



SECTION 8 - CONTROL STATUS WORD BIT COMMANDS (CAR)	2
CSW Car (Control Status Word 0)	3
CS1 Car (Control Status Word 1)	4
CS2 Car (Control Status Word 2)	5
CS3 Car (Control Status Word 3)	6
CS4 Car (Control Status Word 4)	7
CS5 Car (Control Status Word 5)	8
CS6 Car (Control Status Word 6)	9
CS7 Car (Control Status Word 7)	10
CS8 Car (Control Status Word 8)	11
CS9 Car (Control Status Word 9)	12
CS10 Car (Control Status Word 10)	13
CS11 Car (Control Status Word 11)	14
CS12 Car (Control Status Word 12)	15
CS13 Car (Control Status Word 13)	16
NOTES	17



SECTION 8 - CONTROL STATUS WORD BIT COMMANDS (CAR)

The **FUTURA™** operating system provides Control Status Words for customizing the operation of the elevator. An example would be the ability to enable or disable pre-opening of the doors. Each Control Status Word is made up of 16 bits labeled 0-15. Each bit controls a specific operation of the elevator or one of its devices. Each bit can be set (1) or reset (0) and the operation which each bit controls is affected by the state (set or reset) of the bit.

The following command <BIT> is used to set or reset the individual control flags (bits) of the control status word parameters. Each bit of a control status word is used to activate or deactivate a particular service or function. These control status words are found both in the individual car controllers and in the group controller.

- ✓ Set designates that a bit is a logic 1 (True).
- ✓ Reset designates that a bit is a logic 0 (False).
- ✓ There are 16 bits per control status word, referenced 0-15
- ✓ Control status words (CAR) available: CSW (CS0), CS1, CS2, CS3, CS4, CS5, CS6, CS7, CS8.

Note: *The number of Control Status Words used on a particular job depends on the job itself. Your particular job may not contain all the Control Status Words.*

<COMMAND>	FUNCTION
BITRx,n <ENTER ↵>	Resets bit n of Csx (where x = 0-8, n = 0-15).
BITSx,n, <ENTER ↵>	Sets bit n of Csx (where x = 0-8, n = 0-15).
BITD <ENTER ↵>	Displays the current bit status of all control status words in tabular form.

Table A



CSW Car (Control Status Word 0)

BIT	AFFECT	DEFAULT	DESCRIPTION
0	EDS	R	When set, prevents Emergency Dispatching (EDS parameter) from enabling when a Dispatch Loss occurs, even if EDS is activated.
1	DPP	S	When set, permits presetting the Digital Position Pulse (DPP) at start sequence. Note: must always be set in normal operation.
2	DRIVE	S	When set, permits Fault Reset of an internal Drive Fault after car stops.
3			Not valid on FUTURA™ HYDRO.
4	CALL	S	Dumps all calls after consecutive car calls answered per Car Call Dump (CCD parameter) number order with no Electronic Eye (EE device) break.
5			Not valid on FUTURA™ HYDRO.
6	DOOR	R	Set to allow doors to reverse before reaching Door Open Limit (DOL input): Presently used only with an extra Door Reversal Limit (DLR input) switch.
7	LOBBY	R	When set, car will return to lobby floor after the last call (Lobby Recall).
8	EMP	R	During Manual Emergency power selection, setting this bit causes the car NOT to recall to the main floor if car loses communication with the dispatcher.
9	IND	R	When set and on Independent Service mode, calls are accepted only when the doors are closed.
10	IND	R	When set and on Independent Service mode, car calls are canceled when a slowdown is initiated.
11	DRIVE	R	When set, if drive switch input is deactivated, car will be returned to the main lobby floor and no calls will be accepted.
12	DRIVE	R	When set, doors remain open when drive switch is deactivated. (No effect on FUTURA™ HYDRO)
13	DOOR	R	When set and on Independent Service, the doors will close automatically when a car call is registered.
14	GONG	R	When set, no double gong occurs with the down hall lantern.
15			Not valid on FUTURA™ HYDRO.

