HYDRO:EVOLVED

PARAMETER LIST

VERSION 6.0

SMARTRISE

Date	Version	Summary of Changes
June 20, 2025	6.0	Removed traction parameters.
June 12, 2025	5.01	Reviewed parameter 01-0018's description.
May 26, 2025	5.0	Updated document template.
January 20, 2025	4.6	Reviewed parameter 08-0123's description. Added the "Open Rear Door on VIP" parameter under Door Parameters section. Added the "Enable Rope Gripper Brake Board" parameter under Brake Parameters section. Added the "Regen Enable On Delay Sec" parameter under Miscellaneous Parameters section. Added the "Fire1 Recall To Flood Safe Floor", "Alt. Is Flood Safe Floor", and the "Enable Flood Limits On Inspection/Hoistway Access" parameters under the Flood Parameters section.
September 9, 2024	4.5	Added the "IC Stop Switch Kills Doors On Non Emergency Modes" parameter under Door Parameters section. Added the "Bypass In Car Stop when the car is on Fire Recall" parameter under Fire Parameters section. Added the "Brake Double Pick Time" parameter under the Brake Parameters section. Updated parameter 01-0019's name.
July 30, 2024	4.4	Reviewed the description for the "Fire Stop Switch Kills DR Operator" parameter.
June 17, 2024	4.3	Replaced "S-curve" with "Digital S-curve Technology ™ (U.S. Patent Pending)".
May 27, 2024	4.2	Added the "Keep Regen Output Active" parameter under the Miscellaneous Parameters section.
February 5, 2024	4.1	Updated Document name to "C4 & HYDRO:EVOLVED PARAMETER LIST" Updated Document Presentation. Added the Custom Mode Parameters section. Introduced additional parameters. Reviewed existing parameters.
October 25, 2021	4.0	Added additional parameters. Removed Inspection Mode Parameters section.
November 4, 2020	3.0	Changed how document was written from the type of adjustment to parameters that pertain to certain topics. Added additional parameters. Added additional tables. Added Min Value column to all tables.
December 30, 2019	2.0	Changed cover page. New document formatting. Added parameters to all sections. Moved conversion chart to the new Appendix section.
March 28, 2019	1.0	Initial Release

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1 Adjust Parameters

Parameters can be adjusted within a decimal range of 255 to 65,535. To assist with conversion, refer to the *Conversion Chart* in the Appendix to find the corresponding hexadecimal value required for the task.

2 Attendant Service Parameters

The table below lists Attendant Service parameters.

Table 1: Attendant Service Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0104	Attendant Direction With CCB	Pressing a car call button assigns direction when on Attendant Service. This can be used instead of dedicated UP and DOWN direction buttons on the COP panel.	0	1	0
01-0303	Attendant Service Use Only Swing Mask	If enabled, the car will only serve the hall calls matching the swing mask in the attendant mode	0	1	0
01-0338	Attendant Service Use Swing and Normal Mask	If enabled, the car will serve the normal and swing hall calls on the attendant mode (param overridden by 01-303)	0	1	0
01-0352	Attendant Byp. Security	Ignores car call security when on Attendant service	0	1	0

3 Battery Back-Up/Emergency Power Parameters

The table below lists the Battery Back-Up/Emergency Power parameters.

Table 2: Battery Back-Up/Emergency Power Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0127	DISA E-Power	When set to ON, the car will ignore emergency power commands.	0	1	0
01-0166	EPWR Pretransfer Stall	When set to ON, if the emergency power Pretransfer input is active, cars stop in a faulted state wherever they are. When set to OFF, cars move to the nearest landing and go out of service with the door open. This option is used when system is wired to use Pretransfer input to delay cars both at the transfer into and out of emergency power.	0	1	0
01-0270	Battery Power Fire1 DZ_Stop	When set to ON, when car is on fire, battery power is low, and the car is above the fire recall floor, it will stop	0	1	0

		at intermediate DZs before going to the recall floor.			
01-0295	Auto Rescue Close Doors	After Auto Rescue recall completes, close the doors after 15s.	0	1	0
01-0312	Allow Inspection Movement on EP	Allow car movement while a car is on Inspection during E-Power.	0	1	0
01-0347	Epower Car Active On Inspection	When enabled, the car on inspection is supposed online and counted as on normal mode from the budget of Epower.	0	1	0
08-0129	Epower Priority Car	Sets the first car selected when on emergency power and the Auto Select input is active. NOTE: In Canada this is the fire car. Set to the index of the intended car.	0	7	0
08-0145	Group Priority	Selects which group has priority during an Emergency Power event and organizes cars accordingly.	0	8	0
08-0186	NumEPCars	Sets the number of cars allowed to run during Emergency Power operation	1	8	1
08-0230	Maximum EP Group Cars	Maximum number of cars that can run in all interconnected groups during Emergency Power operation.	0	255	config
08-0232	Idle Time Before Recall	Epower Privileged Car Idle Time Before Recall - Minutes	0	3	2

4 Car Call and Hall Call Parameters

The table below lists the Car Call and Hall Call parameters.

Table 3: Car Call and Hall Call Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0056	Auto Runs Terminal To Terminal R	Enables automatic rear car call runs between terminal floors when on Enter Car Calls menu on the MR board display. This option should be left OFF and is for test purposes only.	0	1	0
01-0074	Auto Runs Terminal To Terminal F	Enables automatic front car call runs between terminal floors when on Enter Car Calls menu on the MR board display. This option should be left OFF and is for test purposes only.	0	1	0
01-0090	CustomMode IgnoredCar	Configure custom mode to ignore front car calls during test	0	1	0

	Call F				
01-0091	CustomMode IgnoredCar Call R	Configure custom mode to ignore rear car calls during test	0	1	0
01-0092	CustomMode IgnoreHall Call	Configure custom mode to ignore hall car calls during test	0	1	0
01-0106	CC Acknowledge	When set to ON, whenever a car call is placed, the CC Acknowledge output will be triggered. This is used in Canada for blind people.	0	1	0
01-0114	Random Hall Runs	Enables automatic hall call runs to random destinations when on the Enter Hall Calls menu on the MR board. This option should be left OFF and is for test purposes only.	0	1	0
01-0160	Car To Lobby Express	When the Car to Lobby input is asserted, the car stops answering hall calls. This parameter determines how it handles car calls. If this parameter is ON, the controller continues responding to car calls until none are left. The car then returns to the lobby. If this parameter is OFF, the car cancels any existing car calls and returns to the lobby floor immediately.	0	1	0
01-0188	En. Clear Car Call	When set to ON, pressing the DC button and a latched car call button at the same time cancels the car call	0	1	0
01-0191	Suppress Reopen OnGSW	When set to ON, reopening to hall calls are supressed when the doors have already opened at a level, both GSW signals are made, and there is demand	0	1	1
01-0194	ENA Never Drop Hall Calls	When set to ON, the car always maintains its HML (latchable hall call mask), even when the car is in a mode of operation that does not support hall calls.	0	1	0
01-0232	AN ClrReverse DirCC	When set to ON, car will clear out car calls entered in a direction opposite the car's current movement direction.	0	1	0
01-0245	Run Random Runs F	Enables automatic front car call runs to random destinations when	0	1	0

		on the Enter Car Calls menu on the MR board. If on the Enter Hall Calls menu, the car enters hall calls to random floors. This option should be left OFF and is for test purposes only.			
01-0274	ENA CAN OVF RST	When set to OFF, the CAN1 bus buffer will not be cleared when it is filled. When set to ON, the CAN1 bus buffer will clear when filled.	0	1	0
01-0305	Non-selective HC mode	When set to ON, enables "non-selective", single-button hall calls. All hall calls should be wired as down calls.	0	1	0
01-0306	Non collective mode	When set to ON, enables "non-collective" hall calls. Once a hall call is latched, additional hall calls cannot be entered until car completes current demand.	0	1	0
01-0308	Latch single CCs on non - collective mode	When set to ON, only one CC is allowed to be latched on non-collective mode	0	1	0
01-0314	Allow HC & CC with Viscosity	Allow Hall Calls and Car Calls when oil warming motor run cycles are active to heat Hydraulic Oil.	0	1	0
01-0323	Ignore Calls When Car Not Empty on Main Floor	Ignore HC/CC on main recall floor when the car is not empty and in normal mode	0	1	0
01-0325	Enable Single CC on VIP	Enable single CC when VIP mode services car calls	0	1	0
01-0324	Ignore Calls When Car Not Empty on Alt Floor	Ignore HC/CC on alternate recall floor when the car is not empty and in normal mode	0	1	0
08-0050	CC Dir. Change (50ms)	Sets the car call direction change delay. This delays the direction change after answering a car call to allow time for hall call assignment. Units are in 50 ms counts.	0	255	10
08-0134	VIP_HC_ Transition Delay_50ms	Sets the time between when a VIP car arrives at the VIP HC floor with its doors fully open, and when the car can begin taking CCs. This timer may need to be extended for	0	255	20

		jobsites where the VIP HC does not appear to clear. 50ms counts.			
08-0166	Attendant Buzzer Duration	Specifies how long to sound the buzzer to alert the attendant that a hall call was pressed. Units are in 100 ms counts.	0	255	0
08-0189	Dir. Change Delay (1s)	Sets the time to delay car direction changes. Allows time for passengers to enter their car calls. Units are in 1 second counts.	0	30	3
08-0204	Max Car Calls Per 250lb	Sets the max number of car calls that can be latched for every 250 lbs of in car weight. If this limit is exceeded, all car calls are cleared as an anti-nuisance measure. If set to zero, this feature is disabled.	0	255	0
08-0223	Max Car Calls Light Load	Number of Car Calls latched. In Light Load, if this limit is exceeded, all car calls are cleared as an anti-nuisance measure. If set to zero, this feature is disabled.	0	255	0
08-0242	Vip Idle Time 1s	Sets the time while on VIP from when the car completes all car calls to servicing VIP Hall Calls.	0	255	10
08-0269	Delay Between Calls Sec	A delay before servicing latched Car Calls and Hall Calls. This was requested by a job where the Doors do not automatically open, and user needs to activate the DOB button.	0	255	0
08-0271	Car Call Enable Delay Sec	Delay time between car call button and car call enable security key switch. In Seconds	0	255	0

5 Custom Mode Parameters

The table below lists the Custom Mode parameters.

Table 4: Custom Mode Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0340	Clear HC After Timeout On Custom Mode	When enabled, The HC of the current floor on custom mode with Auto door open disabled will clear the HC after (08-269) if the door remains closed	0	1	0

01-0345	DOB Momentarily OnCustomMode	The DCB is only constant pressure when 01-0096 is ON on custom mode while DOB is momentarily.	0	1	0

6 Comm Port Parameters

The table below lists the Comm Port parameters.

Table 5: Comm Port Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0047	Transmit Run Log	Enables transmission of run logs to the group network. UNUSED	0	1	0
01-0053	ENA Emergency Dispatch	When set to ON, triggering communication loss on any Riser board's hall network causes the car to move into Sabbath mode until communication is restored.	0	1	0
01-0135	ENA CPLD Offline	When set to ON, communication from system CPLDs are monitored for timeout. The timeout will be determined by parameter 08-173.	0	1	0
01-0156	ENA DuparCOP	Enables communication with Dupar COP.	0	1	config
01-0164	ENA Janus RS Fixture	"Enables Janus RS485 fixtures on CT/COP boards. Requires system power cycle after changing to clear the ""Need To Cycle Pwr"" fault (F83/F717/F718)."	0	1	config
01-0201	ENA CPLD V3	When set to ON, the uses hardware with CPLD v3_X software. When set to OFF, it uses hardware with CPLD v1_x software. System must be power cycled after changing this value.	0	1	config
01-0204	ENA DL20 CT	"When set to ON, communication to DL-20 fixtures from the CT board is supported. Priority given to Janus emotive fixtures option (01-164). Requires system power cycle after changing to clear the ""Need To Cycle Pwr"" fault (F83/F717/F718)."	0	1	config
01-0205	Enable DL20 COP	"When set to ON, communication to DL-20 fixtures from the COP board is supported. Priority given to Janus emotive fixtures option (01-164).	0	1	config

		Requires system power cycle after changing to clear the ""Need To Cycle Pwr"" fault (F83/F717/F718)."			
01-0210	ENA EX51 CT	When set to ON, communication to EX-51 fixtures from CT board is supported. Priority given to Janus emotive fixtures option (01-164).	0	1	config
01-0211	ENA EX51 COP	When set to ON, communication to EX-51 fixtures from the COP board is supported. Priority given to Janus emotive fixtures option (01-164).	0	1	config
01-0240	DISA CAM ON HA	When set to ON, disables the CAM output for the configured opening when performing a hoistway access top run or hoistway access bottom run.	0	1	0
01-0243	ENA SR Soft Starter	When set to ON at startup, the system expects to communicate with the SR serial soft starter. Requires system power cycle after changing to clear the "Need To Cycle Pwr" fault (F83/F717/F718).	0	1	config
01-0249	JackResync_IgnoreCalls	When set to ON, calls will not cancel a jack resync in progress.	0	1	0
01-0285	Group Redundancy Check	When set to ON, the controller will check if any communicating Riser Board has been offline for more than 10 seconds, in which it will then assert the Group Redundancy Output. Used for jobs that require Group Redundancy.	0	1	0

7 COP Board Parameters

The table below lists the COP Board parameters.

Table 6: COP Board Parameters

Number	String	Description	Min Value	Max Value	Default Value
16-0024 through 16-0039	COP IN (1-16)	Set the COP board input terminal (1-16) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0416 through 16-0431	COP OUT (1-16)	Set the COP board output terminal (1-16) functionality. Change via SETUP | SETUP I/O | SETUP	0	65535	0

		OUTPUTS. Only two instances of each function are permitted.			

8 CT Board Parameters

The table below lists the CT Board parameters.

Table 7: CT Board Parameters

Number	String	Description	Min Value	Max Value	Default Value
16-0008 through 16-0023	CT IN (1-16)	Set the CT board input terminal (1-16) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0400 through 16-0415	CT OUT (1-16)	Set the CT board output terminal (1-16) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0

9 DAD Parameters

The table below lists the DAD parameters.

Table 8: DAD Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0235	Disable Virtual Input	When set to ON, virtual inputs from the DAD unit are ignored.	0	1	0
01-0244	ENA DAD Flt Resend	When set to ON, enables minimum resend of fault and alarm packets sent to the DAD unit. Should be turned OFF for some job sites running older DAD software with a bug causing multiple instances of the same fault/alarm event to appear in the logs.	0	1	1

10 Discrete Hall Lantern Parameters

The table below lists the Discrete Hall Lantern parameters.

Table 9: Discrete Hall Lantern Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0175	Arv Lantern DR 1	When set to ON, set 1 of discrete arrival lantern outputs are for rear arrival. Set with 08-0197.	0	1	0
01-0176	Arv Lantern DR 2	When set to ON, set 2 of discrete arrival lantern outputs are for rear arrival. Set with 08-0198.	0	1	0
01-0177	Arv Lantern DR 3	When set to ON, set 3 of discrete arrival lantern outputs are for rear arrival. Set with 08-0199.	0	1	0
01-0178	Arv Lantern DR 4	When set to ON, set 4 of discrete arrival lantern outputs are for rear arrival. Set with 08-0200.	0	1	0
01-0179	Arv Lantern DR 5	When set to ON, set 5 of discrete arrival lantern outputs are for rear arrival. Set with 08-0201.	0	1	0
08-0168	Arrival Lantern Update Time	Sets the time before arriving at a floor to update arrival lantern outputs. If set to zero, arrival outputs update when doors begin to open. Units are in seconds.	0	10	3
08-0197	Arv Lantern FLR 1	Specifies the floor index for set 1 of discrete arrival lantern outputs. Set with 01-0175.	0	255	0
08-0198	Arv Lantern FLR 2	Specifies the floor index for set 2 of discrete arrival lantern outputs. Set with 01-0176.	0	255	0
08-0199	Arv Lantern FLR 3	Specifies the floor index for set 3 of discrete arrival lantern outputs. Set with 01-0177.	0	255	0
08-0200	Arv Lantern FLR 4	Specifies the floor index for set 4 of discrete arrival lantern outputs. Set with 01-0178.	0	255	0
08-0201	Arv Lantern FLR 5	Specifies the floor index for set 5 of discrete arrival lantern outputs. Set with 01-0179.	0	255	0
08-0213	Hall Lantern Mask	Sets which hall lantern function groups are active. Each bit represents a different Hall board function. Power must be cycled to the MR SRU after setting this parameter to enable the feature.	0	255	config
08-0214	Rear Lantern Mask	Sets which hall lantern function groups are used for rear lanterns. Each bit represents a different Hall board function.	0	255	config

11 Door Parameters

The table below lists the Door parameters.

