

OFF-THE-SHELF CONTROLLER

FIELD-PROGRAMMABLE
FEATURES & PARAMS

VERSION 1.2



Document History

Date	Version	Summary of Changes
February 28, 2024	1.2	Updated UI instructions under Fire Service
February 19, 2024	1.1	Added the Hall Lantern field-programmable feature
October 30, 2023	1.0	Initial Release

Table of Contents

1	Field-Programmable Features	1
1.1	Adding Openings	1
1.1.1	Adding Openings Wiring Setup	1
1.1.2	Adding Openings Controller Setup	2
1.2	Removing Openings.....	5
1.2.1	Removing Openings Wiring Setup	5
1.2.2	Removing Openings Controller Setup	5
1.3	Hall Lantern.....	9
1.3.1	Hall Lantern Wiring Setup.....	9
1.3.2	Hall Lantern Controller Setup	10
1.4	Car Call Security	10
1.4.1	Car Call Security Wiring Setup	11
1.4.2	Car Call Security Controller Setup	11
1.5	Re-Sync Jack	12
1.5.1	Re-Sync Jack Wiring Setup.....	12
1.5.2	Re-Sync Jack Controller Setup.....	12
1.6	Viscosity Control	14
1.6.1	Viscosity Control Wiring Setup.....	14
1.6.2	Viscosity Control Controller Setup.....	14
1.7	Flood	16
1.7.1	Flood Wiring Setup	16
1.7.2	Flood Controller Setup	16
1.8	Massachusetts Emergency Medical Service Phase 1	18
1.8.1	Massachusetts EMS Phase 1 Wiring Setup.....	18
1.8.2	Massachusetts EMS Phase 1 Controller Setup.....	18
1.9	Massachusetts Emergency Medical Service Phase 2	19
1.9.1	Massachusetts EMS Phase 2 Wiring Setup.....	19
1.9.2	Massachusetts EMS Phase 2 Controller Setup.....	19
1.10	Seismic.....	21
1.10.1	Seismic Wiring Setup	21
1.10.2	Seismic Controller Setup	21

1.11	Rear Door I/O	23
1.11.1	Rear Door I/O Wiring Setup	23
1.11.2	Rear Door I/O Controller Setup	23
1.12	Detroit Shunt Trip.....	28
1.12.1	Detroit Shunt Trip Wiring Setup	28
1.12.2	Detroit Shunt Trip Controller Setup	28
1.13	Short Floor.....	30
1.13.1	Short Floor Wiring Setup	30
1.13.2	Short Floor Controller Setup	30
2	State-Specific Fire Service Field-Programmable Parameters	31
2.1	Chicago	31
2.1.1	Chicago Field-Programmable Fire Service Parameters.....	31
2.2	Florida	32
2.2.1	Florida Field-Programmable Fire Service Parameters.....	32
2.3	Detroit	33
2.3.1	Detroit Field-Programmable Fire Service Parameters.....	33
2.4	Denver	34
2.4.1	Denver Field-Programmable Fire Service Parameter	34
3	General Fire Service Field-Programmable Parameters.....	35
	List of Abbreviations	48

List of Figures

Figure 1: DIP Switch Settings (Adding Openings) 1
Figure 2: DIP Switch Settings (Removing Openings)..... 5
Figure 3: DIP Switch Settings (Hall Lantern) 10
Figure 4: Location of B2 DIP Switch on the CT / COP Board..... 23

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1 Field-Programmable Features

Smartrise's off-the-shelf controllers are designed with certain field-programmable features. The features provided with these controllers, along with detailed instructions on how to activate them through the wiring and controller setups, are listed in the subsequent sections.

1.1 Adding Openings

To add openings, follow the instructions under the Wiring and Controller Setup sections:

1.1.1 Adding Openings Wiring Setup

1. Car Operating Panel (COP) board:
 - i. Connect the Push Button to any Input (512-516) on the COP board.
 - ii. Connect the Lamp to any Output (612-616) on the COP board.
2. Hall Board:

Add a new Hall Board and assign the appropriate dip switches as mentioned below:

- i. A → DIPs (1-7)

Refer to the floor ID.

Example: Floor 1 → 0000000; Floor 2 → 1000000; Floor 3 → 0100000; etc.

- ii. B → DIP (8)

Set it to 0 If the Opening is Front; Set it to 1 if the opening is Rear.

- iii. C → DIP (12)

Set it to 1 only if the opening is the Terminated Opening in the network; Else, set it to 0.

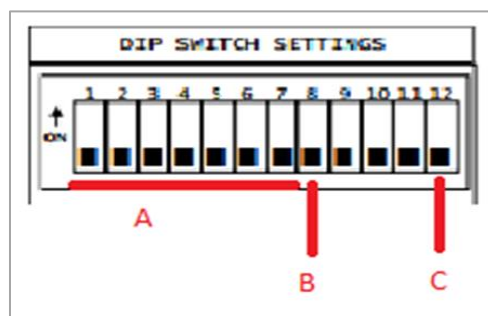


Figure 1: DIP Switch Settings (Adding Openings)

NOTE: If the Controller is located Over Head, then the first opening is considered as the Terminated Opening; However, if the controller is located in the Basement, then the last opening is considered as the Terminated Opening.

1.1.2 Adding Openings Controller Setup

1. Assign Number of Floors:
 - i. Navigate to Machine Room (MR) board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to FLOORS.
 - v. Select NUMBER OF FLOORS.c
 - vi. Add the number of floors needed.
 - vii. Scroll right and SAVE.
2. Power Cycle:
 - i. Restart the controller.
3. Assign Front Openings (if there are any):
 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to FLOORS.
 - v. Select OPENING (F).
 - vi. Navigate to the floors with front openings and set them to ON.
 - vii. Scroll right and SAVE.
4. Assign Rear Openings (if there are any):
 - i. Navigate to MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to FLOORS.
 - v. Select OPENING (R).
 - vi. Navigate to the floors with rear openings and set them to ON.
 - vii. Scroll right and SAVE.
5. Assign PI Labels:
 - i. Navigate to the MR board.

- ii. Navigate to MAIN MENU.
- iii. Go to SETUP.
- iv. Go to PI LABELS.
- v. Set the PI labels as required (they can either be 'int' or 'char')
- vi. Scroll right and SAVE.

6. Define the Front Inputs:

NOTE: do this for all the front openings.

- i. Navigate to the MR board.
- ii. Navigate to MAIN MENU.
- iii. Go to SETUP.
- iv. Go to SETUP I/O.
- v. Go to SETUP INPUTS.
- vi. Select CAR OPERATING PANEL.
- vii. Scroll up/down to select the Input number (512-516).
- viii. Go one step to the right.
- ix. Scroll up/down to select the CC Button (F).
- x. Go one step to the right.
- xi. Scroll up/down to select the floor (ex: button (1) represents the first front floor available).
- xii. Scroll right and SAVE.

7. Define the Rear Inputs:

NOTE: do this for all the rear openings.

- i. Navigate to the MR board.
- ii. Navigate to MAIN MENU.
- iii. Go to SETUP.
- iv. Go to SETUP I/O.
- v. Go to SETUP INPUTS.
- vi. Select CAR OPERATING PANEL.
- vii. Scroll up/down to select the Input number (512-516).
- viii. Go one step to the right.
- ix. Scroll up/down to select the CC Button (R).

- x. Go one step to the right.
- xi. Scroll up/down to select the floor (ex: button (1) represents the first rear floor available).
- xii. Scroll right and SAVE.

8. Define the Front Outputs:

NOTE: do this for all the front openings.

- i. Navigate to the MR board.
- ii. Navigate to MAIN MENU.
- iii. Go to SETUP.
- iv. Go to SETUP I/O.
- v. Go to SETUP OUTPUTS.
- vi. Select CAR OPERATING PANEL.
- vii. Scroll up/down to select the Output number (612-616).
- viii. Go one step to the right.
- ix. Scroll up/down to select the CC Button (F).
- x. Go one step to the right.
- xi. Scroll up/down to select the floor (ex: button (1) represents the first front floor available).
- xii. Scroll right and SAVE.