Table B



CS1 Car (Control Status Word 1)

BIT	AFFECT	DEFAULT	DESCRIPTION
0			Not valid on <i>FUTURA™ HYDRO</i> .
1			Not valid on <i>FUTURA™ HYDRO</i> .
2	DOOR	S	When set, pre-opening is disabled for the rear door operation.
3	DOOR	R	When set, rear door pre-opening will occur at the 2" (5cm) leveling zone.
4	DOOR	S	When set, pre-opening is disabled for the front door operation.
5	DOOR	R	When set, front door pre-opening will occur at the 2" (5 cm) leveling zone.
6	HOMING	R	When set, all calls are answered. When reset, calls are canceled immediately if a homing recall occurs.
7	DOOR	R	When set, rear door operation disabled. (Similar to door disconnect switch.)
8	FIRE	R	When set, the fire buzzer is pulsed.
9	FIRE	R	When set, the fire emergency light is pulsed.
10	FIRE	R	When set, the stop switch is not bypassed. When reset, it is bypassed according to bit 11.
11	FIRE	R	When set, is bypassed all the time. When reset, the stop switch is bypassed according to ANSI code standard.
12	FIRE	R	When set and on Fire Phase II, the doors will open automatically when the car returns to the designated floor. If reset, the fireman must open doors.
13	FIRE	R	When set, the in-car Fire Service light also operates during Phase II.
14	FIRE	R	When set, the doors will close when a car call is registered. If reset the door must be closed with the Door Close Button (DCB input).
15	FIRE	R	If set, car is not a designated car. If reset, car is a designated car: Under Fire Phase II (New York City only)

Table C



CS2 Car (Control Status Word 2)

BIT	AFFECT	DEFAULT	DESCRIPTION
0	DOOR	R	If set, wait for the generator to be running before opening the doors.
1	DOOR	R	If set, pressing the Door Close Button (DCB input) shortens the door open time (transfer time). If reset DCB has no effect on door open time.
2	FAULT	R	If set, allows a reset of a panic motion fault. Note that if the fault keeps recurring, the processor will not continue to reset the fault.
3	FAULT	S	Must be set to activate the panic motion fault feature. (See VDF & TDF parameters and bit 2 of this status word.) When a panic fault is detected, an error 9 is registered and the processor immediately begins to shutdown the car by removing the SYSTEM MASTER (SM output) and the direction signals. The brake will apply immediately.
4	IND	S	If set, Independent Service mode will be disabled after IFT parameter time when a Fire Recall is initiated.
5			Not valid on FUTURA™ HYDRO.
6	DOOR	R	Allows short rear door reversal. Allows doors to reverse before reaching Rear Door Open Limit.
7	BUZZER	R	If set and car door is closing on Nudging Mode, nudging buzzer activates only when a Door Open Device is activated. If reset, nudging buzzer sounds while doors are nudging closed.
8	DOOR	R	Does not allow reopening of doors with the Safety-edge (SE input) or the Electric-Eye (EE input) during nudging.
9	DOOR	R	If set, simultaneous front and rear door operation instead of selective.
10			Not valid on FUTURA™ HYDRO.
11		R	Reserved.
12	VIP	R	If set, enables buzzer to sound during VIP mode to alert passenger that car is in VIP operation mode.
13	VIP	R	If set, enables the buzzer to sound at VIP floor.
14	SEC	R	If set, a special buzzer sounds during security with push-button keypad operation. A brief sound indicates acceptance of security code and registration of call while extended sound indicates rejection of security code. (Per contract basis.)
15	LANT	R	Must be set for software version that utilizes a Lantern Master I/O module for controlling the lantern's power supply.

