



SECTION 12 - CAR COMMANDS

From the Human Interface terminal, type <CAR> to establish communication with the car functions. The prompt in Car Human Interface mode is:

C# 1=>

CAR DIAGNOSTIC COMMANDS

<COMMAND>	DESCRIPTION OF CAR COMMAND
ASU	<p>Automatic Set Up: (Hoistway Scan) Limit switch position and Floor Center of Target (COT) Position Reference Set-up.</p> <p>Note: <i>The following sequence must be performed to adjust the car (refer to Position Reader Tape Installation):</i></p> <ol style="list-style-type: none"> 1. Adjust the Leveling Vane for accurate floor level. 2. Adjust the terminal slow-down limit switches. 3. Put the car in Panel Test and position below the bottom terminal.
BAS	<p>BASe of output: Output base setting can be either 10 or 16. If set to 10, all values returned by the controller will be in decimal notation (easiest to read). If set to 16, all values returned by the controller will be in hexadecimal notation. It is advisable to leave it at 10.</p>
BBT	<p>Break to Break last travel Time: This command returns time period of last run performed by car.</p>
BDC	<p>Brake Duty Cycle. Typing "BDC=[number 1 to 255]<enter>" while the care is on inspection sends a turn on duty cycle to the brake device. Manually pushing in MC and BK contactors will lift the brake. Typing "BDC<enter>", placing the car on automatic, or pressing the SPU button on the front panel, will turn off the brake.</p>
BFM	<p>Building Floor Marking: This command returns the building floor marking e.g. L, M, 3 through 12, 14, 15, 16, etc. for the current position of the elevator.</p>
CCS	<p>Car Call pilot Status: Displays the pilot status of the car. An UP pilot is a call above current car position. A DOWN pilot is a call below current car position. The hexadecimal numbers below indicate the pilot status:</p> <p style="padding-left: 40px;"> 0H - no pilot 1H - up pilot 2H - down pilot 3H - up and down pilot 4H - at call floor 5H - at call floor and up pilot 6H - at call floor and down pilot 7H - at call floor and up and down pilot </p>
CCT	<p>Car Call Test. The car call test automatically activates car calls at selected floors to allow the car to run continuously in a test mode unattended. The command CCT toggles the car call test operation on and off. To select the desired floor, type "CCTF" for front or "CCTR" for rear car calls and follow the prompt to select the individual floor. More than one car call must be selected to activate the test. Loss of power or activation of fire service will cancel the car call test operation.</p>
CLS	<p>CLear terminal Screen. Clears the terminal screen on the wizard or human interface terminal device.</p>