9. Define the Rear Outputs:

NOTE: do this for all the rear openings.

- i. Navigate to the MR board.
- ii. Navigate to MAIN MENU.
- iii. Go to SETUP.
- iv. Go to SETUP I/O.
- v. Go to SETUP OUTPUTS.
- vi. Select CAR OPERATING PANEL.
- vii. Scroll up/down to select the Output number (612-616).
- viii. Go one step to the right.
- ix. Scroll up/down to select the CC Button (R).
- x. Go one step to the right.
- xi. Scroll up/down to select the floor (ex: button (1) represents the first rear floor available).

- xii. Scroll right and SAVE.

1.2 Removing Openings

To remove openings, follow the instructions under the Wiring and Controller Setup sections:

1.2.1 Removing Openings Wiring Setup

1. COP Board:
 - i. Connect the Push Button to any Input (512-516) on the COP board.
 - ii. Connect the Lamp to any Output (612-616) on the COP board.

2. Hall Board:

Add a new Hall Board and assign the appropriate dip switches as mentioned below:

- i. A → DIPs (1-7)
Refer to the floor ID.
Example: Floor 1 → 0000000; Floor 2 → 1000000; Floor 3 → 0100000; etc.
- ii. B → DIP (8)
Set it to 0 If the Opening is Front; Set it to 1 if the opening is Rear.
- iii. C → DIP (12)
Set it to 1 only if the opening is the Terminated Opening in the network; else, set it to 0.

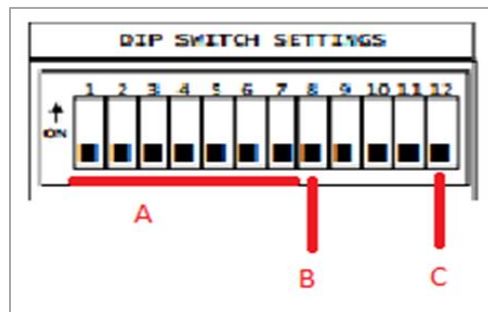


Figure 2: DIP Switch Settings (Removing Openings)

NOTE: If the Controller is located Over Head, then the first opening is considered as the Terminated Opening; However, if the controller is located in the Basement, then the last opening is considered as the Terminated Opening.

1.2.2 Removing Openings Controller Setup

1. Assign Number of Floors:
 - i. Navigate to the MR board.

- ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to FLOORS.
 - v. Select NUMBER OF FLOORS.
 - vi. Add the number of floors needed.
 - vii. Scroll right and SAVE.
2. Power Cycle:
 - i. Restart the controller.
3. Unassign Front Openings (if there are any):

NOTE: do this for all front openings.

 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to FLOORS.
 - v. Select OPENING (F).
 - vi. Navigate to the floors with front openings and set them to OFF.
 - vii. Scroll right and SAVE.
4. Unassign Rear Openings (if there are any):

NOTE: do this for all the rear openings.

 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to FLOORS.
 - v. Select OPENING (R).
 - vi. Navigate to the floors with rear openings and set them to OFF.
 - vii. Scroll right and SAVE.
5. Re-assign Front Openings (if there are any):
 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.

- iv. Go to FLOORS.
 - v. Select OPENING (F).
 - vi. Navigate to the floors with front openings and set them to ON.
 - vii. Scroll right and SAVE.
6. Re-assign Rear Openings (if there are any):
- i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to FLOORS.
 - v. Select OPENING (R).
 - vi. Navigate to the floors with rear openings and set them to ON.
 - vii. Scroll right and SAVE.
7. Assign PI Labels:
- i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to PI LABELS.
 - v. Set the PI labels as required (they can either be 'int' or 'char')
 - vi. Scroll right and SAVE.
8. Define the Front Inputs:
- NOTE:** do this for all the front openings.
- i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP INPUTS.
 - vi. Select CAR OPERATING PANEL.
 - vii. Scroll up/down to select the Input number (512-516).
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the CC Button (F).

- x. Go one step to the right.
- xi. Scroll up/down to select the floor (ex: button (1) represents the first front floor available).
- xii. Scroll right and SAVE.

9. Define the Rear Inputs:

NOTE: do this for all the rear openings.

- i. Navigate to the MR board.
- ii. Navigate to MAIN MENU.
- iii. Go to SETUP.
- iv. Go to SETUP I/O.
- v. Go to SETUP INPUTS.
- vi. Select CAR OPERATING PANEL.
- vii. Scroll up/down to select the Input number (512-516).
- viii. Go one step to the right.
- ix. Scroll up/down to select the CC Button (R).
- x. Go one step to the right.
- xi. Scroll up/down to select the floor (ex: button (1) represents the first rear floor available).
- xii. Scroll right and SAVE.

10. Define the Front Outputs:

NOTE: do this for all the front openings.

- i. Navigate to the MR board.
- ii. Navigate to MAIN MENU.
- iii. Go to SETUP.
- iv. Go to SETUP I/O.
- v. Go to SETUP OUTPUTS.
- vi. Select CAR OPERATING PANEL.
- vii. Scroll up/down to select the Output number (612-616).
- viii. Go one step to the right.
- ix. Scroll up/down to select the CC Button (F).
- x. Go one step to the right.
- xi. Scroll up/down to select the floor (ex: button (1) represents the first front floor available).

xii. Scroll right and SAVE.

11. Define the Rear Outputs:

NOTE: do this for all the rear openings.

- i. Navigate to the MR board.
- ii. Navigate to MAIN MENU.
- iii. Go to SETUP.
- iv. Go to SETUP I/O.
- v. Go to SETUP OUTPUTS.
- vi. Select CAR OPERATING PANEL.
- vii. Scroll up/down to select the Output number (612-616).
- viii. Go one step to the right.
- ix. Scroll up/down to select the CC Button (R).
- x. Go one step to the right.
- xi. Scroll up/down to select the floor (ex: button (1) represents the first rear floor available).
- xii. Scroll right and SAVE.

1.3 Hall Lantern

To enable the Hall Lantern feature, follow the instructions under the Wiring and Controller Setup sections:

1.3.1 Hall Lantern Wiring Setup

Add a new Hall Board and assign the appropriate dip switches as mentioned below:

- i. A → DIPs (1-7)

Refer to the floor ID.

Example: Floor 1 → 0000000; Floor 2 → 1000000; Floor 3 → 0100000; etc.

- ii. B → DIP (8)

Set it to 0 If the Opening is Front; Set it to 1 if the opening is Rear.

- iii. C → DIP (12)

Set it to 1 only if the opening is the Terminated Opening in the network; else, set it to 0.

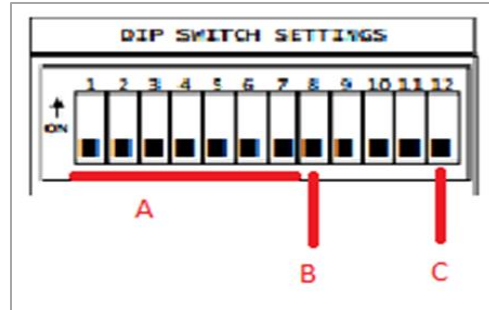


Figure 3: DIP Switch Settings (Hall Lantern)

NOTE: If the Controller is located Over Head, then the first opening is considered as the Terminated Opening; However, if the controller is located in the Basement, then the last opening is considered as the Terminated Opening.

1.3.2 Hall Lantern Controller Setup

1. Set the Front Hall Lantern Mask:
 - i. Navigate to the MR Board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to DEBUG
 - iv. Go to EDIT PARAMETERS.
 - v. Select HEX FORMAT.
 - vi. Scroll up to form 08-0213.
 - vii. Scroll right and set the value to x03.
2. Set the Rear Hall Lantern Mask:
 - i. Navigate to the MR Board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to DEBUG
 - iv. Go to EDIT PARAMETERS.
 - v. Select HEX FORMAT.
 - vi. Scroll up to form 08-0214.
 - vii. Scroll right and set the value to x02.

