUIDE
Date: Mar 25 / 2019
6.0 CONTROLLER SETTINGS

6.1 DOOR MOTION PROFILES

6.2 CAR & LANDING DOOR CONTROLLER PARAMETERS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Range</th>
<th>Landing Pre Set</th>
<th>Car Pre Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reset Overload (00 = Do not reset, 01 = Reset)</td>
<td>00-01</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>2</td>
<td>Controller Type: Car Door, Landing Door, Slave</td>
<td>Cd,Ld,SL</td>
<td>Ld</td>
<td>Ld</td>
</tr>
<tr>
<td>3</td>
<td>Channel: set a unique Channel for each line of doors</td>
<td>11-22</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>Floor: set a unique Floor address for each Landing Door</td>
<td>00-30</td>
<td>00</td>
<td>N/A</td>
</tr>
<tr>
<td>10</td>
<td>Learn Command: used to learn the opening</td>
<td>Lr or --</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>11</td>
<td>Learn Speed: set learn and power-up speed</td>
<td>40-70</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>12</td>
<td>Car Door Duty: increase the car door duty</td>
<td>Sd-Hd</td>
<td>N/A</td>
<td>Sd</td>
</tr>
<tr>
<td>23</td>
<td>Open High Speed: set the opening high speed</td>
<td>20-99</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>24</td>
<td>Open Deceleration Zone: set distance of deceleration ramp</td>
<td>00-30</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>25</td>
<td>Open Low Speed: set low speed open</td>
<td>20-99</td>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td>26</td>
<td>Open Low Speed Zone</td>
<td>00-30</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>27</td>
<td>Open Hold Torque: set the hold open torque</td>
<td>00-50</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td>41</td>
<td>Close High Speed: set the closing high speed</td>
<td>20-99</td>
<td>99</td>
<td>85</td>
</tr>
<tr>
<td>42</td>
<td>Close High Speed Torque Limit</td>
<td>30-99</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>43</td>
<td>Close Nudging Speed</td>
<td>30-70</td>
<td>N/A</td>
<td>50</td>
</tr>
<tr>
<td>44</td>
<td>Close Nudging Speed Torque Limit</td>
<td>30-99</td>
<td>N/A</td>
<td>99</td>
</tr>
<tr>
<td>45</td>
<td>Close Deceleration Zone: set distance of deceleration ramp</td>
<td>00-30</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>46</td>
<td>Close Low Speed: set low speed close</td>
<td>20-99</td>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Range</td>
<td>Landing Pre Set</td>
<td>Car Pre Set</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td>-------</td>
<td>-----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>47</td>
<td>Close Low Speed Zone: set distance of low speed zone</td>
<td>00-20</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>48</td>
<td>Close Hold Torque: set the hold close torque</td>
<td>00-50</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td>50</td>
<td>Control Interface: set discrete or CAN bus interface</td>
<td>00-01</td>
<td>N/A</td>
<td>00</td>
</tr>
<tr>
<td>52</td>
<td>Car Door Designation: 00 = Front, 01 = Rear</td>
<td>00-01</td>
<td>N/A</td>
<td>00</td>
</tr>
<tr>
<td></td>
<td>(only displayed if Parameter 50 = 01)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>CmcMedia: 00 = RF, 01 = Wired RS_485</td>
<td>00-01</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>54</td>
<td>USING AS REPLACEMENT CONTROLLER</td>
<td>00-01</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>55</td>
<td>Lost Communication Reaction Time</td>
<td>04-18</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>04 = 0.4 sec</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>05 = 0.5 sec</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>Deceleration rate</td>
<td>01-10</td>
<td>03</td>
<td>03</td>
</tr>
<tr>