Table 10: Door Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0033	ENA Rear Doors	Enables rear doors if DIP 2B is turned on for the Machine Room (MR), Car Top (CT), and Car Operating Panel (COP) boards. Requires system power cycle after changing to clear the "Need To Cycle Pwr" fault (F83/F717/F718).	0	1	config
01-0041	ENA Releveling	Enables releveling when car is in door zone but outside the configured releveling zone (08-158)	0	1	1
01-0045	DZ Stuck High Test	Testing of DZ stuck high software solution. When ON, checks CTA for position rather than MRA.	0	1	1
01-0048	ENA Freight Doors	Enable freight doors. Requires system power cycle after changing to clear the "Need To Cycle Pwr" fault (F83/F717/F718).	0	1	0
01-0049	ENA FDR DCM	Enable freight doors fast close. UNUSED	0	1	0
01-0050	ENA FDR Auto Close	Enable freight doors auto close. UNUSED	0	1	0
01-0076	DR DC On Run	Activates door close output when in motion.	0	1	0
01-0079	OOS Rear Opening	Sets which door to open when recalled on out-of-service mode. Uses the rear door when set to ON.	0	1	0
01-0081	OOS SetDR Open	Keeps door open when at floor in out of service mode.	0	1	0
01-0084	Locks Jumped On DOL	When set to ON, detects jumper on open DOL instead of GSW.	0	1	0
01-0088	CustomMode AllowedOutsideDR Zone	Configure custom mode to allow outside door zone during test	0	1	0
01-0093	CustomMode AutoDR Open	Configure custom mode to automatically open the door during test.	0	1	0
01-0094	CustomMode DR Hold	Configure custom mode to hold the door during test.	0	1	0
01-0095	CustomMode IgnoreDCB	Configure custom mode to ignore door close buttons during test.	0	1	0

01-0096	CustomMode ForceDoorsOpenOrClosed	Configure custom mode to allow for forcibly open or close doors during test.	0	1	0
01-0108	DR DC On Closed State	Activates door close output while doors are in a closed state. This parameter is set via SETUP | DOOR SETUP | DC ON CLOSE.	0	1	0
01-0109	DR DO On Opened State	Activates door open output while doors are in a open state. This parameter is set via SETUP | DOOR SETUP | DO ON OPEN.	0	1	0
01-0115	CT ST SW Kills Doors	When set to ON, door outputs are supressed when the Car Top Stop switch is active.	0	1	0
01-0118	DISA DoorsOnHA	When set to ON, door outputs on hoistway access inspection are supressed.	0	1	0
01-0120	ENA AT400 DR	When set to ON, doors are configured for AT400 door operators. Both DC and NDG outputs are active for door close. DC is active, and NDG is inactive for door nudge.	0	1	0
01-0132	ParkingWithDR Open	"When set to ON, the door, based on 1-313 (On = rear / Off = front), is held open when the car is	0	1	0
01-0134	NoDemandDoorsOpen	When set to ON, car doors are held open when the car is idle.	0	1	0
01-0151	ENA Insp DO Out Of DZ	Enables opening doors while outside of a door zone during inspection	0	1	0
01-0165	Learn Opening Time	When set to ON, if preflight is disabled (01-64), the car records the door opening time of its next run then stores it for use when preflight is enabled (08-187).	0	1	0
01-0189	ENA Dual PHE Test	Enables Dual PHE testing for freight doors	0	1	0
01-0193	ENA Passing Lobby DO	When set to ON, forces the car to stop and open its doors every time it passes the lobby floor. The lobby floor is the main fire recall floor.	0	1	0
01-0207	Door Retiring CAM	When set to ON, the CAM output controls hall interlocks. Otherwise, interlocks are controlled by the door operator. It is set to 0 when Mechanical retiring CAM is used instead of electrical CAM.	0	1	config

01-0208	Fixed Hall CAM	When set to ON, the door has a fixed hall CAM. The car is allowed to start a run without hall locks (hall closed contacts still required). The car is allowed to move up to 2 feet without locks before faulting.	0	1	config
01-0209	Hall Closed Req for CAM	When set to ON, CAM does not energize if any hall door is open	0	1	config
01-0222	Freight Test PHE	When set ON, if either door is set to Freight (08-0012 or 08-0013 set to 1) door requires photoeye testing prior to closing doors. When set to OFF and for non-freight doors, this check is bypassed. This feature is required for Peelle door operators.	0	1	config
01-0237	DISA_DoorJumperCheck	When set to ON, door jumper check will be disabled. This should be turned OFF to enable Door Lock Monitoring.	0	1	0
01-0238	Nudge Without Onward Demand	When set to ON, the doors will begin to nudge (and the buzzer will fire if enabled) after a set time if the PHE is triggered and there is no command to move. Also, if the user would like the buzzer to fire whenever Nudge is commanded (even if there is no demand to move), turn this parameter ON.	0	1	config
01-0241	Disable Rear DOB	When set to ON, the rear DOB button is disabled.	0	1	0
01-0247	MLT_Fire1_DC	When set to ON, when the car hits MLT limit, doors will auto close after a phase 1 recall.	0	1	0
01-0255	DO OnArrivalOnly	For FRONT Doors - When set to ON, the Door Open output is activated on initial arrival at a landing. Once initial opening is complete, all open and close functions are done by DOB/DCB signals wired directly to the door operator. Set to ON for door operators from the company EMS, Courion, or Peelle (wired type). This parameter does not relate to the EMS (emergency medical service) mode of operation. Set this parameter if there is no PHE input defined for the door.	0	1	config

01-0256	InfiniteDwellTime	For FRONT Doors - When set to ON, configured dwell time is bypassed and doors will remain open. Used for swing/freight doors where door control is handled by the door operator. (i.e. courion door operator or Peelle wired door operator).	0	1	config
01-0264	DISA DCB ON NORMAL	When set to ON, pressing the DC button while the car is on normal operation will not cancel the door dwell time.	0	1	0
01-0265	DISA CLOSED CONTACTS DOB	When set to OFF, if a closed contact is open the car will see this as a DOB press. When set to ON this reopening behavior is suppressed. This is required for the Peelle door operator which expects the car's DC command when the closed contacts are open.	0	1	config
01-0276	DO on Arrival Only R	For REAR Doors - When set to ON, the Door Open output is activated on initial arrival at a landing. Once initial opening is complete, all open and close functions are done by DOB/DCB signals wired directly to the door operator. Set to ON for door operators from the company EMS, Courion, or Peelle (wired type). This parameter does not relate to the EMS (emergency medical service) mode of operation	0	1	config
01-0277	InfiniteDwellTime R	For REAR Doors - When set to ON, configured dwell time is bypassed and doors will remain open. Used for swing/freight doors where door control is handled by the door operator. (i.e. courion door operator or Peelle wired door operator).	0	1	config
01-0279	JumperOnGSW_DOL	When set to ON, jumper on gateswitch faults (F98 and F107) are triggered when the gateswitch input indicates doors are closed, but the door open limit input indicates the doors are open. When set to OFF, these faults are triggered when the gateswitch	0	1	0

		input indicates the doors are open, but the door close limit input indicates the doors are open.			
01-0288	Disable Freight Door Buzzer for DO Modes	When set on, disables the Freight Door Buzzer for Modes that Open the doors with zero dwell time. This does not disable the buzzer if the doors open with a Dwell time active or if the buzzer is needed during door closing.	0	1	0
01-0294	Automatic Freight Hall Door	Set when an automatic hall freight door is being used.	0	1	0
01-0313	Parking Opens Rear Door	When set to ON, the rear door opens when the car reaches the parking floor	0	1	0
01-316	Keep lights on DO	Allows the lamp to turn ON while the door is open	0	1	1
01-328	Active Shooter Close Doors	When set to ON, the lockdown feature is enabled on active shooter and therefore the doors stay closed and disabled on alternate floor.	0	1	0
01-0332	Access Dis. F Doors	When set to ON, it disables front doors to have access code.	0	1	0
01-0333	Access Dis. R Doors	When set to ON, it disables rear doors to have access code.	0	1	0
01-0349	CC Overrides the Door Hold Timer	When enabled, the Hold timer will cancel in case registering car call or activating door close button	0	1	0
01-0350	HC Buzzer Activation during Door Hold	When enabled, it triggers a buzzer if the door was on Hold and HC was entered on another floor	0	1	0
01-0356	Open Rear Door on VIP	When enabled, in case there is a VIP call, the system should open both the front and rear doors.	0	1	0
01-0359	IC Stop Switch Kills Doors On Non Emergency Modes	When enabled, the car kills the doors when ICSW is active on non emergency modes	0	1	0
08-0000	DR Recall Time 1s	Sets the time the doors remain open after performing a recall on an emergency modes like Fire and Battery Lowering. See A17.1 2019, 3.27.2.	0	15	config

08-0001	DR Dwell Time 1s	Sets the time car doors remain open when responding to car calls or open button requests. The units are in seconds.	0	255	3
08-0002	DR Stuck Time 1s	Sets the time limit for a door to complete an opening or closing request before faulting. The units are in seconds.	0	255	30
08-0003	DR Nudge Time 1s	Sets the time doors will spend trying to close before transitioning to nudging which ignores photoeye. If set to zero, nudging is disabled. The units are in seconds.	0	255	20
08-0004	DR Dwell Hall Time 1s	Sets the time car doors remain open when responding to hall calls. The units are in seconds.	0	255	6
08-0005	DR Dwell ADATime 1s	Sets the time car doors remain open when responding to ADA. The units are in seconds.	0	255	30
08-0006	DR Dwell Hold Time 1s	Sets the time car doors remain open when responding to door hold button requests. The units are in seconds.	0	255	0
08-0007	DR Dwell Sabbath Time 1s	Sets the time car doors remain open while in Sabbath operation. The units are in seconds.	0	255	3
08-0008	DR Jumper Timeout 100ms	Sets the timer for jumper on Gate switch (F98/F107) and jumper on lock (F99/F108) faults. This value is added to a minimum timeout of 1.6 seconds. The units are in 100 millisecond counts.	0	255	0
08-0009	FDR Contacts Timeout 1s	Sets the timeout between CAM being energized and closed contacts being made. If value is zero, timeout is set to 500 ms. The units are in seconds.	0	255	20
08-0010	FDR GSW Locks Timeout 1s	Sets the timeout between GSW and locks. If value is zero, timeout is set to 500 ms. The units are in seconds.	0	255	30
08-0011	Lobby Dwell Time 1s	If set to nonzero, overrides the hall dwell time when at the lobby floor. The lobby floor is the main fire recall floor (08-111).	0	255	0
08-0012	Door Type (F)	Selects door type for Front doors • 0=Automatic (used when CarDoor & HallDoor are auto) • 1= Freight (used with Freight	0	255	config

		doors, CarDoor can be manual/auto, HallDoor must be manual) • 2=Manual (used when both doors are manual) • 3=Swing (used when HallDoor is Swing & CarDoor auto) Requires system power cycle after changing to clear the "Need To Cycle Pwr" fault (F83/F717/F718).			
08-0013	Door Type (R)	Selects door type for Rear doors • 0=Automatic (used when CarDoor & HallDoor are auto) • 1= Freight (used with Freight doors, CarDoor can be manual/auto, HallDoor must be manual) • 2=Manual (used when both doors are manual) • 3=Swing (used when HallDoor is Swing & CarDoor auto) Requires system power cycle after changing to clear the "Need To Cycle Pwr" fault (F83/F717/F718).	0	255	config
08-0014	Door Close Buzzer 100ms	Sets the amount of time before doors begin to close that the door close buzzer will be turned ON. There is one buzzer output per door. This buzzer output remains on until doors are fully closed. This feature is used with the Peelle door operator.	0	255	50
08-0097	HA Top Opening	When nonzero, configures the top hoistway access to use the rear opening	0	255	0
08-0098	HA Bottom Opening	When nonzero, configures the bottom hoistway access to use the rear opening	0	255	0
08-0141	AN Max Opens Without PHE	Sets the max number of times that a car's doors can open without detecting a PHE transition. If this limit is exceeded, all car calls are cleared as an anti-nuisance measure. If set to zero, this feature is disabled.	0	255	0
08-0148	DR Hourly Fault Limit	Sets the number of door faults allowed within a 1-hour window before the car goes out of service.	0	255	0

		If the car goes out of service, it will remain out of service until the hour window elapses. If set to zero, there is no limit to the number of hourly door faults.			
08-0185	Door Check Time 100ms	Sets the time the car doors must be seen as safe before the car is allowed to start a run in automatic operation. Time is set in 100 ms counts. If zero, defaults to 1 second.	0	255	3
08-0187	DR Opening Time (100ms)	Sets the estimated time it takes the doors to go from fully closed to fully open. This value is learned after performing a run with preflight disabled (01-64) and the learn opening time bit on (01-165). This can help improve dwell time delays when preflight is on. If set to zero, this option is disabled.	0	255	0
08-0253	Drop Cam Outside DZ Idle Timer_1min	When set to non-zero, if the car is outside of the DZ, idle, and in auto operation, the car will assert the CAM until this timer expires.	0	255	0
08-0265	Door Zone Blade Size	Specifies the door zone blade size in inches.	6	24	6
08-0268	Inching Reduced Limit	The lower nibble defines be the adjustment for the Up direction, and the higher nibble for the Down direction. The values of these adjustments are incremented by 1 to compute the inching limits. Setting the parameter to 0 should result in a limit of (DZ/2 -1) in both directions to recover the old behavior.	0	255	0
16-0910	PreOpeningDistance	Sets the distance from a floor to start preopening doors. If zero, preopening is disabled. Units are in 0.019-inch counts.	0	131	26
32-0000	Front Opening Map 0	Front door opening map for floors 1 to 32. Edit via SETUP | FLOORS | OPENINGS (F). Requires system power cycle after changing to clear the "Need To Cycle Pwr" fault (F83/F717/F718).	0	4294967295	config
32-0001	Front Opening Map 1	Front door opening map for floors 33 to 64. Edit via SETUP | FLOORS | OPENINGS (F).	0	4294967295	config

		Requires system power cycle after changing to clear the "Need To Cycle Pwr" fault (F83/F717/F718).			
32-0002	Front Opening Map 2	Front door opening map for floors 65 to 96. Edit via SETUP | FLOORS | OPENINGS (F). Requires system power cycle after changing to clear the "Need To Cycle Pwr" fault (F83/F717/F718).	0	4294967295	config
32-0004	Rear Opening Map 0	Rear door opening map for floors 1 to 32. Edit via SETUP | FLOORS | OPENINGS (R). Requires system power cycle after changing to clear the "Need To Cycle Pwr" fault (F83/F717/F718).	0	4294967295	config
32-0005	Rear Opening Map 1	Rear door opening map for floors 33 to 64. Edit via SETUP | FLOORS | OPENINGS (R). Requires system power cycle after changing to clear the "Need To Cycle Pwr" fault (F83/F717/F718).	0	4294967295	config
32-0006	Rear Opening Map 2	Rear door opening map for floors 65 to 96. Edit via SETUP | FLOORS | OPENINGS (R). Requires system power cycle after changing to clear the "Need To Cycle Pwr" fault (F83/F717/F718).	0	4294967295	config
32-0032	WanderGuard Mask0	Sets which floors the car should stop at with doors open when wander guard (aka Code Pink) mode is activated. Floors 1 to 32.	0	4294967295	0
32-0033	WanderGuard Mask1	Sets which floors the car should stop at with doors open when wander guard (aka Code Pink) mode is activated. Floors 33 to 64.	0	4294967295	0
32-0034	WanderGuard Mask2	Sets which floors the car should stop at with doors open when wander guard (aka Code Pink) mode is activated. Floors 65 to 96.	0	4294967295	0

12 Starter Parameters

The table below lists the Starter parameters.

Table 11: Starter Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0044	DISA Brake Faults	This option will disable serial valve board and serial soft starter faults. This option should be left OFF and is for test purposes only.	0	1	0
01-0122	StopSeq DISA RampZero	Default On, stop cycle completes and preflight will be started before car speed reaches zero.	0	1	0
16-0889	MotorDropDelay Auto (ms)	Sets the stop sequence delay between dropping drive control and dropping the M contactor while on automatic operation.	0	65535	500
16-0890	MotorDropDelay Insp (ms)	Sets the stop sequence delay between dropping drive control and dropping the M contactor while on inspection operation.	0	65535	500

13 Earthquake Parameters

The table below lists the Earthquake parameters.

Table 12: Earthquake

Number	String	Description	Min Value	Max Value	Default Value
01-0042	ENA EQ	Enables seismic and counterweight derail modes of operation.	0	1	0
01-0246	EQ Buzzer	Turns the Auto Operation Buzzer on if on Seismic.	0	1	0
01-0287	EQ Buzz Until Safe	When set to ON, if EQ_Buzzer (01-0246) is also set to ON, the buzzer will fire when the car goes into Seismic or CW Derail. The buzzer will stop when the car has successfully recalled to a floor and fully opened the doors.	0	1	0
01-0298	EQ Buzz only on DOL	If this parameter is ON, it will override EQ_BuzzUntilSafe (01-287) and allow the buzzer to turn ON in Seismic or CW Derail only when doors are open. If set to 0, this parameter will not affect the system.	0	1	0

14 EMS Parameters

The table below lists the EMS parameters.