<COMMAND>	DESCRIPTION OF CAR COMMAND																																																																																																																																										
CMC	<p>This command displays Car smart controllers CoMmunication status (Communication Status of the following Devices):</p> <p style="text-align: center;"><u>COMMUNICATION STATUS (CAR)</u></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>LOC</th> <th>ST</th> <th>RCV</th> <th>FAIL</th> <th>CAR</th> <th>ST</th> <th>RCV</th> <th>FAIL</th> <th>DRV</th> <th>ST</th> <th>RCV</th> <th>FAIL</th> </tr> </thead> <tbody> <tr> <td>9</td> <td>OK</td> <td>13544</td> <td>0</td> <td>8</td> <td>OK</td> <td>13544</td> <td>0</td> <td>2</td> <td>OK</td> <td>6774</td> <td>0</td> </tr> <tr> <td>11</td> <td>OK</td> <td>13544</td> <td>0</td> <td>18</td> <td>OK</td> <td>13544</td> <td>0</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>12</td> <td>OK</td> <td>13544</td> <td>0</td> <td>20</td> <td>OK</td> <td>6774</td> <td>0</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Note: ST (status) line indicates "OK" when the device is communicating; RCV = the # of packets received; FAIL = the # of failed packets; LOC = local port; CAR = car port and DRV = drive port.</p> <p>The following indicates the corresponding address to each board:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th><u>DEVICE NAME</u></th> <th><u>COMMUNICATION ADDRESS</u></th> <th><u>DESCRIPTION</u></th> </tr> </thead> <tbody> <tr><td>DRV</td><td>2</td><td>DRiVe System</td></tr> <tr><td>CPT</td><td>8</td><td>Car Position Transducer</td></tr> <tr><td>BK</td><td>9</td><td>BraKe Board</td></tr> <tr><td>MF</td><td>10</td><td>Motor Field</td></tr> <tr><td>VFC</td><td>11</td><td>Velocity Fault Controller SMI</td></tr> <tr><td>VFC-HS</td><td>11</td><td>Velocity Fault Controller SMI-High Speed</td></tr> <tr><td>MRC</td><td>12</td><td>Motor Room Controller SMI</td></tr> <tr><td>GLB</td><td>13</td><td>Gate Lock Bypass SMI</td></tr> <tr><td>GP1</td><td>13</td><td>General Purpose SMI 1</td></tr> <tr><td>GP2</td><td>14</td><td>General Purpose SMI 2</td></tr> <tr><td>GP3</td><td>15</td><td>General Purpose SMI 3</td></tr> <tr><td>GP4</td><td>16</td><td>General Purpose SMI 4</td></tr> <tr><td>TOC</td><td>18</td><td>Top Of Car Device</td></tr> <tr><td>COP</td><td>19</td><td>Car Operating Panel</td></tr> <tr><td>CC1</td><td>20</td><td>Car Call Board Number 1</td></tr> <tr><td>CC2</td><td>21</td><td>Car Call Board Number 2</td></tr> <tr><td>CC3</td><td>22</td><td>Car Call Board Number 3</td></tr> <tr><td>CC4</td><td>23</td><td>Car Call Board Number 4</td></tr> <tr><td>CC5</td><td>24</td><td>Car Call Board Number 5</td></tr> <tr><td>RCC1</td><td>25</td><td>Rear Car Call Board Number 1</td></tr> <tr><td>RCC2</td><td>26</td><td>Rear Car Call Board Number 2</td></tr> <tr><td>RCC3</td><td>27</td><td>Rear Car Call Board Number 3</td></tr> <tr><td>RCC4</td><td>28</td><td>Rear Car Call Board Number 4</td></tr> <tr><td>GP5</td><td>29</td><td>General Purpose SMI 5</td></tr> <tr><td>GP6</td><td>30</td><td>General Purpose SMI 6</td></tr> <tr><td>GP7</td><td>31</td><td>General Purpose SMI 7</td></tr> <tr><td>GP8</td><td>32</td><td>General Purpose SMI 8</td></tr> <tr><td>GP9</td><td>33</td><td>General Purpose SMI 9</td></tr> <tr><td>GP10</td><td>34</td><td>General Purpose SMI 10</td></tr> </tbody> </table>	LOC	ST	RCV	FAIL	CAR	ST	RCV	FAIL	DRV	ST	RCV	FAIL	9	OK	13544	0	8	OK	13544	0	2	OK	6774	0	11	OK	13544	0	18	OK	13544	0					12	OK	13544	0	20	OK	6774	0					<u>DEVICE NAME</u>	<u>COMMUNICATION ADDRESS</u>	<u>DESCRIPTION</u>	DRV	2	DRiVe System	CPT	8	Car Position Transducer	BK	9	BraKe Board	MF	10	Motor Field	VFC	11	Velocity Fault Controller SMI	VFC-HS	11	Velocity Fault Controller SMI-High Speed	MRC	12	Motor Room Controller SMI	GLB	13	Gate Lock Bypass SMI	GP1	13	General Purpose SMI 1	GP2	14	General Purpose SMI 2	GP3	15	General Purpose SMI 3	GP4	16	General Purpose SMI 4	TOC	18	Top Of Car Device	COP	19	Car Operating Panel	CC1	20	Car Call Board Number 1	CC2	21	Car Call Board Number 2	CC3	22	Car Call Board Number 3	CC4	23	Car Call Board Number 4	CC5	24	Car Call Board Number 5	RCC1	25	Rear Car Call Board Number 1	RCC2	26	Rear Car Call Board Number 2	RCC3	27	Rear Car Call Board Number 3	RCC4	28	Rear Car Call Board Number 4	GP5	29	General Purpose SMI 5	GP6	30	General Purpose SMI 6	GP7	31	General Purpose SMI 7	GP8	32	General Purpose SMI 8	GP9	33	General Purpose SMI 9	GP10	34	General Purpose SMI 10
LOC	ST	RCV	FAIL	CAR	ST	RCV	FAIL	DRV	ST	RCV	FAIL																																																																																																																																
9	OK	13544	0	8	OK	13544	0	2	OK	6774	0																																																																																																																																
11	OK	13544	0	18	OK	13544	0																																																																																																																																				
12	OK	13544	0	20	OK	6774	0																																																																																																																																				
<u>DEVICE NAME</u>	<u>COMMUNICATION ADDRESS</u>	<u>DESCRIPTION</u>																																																																																																																																									
DRV	2	DRiVe System																																																																																																																																									
CPT	8	Car Position Transducer																																																																																																																																									
BK	9	BraKe Board																																																																																																																																									
MF	10	Motor Field																																																																																																																																									
VFC	11	Velocity Fault Controller SMI																																																																																																																																									
VFC-HS	11	Velocity Fault Controller SMI-High Speed																																																																																																																																									
MRC	12	Motor Room Controller SMI																																																																																																																																									
GLB	13	Gate Lock Bypass SMI																																																																																																																																									
GP1	13	General Purpose SMI 1																																																																																																																																									
GP2	14	General Purpose SMI 2																																																																																																																																									
GP3	15	General Purpose SMI 3																																																																																																																																									
GP4	16	General Purpose SMI 4																																																																																																																																									
TOC	18	Top Of Car Device																																																																																																																																									
COP	19	Car Operating Panel																																																																																																																																									
CC1	20	Car Call Board Number 1																																																																																																																																									
CC2	21	Car Call Board Number 2																																																																																																																																									
CC3	22	Car Call Board Number 3																																																																																																																																									
CC4	23	Car Call Board Number 4																																																																																																																																									
CC5	24	Car Call Board Number 5																																																																																																																																									
RCC1	25	Rear Car Call Board Number 1																																																																																																																																									
RCC2	26	Rear Car Call Board Number 2																																																																																																																																									
RCC3	27	Rear Car Call Board Number 3																																																																																																																																									
RCC4	28	Rear Car Call Board Number 4																																																																																																																																									
GP5	29	General Purpose SMI 5																																																																																																																																									
GP6	30	General Purpose SMI 6																																																																																																																																									
GP7	31	General Purpose SMI 7																																																																																																																																									
GP8	32	General Purpose SMI 8																																																																																																																																									
GP9	33	General Purpose SMI 9																																																																																																																																									
GP10	34	General Purpose SMI 10																																																																																																																																									