Table D



CS3 Car (Control Status Word 3)

BIT	AFFECT	DEFAULT	DESCRIPTION
0			Not used on <i>FUTURA</i> ™.
1	DOOR	R	If set, allows call pilots to be accepted when on door protection mode.
2	DOOR	R	If set, allows Door Open Delay (DOD output) to operate every time door opens.
3	FIRE	R	If set, allows car to shut door automatically after Phase II key switch is set to "OFF" and Phase I condition exists.
4	INDEP	R	Independent Service: If reset, Independent Service mode overridden by Fire Service after Independent/Fire Service override time (IFT parameter) expires.
5	FIRE	R	When set, the door open button is disabled during Phase I Fire Service.
6		R	Reserved.
7	MOTION	R	Not valid on <i>FUTURA</i> ™ <i>HYDRO</i> .
8	CALL	R	If set, no slowdown for hall calls and the floor is secured by the <SFL> command from the Human Interface.
9	ZONE	R	If set, no ZONE slowdown at floors secured by <SFL> command from Human Interface.
10	LOBBY	R	If set, car can be removed from Lobby Independent Service at any floor when the key switch is turned off. If reset, the car must be at lobby floor.
11	LOBBY	R	If set, Short Door Timer (SDT parameter) disabled when car at lobby floor.
12		R	Reserved.
13	DOOR	R	If set, door nudging operation is disabled.
14	FIRE	R	If set, door nudging operation is activated during Phase I Fire Service operation while door is closing. This bit will override Bit 13 (Disable nudging).
15	DOOR	R	If set, the Electric Eye (EE) time-out feature (nudging) is disabled.

Table E



CS4 Car (Control Status Word 4)

BIT	AFFECT	DEFAULT	DESCRIPTION
0	FIRE	R	If reset, car will open front door automatically when it reaches the fire floor during Phase I.
1	FIRE	R	If reset, car will open rear door automatically when it reaches fire floor during Phase I.
2	CALL	R	If set, Car Calls are latched internally.
3	CALL	R	If set, Hall Calls are latched internally for a simplex car.
4	LANT	R	If set, cab lantern is triggered when door reaches Door Open Limit switch (DOL input).
5	DOOR	R	If set, front door pre-opening will occur when car levels into mid level zone.
6	DOOR	R	If set, rear door pre-opening will occur when car levels into mid level zone.
7	INDEP	R	If set, a car on Independent Service mode will answer car calls secured from the secure floor <SFL> command with the human interface.
8	POSIT	R	If set, the position output is disabled when the car is out of service.
9	POSIT	R	If set, the position output will flash when the car is out of service.
10	CALL	R	If set, Car Calls will not be canceled when the car has a reversal slowdown.
11	CALL	R	If set, cancel car calls for positions above the car when the car is moving down and cancel car calls below the car when the car is moving up.
12	LOBBY	R	When set, car will stop at lobby if it is above lobby and calls are placed below lobby or if car is below lobby and calls are placed above lobby.
13	VIDEO	R	If set, do not blink the car symbol in the video display.
14	ELD		If set, do not "refresh" the ELD display in the car.
15			Reserved.

Table F



CS5 Car (Control Status Word 5)

BIT	AFFECT	DEFAULT	DESCRIPTION
0	DOOR	R	If set, the Electric Eye (EE device) is disabled when the door is closing.
1	DOOR	R	If set, then full door reversal after the Safety Edge (SE device) is activated when the door is on nudging operation.
2			Not valid on FUTURA™ HYDRO.
3	DOOR	R	If set, car will shutdown if car goes out of level zone and doors are open.
4	LOBBY	R	Set to use Lobby Independent Service as Lobby Recall Service.
5	LOBBY	R	Set to open the rear door when car is on Lobby Recall Service.
6	LOBBY	R	Set to take car out of group svc. when car is returning on lobby recall svc.
7			Not valid on FUTURA™ HYDRO.
8			Not valid on FUTURA™ HYDRO.
9	ERROR	R	Set to disable interrupt error display.
10			Not valid on FUTURA™ HYDRO.
11			Not valid on FUTURA™ HYDRO.
12			Not valid on FUTURA™ HYDRO.
13	ELD	R	If set, no lines are displayed on the ELD screen.
14	ELD	R	If set, ELD screen remains on all the time.
15	DOOR	R	If set, drops Door Close (DC) module output after car in motion for 0.5 seconds.