Table 13: EMS Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0051	Fire Overrides EMS Ph2	If turned ON, Fire Service will take priority over EMS2.	0	1	0
01-0097	EMS Allow Ph2 Without Ph1	Allows activation of Medical Phase 2 even if the car was never placed on Phase 1	0	1	0
01-0098	EMS Exit Ph2 At Any FLR	Allows exiting of EMS Phase 2 at any floor. Jobs with full hospital service should have this parameter turned ON. Jobs with EMT service should have this parameter OFF.	0	1	0
01-0100	Fire Overrides EMS Ph1	When set to ON, the activation of a smoke or Fire Phase 1 key causes a car that is currently on EMS Phase 1 to exit medical service and go on Fire Phase 1 recall. When turned OFF, the car remains on EMS Phase 1.	0	1	0
01-0292	Close Door on EMS2	When parameter is set, while car is on phase 2 close the door as soon as the car call is received. If the parameter is Off, after receiving the car call close the door with DCB to close the door.	0	1	0
01-0297	Diff Front/Rear doors in EMS2 CCs	When set to on, car calls in EMS2 differentiate between front and rear CCs. If set to off, both doors open after a CC.	0	1	0
01-0327	Enable first latched CC on EMS2	Enable first single CC, and disables other on EMS2	0	1	0

15 Expansion Board Parameters

The table below lists the Expansion Board parameters.

Table 14: Expansion Board Parameters

Number	String	Description	Min Value	Max Value	Default Value
16-0072 through 16-0079	EXP01 IN (1-8)	Set the Expansion1 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0080 through 16-0087	EXP02 IN (1-8)	Set the Expansion2 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP	0	65535	0

		INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.			
16-0088 through 16-0095	EXP03 IN (1-8)	Set the Expansion3 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0096 through 16-0103	EXP04 IN (1-8)	Set the Expansion4 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0104 through 16-0111	EXP05 IN (1-8)	Set the Expansion5 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0112 through 16-0119	EXP06 IN (1-8)	Set the Expansion6 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0120 through 16-0127	EXP07 IN (1-8)	Set the Expansion7 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0128 through 16-0135	EXP08 IN (1-8)	Set the Expansion8 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0136 through 16-0143	EXP09 IN (1-8)	Set the Expansion9 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs	0	65535	0

		can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.			
16-0144 through 16-0151	EXP10 IN (1-8)	Set the Expansion10 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0152 through 16 0159	EXP11 IN (1-8)	Set the Expansion11 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0160 through 16-0167	EXP12 IN (1-8)	Set the Expansion12 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0168 through 16-0175	EXP13 IN (1-8)	Set the Expansion13 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0176 through 16-0183	EXP14 IN (1-8)	Set the Expansion14 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0184 through 16-0191	EXP15 IN (1-8)	Set the Expansion15 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0192 through 16-0199	EXP16 IN (1-8)	Set the Expansion16 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0

16-0200 through 16-0207	EXP17 IN (1-8)	Set the Expansion17 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0208 through 16-0215	EXP18 IN (1-8)	Set the Expansion18 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0216 through 16-0223	EXP19 IN (1-8)	Set the Expansion19 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0224 through 16-0231	EXP20 IN (1-8)	Set the Expansion20 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0232 through 16-0239	EXP21 IN (1-8)	Set the Expansion21 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0240 through 16-0247	EXP22 IN (1-8)	Set the Expansion22 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0248 through 16-0255	EXP23 IN (1-8)	Set the Expansion23 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0

16-0256 through 16-0263	EXP24 IN (1-8)	Set the Expansion24 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0264 through 16-0271	EXP25 IN (1-8)	Set the Expansion25 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0272 through 16-0279	EXP26 IN (1-8)	Set the Expansion26 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0280 through 16-0287	EXP27 IN (1-8)	Set the Expansion27 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0288 through 16-0295	EXP28 IN (1-8)	Set the Expansion28 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0296 through 16-0303	EXP29 IN (1-8)	Set the Expansion29 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0304 through 16-0311	EXP30 IN (1-8)	Set the Expansion30 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0

16-0312 through 16-0319	EXP31 IN (1-8)	Set the Expansion31 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0320 through 16-0327	EXP32 IN (1-8)	Set the Expansion32 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0328 through 16-0335	EXP33 IN (1-8)	Set the Expansion33 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0336 through 16-0343	EXP34 IN (1-8)	Set the Expansion34 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0344 through 16-0351	EXP35 IN (1-8)	Set the Expansion35 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0352 through 16-0359	EXP36 IN (1-8)	Set the Expansion36 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0360 through 16-0367	EXP37 IN (1-8)	Set the Expansion37 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0

16-0368 through 16-0375	EXP38 IN (1-8)	Set the Expansion38 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0376 through 16-0383	EXP39 IN (1-8)	Set the Expansion39 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0384 through 16-0391	EXP40 IN (1-8)	Set the Expansion40 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0464 through 16-0471	EXP01 OUT (1-8)	Set the Expansion1 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0472 through 16-0479	EXP02 OUT (1-8)	Set the Expansion2 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0480 through 16-0487	EXP03 OUT (1-8)	Set the Expansion3 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0488 through 16-0495	EXP04 OUT (1-8)	Set the Expansion4 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0496 through 16-0503	EXP05 OUT (1-8)	Set the Expansion5 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0504 through 16-0511	EXP06 OUT (1-8)	Set the Expansion6 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0

16-0512 through 16-0519	EXP07 OUT (1-8)	Set the Expansion7 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0520 through 16-0527	EXP08 OUT (1-8)	Set the Expansion8 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0528 through 16-0535	EXP09 OUT (1-8)	Set the Expansion9 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0536 through 16-0543	EXP10 OUT (1-8)	Set the Expansion10 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0544 through 16--0551	EXP11 OUT (1-8)	Set the Expansion11 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0552 through 16-0559	EXP12 OUT (1-8)	Set the Expansion12 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0560 through 16-0567	EXP13 OUT (1-8)	Set the Expansion13 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0568 through 16-0575	EXP14 OUT (1-8)	Set the Expansion14 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0576 through 16-0583	EXP15 OUT (1-8)	Set the Expansion15 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0584 through 16-0591	EXP16 OUT (1-8)	Set the Expansion16 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0

16-0592 through 16-0599	EXP17 OUT (1-8)	Set the Expansion17 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0600 through 16-0607	EXP18 OUT (1-8)	Set the Expansion18 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0608 through 16-0615	EXP19 OUT (1-8)	Set the Expansion19 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0616 through 16-0623	EXP20 OUT (1-8)	Set the Expansion20 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0624 through 16-0631	EXP21 OUT (1-8)	Set the Expansion21 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0632 through 16-0639	EXP22 OUT (1-8)	Set the Expansion22 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0640 through 16-0647	EXP23 OUT (1-8)	Set the Expansion23 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0648 through 16-0655	EXP24 OUT (1-8)	Set the Expansion24 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0656 through 16-0663	EXP25 OUT (1-8)	Set the Expansion25 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0664 through 16-0671	EXP26 OUT (1-8)	Set the Expansion26 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0

16-0672 through 16-0679	EXP27 OUT (1-8)	Set the Expansion27 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0680 through 16-0687	EXP28 OUT (1-8)	Set the Expansion28 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0688 through 16-0695	EXP29 OUT (1-8)	Set the Expansion29 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0696 through 16-0703	EXP30 OUT (1-8)	Set the Expansion30 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0704 through 16-0711	EXP31 OUT (1-8)	Set the Expansion31 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0712 through 16-0719	EXP32 OUT (1-8)	Set the Expansion32 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0720 through 16-0727	EXP33 OUT (1-8)	Set the Expansion33 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0728 through 16-0735	EXP34 OUT (1-8)	Set the Expansion34 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0736 through 16-0743	EXP35 OUT (1-8)	Set the Expansion35 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0744 through 16-0751	EXP36 OUT (1-8)	Set the Expansion36 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0

16-0752 through 16-0759	EXP37 OUT (1-8)	Set the Expansion37 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0760 through 16-0767	EXP38 OUT (1-8)	Set the Expansion38 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0768 through 16-0775	EXP39 OUT (1-8)	Set the Expansion39 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0776 through 16-0783	EXP40 OUT (1-8)	Set the Expansion40 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
32-0029	Exp 24 Inputs Bitmap 0	Sets the index of 24 inputs board on the first 32 expansions	0	4294967295	config

16 Fire Parameters

The table below lists the Fire parameters.

Table 15: Fire Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0000	Fire Main Use Rear DR	Sets the door that opens after performing a main floor fire recall. Uses the rear door if set to ON.	0	1	config
01-0001	Fire Alt Use Rear DR	Sets the door that opens after performing an alternate floor fire recall. Uses the rear door if set to ON.	0	1	config
01-0002	Fire MAIN Use Alt FLR	Sets which recall floor to use when the smoke sensor located at the main recall floor is activated. Uses the alternate floor if set to ON.	0	1	config
01-0003	Fire Alt Use Alt FLR	Sets which recall floor to use when the smoke sensor located at the alternate recall floor is activated. Uses the alternate floor if set to ON.	0	1	config
01-0004	Fire MR Use Alt FLR	Sets which recall floor to use when the smoke sensor located in the machine room is activated.	0	1	config

		Uses the alternate floor if set to ON.			
01-0005	Fire HW Use Alt FLR	Sets which recall floor to use when the smoke sensor located in the hoistway is activated. Uses the alternate floor if set to ON.	0	1	config
01-0006	Fire Main Flash Fire Hat	Flashes the fire hat output when the Main Smoke input is active	0	1	config
01-0007	Fire Alt Flash Fire Hat	Flashes the fire hat output when the Alternate Smoke input is active	0	1	config
01-0008	Fire MR Flash Fire Hat	Flashes the fire hat output when the Machine Room Smoke input is active	0	1	config
01-0009	Fire HW Flash Fire Hat	Flashes the fire hat output when the Hoistway Smoke input is active	0	1	config
01-0010	Fire Main Shunt On Recall	Activates fire shunt output during Phase 1 recall if triggered by Main Smoke input	0	1	config
01-0011	Fire Alt Shunt On Recall	Activates fire shunt output during Phase 1 recall if triggered by Alternate Smoke input	0	1	config
01-0012	Fire MR Shunt On Recall	Activates fire shunt output during Phase 1 recall if triggered by Machine Room Smoke input	0	1	config
01-0013	Fire HW Shunt On Recall	Activates fire shunt output during Phase 1 recall if triggered by Hoistway Smoke input	0	1	config
01-0014	Fire Reset To Exit Phase 1	The Fire Reset Key input must be active to exit Phase 1	0	1	config
01-0015	Fire DISA DR Restrictor Phase 2	When set to ON, the door restrictor outputs are always turned OFF when the car is on Fire Phase 2.	0	1	config
01-0016	Fire Phase 2 Swing Reopen DISA	When set to ON, the car ignores the position of the swing door on Fire Phase 2. NOTE: Set ON mostly just in NYC	0	1	config
01-0017	Fire Phase 2 Exit only at Recall Flr	The car must be at recall floor to exit Fire Phase 2	0	1	config
01-0018	Fire Ignore Locks Jumped On Phase 2	Bypasses lock jumper detection logic when car is on fire phase 2.	0	1	config
01-0019	Fire or IC Stop Switch Kills DR	Supress 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.	0	1	config

01-0020	Fire DOL To Exit Phase 2	The car's Door Open Limit input must be active to exit Phase 2	0	1	config
01-0022	Fire Ok To Stop Outside DZ	N/A	0	1	config
01-0023	Fire Allow Reset With Active Smoke	Allows Fire Phase 1 reset with active smokes.	0	1	config
01-0024	Fire Hat Flash Ignore Order	Flashes fire hat for any active smoke. If OFF, only the first active smoke is checked.	0	1	config
01-0025	Fire Momentary DCB	When set to ON, when car is on fire phase 2 operation and the in car fire key switch is set to ON, pressing the DCB just momentarily will cause the door to close. When set to OFF, the DCB must be held until the door reaches the fully closed state, or the door will automatically reopen.	0	1	config
01-0026	Fire Flash Lobby Lamp	Enables flashing of the lobby fire lamp output	0	1	config
01-0027	Fire Remote And Main To Override Smoke	Both remote and Main Fire Key switch must be on to trigger main floor recall	0	1	config
01-0028	Fire ENA PHE On Phase 2	Enables photo eye during Fire Phase 2	0	1	config
01-0029	Fire DR Open On Hold	Hold doors open when on Fire Phase 2 hold	0	1	config
01-0031	Fire Pit Flash Fire Hat	Flashes the fire hat output when the Pit Smoke input is active	0	1	config
01-0032	Fire Pit Shunt On Recall	Activates fire shunt output during Phase 1 recall if triggered by Pit Smoke input	0	1	config
01-0036	Fire Pit Use Alt FLR	Sets which recall floor to use when the Pit Smoke input is active. Uses the alternate floor if set to ON.	0	1	config
01-0040	DISA BYP IC Stop	When set to ON, bypassing of IC stop switch is disabled. When set to OFF IC stop switch is bypassed during fire 2 recall, fire phase 1 recall, or ems phase 1 recall. For jobs that are compliant with A17.1-2016 code.	0	1	config
01-0046	Courion Fire1 Active	When turned ON, the output Fire I Active will stay asserted during the entirety of Fire Phase 1 (This is required for Courion Door	0	1	0

		Operators). If turned OFF, the output Fire I Active will assert until the car has finished Fire Phase 1 Recalling (This is required for PEELE Door Operators).			
01-0119	EMS Fire 1 Active	When set to ON, the Fire 1 Active output will only fire when the car is on Fire Phase 1 and it is at the Recall floor. Required for EMS door operators for the Fire 1 Hold.	0	1	config
01-0131	BYP FireSrv	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.	0	1	0
01-0181	Enable Alt MR	When set to ON, the car looks for alternate MR and HA Smoke inputs. Used for groups split between two physical machine rooms.	0	1	config
01-0182	Fire MR 2 Flash Fire Hat	Flashes the fire hat output when the Machine Room 2 Smoke input is active	0	1	config
01-0183	Fire HW 2 Flash Fire Hat	Flashes the fire hat output when the Hoistway 2 Smoke input is active	0	1	config
01-0184	Fire MR 2 Use Alt FLR	Sets which recall floor to use when the Machine Room 2 Smoke input is active. Uses the alternate floor if set to ON.	0	1	config
01-0185	Fire HW 2 Use Alt FLR	Sets which recall floor to use when the Hoistway 2 Smoke input is active. Uses the alternate floor if set to ON.	0	1	config
01-0186	Fire MR 2 Shunt On Recall	Activates Fire Shunt output during Phase 1 recall if triggered by Machine Room 2 Smoke input	0	1	config
01-0187	Fire HW 2 Shunt On Recall	Activates Fire Shunt output during Phase 1 recall if triggered by Hoistway 2 Smoke input	0	1	config
01-0200	Fire Key FlashFireHat	Flashes the fire hat output when the fire recall key is active	0	1	config
01-0203	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.	0	1	0
01-0221	Fire2 Swing Reopen	When set ON, opening a swing hall closed contact will cause the doors to reopen.	0	1	0
01-0227	Fire DISA Latch Smokes	When set to OFF, the controller will remember the first smoke	0	1	config

		input it saw tripped until you exit fire service. The smoke will be remembered even across a power cycle. Most jobs except NYC will require this. This parameter is usually off for any controller that has a lobby fire key switch with a RESET position.			
01-0228	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. If set to ON, Fire Phase 1 is constantly reassessed when the recall source is the lobby key.	0	1	config
01-0229	Fire DISA Latch Main Recall	When set to OFF, if the car ever recalls to the main fire recalls floor, then it can't recall to the alternate floor until fire service has been reset. This is required by 2016 code.	0	1	config
01-0231	Fire Reset On Transition	When set to ON, resets Fire 1 on key switch position transition from RESET to OFF	0	1	1
01-0267	EPWR DISA Fire1Lamp	When set to ON, in car fire lamp will behave as specified in the A17.1-2019 code. For A17.1-2019 the in car fire lamp should be suppressed when on fire phase 2, and the car is on emergency power but not selected to run. For A17.1-2010 the in car fire lamp should be suppressed when on fire and the car is not selected to run. A17.1-2.27.2.4.4 (b)	0	1	0
01-0268	Fire Exit Ph2 Without Ph1 Rcl	When set to ON, if the car is on fire phase 2, and fire phase 1 has been cleared via 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. For addressing A17.1 2000, Florida testing procedures, https://dev.azure.com/smartrise-us/C4%20Development/_workitems/edit/1843. When set to off, the car will return to the fire recall	0	1	0

		floor before returning to normal operation.			
01-0275	ENA Phase 1 EP Car Select	Enable support for A17.1 2008-2019 Section 2.27.2.4.5 Emergency Power Fire Phase 1 Car Selection.	0	1	config
01-0282	Fire Nudge with No Buzzer	When set to ON, while on Fire Service, the car will not assert the buzzer when nudge command is asserted.	0	1	0
01-0290	Fire 2 Active Always On During FP2	When set to ON, the output Fire II Active will assert whenever the car is on Fire Phase 2. Upon transitioning from Fire Phase 2 to Fire Phase 1, Fire II Active will drop, and Fire 1 Active will assert. This is used for non-peele non-automatic doors that require Fire 1 Active and Fire 2 Active to control the door operation during Fire.	0	1	0
01-0307	Close door when PHE Bypassed on FF2	When set to ON, the door sends a close command instead of nudge if phe is byapssed on FF2	0	1	0
01-0309	Fire2 Bypass on MR and HA smoke	When set to ON, the Fire2 is bypassed if the origin of Fire1 is machine room or hoistway smoke	0	1	0
01-0310	Fire1 DOB HC Enabled Dwell 1 min	When set to ON, the Fire1 doors are cycled on recall, DOB and HC of recall floor after 1 min	0	1	0
01-0311	Only Exit FP1 on Main Landing	When Set ON, the car will only exit FP on the Main recall landing. A car that has been utilized for FP2 operation will remain in FP until returned to the main landing and switched Off FP2 after a FP1 reset	0	1	0
01-0317	Fire2 Cancel Button Reopen door	When Fire II cancel button is pressed while car on fire recall floor, the doors reopen	0	1	0
01-0319	Fire2 Close Door When No DOB	Closes the door on fire2 ON when DOB is not pressed	0	1	0
01-0320	Fire Switch 2 positions	When set to ON, the fire switches used on lobby and inside car are 2 positions	0	1	0
01-0321	Fire No DCL to Exit phase 2	When the car needs to exit fire2 and recall to lobby, the door should not be closed	0	1	0
01-0326	Fire1 reset extinguishes	The lobby fire lamp turns off when fire1 is reset on alternate floor	0	1	0