<COMMAND>	DESCRIPTION OF CAR COMMAND																																																																																																																																							
CMG	<p>Displays Group CoMmunication status status (Communication Status of the following Devices):</p> <p style="text-align: center;"><u>COMMUNICATION STATUS (GROUP)</u></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>HI</th> <th>ST</th> <th>RCV</th> <th>FAIL</th> <th>CTG</th> <th>ST</th> <th>RCV</th> <th>FAIL</th> <th>HC</th> <th>ST</th> <th>RCV</th> <th>FAIL</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>OK</td> <td>2965</td> <td>0</td> <td>201</td> <td>OK</td> <td>40816</td> <td>0</td> <td>44</td> <td>OK</td> <td>43708</td> <td>0</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>202</td> <td>OK</td> <td>40816</td> <td>0</td> <td>45</td> <td>OK</td> <td>43708</td> <td>0</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>203</td> <td>OK</td> <td>40816</td> <td>0</td> <td>211</td> <td>OK</td> <td>43708</td> <td>0</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>204</td> <td>OK</td> <td>40817</td> <td>0</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>The following description indicates the corresponding address to each board:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th><u>DEVICE NAME</u></th> <th><u>COMMUNICATION ADDRESS</u></th> <th><u>DESCRIPTION</u></th> </tr> </thead> <tbody> <tr><td>HI</td><td>3</td><td>Human Interface</td></tr> <tr><td>HPU</td><td>11-43</td><td>HPU Hall Calls for floors 1 through 33</td></tr> <tr><td>HC1</td><td>44</td><td>Hall Call SMI Board</td></tr> <tr><td>HC2</td><td>45</td><td>Hall Call SMI Board</td></tr> <tr><td>HC3</td><td>46</td><td>Hall Call SMI Board</td></tr> <tr><td>HC4</td><td>47</td><td>Hall Call SMI Board</td></tr> <tr><td>HC5</td><td>48</td><td>Hall Call SMI Board</td></tr> <tr><td>HC6</td><td>49</td><td>Hall Call SMI Board</td></tr> <tr><td>HC7</td><td>50</td><td>Hall Call SMI Board</td></tr> <tr><td>HC8</td><td>51</td><td>Hall Call SMI Board</td></tr> <tr><td>HC9</td><td>52</td><td>Hall Call SMI Board</td></tr> <tr><td>GRP</td><td>200</td><td>GRouP Communication Address</td></tr> <tr><td>CAR 1</td><td>201</td><td>Car #1 Communication Address</td></tr> <tr><td>CAR 2</td><td>202</td><td>Car #2 Communication Address</td></tr> <tr><td>CAR 3</td><td>203</td><td>Car #3 Communication Address</td></tr> <tr><td>CAR 4</td><td>204</td><td>Car #4 Communication Address</td></tr> <tr><td>CAR 5</td><td>205</td><td>Car #5 Communication Address</td></tr> <tr><td>CAR 6</td><td>206</td><td>Car #6 Communication Address</td></tr> <tr><td>CAR 7</td><td>207</td><td>Car #7 Communication Address</td></tr> <tr><td>CAR 8</td><td>208</td><td>Car #8 Communication Address</td></tr> <tr><td>CAR 9</td><td>209</td><td>Car #9 Communication Address</td></tr> <tr><td>CAR 10</td><td>210</td><td>Car #10 Communication Address</td></tr> <tr><td>RVU</td><td>211</td><td>RVU on Hall Call Bus</td></tr> <tr><td>RVU</td><td>212</td><td>RVU on Car To Group Bus</td></tr> </tbody> </table> <p>Note: HI = Human Interface; CTG = Car to Group; and HC = Hall Call; ST indicates "OK" when the devise is communicating; RCV = # packets received; and FAIL = # of failed packets.</p>	HI	ST	RCV	FAIL	CTG	ST	RCV	FAIL	HC	ST	RCV	FAIL	3	OK	2965	0	201	OK	40816	0	44	OK	43708	0					202	OK	40816	0	45	OK	43708	0					203	OK	40816	0	211	OK	43708	0					204	OK	40817	0					<u>DEVICE NAME</u>	<u>COMMUNICATION ADDRESS</u>	<u>DESCRIPTION</u>	HI	3	Human Interface	HPU	11-43	HPU Hall Calls for floors 1 through 33	HC1	44	Hall Call SMI Board	HC2	45	Hall Call SMI Board	HC3	46	Hall Call SMI Board	HC4	47	Hall Call SMI Board	HC5	48	Hall Call SMI Board	HC6	49	Hall Call SMI Board	HC7	50	Hall Call SMI Board	HC8	51	Hall Call SMI Board	HC9	52	Hall Call SMI Board	GRP	200	GRouP Communication Address	CAR 1	201	Car #1 Communication Address	CAR 2	202	Car #2 Communication Address	CAR 3	203	Car #3 Communication Address	CAR 4	204	Car #4 Communication Address	CAR 5	205	Car #5 Communication Address	CAR 6	206	Car #6 Communication Address	CAR 7	207	Car #7 Communication Address	CAR 8	208	Car #8 Communication Address	CAR 9	209	Car #9 Communication Address	CAR 10	210	Car #10 Communication Address	RVU	211	RVU on Hall Call Bus	RVU	212	RVU on Car To Group Bus
HI	ST	RCV	FAIL	CTG	ST	RCV	FAIL	HC	ST	RCV	FAIL																																																																																																																													
3	OK	2965	0	201	OK	40816	0	44	OK	43708	0																																																																																																																													
				202	OK	40816	0	45	OK	43708	0																																																																																																																													
				203	OK	40816	0	211	OK	43708	0																																																																																																																													
				204	OK	40817	0																																																																																																																																	
<u>DEVICE NAME</u>	<u>COMMUNICATION ADDRESS</u>	<u>DESCRIPTION</u>																																																																																																																																						
HI	3	Human Interface																																																																																																																																						
HPU	11-43	HPU Hall Calls for floors 1 through 33																																																																																																																																						
HC1	44	Hall Call SMI Board																																																																																																																																						
HC2	45	Hall Call SMI Board																																																																																																																																						
HC3	46	Hall Call SMI Board																																																																																																																																						
HC4	47	Hall Call SMI Board																																																																																																																																						
HC5	48	Hall Call SMI Board																																																																																																																																						
HC6	49	Hall Call SMI Board																																																																																																																																						
HC7	50	Hall Call SMI Board																																																																																																																																						
HC8	51	Hall Call SMI Board																																																																																																																																						
HC9	52	Hall Call SMI Board																																																																																																																																						
GRP	200	GRouP Communication Address																																																																																																																																						
CAR 1	201	Car #1 Communication Address																																																																																																																																						
CAR 2	202	Car #2 Communication Address																																																																																																																																						
CAR 3	203	Car #3 Communication Address																																																																																																																																						
CAR 4	204	Car #4 Communication Address																																																																																																																																						
CAR 5	205	Car #5 Communication Address																																																																																																																																						
CAR 6	206	Car #6 Communication Address																																																																																																																																						
CAR 7	207	Car #7 Communication Address																																																																																																																																						
CAR 8	208	Car #8 Communication Address																																																																																																																																						
CAR 9	209	Car #9 Communication Address																																																																																																																																						
CAR 10	210	Car #10 Communication Address																																																																																																																																						
RVU	211	RVU on Hall Call Bus																																																																																																																																						
RVU	212	RVU on Car To Group Bus																																																																																																																																						
CPY	<p>CoPY flash parameters to ram or ram parameters to flash.</p> <ul style="list-style-type: none"> • CPYR – Copies ram parameters to flash. • CPYF – Copies flash parameters to ram. 																																																																																																																																							
DATE	<p>Set the real time calendar clock DATE. The date is entered as month/day/year. To exit this command without changing the date, hit <enter ↵> before typing in new date values.</p> <p style="margin-left: 40px;">Current date: 6/21/94 Enter new date: 7/26/94</p>																																																																																																																																							
DCS	<p>Down Call pilot Status:</p> <p>a) Up Pilot -- down hall call above current car position</p>																																																																																																																																							