<td>61</td>
<td>Acceleration rate</td>
<td>01-10</td>
<td>03</td>
<td>03</td>
</tr>
<tr>
<td>62</td>
<td>USER 2 Close Limit: set position of the user door close limit</td>
<td>70-99</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>63</td>
<td>USER 1 Open Limit: set position of the user door open limit</td>
<td>70-99</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>64</td>
<td>User Limits Setting:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>00 = landing door USER limit + car door USER limit sets USER relay output on car door controller</td>
<td>00-01</td>
<td>N/A</td>
<td>00</td>
</tr>
<tr>
<td></td>
<td>01 = car door USER limit sets USER relay output on car door controller</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65</td>
<td>USER 1 options</td>
<td>00-07</td>
<td>03</td>
<td>00</td>
</tr>
<tr>
<td></td>
<td>00 = USER1 POSITION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>01 = USER2 POSITION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>02 = ZONE</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>03 = BUZZ / STROBE</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>04 = DOOR OPEN POSITION</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>05 = DOOR CLOSED POSITION</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>06 = AUX2 INPUT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>07 = TEST OUTPUT (BRIDGE OPTION ONLY)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>Retiring Cam Ramp Up Time (0.1 second increments)</td>
<td>00-20</td>
<td>N/A</td>
<td>00</td>
</tr>
<tr>
<td>71</td>
<td>Retiring Cam Ramp Down Time (0.1 second increments)</td>
<td>00-20</td>
<td>N/A</td>
<td>00</td>
</tr>
<tr>
<td>80</td>
<td>Software Version (read only)</td>
<td>2 digits</td>
<td>Software Version</td>
<td>Software Version</td>
</tr>
<tr>
<td>81</td>
<td>Radio Strength</td>
<td>01-31</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>82</td>
<td>Motor Duty Control</td>
<td>00-02</td>
<td>01</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td>00 = Disabled (contact Peelle if used)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>01 = Standby Duty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>02 = Increased Duty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>Motor Overload Control</td>
<td>00-02</td>
<td>01</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td>00 = Disabled (contact Peelle if used)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>01 = Default Threshold</td>
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<td></td>
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<tr>
<td></td>
<td>02 = Increased Threshold</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>84</td>
<td>Drive Over Temperature Control</td>
<td>00-02</td>
<td>01</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td>00 = Disabled (contact Peelle if used)</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>01 = Default Threshold</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>02 = Increased Threshold</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>85</td>
<td>USER 2 options</td>
<td>00-06</td>
<td>03</td>
<td>00</td>
</tr>
<tr>
<td></td>
<td>00 = USER 2 POSITION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>01 = USER 1 POSITION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>02 = ZONE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>03 = BUZZ / STROBE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>04 = DOOR OPEN POSITION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>05 = DOOR CLOSED POSITION</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>06 = AUX2 INPUT</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## WIRELESS CONTROLLER & BRIDGE INSTALLATION & INTERFACE GUIDE