1.4 Car Call Security

To enable the Car Call Security feature, follow the instructions under the Wiring and Controller Setup sections:

1.4.1 Car Call Security Wiring Setup

1. MR Board:
 - i. Connect the Push Button to any Input (503-506) on the EXP17 board.

1.4.2 Car Call Security Controller Setup

1. Set the Secure Front Floor:
 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to FLOORS.
 - v. Select Security (F).
 - vi. Navigate to the floors with front openings and set them to ON.
 - vii. Scroll right and SAVE.
2. Set the Secure Rear Floor:
 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to FLOORS.
 - v. Select Security (R).
 - vi. Navigate to the floors with rear openings and set them to ON.
 - vii. Scroll right and SAVE.
3. Define the Front Secure Inputs:
 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP INPUTS.
 - vi. Select MACHINE ROOM.
 - vii. Scroll up/down to select the Input number (ex: 501).
 - viii. Go one step to the right.

- ix. Scroll up/down to select the CC Enable (F).
 - x. Go one step to the right.
 - xi. Scroll up/down to select the floor (ex: key (1)).
 - xii. Scroll right and SAVE.
4. Define the Rear Secure Inputs:
- i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP INPUTS.
 - vi. Select MACHINE ROOM.
 - vii. Scroll up/down to select the Input number (ex: 501).
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the CC Enable (R).
 - x. Go one step to the right.
 - xi. Scroll up/down to select the floor (ex: key (1)).
 - xii. Scroll right and SAVE.

1.5 Re-Sync Jack

To enable the Re-Sync Jack feature, follow the instructions under the Wiring and Controller Setup sections:

1.5.1 Re-Sync Jack Wiring Setup

NA

1.5.2 Re-Sync Jack Controller Setup

1. Start time of Jack Re-sync:
 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to HYDRO.
 - v. Go to JACK RESYNC.

- vi. Select JACK RESYNC TIME.
 - vii. Set the time to start re-sync.
 - viii. Scroll right and SAVE.
2. To ignore calls during Re-Sync:
 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to HYDRO.
 - v. Go to JACK RESYNC.
 - vi. Select IGNORE CALLS.
 - vii. Set to ON.
 - viii. Scroll right and SAVE.
3. Duration of Re-Sync:
 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to HYDRO.
 - v. Go to JACK RESYNC.
 - vi. Select DURATION.
 - vii. Set the duration of re-sync.
 - viii. Scroll right and SAVE.
4. Set frequency of Re-Sync (in hours):
 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to HYDRO.
 - v. Go to JACK RESYNC.
 - vi. Select FREQUENCY.
 - vii. Set the number of hours.
 - viii. Scroll right and SAVE.

5. Activate Jack Re-Sync:
 - i. Navigate to MR board.
 - ii. Turn on DIP A3.
 - iii. Navigate to MAIN MENU.
 - iv. Go to SETUP.
 - v. Go to HYDRO.
 - vi. Go to JACK RESYNC.
 - vii. Select ACTIVATE JACK RESYNC.
 - viii. Set to YES.
 - ix. Scroll right and SAVE.

1.6 Viscosity Control

To enable the Viscosity Control feature, follow the instructions under the Wiring and Controller Setup sections:

1.6.1 Viscosity Control Wiring Setup

1. MR Board:
 - i. Connect the Normally Open (NO) Contact to any Input 506 on the EXP17 board.

1.6.2 Viscosity Control Controller Setup

1. Define the Viscosity Input:
 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP INPUTS.
 - vi. Select MACHINE ROOM.
 - vii. Scroll up/down to select the Input number (ex: 501).
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the SAFETY.
 - x. Go one step to the right.
 - xi. Scroll up/down to select the VISCOSITY.

- xii. Scroll right and SAVE.
2. To allow calls during Viscosity activity:
 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to HYDRO.
 - v. Go to VISCOSITY.
 - vi. Select ALLOW CALLS.
 - vii. Set to ON.
 - viii. Scroll right and SAVE.
 3. Maximum number of cycles:
 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to HYDRO.
 - v. Go to VISCOSITY.
 - vi. Select CYCLES ALLOWED.
 - vii. Set the maximum number of cycles needed (ex: 5).
 - viii. Scroll right and SAVE.
 4. Run Time (set the pump running time):
 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to HYDRO.
 - v. Go to VISCOSITY.
 - vi. Select CYCLES ALLOWED.
 - vii. Set the maximum run time needed (ex: 15 mins).
 - viii. Scroll right and SAVE.
 5. Rest Time (set the pump resting time during a cycle):
 - i. Navigate to the MR board.

- ii. Navigate to MAIN MENU.
- iii. Go to SETUP.
- iv. Go to HYDRO.
- v. Go to VISCOSITY.
- vi. Select CYCLES ALLOWED.
- vii. Set the minimum rest time needed (ex: 5 mins).
- viii. Scroll right and SAVE.

1.7 Flood

To enable the Flood feature, follow the instructions under the Wiring and Controller Setup sections:

1.7.1 Flood Wiring Setup

1. MR Board:
 - i. Connect the Switch to any Input 505 on the EXP17 board.
 - ii. Connect the Indicator to any Output 603 on the MR board.

1.7.2 Flood Controller Setup

1. Define the Flood Input:
 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP INPUTS.
 - vi. Select MACHINE ROOM.
 - vii. Scroll up/down to select the Input number (ex: 501).
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the SAFETY.
 - x. Go one step to the right.
 - xi. Scroll up/down to select FLOOD.
 - xii. Scroll right and SAVE.
2. Define the Flood Output:

- i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP OUTPUTS.
 - vi. Select MACHINE ROOM.
 - vii. Scroll up/down to select the Input number (ex: 601).
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the SAFETY.
 - x. Go one step to the right.
 - xi. Scroll up/down to select LAMP FLOOD.
 - xii. Scroll right and SAVE.
3. Set the number of floors to avoid during Flood operation.
 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to FLOOD.
 - v. Select NUMBER OF FLOORS.
 - vi. Set the number of floors needed.
 - vii. Scroll right and SAVE.
4. Enable Car and Hall Calls (Okay to Run):
 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to FLOOD.
 - v. Select OKAY TO RUN.
 - vi. Set to ON.
 - vii. Scroll right and SAVE.
5. Override Fire:
 - i. Navigate to the MR board.

- ii. Navigate to MAIN MENU.
- iii. Go to SETUP.
- iv. Go to FLOOD.
- v. Select OVERRIDE FIRE.
- vi. Set to ON.
- vii. Scroll right and SAVE.

1.8 Massachusetts Emergency Medical Service Phase 1

To enable the Massachusetts Emergency Medical Service (EMS) Phase 1 feature, follow the instructions under the Wiring and Controller Setup sections:

1.8.1 Massachusetts EMS Phase 1 Wiring Setup

1. Riser Board:
 - i. Connect the Switch of MA_EMS Phase 1 to Riser Board 507 Input.
 - ii. Connect the Output Lamp of MA_EMS Phase 1 to Riser Board 602 Output.

1.8.2 Massachusetts EMS Phase 1 Controller Setup

1. Define the MA_EMS Phase 1 Input:
 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP INPUTS.
 - vi. Select RISER.
 - vii. Scroll up/down to select the Input number 507 on RIS1.
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the AUTO OPERATION.
 - x. Go one step to the right.
 - xi. Scroll up/down to select MA EMS1.
 - xii. Scroll right and SAVE.
2. Define the MA_EMS Output:
 - i. Navigate to the MR board.

- ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP OUTPUTS.
 - vi. Select RISER.
 - vii. Scroll up/down to select the Output number 602 on RIS1.
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the AUTO OPERATION.
 - x. Go one step to the right.
 - xi. Scroll up/down to select LAMP EMS.
 - xii. Scroll right and SAVE.
3. EMS1 Recall Floor:
- i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to EMS.
 - v. Go to PH1 RECALL FLOOR.
 - vi. Set the floor number.
 - vii. Scroll right and SAVE.