<COMMAND>	DESCRIPTION OF CAR COMMAND
	b) Down Pilot -- down hall call below current car position
DLB	Down Limit Break: Car velocity and position when the Down Limit switches first break open during a run. This command is entered after the elevator has tripped all the slowdown limit switches on a run to the first landing.
DPC	Digital Position Count: This command returns the DPP count of the current elevator position. This value is also displayed on the car diagnostic screen under "Pos Cn".
DPY	<p>Diagnostic Display Control: The <DPY> commands allow the user to capture up to 128 frames of the car diagnostic display for playback at a later time. The capturing of the diagnostic display can be triggered on the activation of any error code.</p> <p>DPYD or DPYTD Enter diagnostic display mode. This mode will display the captured frames of the diagnostic display</p> <p>Enter:</p> <p> to play Backward one frame <F> to play Forward one frame <C> to get Current frame <CTRL> + <C> to quit diagnostic display mode</p> <p>DPYT Displays all the DPY commands DPYTS Setup diagnostic triggering DPYTR Reset triggering display (returns display to normal mode)</p>
ELB	<p>ETS (Emergency Terminal Slowdown) Limit Break: Car velocity and position when the ETS Limits first break open during a run. This command is entered after the elevator has tripped all the slowdown limits on a run to the first landing.</p> <p><i>VFC Emergency Limit Velocity</i></p> <p>*Down Limit Fault at limit # *Up Limit Fault at limit # <i>Emergency Slowdown Velocity (ESV):</i> 1= 350; 2= 450; 3= 0; 4= 0; 5= 0</p> <p>*Down Emergency Terminal Slowdown Fault *Up Emergency Terminal Slowdown Fault <i>Emergency Terminal Slowdown Velocity: 220 fpm</i> * Displayed only if the corresponding fault condition occurs.</p>
EXE	<p>EXclude Error Code. The command creates a list of error codes that are not stored in the error buffer.</p> <p>EXES – Set bit to exclude error code from buffer. Eg. Type EXES54<enter> to exclude error code 54 from buffer.</p> <p>EXER – Reset bit that excluded error codes from buffer. Eg. Type EXER54<enter> to allow error code 54 to be placed in the buffer.</p> <p>EXEC – Clear error code exclusions list. Allow all error codes to be placed in buffer.</p> <p>EXEL – List error codes excluded from being placed in error buffer.</p>
FLTn (See p.8-29 for Error Code Definitions)	<p>FauLTs (Errors): The FUTURA™ Operating System keeps a record of the previous 24 faults that have occurred along with the number of occurrences, time of day, the floor number, the velocity, digital position count and various status bytes. The faults are labeled 0-23. This command displays four of the 24 faults starting at fault n (n = 0-23). The n is optional. If not used, the <FLT> command displays all 24 faults. Zero indicates no fault occurrence. Note that CS and DS are</p>