### Parameter Description

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Range</th>
<th>Landing Pre Set</th>
<th>Car Pre Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>86</td>
<td>Retiring Cam Startup Torque Only applicable if P70 or P71 is &gt;0</td>
<td>50-99</td>
<td>N/A</td>
<td>50</td>
</tr>
<tr>
<td>87</td>
<td>Fast Open / Close 00 = Fast close only 01 = Fast open and close</td>
<td>00-01</td>
<td>N/A</td>
<td>00</td>
</tr>
<tr>
<td>88</td>
<td>Car Door Aux2 Input Option 00 = Disabled 01 = Independent Car Door Operation with input ON</td>
<td>00-01</td>
<td>N/A</td>
<td>00</td>
</tr>
<tr>
<td>89</td>
<td>Momentary Door Open / Door Close Option 00 = Constant DO and DC operation 01 = Momentary DO and DC operation</td>
<td>00-01</td>
<td>N/A</td>
<td>00</td>
</tr>
<tr>
<td>93</td>
<td>Power Up landing door speed (unzoned only) 00 = learn speed until final open/close limit 01 = normal profile speed</td>
<td>00-01</td>
<td>01</td>
<td>N/A</td>
</tr>
<tr>
<td>94</td>
<td>Buzzer Output: 00 = Pulsing, 01 = Continuous</td>
<td>00-01</td>
<td>01</td>
<td>00</td>
</tr>
<tr>
<td>95</td>
<td>Close Input Buzzer Control: 00 = Disabled, 01 = Enabled</td>
<td>00-01</td>
<td>01</td>
<td>01</td>
</tr>
<tr>
<td>96</td>
<td>Hall Stop Button Input: 00 = Normally Open, 01 = Normally Closed</td>
<td>00-01</td>
<td>00</td>
<td>N/A</td>
</tr>
<tr>
<td>97</td>
<td>Power-Up Settings: 01 – Door Closed = 1, Door Open = 1; 02 – Door Closed = 1, Door Open = 0; 03 – Door Closed = 0, Door Open = 0; If zoned, both Door Closed and Door Open = 0, regardless of selection. Condition of outputs is established automatically after opening or closing cycle</td>
<td>01-03</td>
<td>02</td>
<td>02</td>
</tr>
<tr>
<td>98</td>
<td>Show Cycle Counter 6 digits</td>
<td>Cycle Counter</td>
<td>Cycle Counter</td>
<td></td>
</tr>
<tr>
<td>99</td>
<td>Restore Factory Default Settings 00 – Exit without saving 01 – Restore all Motor parameters (#20 – 97) 02 – Restore all parameters (#2 – 97)</td>
<td>00-02</td>
<td>00</td>
<td>00</td>
</tr>
</tbody>
</table>

N/A – Not available

Speeds are expressed as a percentage of full speed. Zone is expressed as a percentage of total travel. Torque is expressed as a percentage of nominal voltage for corresponding speed.
### 6.3 BRIDGE CONTROLLER PARAMETERS

Bridge Controllers will show a “br” on the LCD display

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Range</th>
<th>Bridge Pre Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>CAR DOOR DISPLAY&lt;br&gt;00 = BRIDGE DISPLAY&lt;br&gt;01 = MIMIC CAR DOOR DISPLAY FOR 30 SEC&lt;br&gt;USE FRONT / REAR SLIDER SWITCH FOR FRONT / REAR CAR DOOR DISPLAY</td>
<td>00-01</td>
<td>00</td>
</tr>
<tr>
<td>13</td>
<td>CLOSE OPERATION&lt;br&gt;00 = CONSTANT PRESSURE CLOSE&lt;br&gt;01 = MOMENTARY PRESSURE CLOSE</td>
<td>00-01</td>
<td>00</td>
</tr>
<tr>
<td>14</td>
<td>POWER UP MODE&lt;br&gt;00 = DISSABLED&lt;br&gt;01 = ENABLED</td>
<td>00-01</td>
<td>01</td>
</tr>
<tr>
<td>15</td>
<td>Auto Close Timer&lt;br&gt;00 = Disabled&lt;br&gt;30 - 300 = Enabled time in seconds (30, 45, 60, 90, 120, 150, 180, 300)</td>
<td>00-300</td>
<td>00</td>
</tr>
<tr>
<td>16</td>
<td>New York City Fire Service&lt;br&gt;00 = Disabled&lt;br&gt;01 = Enabled</td>
<td>00-01</td>
<td>00</td>
</tr>
<tr>
<td>17</td>
<td>Dual Light Curtains (Test Output)&lt;br&gt;Note: Also set parameter 65 on Car Door Controller to 07</td>
<td>00-01</td>
<td>00</td>
</tr>
<tr>
<td>18</td>
<td>USER 1 options&lt;br&gt;00 = USER 1 POSITION - FRONT&lt;br&gt;01 = USER 2 POSITION - FRONT&lt;br&gt;02 = ZONE - FRONT&lt;br&gt;03 = BUZ / STROBE - FRONT&lt;br&gt;04 = DOOR OPEN POSITION - FRONT&lt;br&gt;06 = AUX 2 INPUT - FRONT&lt;br&gt;07 = LIGHT CURTAIN TEST OUTPUT (BRIDGE OPTION ONLY)</td>
<td>00-13</td>
<td>00</td>
</tr>
<tr>
<td>19</td>
<td>USER 2 options&lt;br&gt;00 = USER 1 POSITION - FRONT&lt;br&gt;01 = USER 2 POSITION - FRONT&lt;br&gt;02 = ZONE - FRONT&lt;br&gt;03 = BUZ / STROBE - FRONT&lt;br&gt;04 = DOOR OPEN POSITION - FRONT&lt;br&gt;06 = AUX 2 INPUT - FRONT&lt;br&gt;07 = LIGHT CURTAIN TEST OUTPUT (BRIDGE OPTION ONLY)</td>
<td>00-13</td>
<td>00</td>
</tr>
<tr>
<td>20</td>
<td>Software Version (Read Only)</td>
<td>2 digits</td>
<td>Software Version</td>
</tr>
<tr>
<td>21</td>
<td>Restore Factory Default Settings&lt;br&gt;00 – Exit without saving&lt;br&gt;01 – Restore all Default parameters</td>
<td>00-01</td>
<td>00</td>
</tr>
</tbody>
</table>
## 7.0 TROUBLESHOOTING