1.9 Massachusetts Emergency Medical Service Phase 2

To enable the Massachusetts EMS Phase 2 feature, follow the instructions under the Wiring and Controller Setup sections:

1.9.1 Massachusetts EMS Phase 2 Wiring Setup

1. COP Board:
 - i. Connect the EMS2 Switch to Input 516 on the COP board.
 - ii. Connect the Indicator to Output 608 on the COP board.

1.9.2 Massachusetts EMS Phase 2 Controller Setup

1. Define the MA_EMS Phase 2 Input:
 - i. Navigate to the MR board.

- ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP INPUTS.
 - vi. Select CAR OPERATING PANEL.
 - vii. Scroll up/down to select the Input number 516.
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the AUTO OPERATION.
 - x. Go one step to the right.
 - xi. Scroll up/down to select EMS2 ON.
 - xii. Scroll right and SAVE.
2. Define the MA_EMS Output:
- i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP OUTPUTS.
 - vi. Select CAR OPERATING PANEL.
 - vii. Scroll up/down to select the Output number 603.
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the AUTO OPERATION.
 - x. Go one step to the right.
 - xi. Scroll up/down to select LAMP EMS.
 - xii. Scroll right and SAVE.
3. Allow Phase 2 without Phase 1:
- i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to EMS.
 - v. Go to ALLOW PH2 WITHOUT PH1.

- vi. Set to ON.
 - vii. Scroll right and SAVE.
4. Exit Phase 2 Any Floor:
- i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to EMS.
 - v. Go to EXIT PH2 ANY FLOOR.
 - vi. Set to ON.
 - vii. Scroll right and SAVE.
5. Phase 2 Exit Delay:
- i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to EMS.
 - v. Go to PH2 EXIT DELAY.
 - vi. Set to the value in seconds.
 - vii. Scroll right and SAVE.

1.10 Seismic

To enable the Seismic feature, follow the instructions under the Wiring and Controller Setup sections:

1.10.1 Seismic Wiring Setup

1. MR Board:
 - i. Connect the NO Sensor to 507 Input on the EXP17 board (ACTIVE LOW).
 - ii. Connect the Indicator to Output 604 on the MR board.

1.10.2 Seismic Controller Setup

1. Define the Seismic Input:
 - i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.

- iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP INPUTS.
 - vi. Select MACHINE ROOM.
 - vii. Scroll up/down to select the Input number 507.
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the FIRE EQ.
 - x. Go one step to the right.
 - xi. Scroll up/down to select SEISMIC STATUS.
 - xii. Scroll right and SAVE.
2. Define the Seismic Output:
- i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP INPUTS.
 - vi. Select MACHINE ROOM.
 - vii. Scroll up/down to select the Output number 604.
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the FIRE EQ.
 - x. Go one step to the right.
 - xi. Scroll up/down to select SEISMIC STATUS.
 - xii. Scroll right and SAVE.
3. Enable EQ:
- i. Navigate to the MR board.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to EARTHQUAKE.
 - v. Select ENABLE EARTHQUAKE.
 - vi. Set to ON.

- vii. Scroll right and SAVE.

1.11 Rear Door I/O

To enable the Rear Door I/O feature, follow the instructions under the Wiring and Controller Setup sections:

1.11.1 Rear Door I/O Wiring Setup

1. Car Top (CT) Board:
 - i. Connect the GS1 to 502 Input on the CT board.
 - ii. Connect the Position Monitor Input to 509 Input on the CT board.
 - iii. Connect the Door Photo Eye (PHE) Input to 510 Input on the CT board.
 - iv. Connect the Door Close Limit (DCL) to 511 Input on the CT board.
 - v. Connect the Door Open Limit (DOL) to 512 Input on the CT board.
 - vi. Turn ON BIT B2 on the CT board.
2. COP Board:
 - i. Turn ON BIT B2 on the COP board.

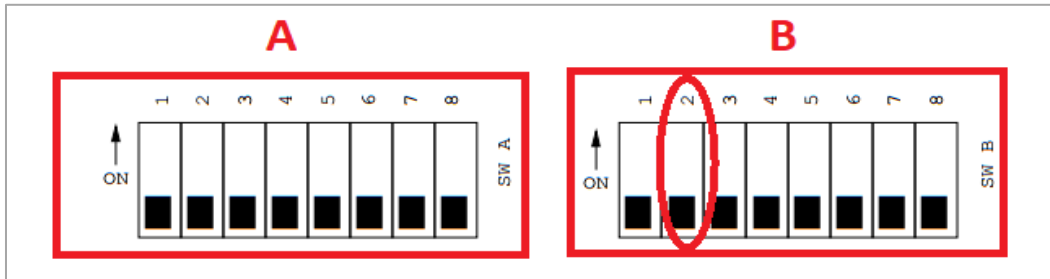


Figure 4: Location of B2 DIP Switch on the CT / COP Board

1.11.2 Rear Door I/O Controller Setup

1. Define the Gate Switch Rear:
 - i. Navigate to the MR BOARD.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP INPUTS.
 - vi. Select CAR TOP.

- vii. Scroll up/down to select the Input number 502.
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the DOORS (R).
 - x. Go one step to the right.
 - xi. Scroll up/down to select GATESWITCH.
 - xii. Scroll right and SAVE.
2. Define the Position Monitor Rear:
- i. Navigate to the MR BOARD.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP INPUTS.
 - vi. Select CAR TOP.
 - vii. Scroll up/down to select the Input number 509.
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the DOORS (R).
 - x. Go one step to the right.
 - xi. Scroll up/down to select DPM.
 - xii. Scroll right and SAVE.
3. Define the Door PHE Rear:
- i. Navigate to the MR BOARD.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP INPUTS.
 - vi. Select CAR TOP.
 - vii. Scroll up/down to select the Input number 510.
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the DOORS (R).
 - x. Go one step to the right.

- xi. Scroll up/down to select PHE.
 - xii. Scroll right and SAVE.
4. Define the DCL Rear:
- i. Navigate to the MR BOARD.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP INPUTS.
 - vi. Select CAR TOP.
 - vii. Scroll up/down to select the Input number 511.
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the DOORS (R).
 - x. Go one step to the right.
 - xi. Scroll up/down to select DCL.
 - xii. Scroll right and SAVE.
5. Define the DOL Rear:
- i. Navigate to the MR BOARD.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP INPUTS.
 - vi. Select CAR TOP.
 - vii. Scroll up/down to select the Input number 512.
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the DOORS (R).
 - x. Go one step to the right.
 - xi. Scroll up/down to select DOL.
 - xii. Scroll right and SAVE.
6. Define the Door Open Rear:
- i. Navigate to the MR BOARD.

- ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP OUTPUTS.
 - vi. Select CAR TOP.
 - vii. Scroll up/down to select the Output number 610.
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the DOORS (R).
 - x. Go one step to the right.
 - xi. Scroll up/down to select DO.
 - xii. Scroll right and SAVE.
7. Define the Door Close Rear:
- i. Navigate to the MR BOARD.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP OUTPUTS.
 - vi. Select CAR TOP.
 - vii. Scroll up/down to select the Output number 611.
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the DOORS (R).
 - x. Go one step to the right.
 - xi. Scroll up/down to select DC.
 - xii. Scroll right and SAVE.
8. Define the Door Nudge:
- i. Navigate to the MR BOARD.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP OUTPUTS.
 - v. Select CAR TOP.

- vi. Scroll up/down to select the Output number 612.
 - vii. Go one step to the right.
 - viii. Scroll up/down to select the DOORS (R).
 - ix. Go one step to the right.
 - x. Scroll up/down to select NDG.
 - xi. Scroll right and SAVE.
9. Define the Door Open Button:
- i. Navigate to the MR BOARD.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP INPUTS.
 - vi. Select CAR OPERATING PANEL.
 - vii. Scroll up/down to select the Input number 514.
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the DOORS (R).
 - x. Go one step to the right.
 - xi. Scroll up/down to select DOB.
 - xii. Scroll right and SAVE.
10. Define the Door Close Button (DCB):
- i. Navigate to the MR BOARD.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP INPUTS.
 - vi. Select CAR OPERATING PANEL.
 - vii. Scroll up/down to select the Input number 515.
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the DOORS (R).
 - x. Go one step to the right.