<COMMAND>	DESCRIPTION OF CAR COMMAND																																																																											
	<p>in hexadecimal form, which must be converted into binary form. 00H 0 The fault is displayed on screen as follows: C# 1>FLT0</p>																																																																											
<table border="0"> <thead> <tr> <th></th> <th>FLT</th> <th>COUNT</th> <th>FLR</th> <th>TIME</th> <th>DATE</th> <th>DPP</th> <th>DMD</th> <th>VEL</th> <th>DM</th> <th>DZ</th> <th>SV</th> <th>CS</th> <th>DS</th> <th>GR</th> </tr> </thead> <tbody> <tr> <td>FLT0=</td> <td>80</td> <td>1</td> <td>11</td> <td>4:39:22p</td> <td>6/02/94</td> <td>5279</td> <td>350</td> <td>350</td> <td>3</td> <td>00H</td> <td>26</td> <td>AFH</td> <td>0FH</td> <td>20</td> </tr> <tr> <td>FLT1=</td> <td>0</td> <td>0</td> <td>0</td> <td>0:00:00a</td> <td>0/00/94</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>00H</td> <td>0</td> <td>00H</td> <td>00H</td> <td>0</td> </tr> <tr> <td>FLT2=</td> <td>0</td> <td>0</td> <td>0</td> <td>0:00:00a</td> <td>0/00/94</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>00H</td> <td>0</td> <td>00H</td> <td>00H</td> <td>0</td> </tr> <tr> <td>FLT3=</td> <td>0</td> <td>0</td> <td>0</td> <td>0:00:00a</td> <td>0/00/94</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>00H</td> <td>0</td> <td>00H</td> <td>00H</td> <td>0</td> </tr> </tbody> </table>		FLT	COUNT	FLR	TIME	DATE	DPP	DMD	VEL	DM	DZ	SV	CS	DS	GR	FLT0=	80	1	11	4:39:22p	6/02/94	5279	350	350	3	00H	26	AFH	0FH	20	FLT1=	0	0	0	0:00:00a	0/00/94	0	0	0	0	00H	0	00H	00H	0	FLT2=	0	0	0	0:00:00a	0/00/94	0	0	0	0	00H	0	00H	00H	0	FLT3=	0	0	0	0:00:00a	0/00/94	0	0	0	0	00H	0	00H	00H	0	
	FLT	COUNT	FLR	TIME	DATE	DPP	DMD	VEL	DM	DZ	SV	CS	DS	GR																																																														
FLT0=	80	1	11	4:39:22p	6/02/94	5279	350	350	3	00H	26	AFH	0FH	20																																																														
FLT1=	0	0	0	0:00:00a	0/00/94	0	0	0	0	00H	0	00H	00H	0																																																														
FLT2=	0	0	0	0:00:00a	0/00/94	0	0	0	0	00H	0	00H	00H	0																																																														
FLT3=	0	0	0	0:00:00a	0/00/94	0	0	0	0	00H	0	00H	00H	0																																																														
	<p>FLT = Fault number COUNT = Number of occurrences FLR = Floor where the error occurred TIME = The time the fault occurred (from the system real time clock) DATE = Date of occurrence DPP = Digital Position Pulse count DMD = Demand velocity VEL = Car's Velocity calculated from the Digital Position Pulse DZ = Door Zone status</p> <p>To interpolate the information below, convert the hexadecimal number under the DZ heading into a binary number. The 8-bit binary number will correspond to the bits shown below. Bit 0 will be the least significant, or the "right-most" bit. Wherever there is one (1) on the specified bit, this signifies that the item described next to the bit was active when the fault occurred.</p> <p>BITS</p> <table border="0"> <tr><td>0</td><td>up level zone</td></tr> <tr><td>1</td><td>up final level zone</td></tr> <tr><td>2</td><td>down final level zone</td></tr> <tr><td>3</td><td>down level zone</td></tr> <tr><td>4</td><td>dz</td></tr> <tr><td>5</td><td>Not Used</td></tr> <tr><td>6</td><td>Not Used</td></tr> <tr><td>7</td><td>Not Used</td></tr> </table>	0	up level zone	1	up final level zone	2	down final level zone	3	down level zone	4	dz	5	Not Used	6	Not Used	7	Not Used																																																											
0	up level zone																																																																											
1	up final level zone																																																																											
2	down final level zone																																																																											
3	down level zone																																																																											
4	dz																																																																											
5	Not Used																																																																											
6	Not Used																																																																											
7	Not Used																																																																											