### 7.1 INDEPENDENT MODE

**PEELLE ONLY OPERATION - USED FOR COMMISSIONING AND INDIVIDUAL LANDING/CAR DOOR OPERATION**
(AUTO-IND slider switch set to IND)

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>No operation from OPEN/CLOSE pushbutton</td>
<td>AUTO-IND slider not set to IND</td>
<td>Set AUTO-IND slider to IND</td>
</tr>
<tr>
<td></td>
<td>Wiring problem to Landing Door motor output or Car Door selector relay output</td>
<td>See page 6 for Landing Door motor wiring</td>
</tr>
<tr>
<td></td>
<td>Flashing LCD “OVERLOAD” icon</td>
<td>Duty timer for motor has been exceeded. Cool down period required for motor regeneration. If condition persists, increase duty timer. See parameters P72 &amp; P82. Note: increasing duty timer may shorten motor life</td>
</tr>
<tr>
<td></td>
<td>Constant LCD “OVERLOAD” icon</td>
<td>Check Landing Door motor output or Car Door selector relay output for short circuit to ground</td>
</tr>
<tr>
<td></td>
<td>No operation from RETCAM pushbutton</td>
<td>Controller type not set to Car Door (CD) Ensure parameter P02 is set to “CD”</td>
</tr>
<tr>
<td></td>
<td>Wiring problem to Car Door selector relay output</td>
<td>See pages 15 &amp; 16 for Car Door/Retiring Cam motor wiring</td>
</tr>
<tr>
<td></td>
<td>Slow speed Landing/Car Door operation only</td>
<td>LCD “LEARN” flashing Operational profile not learned. Set parameter P10 to “Lr” to initiate learn sequence</td>
</tr>
<tr>
<td></td>
<td>Landing/Car door runs for 12” then stops</td>
<td>Encoder set screw loose Ensure set screw is tight on encoder shaft</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Encoder wiring problem See page 5 for Landing Door encoder wiring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Move door manually and check that encoder count on LCD is changing</td>
</tr>
<tr>
<td></td>
<td>Retiring Cam not fully pulling back</td>
<td>Mechanical problem with bottom assembly (face) Ensure bottom assembly moves freely on pivot pins</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mechanical problem with top assembly (motor) Ensure connecting rod is parallel to bottom assembly (face) and top assembly (motor)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mechanical problem with full assembly Ensure pulley belt has 3/4” of deflection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No operation from RETCAM pushbutton</td>
</tr>
</tbody>
</table>
### 7.2 AUTOMATIC MODE