- xi. Scroll up/down to select DCB.

1.12 Detroit Shunt Trip

To enable the Detroit Shunt Trip feature, follow the instructions under the Wiring and Controller Setup sections:

1.12.1 Detroit Shunt Trip Wiring Setup

1. Riser Board:
 - i. Connect the Input Switch of Shunt Trip 1 to the Riser Board Input 508.
2. MR Board:
 - i. Connect the Output Lamp of MA_EMS Phase 1 to the MR board Output 605.

1.12.2 Detroit Shunt Trip Controller Setup

1. Define the Shunt Trip Intent Input:
 - i. Navigate to the MR BOARD.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.
 - v. Go to SETUP INPUTS.
 - vi. Select RISER.
 - vii. Scroll up/down to select the Input number 508 on RIS1.
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the FIRE EG.
 - x. Go one step to the right.
 - xi. Scroll up/down to select SHUNT TRIP INTENT.
 - xii. Scroll right and SAVE.
2. Define the Shunt Trip Output:
 - i. Navigate to the MR BOARD.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to SETUP I/O.

- v. Go to SETUP OUTPUTS.
 - vi. Select MACHINE ROOM.
 - vii. Scroll up/down to select the Output number 603.
 - viii. Go one step to the right.
 - ix. Scroll up/down to select the FIRE EG.
 - x. Go one step to the right.
 - xi. Scroll up/down to select FIRE SHUNT.
 - xii. Scroll right and SAVE.
3. Allow Shunt Trip on EMS:
 - i. Navigate to the MR BOARD.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to FIRE.
 - v. Go ADVANCED CONFIGS.
 - vi. Set 41 to ON.
 - vii. SAVE.
 4. Allow Shunt Trip on Fire Phase 1 Alternative Landing:
 - i. Navigate to the MR BOARD.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to FIRE.
 - v. Go ADVANCED CONFIGS.
 - vi. Set 40 to ON.
 - vii. SAVE.
 5. Allow Shunt Trip on Inspection:
 - i. Navigate to the MR BOARD.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP.
 - iv. Go to FIRE.
 - v. Go ADVANCED CONFIGS.

- vi. Set 39 to ON.
- vii. SAVE.

1.13 Short Floor

NOTE: this option is only applicable if a floor height is shorter than 7 inches.

To enable the Short Floor feature, follow the instructions under the Wiring and Controller Setup sections:

1.13.1 Short Floor Wiring Setup

NA

1.13.2 Short Floor Controller Setup

1. Determine which floor has a short distance:
 - Example:** if a job consists of four floors and there is a short distance between the 2nd and 3rd floor, the 3rd floor is considered as the Short Floor.
2. Define the Short Floor:
 - i. Navigate to the MR BOARD.
 - ii. Navigate to MAIN MENU.
 - iii. Go to SETUP
 - iv. Go to FLOORS.
 - v. Go to SHORT FLOOR OPENING.
 - vi. Scroll up/down to select the Output short floor number.
 - vii. Set to ON.
 - viii. Scroll right and SAVE.

2 State-Specific Fire Service Field-Programmable Parameters

By ASME 17.1 Elevator Safety Code Compliance, some states require additional fire service safety functions. The states, along with their corresponding field-adjustable parameters and the instructions on how to enable them, are listed in the subsequent sections.

2.1 Chicago

2.1.1 Chicago Field-Programmable Fire Service Parameters

Follow these instructions along with the steps mentioned below each parameter:

Go to the MR BOARD | Navigate to MAIN MENU | Go to SETUP | Go to FIRE | Go to ADVANCED CONFIGS

- **Fire Reset to Exit Phase1:** the Fire Reset Key Input must be active to exit Phase 1.
Parameter: Fire__ResetToExitPhase1
 1. Set 01 to OFF.
 2. Scroll right and SAVE.
- **Fire Phase 2 Exit only at Recall Floor:** the car must be at the Recall Floor to exit Fire Phase 2.
Parameter: Fire__Phase2ExitOnlyAtRecallFlr
 1. Set 04 to OFF.
 2. Scroll right and SAVE.
- **Fire DOL to Exit Phase2:** the car's DOL Input must be active to exit Phase 2.
Parameter: Fire__DOL_toExitPhase2
 1. Set 07 to OFF.
 2. Scroll right and SAVE.
- **DISA BYP IC Stop:** when set to ON, bypassing the In-Car (IC) Stop Switch is disabled; When set to OFF, the IC Stop Switch is bypassed during Fire Phase 2 Recall, Fire Phase 1 Recall, or EMS Phase 1 Recall.
Parameter: DisableBypassICStop
 1. Set 15 to OFF.
 2. Scroll right and SAVE.
- **Fire2 Cancel Button Reopen Door:** when Fire Phase 2 Cancel button is pushed while the car is on Fire Recall Floor, the doors reopen.
Parameter: Fire2_CancelButton_ReopenDoor
 1. Set 33 to ON.

2. Scroll right and SAVE.

- **Fire2 Close Door When No DOB:** closes the door when Fire Phase 2 is ON and DOB is not pushed.

Parameter: Fire2_CloseDoor_WhenNoDOB

1. Set 34 to ON.

2. Scroll right and SAVE.

- **Fire Switch 2 Positions:** when set to ON, the fire switches used in the lobby and inside the car are two positions.

Parameter: Fire_Switch_2Pos

1. Set 35 to ON.

2. Scroll right and SAVE.

- **Fire No DCL to Exit Phase2:** when the car needs to exit Fire Phase 2 and to be recalled to the lobby, the doors should not be closed.

Parameter: Fire_NoDCL_toExitPhase2

1. Set 36 to ON.

2. Scroll right and SAVE.

2.2 Florida

2.2.1 Florida Field-Programmable Fire Service Parameters

Follow these instructions along with the steps mentioned below each parameter:

Go to the MR BOARD | Navigate to MAIN MENU | Go to SETUP | Go to FIRE | Go to ADVANCED CONFIGS

- **Fire Phase 2 Exit only at Recall Flr:** the car must be on the Recall Floor to exit Fire Phase 2.

Parameter: Fire__Phase2ExitOnlyAtRecallFlr

1. Set 04 to OFF.

2. Scroll right and SAVE.

- **Fire DOL To Exit Phase2:** the car's DOL Input must be active to exit Phase 2.

Parameter: Fire__DOL_toExitPhase2

1. Set 07 to OFF.

2. Scroll right and SAVE.

- **Fire Reset on Transition:** when set to ON, this resets Fire 1 on key switch position transition from RESET to OFF.

Parameter: Fire__ResetOnTransitionFire1

1. Set 24 to OFF.
 2. Scroll right and SAVE.
- **Only Exit FP1 on Main Landing:** when set to ON, the car will only exit Fire Phase on the Main Recall Landing. A car that has been utilized for Fire Phase 2 operation will remain in Fire Phase until returned to the main landing and Fire Phase 2 has been switched off after a Fire Phase 1 reset.

Parameter: Fire1_ExitFP1OnlyOnMain

1. Set 32 to ON.
 2. Scroll right and SAVE.
- **Fire1 Reset Extinguishes Lobby Lamp at Alt Floor:** the Lobby Fire Lamp is turned OFF when Fire Phase 1 is reset on alternate floor.

Parameter: Fire1_Reset_ExtinguishLobbyLampAtAltFlr

1. Set 37 to ON.
2. Scroll right and SAVE.

2.3 Detroit

2.3.1 Detroit Field-Programmable Fire Service Parameters

Follow these instructions along with the steps mentioned below each parameter:

Go to the MR BOARD | Navigate to MAIN MENU | Go to SETUP | Go to FIRE | Go to ADVANCED CONFIGS

- **Fire DISA Latch Smokes:** when set to OFF, the controller will recall the first Smoke Input it encountered as tripped until the fire service is exited. The smoke will be recalled even across a power cycle. Most jobs, except NYC, requires this function. This parameter is usually OFF for any controller that has a Lobby Fire Key Switch with a RESET position.