Table G



CS6 Car (Control Status Word 6)

BIT	AFFECT	DEFAULT	DESCRIPTION
0			Not valid on <i>FUTURA™ HYDRO</i> .
1			Not valid on <i>FUTURA™ HYDRO</i> .
2			Not valid on <i>FUTURA™ HYDRO</i> .
3	DOOR	S	Set to disable electronic Detector Edge time out.
4	DOOR	S	Set to enable electronic Detector Edge operation vs. mechanical Safety Edge (SE).
5	DOOR	R	Set to enable electronic Proximity Edge operation vs. mechanical Safety Edge (SE).
6	BUZZER	S	Set to enable handicap buzzer all the time. If reset, the Audible Service Button (ASB input) must be pressed on each run to enable the handicap buzzer.
7	DRIVE	R	Not valid on <i>FUTURA™ HYDRO</i> .
8	DRIVE	R	Not valid on <i>FUTURA™ HYDRO</i> .
9	DRIVE	R	Not valid on <i>FUTURA™ HYDRO</i> .
10	DRIVE	R	Not valid on <i>FUTURA™ HYDRO</i> .
11	INSP	R	Set to allow hydro controller to run high speed on inspection mode.
12	DOOR	R	Set to disable Door Open Buzzer (DOB input) when front door is secured with lockout switches.
13	DOOR	R	Set to disable Rear Door Open Buzzer (RDOB input) when rear door is secured with lockout switches.
14	DOOR	R	Set to enable drive fault GLR (Gate & Lock input) error. (Both GLR input and DOL input active while level at the floor).
15			

Table H



CS7 Car (Control Status Word 7)

BIT	AFFECT	DEFAULT	DESCRIPTION
0	FAULT	R	Set to cause motion fault when tach direction error occurs with DRIVE unit, CCU board, or VIC controller.
1	FAULT	R	Set to disable deceleration check in emergency mode.
2	FAULT	R	Set to disable ESV and ETS velocity limit at slowdown limit switches.
3	MOTION	R	Set to disable linear time (max change in speed ref) parameter.
4	DPP	R	Set to disable updating position count when error is detected (more than 5 counts off).
5	MOTION	R	Set to adjust cars maximum velocity from MMS parameter.
6			Not valid on <i>FUTURA™ HYDRO</i>.
7			Not valid on <i>FUTURA™ HYDRO</i>.
8			Not valid on <i>FUTURA™ HYDRO</i>.
9			Not valid on <i>FUTURA™ HYDRO</i>.
10	DOOR	R	Set to invert detector edge input.
11	DOOR	R	Set to enable door close button to latch during Attendant Service.
12	BUZZER	R	Set to enable Attendant Buzzer at every floor (adj ABT for buzz duration).
13	ATT	R	Set to enable AUB/ADB inputs (attendant Up/Down buzzer) to latch.
14	FAULT	R	Set to cause motion fault when SPU board emits velocity error.
15	CALL	R	Set to pulse car call output for low intensity light.

Table 1



CS8 Car (Control Status Word 8)

BIT	AFFECT	DEFAULT	DESCRIPTION
0		R	Unused.
1	FAULT	R	Set to disable DPP velocity window check. Velocity window is a difference (tolerance) of ± 100 fpm from previous velocity calculation per CPU. If difference $> \pm 100$ fpm, error 119 occurs. Refer to Error Code List p.8-32.
2	DPP	R	Not valid on FUTURA™ HYDRO.
3			Not valid on FUTURA™ HYDRO.
4			Not valid on FUTURA™ HYDRO.
5	CWD	R	Not valid on FUTURA™ HYDRO.
6	MOTION	R	Set for PEK parameter compensation instead of RVT parameter compensation.
7			Unused.
8			Not valid on FUTURA™ HYDRO.
9			Not valid on FUTURA™ HYDRO.
10			Not valid on FUTURA™ HYDRO.
11			Not valid on FUTURA™ HYDRO.
12			Not valid on FUTURA™ HYDRO.
13			Not valid on FUTURA™ HYDRO.
14			Not valid on FUTURA™ HYDRO.
15	MOTION	R	Set to enable timed leveling mode. Should only be used for test.