	Lobby Lamp at Alt Floor				
01-0329	Turn Off At Recall Output on FP2	When enabled, turns off At Recall output when car is on FP2, and recall is finished	0	1	0
01-0341	Allow Shunt Trip on Inspection mode	When enabled, the shunt trip is enabled on inspection	0	1	0
01-0342	Allow Shunt Trip on Fire I Alternate Landing	When enabled, the shunt trip is enabled on Fire1 alternate floor	0	1	0
01-0343	Allow Shunt Trip on EMS	When enabled, the shunt trip is enabled on EMS	0	1	0
01-0344	Extinguish Fire Lamp On Special Operations	When enabled, the fire lamp is extinguished on low oil, motor overheat and battery rescue modes of operation	0	1	0
01-0377	Bypass In Car Stop when the car is on Fire Recall	When enabled, car will ignore the in-car stop switch, when in Fire Recall mode as required in A17 2004.	0	1	0
08-0111	Fire Main Recall FLR	Sets the main fire recall floor. This value is zero -based, so the bottom most floor is zero.	0	255	config
08-0112	Fire Alternate Recall FLR	Sets the alternate fire recall floor. This value is zero -based, so the bottom most floor is zero.	0	255	config
08-0224	ATTD Fire Recall Delay (1s)	Sets the delay before beginning fire recall when the car is parked at floor on attendant or independent service. See A17.1-2016 2.27.5.2(a).	10	30	20
08-0233	FireRecallKey Debounce_100ms	Debounce counter for fire recall keyswitch inputs. Value is in 100msec counts.	0	127	10
08-0251	LowBattery Fire2 RunLimit	When car is on Fire phase 2 travelling above the Recall fire floor and batterypower is triggered, the car Estops, then the value in this parameter will decide how many CCs the car will accept (CC will be always the floor below the floor it is at), then the car will return to the recall fire floor and fault out.	0	255	1

17 Flood Parameters

The table below lists the Flood parameters.

Table 16: Flood Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0102	Flood Override Fire	Allows flood operation to take priority over fire operation	0	1	0
01-0103	Flood Okay To Run	Allows car to continue to run above the configured flood sensor floor (08-165)	0	1	0
01-0278	Flood Flash Lamp	When turned ON, if the active mode of operation is Flood, the flood lamp will flash instead of being asserted high. (North Carolina Inspector stated that any sensor/switch in the shaft that has a relative lamp, will need it to flash).	0	1	0
01-0374	Fire1 Recall To Flood Safe Floor	When enabled, fire phase 1 will recall to a flood safe floor	0	1	0
01-0375	Alt. Is Flood Safe Floor	When enabled, alternate floor should be a flood safe floor, otherwise fault F337 "Inv. Fire Alt" will be generated	0	1	0
01-0376	Enable Flood Limits On Inspection/Hoistway Access	When enabled, flood limits will be imposed when on Inspection/Hoistway Access, i.e., the car will not be allowed to travel to a flood-unsafe floor, nor will the counterweight. The only exception is to allow elevator personnel to exit the car top at a landing.	0	1	0
08-0165	Number of Flood FLRs	Used in conjunction with the Flood Switch input. If a flood is detected, this parameter tells the controller which floors to avoid. If set to zero, the car can go to all floors. If the flood switch is active and this parameter is set to 1, the car is not allowed to go to the bottom floor. If set to 2 then the car can't go to bottom 2 floors, etc.	0	255	config

18 Floor Parameters

The table below lists the Floor parameters.

Table 17: Floor Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0062	Auto Runs FLR To FLR	Enables automatic one floor car call runs when on Enter Car Calls on the MR board. This option should be left OFF and is for test purposes only.	0	1	0
01-0074	Auto Runs Terminal To Terminal F	Enables automatic front car call runs between terminal floors when on Enter Car Calls menu on the MR board display. This option should be left OFF and is for test purposes only.	0	1	0
01-0077	Auto Runs FLR To FLR R	Enables automatic one floor rear car call runs when on Enter Car Calls on the MR board. This option should be left OFF and is for test purposes only.	0	1	0
01-0099	Auto Runs FLR To FLR F	Enables automatic one floor front car call runs when on Enter Car Calls on the MR board. This option should be left OFF and is for test purposes only.	0	1	0
01-0110	Run Random Runs R	Enables automatic rear car call runs to random destinations when on the Enter Car Calls menu on the MR board. If on the Enter Hall Calls menu, the car enters hall calls to random floors. This option should be left OFF and is for test purposes only.	0	1	0
01-0144	3 Digit PI	When set to ON, three -digit PIs are used.	0	1	0
01-0149	DISA CE FlrPlus1	When set to ON, the floor index sent to CE driver boards start at zero instead of one. Used for jobs where the annuciator was misconfigured.	0	1	0
01-0171	DISA PI OOS	When set to ON, OOS does not flash on the PI when the car is out of group.	0	1	0
01-0173	DISA DOB Secured Flr or Ignored opening	When set to ON, DOB is ignored for secured floors when the doors are fully closed or when the Car calls is ignored on a floor	0	1	0
01-0202	DISA Dest Loss Stop	When set to OFF, if a car is in flight to a floor and its destination lost and no alternate destination is detected, the car ramps down to the next reachable floor. When set	0	1	0

		to ON, this ramp down does not occur.			
01-0225	ENA Ext Floor Limit	When set ON, the floor limit of the system is 96 floors instead of the usual 64.	0	1	config
01-0289	At Recall Lamp Lobby DOL	When set to ON, the At Recall output will assert when the car is at the lobby floor defined at 08-0122, and has the doors fully opened.	0	1	0
01-0355	At Recall Lamp Lobby Bypass DOL	When enabled it will operate in conjunction with Parameter 01-0289. When both parameters are activated, the system should trigger the output (lamp at recall) upon the car reaching a specific landing that can be set through parameter 08-0122 (Car to lobby FLR) disregarding DOL.	0	1	0
08-0092	Number of FLRs	Sets the number of floors. Requires system power cycle after changing to clear the "Need To Cycle Pwr" fault (F83/F717/F718).	2	96	config
08-0094	HA Top Allowed Distance	Sets the distance below the top hoistway access floor that the car is allowed to move while on top hoistway access. The units are in feet.	0	255	9
08-0095	HA Top FLR	Sets the top hoistway access floor. This value is zero -based, so the bottom most floor is zero. This value's upper bound is the configured number of floors (08-93).	0	255	255
08-0096	HA BottomFLR	Sets the bottom hoistway access floor. This value is zero -based, so the bottom most floor is zero.	0	255	0
08-0110	HA Bottom Allowed Distance	Sets the distance above the bottom hoistway access floor that the car is allowed to move while on bottom hoistway access. The units are in feet.	0	255	9
08-0122	Car To Lobby FLR	Sets the floor the car moves to when the Car to Lobby input is activated. This value is zero -based.	0	255	0
08-0156	Relevel Offset Up 0.5mm	Reduces the releveling destination floor count by this value when approaching a floor from below	0	255	0
08-0157	Relevel Offset Down 0.5mm	Reduces the releveling destination floor count by this value when approaching a floor from above	0	255	0

08-0158	Releveling Zone Size	Sets the size of the releveling zone (dead zone) in 0.02-inch position counts. When the car greater than this distance from the nearest learned floor postion, and in door zone, it will attempt to relevel.	13	100	26
08-0169	Dest. Offset Up 0.5mm	Reduces the destination floor count by this value when approaching a floor from below	0	255	0
08-0170	Dest. Offset Down 0.5mm	Reduces the destination floor count by this value when approaching a floor from above	0	255	0
08-0172	Test Runs Dwell Time	Sets the dwell time used when testing the car using automatic call entry modes: Floor to floor (01-62) and random runs (01-114). Units are in seconds.	0	255	0
08-0174	Group Landing Offset	Sets the number of floors below the lowest serviced floor that are serviced by other group cars. This allows calls between different cars to be aligned so they refer to the same landing and is vital to proper dispatching.	0	31	config
08-0202	Check In Floor	Sets Check in Floor for when secure floors CC are latched.	0	255	0
08-0203	Move Idle Car Timer (10min)	Sets the amount of time the car is allowed to stay idle before it is forced to move to a random floor. This feature is used for cars using old DC machine with babbitt bearings that stick if the car is left idle for too long. If set to zero, this feature is disabled.	0	25	0
08-0231	Shuttle Mode Floor	Sets the floor the car moves to or from Main Fire recall floor, when the Shuttle mode input is activated. This value is zero -based.	0	255	0
08-0239	Est F2F Time	Estimated average floor to floor time for this car. Used for destination dispatch call assignment calculations. This value must be manually entered by a user. Units are in seconds.	0	255	10
08-0261	Hard Stop Up floor	Selects the floor that the car should pass when going up.	0	255	0
08-0262	Hard Stop Down floor	Selects the floor that the car should pass when going down.	0	255	0
08-0266	Access Offset Floors	Specifies the number of offset floors that do not have access	0	96	0

		code. Useful to skip basements as an example.			
08-0270	Recall Floor on Active Shooter Plus 1	"When greater than zero, the car recalls to the floor equal to (value - 1) set in this parameter, else it goes to the fire alternate floor.			
16-0958	ShortFloorOpening_0	Sets floors 1-16 as short floors. This setting is in bitmask form which each bit corresponds to a different floor index. Floors marked with 1 are not held to the same spacing requirements as standard floors. During a hoistway learn, their positions are auto set to a quarter inch from the previous floor and their position must be set manually via SETUP | FLOORS | STORE FLOOR LEVEL.	0	65535	0
16-0959	ShortFloorOpening_1	Sets floors 17-32 as short floors. This setting is in bitmask form which each bit corresponds to a different floor index. Floors marked with 1 are not held to the same spacing requirements as standard floors. During a hoistway learn, their positions are auto set to a quarter inch from the previous floor and their position must be set manually via SETUP | FLOORS | STORE FLOOR LEVEL.	0	65535	0
16-0960	ShortFloorOpening_2	Sets floors 33-48 as short floors. This setting is in bitmask form which each bit corresponds to a different floor index. Floors marked with 1 are not held to the same spacing requirements as standard floors. During a hoistway learn, their positions are auto set to a quarter inch from the previous floor and their position must be set manually via SETUP | FLOORS | STORE FLOOR LEVEL.	0	65535	0
16-0961	ShortFloorOpening_3	Sets floors 49-64 as short floors. This setting is in bitmask form which each bit corresponds to a different floor index. Floors marked with 1 are not held to the same spacing requirements as standard floors. During a hoistway learn, their positions are auto set to a quarter inch from the previous floor and	0	65535	0

		their position must be set manually via SETUP | FLOORS | STORE FLOOR LEVEL.			
16-0962	ShortFloorOpening_4	Sets floors 65-80 as short floors. This setting is in bitmask form which each bit corresponds to a different floor index. Floors marked with 1 are not held to the same spacing requirements as standard floors. During a hoistway learn, their positions are auto set to a quarter inch from the previous floor and their position must be set manually via SETUP | FLOORS | STORE FLOOR LEVEL.	0	65535	0
16-0963	ShortFloorOpening_5	Sets floors 81-96 as short floors. This setting is in bitmask form which each bit corresponds to a different floor index. Floors marked with 1 are not held to the same spacing requirements as standard floors. During a hoistway learn, their positions are auto set to a quarter inch from the previous floor and their position must be set manually via SETUP | FLOORS | STORE FLOOR LEVEL.	0	65535	0
16-0983	Access Code Floor 1F	Sets the Access Code for Floor 1 Front	0	65535	0
16-0984	Access Code Floor 2F	Sets the Access Code for Floor 2 Front	0	65535	0
16-0985	Access Code Floor 3F	Sets the Access Code for Floor 3 Front	0	65535	0
16-0986	Access Code Floor 4F	Sets the Access Code for Floor 4 Front	0	65535	0
16-0987	Access Code Floor 5F	Sets the Access Code for Floor 5 Front	0	65535	0
16-0988	Access Code Floor 6F	Sets the Access Code for Floor 6 Front	0	65535	0
16-0989	Access Code Floor 7F	Sets the Access Code for Floor 7 Front	0	65535	0
16-0990	Access Code Floor 8F	Sets the Access Code for Floor 8 Front	0	65535	0
16-0991	Access Code Floor 1R	Sets the Access Code for Floor 1 Rear	0	65535	0
16-0992	Access Code Floor 2R	Sets the Access Code for Floor 2 Rear	0	65535	0
16-0993	Access Code Floor 3R	Sets the Access Code for Floor 3 Rear	0	65535	0

16-0994	Access Code Floor 4R	Sets the Access Code for Floor 4 Rear	0	65535	0
16-0995	Access Code Floor 5R	Sets the Access Code for Floor 5 Rear	0	65535	0
16-0996	Access Code Floor 6R	Sets the Access Code for Floor 6 Rear	0	65535	0
16-0997	Access Code Floor 7R	Sets the Access Code for Floor 7 Rear	0	65535	0
16-0998	Access Code Floor 8R	Sets the Access Code for Floor 8 Rear	0	65535	0
16-1046	Terminal Express floors	The MSByte is for top floor and the LSByte is for the bottom floor on terminal express mode of operation	0	65535	0
24-0000 through 24-0095	PI_0 through P1_95	N/A	0	16777215	config
24-0096 through 24-0191	LRN FLR 0 through LRN FLR 95	N/A	0	16777215	0

19 Hall Board Parameters

The table below lists the Hall Board parameters.

Table 18: Hall Board Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0195	ENA Ext. Hall Boards	When set to ON, they system is using 12-DIP Hall boards.	0	1	config
08-0146	Override Group Hall Mask	When the input "Override Group Hall Mask" is activated the car will use this parameter as a hall call mask for the car	0	255	0
08-0178	Linked Hall Mask 1	Sets which function groups of Hall boards that have their outputs tied together. For example, if set to 7 a hall button press triggers the lamp output on function 1, function 2 and function 3 Hall board for that floor. This value is a hall mask. See the C4 User Manual for more details on how these masks are set.	0	255	config
08-0179	Linked Hall Mask 2	Same as Linked Hall Mask 1. Used when multiple sets of linked hall buttons are needed.	0	255	config
08-0180	Linked Hall Mask 3	Same as Linked Hall Mask 1. Used when multiple sets of linked hall buttons are needed.	0	255	config

08-0181	Linked Hall Mask 4	Same as Linked Hall Mask 1. Used when multiple sets of linked hall buttons are needed.	0	255	config
08-0208	Hall Security Mask	Sets which Hall board address ranges require hall security. Set this parameter the same as the hall call mask (08-0209) is set. This should be set the same on all group cars. If EnableHCSecurityByCar (01-0272) is ON, this parameter is car specific instead of shared group wide.	0	255	config
08-0209	Hall Call Mask	Sets which Hall board function groups the car. This function treats as regular hall calls.	0	255	config
08-0210	Hall Medical Mask	Sets which Hall board function groups are medical calls	0	255	config
08-0211	Hall Rear Door Mask	Sets which Hall board function groups are rear calls	0	255	config
08-0212	Swing Call Mask	Sets which Hall board function groups are swing calls	0	255	config
08-0258	Hall Medical Rear Door Mask	Sets which Hall board function groups are rear door medical calls. When set 08-0210 HallMedicalMask differentiates front, and this parameter defines rear. If zero, 08-0210 HallMedicalMask does both.	0	255	config

20 Independent Service Parameters

The table below lists the Independent Service parameters.