<COMMAND>	DESCRIPTION OF CAR COMMAND																																																																																										
	<p>SV = Car service type Numbers shown correspond directly to status (no conversion needed)</p> <table border="0"> <tr> <td>0=INVALID</td> <td>1=SAFETIES</td> <td>2=DRIVE OFF</td> </tr> <tr> <td>3=PWR LOSS</td> <td>4=INSPECT</td> <td>5=### INIT</td> </tr> <tr> <td>6=DRIVE FLT</td> <td>7=CWT DRL</td> <td>8=CTLSHUTDN</td> </tr> <tr> <td>9=EARTH Q.</td> <td>10=FIRE PH 2</td> <td>11=FIRE PH 1</td> </tr> <tr> <td>12=CODE BLUE</td> <td>13=EM RECALL</td> <td>14=HOMING</td> </tr> <tr> <td>15=INDEPEND</td> <td>16=ATT</td> <td>17=DOOR DISC</td> </tr> <tr> <td>18=REAR DISC</td> <td>19=VIP</td> <td>20=LBY IND</td> </tr> <tr> <td>21=DISP LOSS</td> <td>22=STOP SW</td> <td>23=SERV PROT</td> </tr> <tr> <td>24=LOAD BP</td> <td>25=SECURITY</td> <td>26=AUTOMATIC SERV</td> </tr> </table> <p>CS = Car Status Convert hexadecimal numbers to binary as in DZ above.</p> <p>BITS</p> <ul style="list-style-type: none"> 0 start sequence 1 run sequence 2 EMST (Emergency Stop Output) 3 EMSD (Emergency Stop Input) 4 SRU (Speed Reference Up) 5 SRD (Speed Reference Down) 6 up motion 7 down motion <p>DS = Door Status Convert hexadecimal numbers to binary as in DZ and CS above.</p> <p>BITS</p> <ul style="list-style-type: none"> 0 door open limit (DOL) 1 door close limit (DCL) 2 rear door close limit (RDCL) 3 rear door open limit (RDOL) 4 door open pilot 5 door close pilot 6 rear door open pilot 7 rear door close pilot 	0=INVALID	1=SAFETIES	2=DRIVE OFF	3=PWR LOSS	4=INSPECT	5=### INIT	6=DRIVE FLT	7=CWT DRL	8=CTLSHUTDN	9=EARTH Q.	10=FIRE PH 2	11=FIRE PH 1	12=CODE BLUE	13=EM RECALL	14=HOMING	15=INDEPEND	16=ATT	17=DOOR DISC	18=REAR DISC	19=VIP	20=LBY IND	21=DISP LOSS	22=STOP SW	23=SERV PROT	24=LOAD BP	25=SECURITY	26=AUTOMATIC SERV																																																															
0=INVALID	1=SAFETIES	2=DRIVE OFF																																																																																									
3=PWR LOSS	4=INSPECT	5=### INIT																																																																																									
6=DRIVE FLT	7=CWT DRL	8=CTLSHUTDN																																																																																									
9=EARTH Q.	10=FIRE PH 2	11=FIRE PH 1																																																																																									
12=CODE BLUE	13=EM RECALL	14=HOMING																																																																																									
15=INDEPEND	16=ATT	17=DOOR DISC																																																																																									
18=REAR DISC	19=VIP	20=LBY IND																																																																																									
21=DISP LOSS	22=STOP SW	23=SERV PROT																																																																																									
24=LOAD BP	25=SECURITY	26=AUTOMATIC SERV																																																																																									
<p>FLTXn (See p.8-29 for Error Code)</p>	<p>FauLTs (errors - see FLTn): This command shows the eXtended fault buffer corresponding to the faults shown with the above <FLT> command. The "n" value is set to the fault index number label from 0 to 23. From the <FLT> command example shown below, the "n" number is selected to retrieve additional fault information for fault code 80 stored at index number 0. Convert the hexadecimal numbers to binary for bit settings.</p> <p>C# 1>FLT0</p> <table border="0"> <tr> <td></td> <td>FLT</td> <td>CNT</td> <td>FLR</td> <td>TIME</td> <td>DATE</td> <td>DPP</td> <td>DMD</td> <td>VEL</td> <td>DM</td> <td>DZ</td> <td>SV</td> <td>CS</td> <td>DS</td> <td>GR</td> </tr> <tr> <td>FLT0=</td> <td>80</td> <td>1</td> <td>11</td> <td>4:39:22p</td> <td>6/02/94</td> <td>5279</td> <td>350</td> <td>350</td> <td>3</td> <td>00H</td> <td>0</td> <td>00H</td> <td>00H</td> <td>0</td> </tr> <tr> <td>OFH</td> <td>201</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>FLT1=</td> <td>0</td> <td>0</td> <td>0</td> <td>0:00:00a</td> <td>0/00/94</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>00H</td> <td>0</td> <td>00H</td> <td>00H</td> <td>0</td> </tr> <tr> <td>FLT2=</td> <td>0</td> <td>0</td> <td>0</td> <td>0:00:00a</td> <td>0/00/94</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>00H</td> <td>0</td> <td>00H</td> <td>00H</td> <td>0</td> </tr> <tr> <td>FLT3=</td> <td>0</td> <td>0</td> <td>0</td> <td>0:00:00a</td> <td>0/00/94</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>00H</td> <td>0</td> <td>00H</td> <td>00H</td> <td>0</td> </tr> </table>		FLT	CNT	FLR	TIME	DATE	DPP	DMD	VEL	DM	DZ	SV	CS	DS	GR	FLT0=	80	1	11	4:39:22p	6/02/94	5279	350	350	3	00H	0	00H	00H	0	OFH	201														FLT1=	0	0	0	0:00:00a	0/00/94	0	0	0	0	00H	0	00H	00H	0	FLT2=	0	0	0	0:00:00a	0/00/94	0	0	0	0	00H	0	00H	00H	0	FLT3=	0	0	0	0:00:00a	0/00/94	0	0	0	0	00H	0	00H	00H	0
	FLT	CNT	FLR	TIME	DATE	DPP	DMD	VEL	DM	DZ	SV	CS	DS	GR																																																																													
FLT0=	80	1	11	4:39:22p	6/02/94	5279	350	350	3	00H	0	00H	00H	0																																																																													
OFH	201																																																																																										
FLT1=	0	0	0	0:00:00a	0/00/94	0	0	0	0	00H	0	00H	00H	0																																																																													
FLT2=	0	0	0	0:00:00a	0/00/94	0	0	0	0	00H	0	00H	00H	0																																																																													
FLT3=	0	0	0	0:00:00a	0/00/94	0	0	0	0	00H	0	00H	00H	0																																																																													