**PEELLE ONLY OPERATION - USED FOR COMBINED LANDING AND CAR DOOR OPERATION**  
(AUTO-IND slider switch set to AUTO)

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Action</th>
</tr>
</thead>
</table>
| AUTO-IND slider not set to AUTO | Set AUTO-IND slider to AUTO  
All controllers must be set to AUTO. |
| Elevator not in Landing Door zone | Ensure retiring cam bottom assembly is on Landing Door roller arm |
| LCD “ZONE” icon not on at either Landing Door controller or corresponding Car Door controller | Ensure Input 3 is on at Landing Door controller.  
See page 9. |
| LCD “ANTENNA” icon not on (or flashing) at zoned Landing Door controller or corresponding Car Door controller | Ensure Landing Door channel matches Car Door channel.  
Adjust parameter P03 if necessary |
| LCD “EUD” icon on (or flashing) at Landing Door controller and flashing at corresponding Car Door controller | Constant LCD “EUD” icon = EUD is in set position at current landing  
Flashing LCD “EUD” icon = EUD is in set position at another landing on the same channel  
See page 8. |
| LCD “MULTIZONE” icon on at Landing Door controller and corresponding Car Door controller | Check all interlock zone micro switches. Only one zone micro switch can be on at a time on one channel. |
| Flashing LCD “OVERLOAD” icon | Duty timer for motor has been exceeded. Cool down period required for motor regeneration. If condition persists, increase duty timer.  
See parameters P72 & P82.  
Note: increasing duty timer may shorten motor life |
| Constant LCD “OVERLOAD” icon | Check Landing Door motor output or Car Door selector relay output for short circuit to ground  
See page 6 for Landing Door motor wiring  
See pages 15 & 16 for Car Door/Retiring Cam motor wiring  
Acknowledge “OVERLOAD” by setting parameter P01 to 01 |
<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevator controller is sending outputs to Bridge controller but no Landing / Car Door operation in open or close direction</td>
<td>Are LCD input icons on Bridge controller? If not check the following:  If Peelle power is used to power Peelle inputs, missing jumper from Input Com terminal to V– terminal on Car Door controller</td>
<td>LD &amp; CD on Auto?  Add jumper from Input Com to V–. See page 22  Ensure external power reference is wired to Input Com. See page 22  Ensure external power reference is wired to Input Com. See page 22  Note: ensure no connections to Peelle V+/V–  Ensure parameter P50 is set to 00 on Car Door Controller</td>
</tr>
<tr>
<td></td>
<td>Is antenna icon solid on Bridge controller? If not...</td>
<td>Check CAN connection from Bridge Controller to Car Door Controller</td>
</tr>
<tr>
<td>Bridge controller is sending signal to car door controller but no Landing / Car Door operation in open or close direction</td>
<td>Are LCD input icons on Car Door controller? If not check the following:  If Peelle power is used to power Peelle inputs, missing jumper from Input Com terminal to V– terminal on Car Door controller  If external power is used to power Peelle inputs, missing external power reference wire on Input Com terminal on Car Door controller</td>
<td>Add jumper from Input Com to V–. See page 22  Ensure external power reference is wired to Input Com. See page 22  Note: ensure no connections to Peelle V+/V–  Ensure parameter P50 is set to 00.</td>
</tr>
<tr>
<td></td>
<td>Landing Door stop input on</td>
<td>Ensure input 5 is off on Landing Door controller. See page 10  See Automatic Mode chart</td>
</tr>
<tr>
<td></td>
<td>Landing / Car door stopped before final open/close</td>
<td>Door may be mechanically obstructed. Fix obstruction. If there is not enough power in slow speed for final open or final close, increase the following parameter(s) in multiples of 5 until fixed: Open direction - P27 Close direction - P48</td>
</tr>
<tr>
<td>Bridge controller is sending signals to car door controller but no Landing / Car Door operation in close direction</td>
<td>Light curtain obstructed</td>
<td>Check light curtain alignment  For dual light curtains ensure P65 is set to 047 on car door controller</td>
</tr>
</tbody>
</table>
7.4 ERROR CODES

If the setting is flashing from encoder count (5 digits) to and error code (4 digits) refer to the following.