Table 19: Independent Service Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0236	Independent Srv. Ignore Front CCB	When set to ON, the Front CCB will be ignored while on Independent Service. (Feature Request).	0	1	0
01-0262	IND SRV CCB Closes Door	When set to ON, while on Independent Service, CCBs will close doors.	0	1	0
01-0318	Independent Service Overrides Reset Service Code	When set to on, Independent Service overrides the Reset Service Code and the elevator travels normally	0	1	0
08-0121	Group Car Index	Sets the car's group ID. This value is zero -based.	0	7	config
08-0125	Run Log Scaling	Sets the resolution of captured run logs. Units are in 50 ms counts.	0	255	4

21 Landing System Parameters

The table below lists the Landing System parameters.

Table 20: Landing System Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0038	ENA Landing Insp.	Enables Landing Inspection operation when the MR board DIP 3B is on.	0	1	0
01-0057	DISA CEDES Faults	Disables CEDES offline faults. This option should be left off and is for test purposes only.	0	1	0
01-0147	ENA CEDES2	Enables updated CEDES protocol v2.0.	0	1	0
01-0148	ENA 2nd Camera for ETSL TSRD	Enables a secondary CEDES unit (which connects to the COP) and ETSL/TSRD stop point checks. **NOTE:** Used for Canada jobs	0	1	0
01-0296	Enable ELGO	Enables ELGO Landing System. Overrides CEDES.	0	1	0
08-0243	CEDES Alarm Time 100ms	When a CEDES camera reports difficulty reading the tape an alarm signaling that maintenance cleaning needs to be performed will be asserted. A1457 to A1459. The CEDES read difficulty status is debounced by this timer. If this value is 0, the alarms are disabled. This value is in 100ms counts.	10	255	10
08-0260	APS Error Code Debounce	Debounce setting for detecting a consistent error on the APS system. (CEDES/ELGO)	0	255	8
16-0926	ETSL Camera Offset	The position difference between the primary CEDES camera and the ETSL camera. The ETSL camera is placed above the primary camera. This value is generated automatically when the car is put in learn mode. Units are in 0.019-inch counts.	0	65535	0

22 Load Weighing Parameters

The table below lists the Load Weighing parameters.

Table 21: Load Weighing Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0066	LWD ENA WiFi	When set to ON, the C4 system commands the Smartrise load	0	1	0

		weighing device to enable its Wi-Fi connection			
01-0068	LWD Auto Recalibrate	When set to ON, the car regularly recalibrates its load weigher device	0	1	0
01-0070	LWD Trigger Recalibrate	When set to ON, the car performs a load weighing device empty load recalibration	0	1	0
01-0071	LWD Trigger Load Learn	When set to ON, the car performs load weighing device full load calibration	0	1	0
01-0078	Debug LWD	When set to ON, allows for viewing of load weighing device packet receive counts and raw load values.	0	1	0
01-0273	ENA LWD V2	When set to ON, serial LWD will use the improved calibration procedure for LWD v1.4.00 and later. When set to OFF, the serial SWD will used the calibration procedure for LWD v1.3.16 and prior.	0	1	config
08-0132	LWD Torque Offset	Sets an offset to add to the Smartrise load weighing device torque percentage output. Value is a signed 8 -bit integer.	0	255	0
08-0133	LWD Torque Scaling	Sets a scaling value to multiply by the torque output of the Smartrise load weighing device. The value is a signed 8-bit integer in percentage format.	0	255	0
08-0135	LoadWeigher Select	When set to zero, discrete load weigher signals are used.	0	255	0
08-0205	LWD Monthly Calibration Hour	Sets the time of day to automatically perform a load weighing device recalibration. Recalibration is performed on the first occurence of this day on every month if automatic recalibration is enabled (01-0068).	0	255	23
08-0206	LWD Monthly Calibration Day	Sets the day of the week to automatically perform a load weighing device recalibration. Recalibration is performed on the first occurence of this day on every month if automatic recalibration is enabled (01-0068).	0	255	6

23 Miscellaneous Parameters

The table below lists the Miscellaneous parameters.

Table 22: Miscellaneous Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0030	VIP Priority Dispatching	Places car into VIP/Priority Dispatching. Allows for multiple cars in VIP mode to dispatch as a separate group.	0	1	config
01-0034	BYP Term Limits	Bypasses terminal limit faults. This option is automatically turned off when in automatic operation.	0	1	0
01-0037	ENA Pit Insp.	Enables Pit Inspection operation when the MR board DIP 4B is on.	0	1	0
01-0043	ENA Midflight Destination Change	Enables changing destination during a run. This option should be left ON and is for test purposes only.	0	1	1
01-0064	DISA Preflight	Disables the end of run preflight check	0	1	1
01-0072	ENA Construction Run Box	Enables use of Construction Run Box inputs instead of MR Up and MR Down buttons for construction operation motion. These inputs are labeled CUP, CDN, and MDC on the MR board.	0	1	0
01-0075	IC Insp.Req For CT	Requires in car inspection to enable car top inspection.	0	1	0
01-0080	DISA OOS	Disables out of service	0	1	1
01-0085	NC INPUT CustomMode	Configures custom mode of operation used for test	0	1	0
01-0107	DEBUG MonitorCarDirection	Display car's direction priority on the controller’s home screen.	0	1	0
01-0116	DISA IdleTravelArrows	When set to ON, CE travel arrows reflect the motion direction of the car. When set to OFF, the arrows reflect the motion direction of the car and the arrival direction after a run.	0	1	0
01-0125	Debug FastGroupResend	Doubles the minimum send rate of group network packets necessary for dispatching. This should be set to ON for every car to fully enable this feature.	0	1	0
01-0129	ENA OpModeAlarm	Enables a system alarm signalling when the mode of operation changes (A146)	0	1	0

01-0130	ENA StopAtNextAlarm	Enables a system alarm signalling when a car is commanded to stop at the next available landing (A74). This can occur if the car's current destination has been cleared during a run.	0	1	0
01-0133	ENA LatchesCC	When set to ON, car call enable latches a car call.	0	1	0
01-0136	DebounceLatchedFault	When set to ON, the latching of safety faults is debounced for 6 seconds instead of the standard 2.5 seconds.	0	1	0
01-0142	Buzzer Only On Nudge	When set to ON, during nudging the NDG output is supressed and only the buzzer sounds.	0	1	0
01-0145	DefaultFRAM	Set ON to default the FRAM chip. This option is self -resetting. This clears fault/alarm logs, latched faults, emergency bits, and run counter.	0	1	0
01-0150	ENA EStopAlarms	Enables a system alarm signalling when the Estop is commanded without a corresponding fault (A69 to A76)	0	1	0
01-0161	Double Chime On Down	When set to ON, the car chimes twice when the down arrow is activated. Set to OFF if the fixture automatically chimes twice.	0	1	0
01-0169	FRAM ENA Alarms	When set to ON, a FRAM corruption check on read fails an alarm displays.	0	1	1
01-0172	In Motion Opening Alarm	When set to ON, if car top output 614 (DO) is on during a run, an alarm is asserted (A631). This is used for debugging.	0	1	0
01-0199	ENA Board RTC	When set to ON, the onboard RTC is used instead of the D.A.D unit RTC.	0	1	0
01-0206	DISA DL20 Buzzer	When set to ON, DL20 fixture buzzer feature is suppressed.	0	1	config
01-0224	ENA Shield Alarms	When set ON, shield errors will be flagged as system alarms.	0	1	1
01-0226	ENA CE V2	When set ON,messages to the CE fixture driver board will include dedicated out of service and fire phase 2 messages.	0	1	0
01-0230	DISA_CPLD_OVF_ALARM	When set to ON, disables the CPLD overflow alarm.	0	1	0
01-0233	ENA VIP T/O Alarm	When set to ON, if VIP has timed out an alarm will be asserted.	0	1	0

01-0239	EQ Old Job Support	When set to ON, the EQ lamp does not follow code 8.4.10.1(f) in order to support older jobs.	0	1	0
01-0248	FlashFireHatLowOil	When set to ON, on Low Oil operation car will flash fire hat.	0	1	0
01-0250	CAM Output On Move	When set to OFF, CAM will output when Car is in motion and not pre-opening. When set to ON, CAM will output when Car is outside Door Zone or in Motion.	0	1	0
01-0252	Learn_Improved	When set to ON, learn operation will be performed on the car top instead of the machine room. This can improve the accuracy of learned floor positions.	0	1	0
01-0254	Secondary Valve Board	When set to ON at startup, the car will check for a secondary valve board which will support medium speed valves.	0	1	config
01-0259	Latch_CPLD_FLTS	When set to ON, CPLD preflight failure and redundancy failure faults will remain latched until power is cycled to the car.	0	1	1
01-0261	Secondary SS	When set to ON, the system will look for secondary soft starter signals.	0	1	config
01-0266	Run With One SS	When set to ON, if two soft starters are supported, and only one of those soft starters is faulted, the car will still be allowed to run. In this situation, soft starter faults will instead by asserted as alarms. This option is only available if SecondarySoftStarter (01-0261) is ON.	0	1	0
01-0269	SS Flt Triggers Rst	When set to ON, if the soft starter fault input is activated, the controller will assert the soft starter reset output to power cycle the soft starter. This reset will be attempted multiple times before stopping.	0	1	config
01-0280	Enable TEI CC	When set to ON, the module TEI CC is initialized, and Marshal Mode is disabled. When set to OFF, Marshal Mode is enabled, and the module TEI CC Is disabled. After changing this parameter, a power cycle is required.	0	1	0

01-0284	Bypass Term HA Inspection	When set to ON, while on HA Inspection, the car will be able to bypass term limits. Used in California for the run-by test.	0	1	0
01-0286	Arrival Lantern on DOL	When set to ON, the arrival lanterns will assert when the DOL is reached as opposed to on DO or before DO.	0	1	0
01-0304	Enable COP SR TouchScr	When set to ON, COP will use Smartrise TouchScreen protocol.	0	1	0
01-0322	Enable CE Elite COP	When set to ON, COP will use CE Elite TouchScreen COP.	0	1	0
01-0330	Third Valve Board	When set to ON at startup, the car will check for a Third valve board which only if the secondary valve board is enabled.	0	1	config
01-0331	Third SS	When set to ON, the system will look for Third soft starter signals if the secondary soft starter is enabled.	0	1	config
01-0337	Emotive Swap Indep.Service And Inspection	When set to ON, Emotive will swap the independent service mode and inspection mode display	0	1	0
01-0339	Support the collapsible type on CT Inspection	NA	0	1	0
01-0346	Enable Smartrise PI	When enabled, SRPI is enabled, and CE is disabled	0	1	0
01-0348	Always Monitor Soft Starter Fault	When set on, the fault received from SoftStarter will stop the car regardless SM state	0	1	0
01-0351	Fourth Valve Board	When set to ON at startup, the car will check for a Fourth valve board which only if the third valve board is enabled.	0	1	config
01-0353	UM Redundancy Bypass	Bypass uninenteded movement redundancy with CPLD	0	1	0
08-0024	P1 Leveling Distance 5mm	Adds leveling distance to the learned slowdown trip points in the up direction, extending the time the car will run a leveling speed before reaching a floor. Units are in 0.2-inch counts.	0	122	5
08-0038	EP Leveling Distance	Adds leveling distance to the learned slowdown trip points in the down direction, extending the time the car will run a leveling	0	122	5

		speed before reaching a floor. Units are in 0.2-inch counts. Note, this profile takes effect when the car is running on generator or battery power.			
08-0048	Time Violation Rate	Sets the tolerance for module run time. Units are in 1% of run period	0	255	0
08-0051	VIP CarCall Timer (1s)	Sets the time in seconds allowed to place a car call after entering VIP mode with the doors fully open.	5	255	5
08-0052	Viscosity_CyclesAllowed	This counter limits the number of times the controller cycles through the viscosity run and viscosity rest stages before shutting down. This is to address the potential for a bad sensor or input. This setting is limited to 5 cycles.	0	5	5
08-0053	Viscosity_RunTime_1min	An extended version of the motor limit timer that is used when the car is on cold oil (Viscosity) operation. This timer limits the amount of time the pump motor can be on straight.	0	15	15
08-0054	Viscosity_RestTime_1min	This timer controls how long the motor sits at rest after the Viscosity_RunTime_1min has expired. This is set to a minimum of 5 minutes to prevent overheating the oil.	5	255	10
08-0055	JackResync_Frequency_1hr	Specifies how frequently to perform a jack resync. This option overrides JackResync_StartTime_15min.	0	255	0
08-0057	JackResync_Duration_1s	Specifies how long the car shall remain in the pit during jack resync. Units are in 1 second counts.	0	255	0
08-0058	SAFE Pick Delay 50ms	When moving up, this is the delay between activating the MR SRU SAFE output and activating the primary start motor output. When moving down, this is the delay between activating the SAFE output and activating a value. Units are in 50ms counts.	0	255	5
08-0059	SM1 Pick Delay 50ms	When moving up, this is the delay between activating the primary start motor output and activating	0	255	10

		a valve. Skipped if not moving up. Units are in 50ms counts.			
08-0060	SM2 Pick Delay 50ms	If SecondarySoftStarter (01-0261) is ON, this is the delay between activating the secondary start motor output and activating the primary start motor output. Skipped if not moving up. If SecondarySoftStarter is OFF, this delay is skipped. Units are in 50ms counts.	0	255	0
08-0061	Pump Off Delay 50ms	Sets the time between deactivating the valves and turning off the start pump motor outputs. Skipped if not moving up. Units are in 50ms counts.	0	255	5
08-0062	SAFE Drop Delay 50ms	Sets the time between deactivating pump motor and turning off the MR SRU SAFE output. If the car is moving down this is the time between deactivating the valves and turning off the SAFE output. Units are in 50ms counts.	0	255	20
08-0063	Delta Pick Delay (50ms)	This is the delay between activating the Delta output and activating the valve outputs. Skipped if not moving up. When set to 0, this step is skipped. This should only be set nonzero for a Wye Delta starter configuration.	0	255	config
08-0093	Car Stability Delay (50ms)	Sets the amount of time the car must be stable (moving at 1 fpm or less) before it's allowed to perform a non-releveling run. This timer can be helpful if a car bounces due to rope stretch. Units are in 50 ms counts.	0	255	0
08-0115	Fan And Light Timer	Sets the time the car may be idle before its fan and light output is turned off. If a longer timer is needed, the extended fan and light timer (08-184) should be used with the output MR Fan instead. Units are in seconds.	0	255	0
08-0116	Inspection OVSP Debounce Limit	Sets the time the car must be in an inspection overspeed state before a fault (F66) is flagged. The units are in 10 ms counts.	0	100	10

08-0117	DR Open OVSP Debounce Limit	Sets the time the car must be in a door open overspeed state before a fault (F67 to F74) is flagged. The units are in 10 ms counts.	0	100	10
08-0118	ETS OVSP Debounce Limit	Sets the time the car must be in an ETS overspeed state before a fault (F681 to F696) is flagged. The units are in 10 ms counts.	0	100	10
08-0119	SFP Debounce Limit	Sets the time that the SFP relay must be seen low before a fault (F52) is flagged. The units are in 10 ms counts.	10	255	10
08-0120	Rate To Send Parameters	Sets the rate parameter update packets is sent on the group network. The units are in 5 ms counts.	0	255	20
08-0124	OfflineCtrlTimer	Sets the minimum rate at which packets are sent from each of the main system processors	100	255	100
08-0131	Max Runtime (1s)	This timer monitors the Start Motor (SM) output and will issue a MLT fault when the timer expires, the car should return to the bottom landing and go OOS with doors open. This is bypassed during construction and inspection operations. A different timer is used during viscosity operation. The if the timer expires when low pressure is active, the car faults and goes out of service until the low-pressure fault is cleared.	0	255	180
08-0137	Timeout Lock and CAM (100ms)	Sets the timeout which accounts for the delay between CAM activation and locks being made for manual doors. The units are in 100 ms counts. If set to zero, value defaults to 4 seconds.	0	255	40
08-0138	AccessCode CCB Time (1s)	Sets the time the user must enter each CCB for access code. This timer will reset every time the user enters a CCB for access code.	0	255	5
08-0140	Releveling Delay (50ms)	Sets a delay before performing releveling. This timer can be helpful if a car bounces due to rope stretch. Units are in 50 ms counts.	0	255	10