<COMMAND>	DESCRIPTION OF CAR COMMAND
	<p>C# 1>FLTX0 CS1, CS2, CS3, CS4, VS1, VS2, VFCV, MFS, BKS, DS1, DS2, DS3, DRVCM, FT 0= 04H, 28H, 80H, 00H, 00H, 00H, 0, 00H, 00H, 00H, 00H, 00H, 0003H, 00H, ..., 00H</p> <p>The following details the headings in the above table, which are NOT to be confused with Control Status Word Bits (see page 8-18). In the event of a support call to CEC, you may be asked to provide the appropriate bit description as listed below. Convert hexadecimal numbers to binary for bit settings:</p> <p>CS1 = Car Status 1 BITS 0 Rope Gripper Trip 1 Rope Gripper Fault 2 Fault Trip 3 Relay Fault 4 Controller Fault 5 Motion Fault 6 Gate & Lock (GLR) Fault 7 Run Time-Out Fault</p> <p>CS2 = Car Status 2 BITS 1 Motion Master (elevator motion allowed) 2 g11 Input On Fault 3 Drive Fault 4 Communication Initialized Ok 5 Tach Direction (SPU DPP quadrature: 1=up, 0=dn) 6 Tach Direction Error 7 SPU Tach Direction Error</p> <p>CS3 = Car Status 3 BITS 0 Up Call Pilot 1 Down Call Pilot 2 At Floor Call Pilot 3 Drop Leveling Velocity Output (LVE) 4 Moving 5 Leveling 6 Lev DZ 7 SPU Thermal Sensor</p>



<COMMAND>	DESCRIPTION OF CAR COMMAND
	<p>CS4 = Car Status 4 BITS 0 SYSTEM MASTER (SRD/SRU ok) 1 Proximity 2 g11 3 Gate & Lock (GL) 4 SM Input From Contactor 5 MC Input From Contactor 6 BKR (Brake Relay) 7 Door Operation</p> <p>VS1 = VFC Board Status 1 BITS 0 Slowdown Limit Fault (SLF) 1 Inspection Speed Fault (ISF)/fault at limit 7 (EX0 hs board) 2 GL Speed Fault (GLF)/fault at limit 8 (EX0 hs board) 3 Emergency Terminal Limit Fault (TLF) 4 DF-Deceleration Expected (DF) 5 Moving Up 6 Moving Down 7 Emergency Stop Fault (ESF)</p> <p>VS2 = VFC Board Status 2 BITS 0 Slowdown Fault at Limit 1 1 Slowdown Fault at Limit 2 2 Slowdown Fault at Limit 3 3 Slowdown Fault at Limit 4 4 Slowdown Fault at Limit 5 5 Fault at ETS Limit 6 0=Up Limit Fault; 1=Dn Limit Fault 7 Fault at Limit 6 (High Speed VFC Board)</p> <p>VFCV = Car's velocity from VFC board Digital Position Pulse</p> <p>MFS = Motor Field Board Status BITS 0 +24v fail 1 +15v fail 2 -15v fail 3 No AC Input to Board 4 Motor Field Fault 5 Not Used 6 Not Used</p>



<COMMAND>	DESCRIPTION OF CAR COMMAND
	<p style="text-align: right;">7 Not Used</p> <p>BKS = Brake Board Status</p> <p style="padding-left: 40px;">BITS</p> <ul style="list-style-type: none"> 0 +24v fail 1 +15v fail 2 -15v fail 3 No AC Input to Board 4 Brake Board Fault 5 Not Used 6 Not Used 7 Not Used <p>IF DSD-412 DRIVE: (If applicable, reference DSD Drive Manual - Book 3, especially fault codes f97 through f905)</p> <p>DS1 = Drive Status 1</p> <p style="padding-left: 40px;">BITS</p> <ul style="list-style-type: none"> 0 Set to 1 for Synchronization (Comm. Status between drive and controller). 1 Set to 1 for Synchronization 2 Tach Direction Is Up 3 Tach Direction Is Down 4 Tach Overspeed Fault (f97) 5 Tach Loss Fault (f98) 6 Reverse Tach Fault (f99) 7 Serial Comm Fault <p>DS2 = Drive Status 2</p> <p style="padding-left: 40px;">BITS</p> <ul style="list-style-type: none"> 0 Motor Fault (f400) 1 Excessive Field Current (f401) 2 Contactor Failure (f402) 3 Drive is at CEMF Limit 4 DH Input Fault (f405) 5 E-Stop Fault (f406) 6 A Drive Fault exists 7 Drive is Ready <p>DS3 = Drive Status 3</p> <p style="padding-left: 40px;">BITS</p> <ul style="list-style-type: none"> 0 A "No Loop Fault" Exists (f900) 1 PCU 1st Fault (f901) 2 Line Synchronization Failure (f903) 3 Low Line Fault (f904) 4 Field Loss Fault (f905)