Table J



CS9 Car (Control Status Word 9)

BIT	AFFECT	DEFAULT	DESCRIPTION
0	GROUP	R	Set for slave car to execute group commands. Note that parameters will be overwritten by whichever car is the master (i.e. the group).
1	DOOR	R	Set to disable SRU or SRD inspection door close option.
2			Not valid on FUTURA™ HYDRO.
3	DOOR	R	Set to disable door field economy voltage on door close.
4			Not valid on FUTURA™ HYDRO.
5	DOOR	S	Set to require DCL on (with GL1 and GL) to start the car.
6			Not valid on FUTURA™ HYDRO.
7	MOTION	R	Set to disable pre-start. Pre-start allows the controller to prepare to run when the DCL6 limit is made.
8	BUZZER	R	Set to disable nudging buzzer with EESW in OFF position.
9	DOOR	R	Set to disable DCR if door is open in SAFETIES.
10	DOOR	R	Set to enable hall call door re-open.
11			Not valid on FUTURA™ HYDRO.
12			Not valid on FUTURA™ HYDRO.
13	PI & BUZZER	R	Set for PI and HBZ to ring at dpp position.
14			Not valid on FUTURA™ HYDRO.
15			Not valid on FUTURA™ HYDRO.

Table K



CS10 Car (Control Status Word 10)

BIT	AFFECT	DEFAULT	DESCRIPTION
0			Not valid on <i>FUTURA™ HYDRO</i> .
1			Not valid on <i>FUTURA™ HYDRO</i> .
2	MOTION	R	If set then Start Sequence at DCL point.
3	MOTION	R	If set then Start Sequence at DCL6 point.
4			Not valid on <i>FUTURA™ HYDRO</i> .
5	MOTION	R	If set then enable one floor run sequence.
6	MOTION	R	If set to initiate Start Master (ASM) at door close.
7			Not valid on <i>FUTURA™ HYDRO</i> .
8	LANTERN	R	If set then activate pawl to ring lantern when car parked.
9			Unused.
10			Unused.
11			Unused.
12			Unused.
13			Unused.
14			Unused.
15	LCD DISPLAY	R	If set then LCD cursor location blinks when changing parameters.

Table L



CS11 Car (Control Status Word 11)

BIT	AFFECT	DEFAULT	DESCRIPTION
0	DOOR	R	If set then enable front DHB time out.
1	DOOR	R	If set then enable front DOB time out.
2	DOOR	R	If set then enable rear DHB time out.
3	DOOR	R	If set then enable rear DOB time out.
4	FIRE	R	If set to assign the car as fire fighting car. For UK job only.
5	SECURITY	R	If set to invert security inputs to use card reader rather than lockouts.
6	LIGHT	R	If set to blink GLBL output (2000 Compliant)
7	FIRE	R	If set then allow secondary fire bypass (Input HFBPA) to work.
8	LIGHT	R	If set to invert the logic of in service light (Output ISL).
9	CONTROL	S	Set to Enable CEN Test
10	CONTROL	R	Set disable LCD Auto Logoff
11			Not valid on <i>FUTURA™ HYDRO</i>.
12			Not valid on <i>FUTURA™ HYDRO</i>.
13			Not valid on <i>FUTURA™ HYDRO</i>.
14			Not valid on <i>FUTURA™ HYDRO</i>.
15			Not valid on <i>FUTURA™ HYDRO</i>.

Table M



CS12 Car (Control Status Word 12)

BIT	AFFECT	DEFAULT	DESCRIPTION
0			Unused.
1			Unused.
2			Unused.
3			Unused.
4			Unused.
5			Unused.
6			Unused.
7			Unused.
8			Unused.
9			Unused.
10			Unused.
11			Unused.
12			Unused.
13			Unused.
14			Unused.
15			Unused.

Table N



CS13 Car (Control Status Word 13)

BIT	AFFECT	DEFAULT	DESCRIPTION
0			Unused.
1			Unused.
2			Unused.
3			Unused.
4			Unused.
5			Unused.
6			Unused.
7			Unused.
8			Unused.
9			Unused.
10			Unused.
11			Unused.
12			Unused.
13			Unused.
14			Unused.
15			Unused.

Table M