**How to read**

Example: Car Door Error 06 10

The first two digits are the sum of the first four possible errors.

\[ 06 = 02 \text{ (car door motor run error)} + 04 \text{ (car motor over duty)} \]

The last two digits are the sum of the last four possible errors.

\[ 10 = 02 \text{ (EUD error)} + 08 \text{ (lost zone)} \]

**Car door error codes - first two digits**

- 01 - Landing door motor run error
- 02 - Car door motor run error
- 04 - Car motor over duty
- 08 - Retiring cam motor over duty

**Landing door error codes - first two digits**

- 01 - Landing door motor run error
- 02 - Not used
- 04 - Landing door motor over duty
- 08 - Not used

**Car door error codes - last two digits**

- 01 - Not used
- 02 - EUD error
- 04 - Multi Zone error
- 08 - Lost zone

**Landing door error codes - last two digits**

- 01 - Not used
- 02 - EUD input set
- 04 - Multi Zone error
- 08 - Lost zone

To clear error codes cycle the AUTO-IND slider switch.
Radio Communication
- Antenna is ON solid when elevator is at a floor and
door is ZONED
- Antenna is ON solid when EUD is SET whether
door is ZONED or not
- Antenna is OFF when elevator is not ZONED
- For intermittent flashing in ZONE adjust channel
selection

Motor Overload / Over Duty
- OVERLOAD is ON solid when over current exists
at motor output
  - Check for shorts on motor line
  - Check for shorts to ground
- Reset of overload is required; set parameter 01 to 01
  and press ENTER to clear (must go to IND mode)
- OVERLOAD is flashing when motor run time
  exceeds duty
  - Let motor reset for 5 minutes
  - Over Duty does not require reset

Multiple Zone
- MULTIZONE indicator is shown
  when two or more landing door
controllers are ZONED on the same
channel
- Check zone switches and ZNS inputs
at landings

Number Display
- Number display show encoder count (door
position)
- Approximately 0-50
  for landing door closed
position
- Full count for open
position
- May flash fault codes for
Peelle Use

Input Indicators
1. HDO - Hall door open button
2. HDC - Hall door closed button
3. ZNS - Floor Zone switch
4. EUD - Emergency Unlocking Device
5. STOP - Hall door stop button
6. AUX1 - Not Used
7. AUX2 - Not Used
8. RE - Hall door light curtain input
   (where provided)

Emergency Unlocking Device
- EUD is ON solid when EUD is
  SET at that floor
- Input indicator 4 is ON when
  EUD is SET at that floor
- EUD is flashing when EUD is SET
  at another floor on same channel
- Doors will not run if any EUD is
  SET on the same channel

Landing Zone
- Zone is ON solid when elevator is at a floor with
  retiring cam extended and
door unlocked
- Input indicator 3 ZNS is
  ON when door is ZONED
- Zone and 3 are OFF
  when doors are locked
  and / or car is moving
  between floors
- Doors will not run if
  ZONE is not made
- Check ZNS and zone
  switch

Door Stop Sign
- Door Stop Sign is ON
  whenever motors are not
running
- Door Stop Sign is OFF
  when power is being
  applied to motors
7.6 CAR DOOR LCD

Radio Communication
- Antenna is ON solid when elevator is at a floor and door is ZONED
- Antenna is OFF when elevator is travelling
- Antenna is Flashing Constant when elevator is not ZONED
- For intermittent flashing in ZONE adjust channel selection

Motor Overload / Over Duty
- OVERLOAD is ON solid when over current exists at motor output
- Check for shorts on motor line
- Check for shorts to ground
- Reset of overload is required; set parameter 01 to 01 and press ENTER to clear (must go to IND mode)
- OVERLOAD is flashing when motor run time exceeds duty
- Let motor reset for 5 minutes
- Over Duty does not require reset

Multiple Zone
- MULTIZONE error is shown when two or more landing door controllers are ZONED on the same channel
- ZONED floor addresses are shown in Number Display
- Check ZONE switches and ZNS inputs at landings

Landing Zone
- Zone is ON solid when elevator is at a floor with retiring cam extended and door unlocked
- Zone is OFF when all doors are locked and / or car is moving between floors
- Doors will not run if ZONE is not made
- Check ZNS and zone switch