Parameter: Fire__DisableLatchSmokes

1. Set 21 to ON.
2. Scroll right and SAVE.

- **Fire DISA Latch Lobby Key:** when set to OFF, the controller latches the Lobby Key as the recall source until the key is turned from RESET to OFF. When set to ON, Fire Phase 1 is constantly reassessed when the recall source is the Lobby Key.

Parameter: Fire__DisableLatchLobbyKey

1. Set 22 to ON.
2. Scroll right and SAVE.

- **Fire2 Bypass on MR and HA Smoke:** when set to ON, the Fire Phase 2 is bypassed if the origin of Fire Phase 1 is the MR or Hoistway Access (HA) Smoke.

Parameter: Fire2_Bypass_On_MR_HA_Smoke

1. Set 30 to ON.
2. Scroll right and SAVE.

2.4 Denver

2.4.1 Denver Field-Programmable Fire Service Parameter

Follow these instructions along with the steps mentioned below each parameter:

Go to the MR BOARD | Navigate to MAIN MENU | Go to SETUP | Go to FIRE | Go to ADVANCED CONFIGS

- **Fire1 DOB HC Enabled Dwell 1 min:** when set to ON, the Fire Phase 1 doors are cycled on recall, DOB and Hall Call (HC) of recall floor after 1 min.

Parameter: Fire1_HC_DOB_Enabled_Dwell_1min

1. Set 31 to ON.
2. Scroll right and SAVE.

3 General Fire Service Field-Programmable Parameters

The list below consists of the fire service field-adjustable parameters, along with the instructions on how to enable them.

Follow these instructions along with the steps mentioned below each parameter:

Go to the MR BOARD | Navigate to MAIN MENU | Go to SETUP | Go to FIRE

- **Fire Reset to Exit Phase1:** the Fire Reset Key Input must be active to exit Phase 1.
Parameter: Fire__ResetToExitPhase1
 1. Go to ADVANCED CONFIGS.
 2. Set 01 to ON.
 3. Scroll right and SAVE.
- **Fire DISA DR Restrictor Phase2:** when set to ON, the Door Restrictor outputs are always turned OFF when the car is on Fire Phase 2.
Parameter: Fire__DisableDoorRestrictorOnPhase_2
 1. Go to ADVANCED CONFIGS.
 2. Set 02 to ON.
 3. Scroll right and SAVE.
- **Fire Phase2 Swing Reopen DISA:** when set to ON, the car ignores the position of the swing door on Fire Phase 2.
Parameter: Fire__Phase2SwingReopenDisabled
NOTE: set to ON mostly for NYC.
 1. Go to ADVANCED CONFIGS.
 2. Set 03 to ON.
 3. Scroll right and SAVE.
- **Fire Phase 2 Exit only at Recall Flr:** the car must be at the Recall Floor to exit Fire Phase 2.
Parameter: Fire__Phase2ExitOnlyAtRecallFlr
 1. Go to ADVANCED CONFIGS.
 2. Set 04 to ON.
 3. Scroll right and SAVE.
- **Fire Ignore Locks Jumped on Phase2:** bypasses locks when on Fire Phase 2.
Parameter: Fire__IgnoreLocksJumpedOnPhase2
 1. Go to ADVANCED CONFIGS.
 2. Set 05 to ON.

3. Scroll right and SAVE.

- **Fire Stop Switch Kills DR Operator:** suppresses door outputs when Fire Stop Switch Input is active. Also, with this parameter ON during Fire Recall, IC Stop Switch should stop doors from closing if activated before recall begins. Once recall starts, IC Stop Switch should be suppressed until the car reaches the recall floor and opens its doors.

Parameter: Fire__FireStopSwitchKillsDoorOperator

1. Go to ADVANCED CONFIGS.
2. Set 06 to ON.
3. Scroll right and SAVE.

- **Fire DOL To Exit Phase2:** the car's DOL Input must be active to exit Phase 2.

Parameter: Fire__DOL_toExitPhase2

1. Go to ADVANCED CONFIGS.
2. Set 07 to ON.
3. Scroll right and SAVE.

- **Fire Allow Reset with Active Smoke:** allows Fire Phase 1 reset with active smokes.

Parameter: Fire__AllowResetWithActiveSmoke

1. Go to ADVANCED CONFIGS.
2. Set 08 to ON.
3. Scroll right and SAVE.

- **Fire Hat Flash Ignore Order:** flashes Fire Hat for any active smoke. If OFF, only the first active smoke is detected.

Parameter: Fire__HatFlashIgnoreOrder

1. Go to ADVANCED CONFIGS.
2. Set 09 to ON.
3. Scroll right and SAVE.

- **Fire Momentary DCB:** when set to ON while the car is on Fire Phase 2 operation and the in-car Fire Key Switch is set to ON, pushing the DCB just momentarily will cause the door to close. When set to OFF, the DCB must be held until the door reaches its fully closed state, otherwise the door will automatically reopen.

Parameter: Fire__MomentaryDoorCloseButton

1. Go to ADVANCED CONFIGS.
2. Set 10 to ON.
3. Scroll right and SAVE.

- **Fire Flash Lobby Lamp:** enables signaling from the lobby Fire Lamp output.

Parameter: Fire__FlashLobbyFireLamp

1. Go to ADVANCED CONFIGS.
2. Set 11 to ON.
3. Scroll right and SAVE.

- **Fire Remote and Main to Override Smoke:** both the Remote and Main Fire Key switches must be on to trigger the Main Floor Recall.

Parameter: Fire__RemoteAndMainToOverrideSmoke

1. Go to ADVANCED CONFIGS.
2. Set 12 to ON.
3. Scroll right and SAVE.

- **Fire ENA PHE On Phase2:** enables PHE during Fire Phase 2.

Parameter: Fire__EnablePHE_OnPhase2

1. Go to ADVANCED CONFIGS.
2. Set 13 to ON.
3. Scroll right and SAVE.

- **Fire DR Open on Hold:** holds doors open when on Fire Phase 2 Hold.

Parameter: Fire__DoorOpenOnHold

1. Go to ADVANCED CONFIGS.
2. Set 14 to ON.
3. Scroll right and SAVE.

- **DISA BYP IC Stop:** when set to ON, bypassing the IC Stop Switch is disabled; When set to OFF, the IC Stop Switch is bypassed during Fire Phase 2 Recall, Fire Phase 1 Recall, or EMS Phase 1 Recall.

Parameter: DisableBypassICStop

NOTE: for jobs that are compliant with A17.1-2016 code.

1. Go to ADVANCED CONFIGS.
2. Set 15 to ON.
3. Scroll right and SAVE.

- **BYP Fire Srv:** when set to ON, bypasses fire service when DIP 6B on the MR board is also on. Bypassing fire service also clears any saved fire states.

Parameter: BypassFireSrv

1. Go to ADVANCED CONFIGS.
2. Set 18 to ON.
3. Scroll right and SAVE.

- **Fire Recall to Main After Phase 2:** when set to ON, the car will Fire-Recall to the main floor after exiting Fire Phase 2. A17.1-2004 code.

Parameter: Fire__RecallToMainAfterFirePhase2

1. Go to ADVANCED CONFIGS.
2. Set 19 to ON.
3. Scroll right and SAVE.

- **Fire DISA Latch Smokes:** when set to OFF, the controller will remember the first smoke input it detected tripped until the fire service is exited. The smoke will be recalled even across a power cycle. This parameter is usually off for any controller that has a lobby fire key switch with a RESET position.

Parameter: Fire__DisableLatchSmokes

NOTE: for most jobs, except NYC.

1. Go to ADVANCED CONFIGS.
2. Set 21 to ON.
3. Scroll right and SAVE.

- **Fire DISA Latch Lobby Key:** when set to OFF, the controller latches the Lobby Key as the recall source until the key is turned from RESET to OFF. When set to ON, Fire Phase 1 is constantly reexamined when the recall source is the Lobby Key.