08-0142	NumResendRunLog	Sets the number of times to resend each run log packet	0	255	10
08-0147	Short Profile Minimum Distance	Sets the distance below which the Short Motion profile is used instead of the Normal Motion profile. Units are in feet.	0	255	0
08-0151	Time Violation Module	Sets which module to check against the 16–924-time violation setting. If set to zero, all modules are checked.	0	255	0
08-0152	MedValveSpeed (fpm)	Sets the estimated max medium valve speed.	0	255	0
08-0153	LowValveSpeed (fpm)	Sets the estimated max low valve speed.	0	255	0
08-0160	HourlyFaultLimit	Sets the number faults allowed within a one-hour window before the car goes out of service. If the car goes out of service, it remains out of service until the hour window elapses.	5	255	10
08-0173	CPLD Offline Timeout 10ms	Sets the timeout used when the CPLD offline alarms are enabled (01-135). Units are in 10 millisecond counts.	5	255	50
08-0184	MR Fan Timer (min)	Sets the time the car may be idle before its machine room fan output is turned off. Units are in minutes.	0	255	0
08-0190	CCB Recent Press Timer (100ms)	Sets the time the lamp output is lit after a car call button is pressed	0	255	2
08-0194	Motion Direction Stage Plus1	When zero, direction is asserted during the accel delay start sequence stage. Otherwise, motion direction is asserted based on the start sequence enumeration en_motion_start_sequence plus 1.	0	255	0
08-0196	Max Starts Per Minute	Specifies how many times the car may attempt to start a run in Automatic operation during a 1-minute window. If the controller attempts additional runs, the car goes out of service until the real-time clock increments to the next minute. Set this parameter to zero to disable the feature.	0	255	10

08-0227	SS Vmax VAC %	Used for the C4 serial soft starter. Sets the percentage of input AC voltage used for ramp up.	10	90	config
08-0228	SS OVC (A)	Used for the C4 serial soft starter. Sets the overcurrent limit in amps.	1	140	config
08-0235	SS2 Ramp Up Time 100ms	Used for the C4 serial secondary soft starter. Sets the time to ramp up to V-Max.	0	250	config
08-0236	SS2 Vmax VAC %	Used for the C4 serial secondary soft starter. Sets the percentage of input AC voltage used for ramp up.	10	90	config
08-0237	SS2 OVC (A)	Used for the C4 serial secondary soft starter. Sets the overcurrent limit in amps.	1	140	config
08-0241	Valve Type	This parameter enables the system as a hydro controller. It also selects which valve type is used. Types: - 0 = Traction - 1 = C4 Valve - 2 = Blain Valve - 3 = Bucher Valve Must be set at startup.	0	255	config
08-0245	Group Number	Sets the group number. This value is zero -based.	0	7	config
08-0252	HA Access Slide Distance 1in	This is the distance added to parameter 08-0110 and 08-0094 that a car is allowed to be within from the Top/Bottom DZ limit when traveing towards the respective terminal.	1	255	6
08-0255	DIP Bank to Override	Use this parameter to override a specific DIPA Bank. Disabled by default, zero. If not zero, 1 - MR_BANKA, 2 - CT_BANKA, 3 - COP_BANKA.	0	255	0
08-0256	DIP Bank Bitmask	If DIP_Bank_Override is not zero, the specific DIP bank will be ignored, using this parameter as logical DIP bank.	0	255	0
08-0257	Discrete PI Timeout	Timeout in seconds to stop updating the discrete PI board. Discrete Board will timeout after 2 seconds and revert to default outputs.	0	255	0
08-0259	Jack Resync Day Of Week	Specifies what Day of the week (Monday-Sunday) to perform jack resync.	0	255	0

08-0267	Num Active Valves On Releveling	Sets the number of Valves/Soft Starters activated when the motion state is releveling. 0 means all valves shall be activated during releveling.	0	3	0
16-0849	SS OVT (F)	Used for the C4 serial soft starter. Sets the over temperature limit in degrees Fahrenheit counts.	176	302	config
16-0850	SS2 OVT (F)	Used for the C4 serial secondary soft starter. Sets the over temperature limit in degrees Fahrenheit counts.	176	302	config
16-0876	LockClipTime (10 ms)	Sets the debounce for lock and Gate switch open faults when the car is outside of door zone (see F163, F164, F165, F166, F167, F168, F169, F170). When set to zero, this timer defaults to 500ms. Requires system power cycle after changing to clear the "Need To Cycle Pwr" fault (F83/F717/F718).	1	50	50
16-0897	Soft Limit Distance Up (ft)	Sets the distance away from the top terminal floor that the car switches to inspection terminal speed (16-875) during manual operation	0	65535	2
16-0898	Soft Limit Distance Down (ft)	Sets the distance away from the bottom terminal floor that the car switches to inspection terminal speed (16-875) during manual operation	0	65535	2
16-0924	Module Time Violation (ms)	Any module that runs longer than this set value triggers an alarm	0	65535	0
16-0964	MED Valve Max Run Dist (in)	Sets the max run distance where medium valve speed run is selected. Longer run will use the next higher speed valve. When set to zero, the valve is disabled. Units are in inches.	0	65535	0
16-0965	LOW Valve Max Run Dist (in)	Sets the max run distance where low valve speed run is selected. Longer run will use the next higher speed valve. When set to zero, the valve is disabled. Units are in inches.	0	65535	0
16-0966	LEVEL Valve Max Run Dist (in)	Sets the max run distance where level valve speed run is allowed. Longer run will use the next higher speed valve. When set to	0	65535	6

		zero, the valve is disabled. Units are in inches.			
16-1041	Battery Board Test Time Start	Sets the start time for checking the battery lowering device daily for proper charge. When set to 00:00 or 0, the feature is disabled.	0	65535	0
16-1043	Jack Resync Time	Specifies the time in hour and minute the jack resync needs to be triggered. If 0 Jack Resync will be off.	0	65535	0
16-1044	Bypass GSW Check Distance	Distance from floor level in which GSW check is bypassed in manual doors. Units are in 0.019-inch counts.	0	65535	0
16-1045	Lockout Screen Code	This is the code required to enter to have access to the internal menu. When 0, the lockout feature is disabled.	0	9999	0
32-0007	Valves disable bitmap	The 32 bits are divided into 4 sets of 8 for each valve board, then each set is divided into 2 subsets of 4 for the High-Speed phase and the Leveling phase. Again, these are divided into the High-Speed valve and the Level Speed valve. Each Valve contains 2 bits, one for the corresponding Up direction, and the other for the Down direction. Assigning 0 to the bit will keep the normal behavior, while setting it to 1 will turn the valve off during the specified phase.	0	4294967295	0

24 MR Board Parameters

The table below lists the MR Board parameters.

Table 23: MR Board Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0124	IncreaseMRB SendRate	Doubles the minimum send rate of packets from the MRB processor to the reset of the car's main boards. This option is for test only and should remain OFF.	0	1	0
01-0126	ENA PreflightTest DIP	When set to ON, turning on MR board DIP 7B triggers a preflight check.	0	1	0

01-0137	ENA OldFRAM	When set to ON, the MR board is configured to work with old FRAM hardware.	0	1	0
01-0354	Enable Postflight Only	When enabled, the preflight is always done after the travel	0	1	0
16-0000 through 16-0007	MR IN (1-8)	Set the MR board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0392 through 16-0399	MR OUT (1-8)	Assign MR board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0

25 NTS Parameters

The table below lists the NTS parameters.

Table 24: NTS Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0063	DISA NTS Update	Disables updating of NTS points. Used for debugging purposes and should be turned on only to temporarily manually adjust NTS trip points.	0	1	0
01-0067	Invert NTS Stop	Changes machine room NTS output from active high to active low. This option is obsolete for newer hardware running CPLD v1.1 or CPLD 3.7 and newer. These versions of hardware should invert NTS via the MR SRU DIP B1 and should leave this parameter set to OFF.	0	1	config
01-0153	DISA NonTerminal NTS	When set to OFF, during an NTS trip, the car stops at the first door zone passed after reaching NTS speed. When set to ON, the car stops at its original destination.	0	1	1
01-0260	Hydro DISA NTS ALM	When set to ON, NTS trip alarms are suppressed.	0	1	0
08-0128	ETS Offset From NTS	Sets the position offset applied to the configured up slowdown positions when performing TSRD trip tests for the hydro controller.	0	255	10

08-0139	NTS Debounce	Sets the time the car must be exceeding one of the eight NTS trip points before an NTS trip is flagged (A1 to A64). Units are in 25 ms counts.	0	255	10

26 OOS Parameters

The table below lists the OOS parameters.

Table 25: OOS Parameters

Number	String	Description	Min Value	Max Value	Default Value
08-0254	Reset Service Code Nb of Trips	Number of hall call trips before asserting Reset Service Code	0	255	0
16-1042	Reset Service Code	Reset service code after number of HC trips exceeded	0	9999	0

27 Parking Parameters

The table below lists the Parking parameters.

Table 26: Parking Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0089	CustomMode ParkingEnabled	Configure custom mode to enable parking during test	0	1	0
01-0146	ENA DynamicParking	When set to ON, the parking floor is determined dynamically based on hall call history.	0	1	0
01-0213 through 01-0220	Dynamic Parking DO (1-8)	Sets the parking with door open option for the priority (1-8) dynamic parking landing, where priority 1 is the highest priority. If set to 0, the car will park with the doors closed.	0	1	0
01-0263	ENA Peak Dispatch	when set to ON, Enables the Remote Peak Parking dispatching inputs (Up/Down/Lobby peak)	0	1	0
01-0293	Enable Cycle Doors When Park	When parameter is set, and the door state is closed while parking, the door will open before closing	0	1	0
01-0315	Parking by Proximity	TBD	0	1	0
08-0113	Parking FLR	Sets the parking floor that is used if the parking timer (08-114) is nonzero and dynamic parking is off	0	255	0

		(01-146). This value is zero -based, so the bottom most floor is zero.			
08-0114	Parking Timer	Sets the time it takes before an idle car is parked. If set to zero, parking is disabled. Units are in seconds.	0	255	0
08-0215 through 08-0222	Dynamic Parking Landing (1-8) Plus 1	Sets the priority (1-8) dynamic parking landing, where priority 1 is the highest priority. If set to 0, this option is disabled.	0	255	0

28 Riser Board Parameters

The table below lists the Riser Board parameters.

Table 27: Riser Board Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0060	ENA Riser Alarms	Enables system alarms used to signal Riser board errors	0	1	0
16-0040 through 16-0047	RIS1 IN (1-8)	Set the Riser1 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0048 through 16-0055	RIS2 IN (1-8)	Set the Riser2 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0056 through 16-0063	RIS3 IN (1-8)	Set the Riser3 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0
16-0064 through 16-0071	RIS4 IN (1-8)	Set the Riser4 board input terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP INPUTS. Only two instances of each function are permitted. Inputs can also be inverted via SETUP | SETUP I/O | INVERT INPUTS.	0	65535	0

16-0432 through 16-0439	RIS1 OUT (1-8)	Set the Riser1 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0440 through 16-0447	RIS2 OUT (1-8)	Set the Riser2 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0448 through 16-0455	RIS3 OUT (1-8)	Set the Riser3 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0
16-0456 through 16-0463	RIS4 OUT (1-8)	Set the Riser4 board output terminal (1-8) functionality. Change via SETUP | SETUP I/O | SETUP OUTPUTS. Only two instances of each function are permitted.	0	65535	0

29 Sabbath Parameters

The table below lists the Sabbath parameters.

Table 28: Sabbath Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0139	Sabbath Key Only ENA	When set to ON, Sabbath operations are only activated by Keyswitch input.	0	1	0
01-0140	Sabbath KeyOrTimer ENA	When set to ON, Sabbath operation is activated by either Keyswitch input or configured Sabbath Start Time (24-193) and Sabbath End Time (24-194)	0	1	0
01-0141	Sabbath Timer Only ENA	When set to ON, Sabbath operation is activated only by the configured Sabbath Start Time (24-193) and Sabbath End Time (24-194).	0	1	0
01-0197	DISA Sabbath Releveling	When set to ON, releveling is disabled when on Sabbath operation.	0	1	0
01-0223	Sabbath Disable LWD	When set ON, sabbath mode neutralizes LWD.	0	1	0
01-0234	Sabbath ENA Ext Buzzer	When set to ON, the Sabbath closing buzzer on time, if enabled via the SabbathClosingBuzzer_100ms	0	1	0

		(08-0015), is extended from when the doors start to close to when the doors are fully closed.			
01-0242	Sabbath Nudge Doors	When set to ON, doors Nudge instead of close during Sabbath.	0	1	1
08-0015	Sabbath Closing Buzzer 100ms	Sets the amount of time before doors begin to close that the door close buzzer is turned ON during Sabbath Mode. This buzzer output remains on until doors are fully closed. If set to zero, this feature is disabled.	0	255	50
24-0193	Sabbath_ Start_ Time	Sets the Friday start time for Sabbath when timer enable is set. Format is HHMM, for example, 12:34 PM is 1234.	0	16777215	0
24-0194	Sabbath_ End_ Time	Sets the Saturday end time for Sabbath when timer enable is set. Format is HHMM, for example, 12:34 PM is 1234.	0	16777215	0
32-0023	Sabbath Up Destinations 0	Sets which floors to stop at during Sabbath up destinations 1-32.	0	4294967295	config
32-0024	Sabbath Up Destinations 1	Sets which floors to stop at during Sabbath up destinations 33-64.	0	4294967295	config
32-0025	Sabbath Up Destinations 2	Sets which floors to stop at during Sabbath up destinations 65-96.	0	4294967295	config
32-0026	Sabbath Down Destinations 0	Sets which floors to stop at during Sabbath down destinations 1-32.	0	4294967295	config
32-0027	Sabbath Down Destinations 1	Sets which floors to stop at during Sabbath down destinations 33-64.	0	4294967295	config
32-0028	Sabbath Down Destinations 2	Sets which floors to stop at during Sabbath down destinations 65-96.	0	4294967295	config
32-0036	Sabbath Front Opening 0	Floors 1 to 32 front openings when in Sabbath operation.	0	4294967295	config
32-0037	Sabbath Front Opening 1	Floors 33 to 64 front openings when in Sabbath operation.	0	4294967295	config
32-0038	Sabbath Front Opening 2	Floors 65 to 96 front openings when in Sabbath operation.	0	4294967295	config
32-0039	Sabbath Rear Opening 0	Floors 1 to 32 rear openings when in Sabbath operation.	0	4294967295	config
32-0040	Sabbath Rear Opening 1	Floors 33 to 64 rear openings when in Sabbath operation.	0	4294967295	config
32-0041	Sabbath Rear Opening 2	Floors 65 to 96 rear openings when in Sabbath operation.	0	4294967295	config

30 Security Parameters

The table below lists the Security parameters.