Number Display
- Number display show encoder count (car door position)
- Approximately 0-50 for car door closed position
- Full count for open position
- Will show floor addresses in MULTIZONE error
- Shows floor addresses when and EUD is SET
- May flash fault codes for Peelle Use

Input Indicators
1 DO - Door open command from elevator
2 DC - Door closed command from elevator
3 SE - Close nudging command from elevator
4 DCM - Fast close command from elevator
5 RC - Retiring cam command from elevator
6 BUZZ - Close warning buzzer command from elevator
7 AUX2 - Not Used
8 RE - Reversing edge input from car door

Emergency Unlocking Device
- EUD is flashing when an EUD has been SET
- EUD is OFF when all landing doors have been RESET
- Floor addresses where EUD is SET are shown in the Number Display
- Doors will not run if any EUD is SET on the same channel

Door Stop Sign
- Door Stop Sign is ON whenever motor is not running
- Door Stop Sign is OFF when power is being applied to motor

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7.7 BRIDGE LCD

FRONT or REAR Selector
- LCD shows indicators according to selector switch
- Parameters setting according to selector switch

CAN Communication
- Antenna is ON solid when Bridge is communicating with Car Door controller
- Antenna is Flashing constant when CAN is not communicating

Multiple Zone
- MULTIZONE error is shown when two or more landing door controllers are ZONED on the same channel
- ZONED floor addresses are shown in Number Display
- Check ZONE switches and ZNS inputs at landings

Motor Overload / Over Duty
- OVERLOAD is ON solid when over current exists at motor output
- Check for shorts on motor line
- Check for shorts to ground
- Reset of overload is required; set parameter 01 to 01 and press ENTER to clear (must go to IND mode)
- OVERLOAD is flashing when motor run time exceeds duty
- Let motor reset for 5 minutes
- Over Duty does not require reset

Input Indicators
1. DOR - Rear Door Open
2. DCR - Rear Door Close
3. INS - Rear Inspection
4. DCMR - Rear Door Close Momentary
5. X13 - Phase 2 “ON”
6. X14 - Phase 2 “HOLD”
7. X18 - Phase 2 “OFF”
8. HDB - Hall Door Buttons

Emergency Unlocking Device
- EUD is flashing when an EUD has been SET
- EUD is OFF when all landing doors have been RESET
- Floor addresses where EUD is SET are shown in the Number Display
- Doors will not run if any EUD is SET on the same channel

Landing Zone
- Zone is ON solid when elevator is at a floor with retiring cam extended and door unlocked
- Zone is OFF when all doors are locked and/or car is moving between floors
- Doors will not run if ZONE is not made
- Check ZNS and zone switch

Door Stop Sign
- Door Stop Sign is ON whenever motor is not running
- Door Stop Sign is OFF when power is being applied to motor