Parameter: Fire__DisableLatchLobbyKey

1. Go to ADVANCED CONFIGS.
2. Set 22 to ON.
3. Scroll right and SAVE.

- **Fire DISA Latch Main Recall:** when set to OFF, if the car ever recalls to the Main Fire Recall Floor, it cannot be recalled to the alternate floor until fire service has been reset. This is required by the 2016 code.

Parameter: Fire__DisableLatchMainRecallFloor

1. Go to ADVANCED CONFIGS.
2. Set 23 to ON.
3. Scroll right and SAVE.

- **Fire Reset on Transition:** when set to ON, it resets Fire Phase 1 on the key switch position transition from RESET to OFF.

Parameter: Fire__ResetOnTransitionFire1

1. Go to ADVANCED CONFIGS.
2. Set 24 to ON.
3. Scroll right and SAVE.

- **Fire Exit Ph2 Without Ph1 Recall:** when set to ON, if the car is on Fire Phase 2, and Fire Phase 1 has been cleared via the key switch, when the car is taken off Fire Phase 2, it will not attempt to return to the Fire Recall Floor before exiting Phase 1; Instead, it will return directly to normal operation. The car will also only exit Fire Phase 2 at the Main Recall Floor. This is for addressing A17.1 2000, Florida testing procedures.

Parameter: Fire__ExitPhase2WithoutPhase1Recall

1. Go to ADVANCED CONFIGS.
2. Set 25 to ON.
3. Scroll right and SAVE.

- **Fire 2 Active Always on During FP2:** when set to ON, the output Fire Phase 2 Active will be active whenever the car is on Fire Phase 2. Upon transitioning from Fire Phase 2 to Fire Phase 1, Fire Phase 2 Active will drop, and Fire Phase 1 Active will be asserted. This is used for non-peelle & non-automatic doors that require Fire Phase 1 Active and Fire Phase 2 Active to control the door operation during Fire.

Parameter: Fire2Active_AlwaysOnDuringFP2

1. Go to ADVANCED CONFIGS.
2. Set 26 to ON.
3. Scroll right and SAVE.

- **Auto Rescue Close Doors Fire Only:** used with AutoRescue_Close_Doors_on_Fire (01-0295), limited door closure to Fire Phase 1 and Phase 2.

Parameter: AutoRescue_Close_Doors_FireOnly

NOTE: this is mandatory for A17.1 from the 2007 safety code year, for California (E-10-01). If disabled, close the doors on all modes, to still meet A17.1.

1. Go to ADVANCED CONFIGS.
2. Set 27 to ON.
3. Scroll right and SAVE.

- **Auto Rescue Wait CC to Move Close on FF2 Off:** after Auto Rescue Recall is completed on Fire Phase 1 or on Fire Phase 2 with Fire Phase 2 OFF, close the doors after 15s. On Fire Phase 2 with Fire Phase 2 ON, wait for any car call to be initiated then recall to the closest floor and hold the door open.

Parameter: AutoRescue_WaitCCtoMove_CloseonFF2Off

NOTE: required for A17.1 from the 2013 code year.

1. Go to ADVANCED CONFIGS.
2. Set 28 to ON.
3. Scroll right and SAVE.

- **Close Door when PHE Bypassed on FF2:** when set to ON, the door sends a close command instead of a nudge if PHE is bypassed on Fire Phase 2.

Parameter: Fire__CloseDoor_PHEbypassed_OnPhase2

1. Go to ADVANCED CONFIGS.
2. Set 29 to ON.
3. Scroll right and SAVE.

- **Fire2 Bypass on MR and HA Smoke:** when set to ON, the Fire Phase 2 is bypassed if the origin of Fire Phase 1 is the Machine Room or Hoistway Smoke.

Parameter: Fire2_Bypass_On_MR_HA_Smoke

1. Go to ADVANCED CONFIGS.
2. Set 30 to ON.
3. Scroll right and SAVE.

- **Fire1 DOB HC Enabled Dwell 1min:** when set to ON, the Fire Phase 1 doors are cycled on recall, DOB (Door Open Button) and HC of recall floor after 1 min.

Parameter: Fire1_HC_DOB_Enabled_Dwell_1min

1. Go to ADVANCED CONFIGS.
2. Set 31 to ON.
3. Scroll right and SAVE.

- **Only Exit FP1 on Main Landing:** when set to ON, the car will only exit Fire Phase on the Main Recall Landing. A car that has been utilized for Fire Phase 2 operation will remain in Fire Phase until returned to the main landing and Fire Phase 2 has been switched off after a Fire Phase 1 reset.

Parameter: Fire1_ExitFP1OnlyOnMain

1. Go to ADVANCED CONFIGS.
2. Set 32 to ON.
3. Scroll right and SAVE.

- **Fire2 Cancel Button Reopen Door:** when Fire Phase 2 Cancel Button is pushed while the car is on fire the Recall Floor, the doors reopen.

Parameter: Fire2_CancelButton_ReopenDoor

1. Go to ADVANCED CONFIGS.
2. Set 33 to ON.
3. Scroll right and SAVE.

- **Fire2 Close Door When No DOB:** closes the door when Fire Phase 2 is ON and when DOB is not activated.

Parameter: Fire2_CloseDoor_WhenNoDOB

1. Go to ADVANCED CONFIGS.
2. Set 34 to ON.
3. Scroll right and SAVE.

- **Fire Switch 2 Positions:** when set to ON, the fire switches used on the lobby and inside the car are two positions.

Parameter: Fire_Switch_2Pos

1. Go to ADVANCED CONFIGS.
2. Set 35 to ON.
3. Scroll right and SAVE.

- **Fire No DCL to Exit Phase2:** when the car needs to exit Fire Phase 2 and recall to the lobby, the door should not be closed.

Parameter: Fire_NoDCL_toExitPhase2

1. Go to ADVANCED CONFIGS.
2. Set 36 to ON.
3. Scroll right and SAVE.

- **Fire1 Reset Extinguishes Lobby Lamp at Alt Floor:** the Lobby Fire Lamp turns off when Fire Phase 1 is reset on alternate floor.

Parameter: Fire1_Reset_ExtinguishLobbyLampAtAltFlr

1. Go to ADVANCED CONFIGS.
2. Set 37 to ON.
3. Scroll right and SAVE.

- **Turn Off at Recall Output on FP2:** when enabled, turns off at Recall Output when the car is on Fire Phase 2 and recall is completed.

Parameter: TurnOffAtRecallOutputOnFP2

1. Go to ADVANCED CONFIGS.
2. Set 38 to ON.

3. Scroll right and SAVE.

- **Fire Main Use Rear DR:** sets the door that will be open after performing a Main Floor Fire Recall. It selects the rear door if it was set to ON.

Parameter: FireRecallDoorM

1. Go to MAIN RECALL.
2. Go to OPENING.
3. Choose whether the main floor is Front or Rear.
4. Scroll right and SAVE.

- **Fire Alt Use Rear DR:** sets the door that will be open after performing an Alternate Floor Fire Recall. It selects the rear door if set to ON.

Parameter: FireRecallDoorA

1. Go to ALT RECALL.
2. Go to OPENING.
3. Choose whether the main floor is Front or Rear.
4. Scroll right and SAVE.

- **Fire MAIN Use Alt FLR:** sets which Recall Floor to use when the Main Smoke Input is active. It selects the Alternate Floor if set to ON.

Parameter: Fire__Smoke_Main_UseAltFloor

1. Go to MAIN SMOKE ACTIONS.
2. Go to MAIN or ALT.
3. Select either MAIN FLOOR or ALT FLOOR.
4. Scroll right and SAVE.

- **Fire Alt Use Alt FLR:** sets which Recall Floor to use when the Alternate Smoke Input is active. It selects the alternate floor if set to ON.