Table 29: Security Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0021	Enable CC Secured Alarms	When set to ON, if a pressed CCB is secured, the CCB Secured alarm will be asserted.	0	1	1
01-0065	Independent Srv. Byp. Security	Ignores car call security when on independent service	0	1	0
01-0086	Custom Mode IgnoreCar Call Security	Configure custom mode to ignore all security car calls during test	0	1	0
01-0087	Custom Mode IgnoreHall Call Security	Configure custom mode to ignore all security hall calls during test	0	1	0
01-0138	ENA Hall Security	Enables hall call security	0	1	0
01-0192	ENA Check In Floor	Enables Check In Security	0	1	0
01-0196	Access Code follows Time Security	When set to ON, floors that are secured by an Access Code will only require a code if the time is within the valid time set for Time Security. If an invalid time is set (as in no time is set or time frame is set up wrong), Access Code will be bypassed. When set to OFF, access code is always required regardless of time, for opening where they are configured.	0	1	0
01-0257	ENA Remote Security	When set to ON, remote monitoring systems can enable car call and hall call security at different openings.	0	1	0
01-0272	ENA HC SEC BY CAR	"When set to OFF, the hall call security configuration on the master car is applied to all group cars. On hall call button press, hall security is evaluated before the call is latched. Latched calls are not reassessed if the call is			ENA HC SEC BY CAR

		secured after it is latched. By default this option should be OFF.			
16-0928	Front Check In Security 0	Front door check in security for floors 1 to 16.	0	65535	0
16-0929	Front Check In Security 1	Front door check in security for floors 17 to 32.	0	65535	0
16-0930	Front Check In Security 2	Front door check in security for floors 33 to 48.	0	65535	0
16-0931	Front Check In Security 3	Front door check in security for floors 49 to 64.	0	65535	0
16-0932	Front Check In Security 4	Front door check in security for floors 65 to 80.	0	65535	0
16-0933	Front Check In Security 5	Front door check in security for floors 81 to 96.	0	65535	0
16-0934	Rear Check In Security 0	Rear door check in security for floors 1 to 16.	0	65535	0
16-0935	Rear Check In Security 1	Rear door check in security for floors 17 to 32.	0	65535	0
16-0936	Rear Check In Security 2	Rear door check in security for floors 33 to 48.	0	65535	0
16-0937	Rear Check In Security 3	Rear door check in security for floors 49 to 64.	0	65535	0
16-0938	Rear Check In Security 4	Rear door check in security for floors 65 to 80.	0	65535	0
16-0939	Rear Check In Security 5	Rear door check in security for floors 81 to 96.	0	65535	0
16-0940	Hall Secure Map F 0	Hall call security map for front openings. Turns on hall call security for front openings on group landings 1 to 16. Edit via SETUP | GROUP SETUP | HALL SECURITY MAP (F). Which hall board function ranges are affected by this mask is set by the Hall Security Mask (08-0208). This should be set the same on all group cars. If EnableHCSecurityByCar (01-0272) is ON, this parameter is car specific instead of shared group wide.	0	65535	config
16-0941	Hall Secure Map F 1	Hall call security map for front openings. Turns on hall call security for front openings on group landings 17 to 32. Edit via SETUP | GROUP SETUP | HALL SECURITY MAP (F). Which hall board function ranges are affected by this mask is set by the Hall Security Mask (08-0208).	0	65535	config

		This should be set the same on all group cars. If EnableHCSecurityByCar (01-0272) is ON, this parameter is car specific instead of shared group wide.			
16-0942	Hall Secure Map F 2	Hall call security map for front openings. Turns on hall call security for front openings on group landings 33 to 48. Edit via SETUP | GROUP SETUP | HALL SECURITY MAP (F). Which hall board function ranges are affected by this mask is set by the Hall Security Mask (08-0208). This should be set the same on all group cars. If EnableHCSecurityByCar (01-0272) is ON, this parameter is car specific instead of shared group wide.	0	65535	config
16-0943	Hall Secure Map F 3	Hall call security map for front openings. Turns on hall call security for front openings on group landings 49 to 64. Edit via SETUP | GROUP SETUP | HALL SECURITY MAP (F). Which hall board function ranges are affected by this mask is set by the Hall Security Mask (08-0208). This should be set the same on all group cars. If EnableHCSecurityByCar (01-0272) is ON, this parameter is car specific instead of shared group wide.	0	65535	config
16-0944	Hall Secure Map F 4	Hall call security map for front openings. Turns on hall call security for front openings on group landings 65 to 80. Edit via SETUP | GROUP SETUP | HALL SECURITY MAP (F). Which hall board function ranges are affected by this mask is set by the Hall Security Mask (08-0208). This should be set the same on all group cars. If EnableHCSecurityByCar (01-0272) is ON, this parameter is car specific instead of shared group wide.	0	65535	config

16-0945	Hall Secure Map F 5	Hall call security map for front openings. Turns on hall call security for front openings on group landings 81 to 96. Edit via SETUP | GROUP SETUP | HALL SECURITY MAP (F). Which hall board function ranges are affected by this mask is set by the Hall Security Mask (08-0208). This should be set the same on all group cars. If EnableHCSecurityByCar (01-0272) is ON, this parameter is car specific instead of shared group wide.	0	65535	config
16-0973	HC_Secure Timed BitmapF0	Hall call timed security map for front openings. Turns on hall call security for front openings on group landings 1 to 16	0	65535	0
16-0974	HC_Secure Timed BitmapF1	Hall call timed security map for front openings. Turns on hall call security for front openings on group landings 17 to 32	0	65535	0
16-0975	HC_Secure Timed BitmapF2	Hall call timed security map for front openings. Turns on hall call security for front openings on group landings 33 to 48	0	65535	0
16-0976	HC_Secure Timed BitmapF3	Hall call timed security map for front openings. Turns on hall call security for front openings on group landings 49 to 64	0	65535	0
16-0977	HC_Secure Timed BitmapF4	Hall call timed security map for front openings. Turns on hall call security for front openings on group landings 65 to 80	0	65535	0
16-0978	HC_Secure Timed BitmapF5	Hall call timed security map for front openings. Turns on hall call security for front openings on group landings 81 to 96	0	65535	0
16-0979	Weekday Start Time for Timed HC Security	Sets the Weekday Start Time for Timed Hall call Security.	0	65535	0
16-0980	Weekday End Time for Timed HC Security	Sets the Weekday End Time for Timed Hall Call Security.	0	65535	0
16-0981	Weekend Start Time for Timed HC Security	Sets the Weekend Start Time for Timed Hall Call Security.	0	65535	0

16-0982	Weekend End Time for Timed HC Security	Sets the Weekend End Time for Timed Hall Call Security.	0	65535	0
16-0999	Weekday Start Time for Timed CC Security	Sets the Weekday Start Time for Timed Car Call Security.	0	65535	0
16-1000	Weekday End Time for Timed CC Security	Sets the Weekday End Time for Timed Car Call Security.	0	65535	0
16-1001	Weekend Start Time for Timed CC Security	Sets the Weekend Start Time for Timed Car Call Security.	0	65535	0
16-1002	Weekend End Time for Timed CC Security	Sets the Weekend End Time for Timed Car Call Security.	0	65535	0
16-1010	HC_Secure Timed BitmapR0	Hall call timed security map for rear openings. Turns on hall call security for rear openings on group landings 1 to 16	0	65535	0
16-1011	HC_Secure Timed BitmapR1	Hall call timed security map for rear openings. Turns on hall call security for rear openings on group landings 17 to 32	0	65535	0
16-1012	HC_Secure Timed BitmapR2	Hall call timed security map for rear openings. Turns on hall call security for rear openings on group landings 33 to 48	0	65535	0
16-1013	HC_Secure Timed BitmapR3	Hall call timed security map for rear openings. Turns on hall call security for rear openingson group landings 49 to 64	0	65535	0
16-1014	HC_Secure Timed BitmapR4	Hall call timed security map for rear openings. Turns on hall call security for rear openings on group landings 65 to 80	0	65535	0
16-1015	HC_Secure Timed BitmapR5	Hall call timed security map for rear openings. Turns on hall call security for rear openings on group landings 81 to 96	0	65535	0
16-1035	Hall Secure Map R 0	Hall call security map for rear openings. Turns on hall call security for rear openings on group landings 1 to 16. Edit via SETUP | GROUP SETUP | HALL SECURITY MAP (R). Which hall	0	65535	config

		board function ranges are affected by this mask is set by the Hall Security Mask (08-0208). This should be set the same on all group cars. If EnableHCSecurityByCar (01-0272) is ON, this parameter is car specific instead of shared group wide.			
16-1036	Hall Secure Map R 1	Hall call security map for rear openings. Turns on hall call security for rear openings on group landings 17 to 32. Edit via SETUP | GROUP SETUP | HALL SECURITY MAP (R). Which hall board function ranges are affected by this mask is set by the Hall Security Mask (08-0208). This should be set the same on all group cars. If EnableHCSecurityByCar (01-0272) is ON, this parameter is car specific instead of shared group wide.	0	65535	config
16-1037	Hall Secure Map R 2	Hall call security map for rear openings. Turns on hall call security for rear openings on group landings 33 to 48. Edit via SETUP | GROUP SETUP | HALL SECURITY MAP (R). Which hall board function ranges are affected by this mask is set by the Hall Security Mask (08-0208). This should be set the same on all group cars. If EnableHCSecurityByCar (01-0272) is ON, this parameter is car specific instead of shared group wide.	0	65535	config
16-1038	Hall Secure Map R 3	Hall call security map for rear openings. Turns on hall call security for rear openings on group landings 49 to 64. Edit via SETUP | GROUP SETUP | HALL SECURITY MAP (R). Which hall board function ranges are affected by this mask is set by the Hall Security Mask (08-0208). This should be set the same on all group cars. If EnableHCSecurityByCar (01-	0	65535	config

		0272) is ON, this parameter is car specific instead of shared group wide.			
16-1039	Hall Secure Map R 4	Hall call security map for rear openings. Turns on hall call security for rear openings on group landings 65 to 80. Edit via SETUP | GROUP SETUP | HALL SECURITY MAP (R). Which hall board function ranges are affected by this mask is set by the Hall Security Mask (08-0208). This should be set the same on all group cars. If EnableHCSecurityByCar (01-0272) is ON, this parameter is car specific instead of shared group wide.	0	65535	config
16-1040	Hall Secure Map R 5	Hall call security map for rear openings. Turns on hall call security for rear openings on group landings 81 to 96. Edit via SETUP | GROUP SETUP | HALL SECURITY MAP (R). Which hall board function ranges are affected by this mask is set by the Hall Security Mask (08-0208). This should be set the same on all group cars. If EnableHCSecurityByCar (01-0272) is ON, this parameter is car specific instead of shared group wide.	0	65535	config
24-0195	Job ID	N/A	0	16777215	config
24-0196	Payment Passcode	N/A	0	16777215	0
32-0008	Front Security Map 0	Front door car call security map for floors 1 to 32. Edit via SETUP | FLOORS | SECURITY (F).	0	4294967295	Job Specific
32-0009	Front Security Map 1	Front door car call security map for floors 33 to 64. Edit via SETUP | FLOORS | SECURITY (F).	0	4294967295	config
32-0010	Front Security Map 2	Front door car call security map for floors 65 to 96. Edit via SETUP | FLOORS | SECURITY (F).	0	4294967295	config
32-0012	Rear Security Map 0	Rear door car call security map for floors 1 to 32. Edit via SETUP | FLOORS | SECURITY (R).	0	4294967295	config
32-0013	Rear Security Map 1	Rear door car call security map for floors 33 to 64. Edit via SETUP | FLOORS | SECURITY (R).	0	4294967295	config

32-0014	Rear Security Map 2	Rear door car call security map for floors 65 to 96. Edit via SETUP | FLOORS | SECURITY (R).	0	4294967295	config
32-0016	Secure Timed BitmapF 0	Front door car call timed security map for floors 1 to 32. Edit via SETUP | FLOORS | Timed CC security | Enable Floor (F)	0	4294967295	config
32-0017	Secure Timed BitmapF 1	Front door car call timed security map for floors 33 to 64. Edit via SETUP | FLOORS | Timed CC security | Enable Floor (F)	0	4294967295	config
32-0018	Secure Timed BitmapF 2	Front door car call timed security map for floors 65 to 96. Edit via SETUP | FLOORS | Timed CC security | Enable Floor (F)	0	4294967295	config
32-0020	Secure Timed BitmapR 0	Rear door car call timed security map for floors 1 to 32. Edit via SETUP | FLOORS | Timed CC security | Enable Floor (R)	0	4294967295	config
32-0021	Secure Timed BitmapR 1	Rear door car call timed security map for floors 33 to 64. Edit via SETUP | FLOORS | Timed CC security | Enable Floor (R)	0	4294967295	config
32-0022	Secure Timed BitmapR 2	Rear door car call timed security map for floors 65 to 96. Edit via SETUP | FLOORS | Timed CC security | Enable Floor (R)	0	4294967295	config

31 Speed Parameters

The table below lists the Speed parameters.

Table 30: Speed Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0073	DISA Construction OVSP	Disables the construction overspeed fault (F255)	0	1	1
01-0253	Learn_ Slowdowns	When set to ON, putting the car on learn by turning ON MR DIP A5 will prepare the car for a slowdown learn, instead of the usual hoistway learn. Holding down the MR UP or MR DOWN button until contract speed is reached will cause the car to capture its slowdown points. This process needs to be performed in both the up and down directions.	0	1	0

01-0283	Bypass Term Ignores Term Spd	When set to ON, while on Inspection, if Bypass Term Limit is turned ON, as the car approaches the soft limit distance of either terminal, terminal spd will be ignored and the controller will continue to command the inspection speed.	0	1	1
01-0301	Enable Adaptive Slowdown Learning	Turn on to adjust the slowdown distances to achieve a target leveling time. (08-0263) - Slowdown_TargetLevelTime _100ms	0	1	0
01-0302	Enable Hydro Movement Test	Enable a test to detect zero movement when a movement valve is active. "Speed Dev" F9 when detected and car should be moving.	0	1	1
08-0136	General OVSP Debounce Limit	Sets the time the car must be in a general overspeed state before a fault (F64) is flagged. The units are in 10 ms counts.	0	255	10
08-0159	Construction OVSP Debounce	Sets the time the car must be in a construction overspeed state before a fault (F255) is flagged. The units are in 10 ms counts.	0	100	10
08-0225	EQ Hoistway Scan Speed	Sets the speed used during EQ Hoistway Scan.	10	150	75
08-0226	SS Ramp Up Time 100ms	Used for the C4 serial soft starter. Sets the time to ramp up to V-Max.	0	250	config
08-0263	Target Leveling Time	Target Leveling time for Adaptive Slowdown operation [01-0301 (Enable_AdaptiveSlowdown)]. 0.1 second increments. Default 2 seconds if not set.	0	255	20
16-0864	Acceptance Buffer SPD	Sets the car speed for buffer acceptance testing. For Car buffer acceptance test in Hydro if this speed is equal to contract speed, the car will run with high valves active and if this speed is anything less than contact speed the car will run with level valve active.	0	65535	config
16-0872	Contract SPD	This sets the estimated max speed of the car when running with the high-speed valve. Requires system power cycle after changing to clear the "Need To Cycle Pwr" fault (F83/F717/F718).	10	1600	config
16-0873	Inspection SPD	Sets the speed used when in inspection mode, but not in access	0	150	50

		mode. The controller faults if this is higher than 150 fpm.			
16-0903	SPD Dev Timeout (10 ms)	Used to detect non-movement when a Valve is open. Set to 2-5.	0	65535	300
16-0908	Leveling SPD	Sets the speed used in automatic operation when leveling into a floor. If leveling distance is zero, the leveling speed has no effect. This sets the estimated max speed the car will run at when the car is running with the leveling or releveling.	1	20	5
16-0967	Speed1_ THOLD_fpm	Sets the speed threshold above which the Speed1_SlowdownDist_05mm is used. The positioning system speed feedback is used for this comparison. Units are in feet per minute. Speed1_THOLD_fpm should be the highest speed, with Speed2_THOLD_fpm through Speed6_THOLD_fpm should be decreasing in value. Recommended defaults = (ContractSpeed / 7) * (7 - #)). Where # is the value found in, Speed#_THOLD_fpm. Setting the value to zero will disable this feature.	0	65535	config
16-0968	Speed2_ THOLD_fpm	Sets the speed threshold above which the Speed2_SlowdownDist_05mm is used. The positioning system speed feedback is used for this comparison. Units are in feet per minute. Speed1_THOLD_fpm should be the highest speed, with Speed2_THOLD_fpm through Speed6_THOLD_fpm should be decreasing in value. Recommended defaults = (ContractSpeed / 7) * (7 - #)). Where # is the value found in, Speed#_THOLD_fpm. Setting the value to zero will disable this feature.	0	65535	config
16-0969	Speed3_ THOLD_fpm	Sets the speed threshold above which the Speed3_SlowdownDist_05mm is used. The positioning system speed feedback is used for this comparison. Units are in feet per	0	65535	config

		minute. Speed1_THOLD_fpm should be the highest speed, with Speed2_THOLD_fpm through Speed6_THOLD_fpm should be decreasing in value. Recommended defaults = (Contract Speed / 7) * (7 - #)). Where # is the value found in, Speed#_THOLD_fpm. Setting the value to zero will disable this feature.			
16-0970	Speed4_ THOLD_fpm	Sets the speed threshold above which the Speed4_SlowdownDist_05mm is used. The positioning system speed feedback is used for this comparison. Units are in feet per minute. Speed1_THOLD_fpm should be the highest speed, with Speed2_THOLD_fpm through Speed6_THOLD_fpm should be decreasing in value. Recommended defaults = (ContractSpeed / 7) * (7 - #)). Where # is the value found in, Speed#_THOLD_fpm. Setting the value to zero will disable this feature.	0	65535	config
16-0971	Speed5_ THOLD_fpm	Sets the speed threshold above which the Speed5_SlowdownDist_05mm is used. The positioning system speed feedback is used for this comparison. Units are in feet per minute. Speed1_THOLD_fpm should be the highest speed, with Speed2_THOLD_fpm through Speed6_THOLD_fpm should be decreasing in value. Recommended defaults = (ContractSpeed / 7) * (7 - #)). Where # is the value found in, Speed#_THOLD_fpm. Setting the value to zero will disable this feature.	0	65535	config
16-0972	Speed6_ THOLD_fpm	Sets the speed threshold above which the Speed6_SlowdownDist_05mm is used. The positioning system speed feedback is used for this comparison. Units are in feet per minute. Speed1_THOLD_fpm should be the highest speed, with Speed2_THOLD_fpm through	0	65535	config