WIRELESS CONTROLLER & BRIDGE INSTALLATION & INTERFACE GUIDE

THE PEELLE COMPANY
FREIGHT DOORS | CAR GATES | CAR ENCLOSURES
TECHNICAL SUPPORT 1-800-787-5020 ext 275

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## 8.0 TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Technical Data</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Power</td>
<td>5.5A @ 240V, 1.3 kW</td>
</tr>
<tr>
<td>Supply Voltage</td>
<td>208-240V, 1 Ø AC, 50/60Hz</td>
</tr>
<tr>
<td>Output Power</td>
<td>0-230V, 3 Ø AC, 4.2A, 0-60Hz</td>
</tr>
<tr>
<td>Output Motor</td>
<td>0.75 kW (1 HP)</td>
</tr>
<tr>
<td>Digital Inputs</td>
<td>8 provided, 12-30V, AC or DC</td>
</tr>
<tr>
<td>Encoder Input</td>
<td>Incremental, NPN, 12VDC, 120 PPR</td>
</tr>
<tr>
<td>Relay Outputs</td>
<td>8 provided, Form C, 10A, 125VAC</td>
</tr>
<tr>
<td>Input Indicators</td>
<td>LCD screen</td>
</tr>
<tr>
<td>Output Indicators</td>
<td>LED</td>
</tr>
<tr>
<td>Enclosure Protection</td>
<td>NEMA 1, 4, 4X (indoor use only) - IP 65</td>
</tr>
<tr>
<td>Temperature</td>
<td>40 Deg C Max</td>
</tr>
<tr>
<td>Dimensions</td>
<td>200mm x 430mm x 85mm (W x H x D)</td>
</tr>
<tr>
<td>Mounting Method</td>
<td>4 screw holes on outside perimeter</td>
</tr>
<tr>
<td>Equipment Class</td>
<td>Digital Transmission System</td>
</tr>
<tr>
<td>Wireless Network</td>
<td>802.15.4 LR-WPAN standard</td>
</tr>
<tr>
<td>Wireless Frequency</td>
<td>2.4GHz</td>
</tr>
<tr>
<td>Wireless Output</td>
<td>0.094 Watts</td>
</tr>
<tr>
<td>Wireless Range</td>
<td>100m floor-to-floor up to 99 floors</td>
</tr>
<tr>
<td>User Interface</td>
<td>On board pushbuttons with visual display</td>
</tr>
<tr>
<td>Visual Display</td>
<td>50mm x 40mm back-lit LCD</td>
</tr>
<tr>
<td>Parameters</td>
<td>User adjustable with factory presets and defaults</td>
</tr>
<tr>
<td>Learn Adjustment</td>
<td>Automatic by user parameter</td>
</tr>
<tr>
<td>Landing Door Address</td>
<td>User selectable parameter</td>
</tr>
<tr>
<td>Car or Landing Door Type</td>
<td>User selectable parameter</td>
</tr>
<tr>
<td>Fail Safe Condition</td>
<td>Door Stop if communication lost</td>
</tr>
</tbody>
</table>

### Standards
- Elevators and Lifts
  - ASME-A17.1/CSA-B44
  - ASME-A17.5/CSA-B44.1
- EN 81
- EN 12015 and EN12016
- Telecommunication
- FCC
- Industry Canada
- R&TTE Directive

### Certification
- ETL Listing and Certification Mark
- FCC Grant of Equipment Authorization
- Industry Canada Certificate of Acceptance

### Declaration
This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) the device may not cause harmful interference, and (2) the device must accept any interference received, including interference that may cause undesired operation.

Modifications not expressly approved by The Peelle Company Ltd. could void the user’s authority to operate the equipment under FCC rules.

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THE PEELLE COMPANY
FREIGHT DOORS | CAR GATES | CAR ENCLOSURES
TECHNICAL SUPPORT 1-800-787-5020 ext 275
9.0 EC DECLARATION OF CONFORMITY

Manufacturer:
The Peelle Company Ltd.
195 Sandalwood Pkwy W.
Brampton, Ontario L7A 1J6
CANADA

We, The Peelle Company Limited of Brampton, Ontario, declare that the product designated below complies with the relevant fundamental requirements of Article 3 of the Lifts directive 2014/33/EU insofar as the product is used as intended and the following standards applied:
Product: Wireless Freight Door Controller, 2.4GHz, 802.15.4 Transceiver Module
Manufactured by: The Peelle Company Ltd. Trade mark: Peelle
Model: WFDC 27451 Car Door, WFDC 27452 Landing Door
Environment of use: Residential, commercial and light industry

Standards:
-Lifts EN 81-20:2014 Safety rules for the construction and installation of lifts
EN 12015:2014 Electromagnetic compatibility – Emissions
EN 12016:2013 Electromagnetic compatibility – Immunity
EN 61000-6-1:2007 Electromagnetic compatibility (EMC)

-Telecommunication EN 50371, EN 301 489-1, EN 301 489-17, EN 300 440

Date of issue: MAY 2017
Place of issue: Brampton, Ontario, CA

Frank Leo P.Eng.
Engineering Manager