Parameter: Fire__Smoke_Alt_UseAltFloor

1. Go to ALT SMOKE ACTIONS.
2. Go to MAIN or ALT.
3. Select either MAIN FLOOR or ALT FLOOR.
4. Scroll right and SAVE.

- **Fire MR Use Alt FLR:** sets which Recall Floor to use when the Machine Room Smoke Input is active. It selects the alternate floor if set to ON.

Parameter: Fire__Smoke_MachineRoom_UseAltFloor

1. Go to MR SMOKE ACTIONS.
2. Go to MAIN or ALT.
3. Select either MAIN FLOOR or ALT FLOOR.
4. Scroll right and SAVE.

- **Fire HW Use Alt FLR:** sets which Recall Floor to use when the Hoistway Smoke Input is active. It selects the alternate floor if set to ON.

Parameter: Fire__Smoke_Hoistway_UseAltFloor

1. Go to HOISTWAY SMOKE ACTIONS.
2. Go to MAIN or ALT.
3. Select either MAIN FLOOR or ALT FLOOR.
4. Scroll right and SAVE.

- **Fire Main Flash Fire Hat:** flashes the Fire Hat Output when the Main Smoke Input is active.

Parameter: Fire__Smoke_Main_FlashFireHat

1. Go to MAIN SMOKE ACTIONS.
2. Go to FLASH FIRE HAT.
3. Set to ON.
4. Scroll right and SAVE.

- **Fire Alt Flash Fire Hat:** flashes the Fire Hat Output when the Alternate Smoke Input is active.

Parameter: Fire__Smoke_Alt_FlashFireHat

1. Go to ALT SMOKE ACTIONS.
2. Go to FLASH FIRE HAT.
3. Set to ON.
4. Scroll right and SAVE.

- **Fire MR Flash Fire Hat:** Flashes the Fire Hat Output when the Machine Room Smoke Input is active.

Parameter: Fire__Smoke_MachineRoom_FlashFireHat

1. Go to MR SMOKE ACTIONS.
2. Go to FLASH FIRE HAT.
3. Set to ON.
4. Scroll right and SAVE.

- **Fire HW Flash Fire Hat:** flashes the Fire Hat Output when the Hoistway Smoke Input is active

Parameter: Fire__Smoke_Hoistway_FlashFireHat.

1. Go to HOISTWAY SMOKE ACTIONS.
2. Go to FLASH FIRE HAT.
3. Set to ON.
4. Scroll right and SAVE.

- **Fire Main Shunt on Recall:** activates Fire Shunt Output during Phase 1 Recall if triggered by Main Smoke Input.

Parameter: Fire__Smoke_Main_ShuntOnRecall

1. Go to MAIN SMOKE ACTIONS.
2. Go to SHUNT TRIP.
3. Set to ON.
4. Scroll right and SAVE.

- **Fire Alt Shunt on Recall:** activates Fire Shunt Output during Phase 1 Recall if triggered by Alternate Smoke Input.

Parameter: Fire__Smoke_Alt_ShuntOnRecall

1. Go to ALT SMOKE ACTIONS.
2. Go to SHUNT TRIP.
3. Set to ON.
4. Scroll right and SAVE.

- **Fire MR Shunt On Recall:** activates Fire Shunt Output during Phase 1 Recall if triggered by Machine Smoke Input.

Parameter: Fire__Smoke_MachineRoom_ShuntOnRecall

1. Go to MR SMOKE ACTIONS.
2. Go to SHUNT TRIP.
3. Set to ON.
4. Scroll right and SAVE.

- **Fire HW Shunt On Recall:** activates Fire Shunt Output during Phase 1 Recall if triggered by Hoistway Smoke Input.

Parameter: Fire__Smoke_Hoistway_ShuntOnRecall

1. Go to HOISTWAY SMOKE ACTIONS.
2. Go to SHUNT TRIP.
3. Set to ON.
4. Scroll right and SAVE.

- **Fire Pit Flash Fire Hat:** flashes the Fire Hat Output when the Pit Smoke Input is active.
Parameter: Fire__Smoke_Pit_FlashFireHat
 1. Go to PIT SMOKE.
 2. Go to FLASH FIRE HAT.
 3. Set to ON.
 4. Scroll right and SAVE.
- **Fire Pit Shunt On Recall:** activates Fire Shunt Output during Phase 1 Recall if triggered by Pit Smoke Input.
Parameter: Fire__Smoke_Pit_ShuntOnRecall
 1. Go to PIT SMOKE.
 2. Go to SHUNT TRIP.
 3. Set to ON.
 4. Scroll right and SAVE.
- **Fire Pit Use Alt FLR:** sets which Recall Floor to use when the Pit Smoke Input is active. It selects the alternate floor if set to on.
Parameter: Fire__Smoke_Pit_UseAltFloor
 1. Go to PIT SMOKE.
 2. Go to FLASH FIRE HT.
 3. Select either MAIN FLOOR or ALT FLOOR.
 4. Scroll right and SAVE.
- **Enable Alt MR:** when set to ON, the car will look for Alternate Machine Room or Hoistway Smoke Inputs. This is used for groups split between two physical machine rooms.
Parameter: EnableAltMachineRoom
 1. Go to ALT MACHINE ROOM.
 2. Select ENABLE ALT. MR.
 3. Set to ON.
 4. Scroll right and SAVE.
- **Fire MR 2 Flash Fire Hat:** flashes the Fire Hat Output when the Machine Room 2 Smoke Input is active.
Parameter: Fire__Smoke_MachineRoom2_FlashFireHat.
 1. Go to MR 2 SMOKE.
 2. Go to FLASH FIRE HAT.

3. Set to ON.

4. Scroll right and SAVE.

- **Fire HW 2 Flash Fire Hat:** flashes the Fire Hat Output when the Hoistway 2 Smoke Input is active.

Parameter: Fire__Smoke_Hoistway2_FlashFireHat

1. Go to HW 2 SMOKE.

2. Go to FLASH FIRE HAT.

3. Set to ON.

4. Scroll right and SAVE.

- **Fire MR 2 Use Alt FLR:** sets which Recall Floor to use when the Machine Room 2 Smoke Input is active. It selects the alternate floor if set to on.

Parameter: Fire__Smoke_MachineRoom2_UseAltFloor

1. Go to MR 2 SMOKE.

2. Go to MAIN or ALT.

3. Select either MAIN FLOOR or ALT FLOOR.

4. Scroll right and SAVE.

- **Fire HW 2 Use Alt FLR:** sets which Recall Floor to use when the Hoistway 2 Smoke Input is active. It selects the alternate floor if set to on.

Parameter: Fire__Smoke_Hoistway2_UseAltFloor

1. Go to HW 2 SMOKE.

2. Go to MAIN or ALT.

3. Select either MAIN FLOOR or ALT FLOOR.

4. Scroll right and SAVE.

- **Fire MR 2 Shunt on Recall:** activates Fire Shunt Output during Phase 1 Recall if triggered by Machine Room 2 Smoke Input.

Parameter: Fire__Smoke_MachineRoom2_ShuntOnRecall

1. Go to MR 2 SMOKE.

2. Go to SHUNT TRIP.

3. Set to ON.

4. Scroll right and SAVE.

- **Fire HW 2 Shunt on Recall:** activates Fire Shunt Output during Phase 1 Recall if triggered by Hoistway 2 Smoke Input.

Parameter: Fire__Smoke_Hoistway2_ShuntOnRecall

1. Go to HW 2 SMOKE.
2. Go to SHUNT TRIP.
3. Set to ON.
4. Scroll right and SAVE.

- **Fire Key FlashFireHat:** flashes the Fire Hat Output when the Fire Recall Key is active.

Parameter: Fire__Key_FlashFireHat

1. Go to RECALL KEY.
2. Go to FLASH FIRE HAT.
3. Set to ON.
4. Scroll right and SAVE.

List of Abbreviations

COP	Car Operating Panel
CT	Car Top
DCB	Door Close Button
DCL	Door Close Limit
DOB	Door Open Button
DOL	Door Open Limit
EMS	Emergency Medical Service
HC	Hall Call
IC	In-Car
MR	Machine Room
NO	Normally Open
PHE	Photo Eye