		Speed6_THOLD_fpm should be decreasing in value. Recommended defaults = (ContractSpeed / 7) * (7 - #)). Where # is the value found in, Speed#_THOLD_fpm. Setting the value to zero will disable this feature.			
16-1003	Speed1_ Slowdown Dist_ UP_05mm	Sets the distance from its destination where the car must cut its high-speed valves when moving at a speed above the Speed1_THOLD_fpm. This distance applies when the car is moving in the up direction. Units are in 0.5 mm counts.	0	65535	3098
16-1004	Speed2_ Slowdown Dist_ UP_05mm	Sets the distance from its destination where the car must cut its high-speed valves when moving at a speed above the Speed2_THOLD_fpm. This distance applies when the car is moving in the up direction. Units are in 0.5 mm counts.	0	65535	3098
16-1005	Speed3_ Slowdown Dist_ UP_05mm	Sets the distance from its destination where the car must cut its high-speed valves when moving at a speed above the Speed3_THOLD_fpm. This distance applies when the car is moving in the up direction. Units are in 0.5 mm counts.	0	65535	3098
16-1006	Speed4_ Slowdown Dist_ UP_05mm	Sets the distance from its destination where the car must cut its high-speed valves when moving at a speed above the Speed4_THOLD_fpm. This distance applies when the car is moving in the up direction. Units are in 0.5 mm counts.	0	65535	3098
16-1007	Speed5_ Slowdown Dist_ UP_05mm	Sets the distance from its destination where the car must cut its high-speed valves when moving at a speed above the Speed5_THOLD_fpm. This distance applies when the car is moving in the up direction. Units are in 0.5 mm counts.	0	65535	3098
16-1008	Speed6_ Slowdown Dist_ UP_05mm	Sets the distance from its destination where the car must cut its high-speed valves when moving at a speed above the	0	65535	3098

		Speed6_THOLD_fpm. This distance applies when the car is moving in the up direction. Units are in 0.5 mm counts.			
16-1009	Speed7_ Slowdown Dist_ UP_05mm	Sets the distance from its destination where the car must cut its high-speed valves when moving at a speed above the Speed7_THOLD_fpm. This distance applies when the car is moving in the up direction. Units are in 0.5 mm counts.	0	65535	3098
16-1019	Speed1_ Slowdown Dist_ DN_05mm	Sets the distance from its destination where the car must cut its high-speed valves when moving at a speed above the Speed1_THOLD_fpm. This distance applies when the car is moving in the down direction. Units are in 0.5 mm counts.	0	65535	3098
16-1020	Speed2_ Slowdown Dist_ DN_05mm	Sets the distance from its destination where the car must cut its high-speed valves when moving at a speed above the Speed2_THOLD_fpm. This distance applies when the car is moving in the down direction. Units are in 0.5 mm counts.	0	65535	3098
16-1021	Speed3_ Slowdown Dist_ DN_05mm	Sets the distance from its destination where the car must cut its high-speed valves when moving at a speed above the Speed3_THOLD_fpm. This distance applies when the car is moving in the down direction. Units are in 0.5 mm counts.	0	65535	3098
16-1022	Speed4_ Slowdown Dist_ DN_05mm	Sets the distance from its destination where the car must cut its high-speed valves when moving at a speed above the Speed4_THOLD_fpm. This distance applies when the car is moving in the down direction. Units are in 0.5 mm counts.	0	65535	3098
16-1023	Speed5_ Slowdown Dist_ DN_05mm	Sets the distance from its destination where the car must cut its high-speed valves when moving at a speed above the Speed5_THOLD_fpm. This distance applies when the car is	0	65535	3098

		moving in the down direction. Units are in 0.5 mm counts.			
16-1024	Speed6_ Slowdown Dist_ DN_05mm	Sets the distance from its destination where the car must cut its high-speed valves when moving at a speed above the Speed6_THOLD_fpm. This distance applies when the car is moving in the down direction. Units are in 0.5 mm counts.	0	65535	3098
16-1025	Speed7_ Slowdown Dist_ DN_05mm	Sets the distance from its destination where the car must cut its high-speed valves when moving at a speed above the Speed7_THOLD_fpm. This distance applies when the car is moving in the down direction. Units are in 0.5 mm counts.	0	65535	3098
16-1018	Slowdown Factor Up	Slowdown factor used to generate UP slowdown distances for the speed thresholds. Distance = (Speed_Threshold_fps * factor) / 10	0	1500	50
16-1034	Slowdown Factor Down	Slowdown factor used to generate DOWN slowdown distances for the speed thresholds. Distance = (Speed_Threshold_fps * factor) / 10	0	1500	50

32 Swing Mode Parameters

The table below lists the Swing Mode parameters.

Table 31: Swing Mode Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0082	Swing Calls ENA	Allows swing calls to activate swing operation	0	1	1
01-0083	Swing Stay In Group	When set to ON, the car stays in group during swing operation	0	1	0
01-0291	Answer Swing Calls on Normal	Answer swing calls when car is on Normal	0	1	0
08-0161	Swing IdleTime 1s	If Swing mode is entered by a button press, this timer specifies how long to remain in Swing operation once the car is idle.	0	255	10
16-0946	Swing Door Opening F 0	Set which front openings are manual swing hall doors for landing 1-16. When each bit is set ON, and when "Door Type Select Front" (08-0012) is set to SWING (3). When a	0	65535	config

		bit is OFF, that opening is assumed to have automatic hall doors.			
16-0947	Swing Door Opening F 1	Set which front openings are manual swing hall doors for landing 17-32. When each bit is set ON, and when "Door Type Select Front" (08-0012) is set to SWING (3). When a bit is OFF, that opening is assumed to have automatic hall doors.	0	65535	config
16-0948	Swing Door Opening F 2	Set which front openings are manual swing hall doors for landing 33-48. When each bit is set ON, and when "Door Type Select Front" (08-0012) is set to SWING (3). When a bit is OFF, that opening is assumed to have automatic hall doors.	0	65535	config
16-0949	Swing Door Opening F 3	Set which front openings are manual swing hall doors for landing 49-64. When each bit is set ON, and when "Door Type Select Front" (08-0012) is set to SWING (3). When a bit is OFF, that opening is assumed to have automatic hall doors.	0	65535	config
16-0950	Swing Door Opening F 4	Set which front openings are manual swing hall doors for landing 65-80. When each bit is set ON, and when "Door Type Select Front" (08-0012) is set to SWING (3). When a bit is OFF, that opening is assumed to have automatic hall doors.	0	65535	config
16-0951	Swing Door Opening F 5	Set which front openings are manual swing hall doors for landing 81-96. When each bit is set ON, and when "Door Type Select Front" (08-0012) is set to SWING (3). When a bit is OFF, that opening is assumed to have automatic hall doors.	0	65535	config
16-0952	Swing Door Opening R 0	Set which rear openings are manual swing hall doors for landing 1-16. When each bit is set ON, and when "Door Type Select Reart" (08-0013) is set to SWING (3). When a bit is OFF, that opening is assumed to have automatic hall doors.	0	65535	config
16-0953	Swing Door Opening R 1	Set which rear openings are manual swing hall doors for landing 17-32.	0	65535	config

		When each bit is set ON, and when "Door Type Select Reart" (08-0013) is set to SWING (3). When a bit is OFF, that opening is assumed to have automatic hall doors.			
16-0954	Swing Door Opening R 2	Set which rear openings are manual swing hall doors for landing 33-48. When each bit is set ON, and when "Door Type Select Reart" (08-0013) is set to SWING (3). When a bit is OFF, that opening is assumed to have automatic hall doors.	0	65535	config
16-0955	Swing Door Opening R 3	Set which rear openings are manual swing hall doors for landing 49-64. When each bit is set ON, and when "Door Type Select Reart" (08-0013) is set to SWING (3). When a bit is OFF, that opening is assumed to have automatic hall doors.	0	65535	config
16-0956	Swing Door Opening R 4	Set which rear openings are manual swing hall doors for landing 65-80. When each bit is set ON, and when "Door Type Select Reart" (08-0013) is set to SWING (3). When a bit is OFF, that opening is assumed to have automatic hall doors.	0	65535	config
16-0957	Swing Door Opening R 5	Set which rear openings are manual swing hall doors for landing 81-96. When each bit is set ON, and when "Door Type Select Reart" (08-0013) is set to SWING (3). When a bit is OFF, that opening is assumed to have automatic hall doors.	0	65535	config

33 XREG Parameters

The table below lists the XREG parameters.

Table 32: XREG Parameters

Number	String	Description	Min Value	Max Value	Default Value
01-0167	XREG ENA In Motion Assignment	When set to ON, XREG assignments can be made even when the car reports it is in motion. This can help increase XREG car utilization and compensate for errors seen when the intended XREG car does not take the assigned call.	0	1	1

01-0168	XREG Priority From Arrival Dir	When set to ON, XREG car's direction priority are read from their last arrival lantern signal. If set to OFF, direction priority is up for even car numbers and down for odd car numbers.	0	1	0
08-0167	Attendant Dispatch Timeout (1s)	Sets the time the car has to respond to a destination assignment when on attendant service before it temporarily removes itself from group and the call is be reassigned. This prevents excessive delays in answering hall calls due to someone holding open the car door. If either the dispatch timeout (08-175) or dispatch offline (08-176) are set to zero, this feature is disabled. Units are in 1 second counts.	10	255	60
08-0175	Dispatch Timeout 1s	Sets the time the car has to respond to a destination assignment before it temporarily removes itself from group and the call is be reassigned. This prevents excessive delays in answering hall calls due to someone holding open the car door. If either the dispatch timeout (08-175) or dispatch offline (08-176) are set to zero, this feature is disabled. Units are in 1 second counts.	10	255	30
08-0176	Dispatch Offline 1s	Sets the time the car removes itself from the group after failing to take an assigned call. If either the dispatch timeout (08-175) or dispatch offline (08-176) are set to zero, this feature is disabled. Units are in 1 second counts.	0	255	10
08-0177	NumX RegCars	When set to zero, disables XREG (cross registration or alien) car dispatching. When set to nonzero, enables XREG dispatching.	0	8	0
08-0192	XREG Dest. Timeout (10s)	When nonzero, if an assigned XREG destination has not been cleared for the XREG Dest. Timeout (10s), the car is removed from group for the time set by XREG Dest. Offline (10s).	0	255	15
08-0193	XREG Dest. Offline (10s)	When nonzero, if an assigned XREG destination has not been cleared for the XREG Dest. Timeout (10s), the	0	255	3

		car is removed from group for the time set by XREG Dest. Offline (10s).			
08-0234	XREG RecallDelay	The estimated time an alien cross registration car will take to move to the recall floor on emergency power. Value is in 1 second counts.	0	255	30

Appendix – Conversion Chart

The table below provides decimal, hexadecimal, and binary equivalents.

Table 33: Conversion Chart

DEC	HEX	BIN	DEC	HEX	BIN
1	01	00000001	**44**	2C	00101100
2	02	00000010	**45**	2D	00101101
3	03	00000011	**46**	2E	00101110
4	04	00000100	**47**	2F	00101111
5	05	00000101	**48**	30	00110000
6	06	00000110	**49**	31	00110001
7	07	00000111	**50**	32	00110010
8	08	00001000	**51**	33	00110011
9	09	00001001	**52**	34	00110100
10	0A	00001010	**53**	35	00110101
11	0B	00001011	**54**	36	00110110
12	0C	00001100	**55**	37	00110111
13	0D	00001101	**56**	38	00111000
14	0E	00001110	**57**	39	00111001
15	0F	00001111	**58**	3A	00111010
16	10	00010000	**59**	3B	00111011
17	11	00010001	**60**	3C	00111100
18	12	00010010	**61**	3D	00111101
19	13	00010011	**62**	3E	00111110
20	14	00010100	**63**	3F	00111111
21	15	00010101	**64**	40	01000000
22	16	00010110	**65**	41	01000001
23	17	00010111	**66**	42	01000010
24	18	00011000	**67**	43	01000011
25	19	00011001	**68**	44	01000100
26	1A	00011010	**69**	45	01000101
27	1B	00011011	**70**	46	01000110
28	1C	00011100	**71**	47	01000111
29	1D	00011101	**72**	48	01001000
30	1E	00011110	**73**	49	01001001
31	1F	00011111	**74**	4A	01001010
32	20	00100000	**75**	4B	01001011
33	21	00100001	**76**	4C	01001100
34	22	00100010	**77**	4D	01001101
35	23	00100011	**78**	4E	01001110
36	24	00100100	**79**	4F	01001111
37	25	00100101	**80**	50	01010000
38	26	00100110	**81**	51	01010001
39	27	00100111	**82**	52	01010010
40	28	00101000	**83**	53	01010011
41	29	00101001	**84**	54	01010100
42	2A	00101010	**85**	55	01010101
43	2B	00101011	**86**	56	01010110

87	57	01010111	**136**	88	10001000
88	58	01011000	**137**	89	10001001
89	59	01011001	**138**	8A	10001010
90	5A	01011010	**139**	8B	10001011
91	5B	01011011	**140**	8C	10001100
92	5C	01011100	**141**	8D	10001101
93	5D	01011101	**142**	8E	10001110
94	5E	01011110	**143**	8F	10001111
95	5F	01011111	**144**	90	10010000
96	60	01100000	**145**	91	10010001
97	61	01100001	**146**	92	10010010
98	62	01100010	**147**	93	10010011
99	63	01100011	**148**	94	10010100
100	64	01100100	**149**	95	10010101
101	65	01100101	**150**	96	10010110
102	66	01100110	**151**	97	10010111
103	67	01100111	**152**	98	10011000
104	68	01101000	**153**	99	10011001
105	69	01101001	**154**	9A	10011010
106	6A	01101010	**155**	9B	10011011
107	6B	01101011	**156**	9C	10011100
108	6C	01101100	**157**	9D	10011101
109	6D	01101101	**158**	9E	10011110
110	6E	01101110	**159**	9F	10011111
111	6F	01101111	**160**	A0	10100000
112	70	01110000	**161**	A1	10100001
113	71	01110001	**162**	A2	10100010
114	72	01110010	**163**	A3	10100011
115	73	01110011	**164**	A4	10100100
116	74	01110100	**165**	A5	10100101
117	75	01110101	**166**	A6	10100110
118	76	01110110	**167**	A7	10100111
119	77	01110111	**168**	A8	10101000
120	78	01111000	**169**	A9	10101001
121	79	01111001	**170**	AA	10101010
122	7A	01111010	**171**	AB	10101011
123	7B	01111011	**172**	AC	10101100
124	7C	01111100	**173**	AD	10101101
125	7D	01111101	**174**	AE	10101110
126	7E	01111110	**175**	AF	10101111
127	7F	01111111	**176**	B0	10110000
128	80	10000000	**177**	B1	10110001
129	81	10000001	**178**	B2	10110010
130	82	10000010	**179**	B3	10110011
131	83	10000011	**180**	B4	10110100
132	84	10000100	**181**	B5	10110101
133	85	10000101	**182**	B6	10110110
134	86	10000110	**183**	B7	10110111
135	87	10000111	**184**	B8	10111000

185	B9	10111001	**228**	E4	11100100
186	BA	10111010	**229**	E5	11100101
187	BB	10111011	**230**	E6	11100110
188	BC	10111100	**231**	E7	11100111
189	BD	10111101	**232**	E8	11101000
190	BE	10111110	**233**	E9	11101001
191	BF	10111111	**234**	EA	11101010
192	C0	11000000	**235**	EB	11101011
193	C1	11000001	**236**	EC	11101100
194	C2	11000010	**237**	ED	11101101
195	C3	11000011	**238**	EE	11101110
196	C4	11000100	**239**	EF	11101111
197	C5	11000101	**240**	F0	11110000
198	C6	11000110	**241**	F1	11110001
199	C7	11000111	**242**	F2	11110010
200	C8	11001000	**243**	F3	11110011
201	C9	11001001	**244**	F4	11110100
202	CA	11001010	**245**	F5	11110101
203	CB	11001011	**246**	F6	11110110
204	CC	11001100	**247**	F7	11110111
205	CD	11001101	**248**	F8	11111000
206	CE	11001110	**249**	F9	11111001
207	CF	11001111	**250**	FA	11111010
208	D0	11010000	**251**	FB	11111011
209	D1	11010001	**252**	FC	11111100
210	D2	11010010	**253**	FD	11111101
211	D3	11010011	**254**	FE	11111110
212	D4	11010100	**255**	FF	11111111
213	D5	11010101			
214	D6	11010110			
215	D7	11010111			
216	D8	11011000			
217	D9	11011001			
218	DA	11011010			
219	DB	11011011			
220	DC	11011100			
221	DD	11011101			
222	DE	11011110			
223	DF	11011111			
224	E0	11100000			
225	E1	11100001			
226	E2	11100010			
227	E3	11100011			