<COMMAND>	DESCRIPTION OF CAR COMMAND
	<p style="text-align: right;">5 Not Used 6 Not Used 7 Not Used</p> <p>DRVCM = Drive Command BITS</p> <p style="text-align: right;">0 Set To 1 For Synchronization 1 Set To 1 For Synchronization 2 Run Command (SMC) 3 Fault Reset (AFR) 4 Run Down (SRD) 5 Run UP (SRU) 6 Full Field Command (FEI) 7 Not Used 8 Not Used 9 Not Used 10 Not Used 11 Not Used 12 Not Used 13 Not Used 14 Not Used 15 Not Used</p> <p>END DSD-412</p>
	<p>IF VCD-703 DRIVE:</p> <p>DS1 = Drive Status 1 BITS</p> <p style="text-align: right;">0 Forward Running 1 Running Zero Speed 2 Reverse Running 3 Reset Signal on 4 Drive has Frequency input 5 Drive Ready 6 Minor Fault 7 Major Fault</p> <p>DS2 = Drive Status 2 BITS</p> <p style="text-align: right;">0 Command Fault 1 Recovery From Power Loss 2 Operation Mode 3 Not Used 4 Multifunction Input 1 5 Multifunction Input 2 6 Multifunction Input 3 7 Multifunction Input 4</p> <p>DS3 = Drive Status 3 (always 0)</p> <p>DRVCM = Drive Command</p>



<COMMAND>	DESCRIPTION OF CAR COMMAND
	<p style="text-align: center;">BITS</p> <p>0 Run Command (SMC) 1 Reverse Run Command (SRD) 2 Baseblock 3 Not Used 4 Run Down (SRD) 5 Fault Reset (AFR) 6 Not Used 7 Not Used 8 Not Used 9 Not Used 10 Not Used 11 Not Used 12 Not Used 13 Not Used 14 Not Used 15 Not Used</p> <p>END VCD-703</p> <p>EX1 = Extended Error Data 1 (programmer defined, call CEC) EX2 = Extended Error Data 2 (programmer defined, call CEC) EX3 = Extended Error Data 3 (programmer defined, call CEC) EX4 = Extended Error Data 4 (programmer defined, call CEC) EX5 = Extended Error Data 5 (programmer defined, call CEC)</p>



FPR	Floor P osition Reference at present floor:
FWL	Flash W rite access L og. When data or program is written to flash memory or EEPROM the SPU bios software will log the event in battery backed ram. This command prints the data log to the terminal screen. FWLC clears the write access log.
GET	GET /load the parameters from EEPROM: This command restores modified parameters. (Also verifies the checksum and displays any errors.) Note: FCP, ULR, DLR & TSV parameters must all be valid for <GET> to return an 'OK'.
GRP	Enter the GR oup Human Interface (Prompt: Group =>)
LWR	Load W eigher R eading. Displays the load weigher voltage and percent load.
LWUn	Load Weigher User interface setup. This command guides the user though the load weigher setup starting with the car on independent and the sensor verified with an empty car at the bottom floor, car fully loaded at the top floor and finally empty at the top floor. If the LWU command is entered without a number immediately following, a list of four options are given for the user to select from those shown below: <ol style="list-style-type: none"> 1. Proximity sensor setup. 2. Strain gauge sensor setup. 3. Observe sensor setup parameters. 4. Activate offset calibration procedure. <p>If proximity or strain gauge sensor setup is selected, the user is prompted for additional information to start the setup procedure. Once setup is activated, the following "LWU" commands are entered to validate the load condition of the car.</p> <p>LWU1 – Command is entered when the sensor voltage is setup between 1.0 and 1.4 volts and the car is empty at the bottom landing.</p> <p>LWU2 – Command is entered when the car has full load at the bottom floor.</p> <p>LWU3 – Command is entered when the car has full load at the top floor.</p> <p>LWU4 – Command is entered when the car is empty at the top floor.</p>
MEN	SPU BIOS M ENU: Use to upload the software into FLASH memory
PAE	Last four (4) Floors which had a P Arity Error, e.g. <PAE> <enter ↵> 7, 5; ... " 7 is the DPP computed floor and 5 is the preset code which was read by computer with an Odd parity error.
PAR	P ARameters: This command offers a speedy way to Enter or Review all of the above adjustment parameters. Typing <PAR> <enter ↵> displays all parameters with a slight delay.
PARA	The ' A ' (Alter) suffix permits changing or reviewing all P ARameters. Each command is displayed with the current value followed by a question mark. You can now change its value or hit <enter ↵> to skip to the next one.
POS	True Car P OSition, e.g. 1 through 15 (including 13)
PSE	Last four (4) Floors which had P reSet Error but Odd parity OK. (See <PAE> command for display explanation.)
RCC	R eset all Car Calls
RCM	R eset C oMmunication status log. Resets failure counts for all COMM devices (See <CMC> command)



RDE	Reset Device Errors: Resets communication errors for the following boards: RDED Drive RDEV VFC device RDEB Brake Board device RDEM Motor Field Board
RFL	Reset the FauLt Hold memory
RMA	Request Master. When entered at the terminal of a car that is not the group, this car will request to become the master car, i.e. the group. The existing master car will relinquish group control to this car.
RPU	RPU Hall call unit status commands. RPUC – Reset comm errors for HPU devices on RPU comm buss. RPUR – Software reset of RPU hall call board. RPUD – SPU to send hall call setup information to RPU board. RPU _n – Show HPU device “n” comm status from RPU.
RSL	Request Slave. When entered at the terminal of a car that is currently the group controller, this car will relinquish group control to the next available car with the lowest number. If no car is available, this car will time out and become the group again.
SCC _n	Set Car Call at floor (n)
SDC _n	Set Down Call at floor (n)
STD	STart Down: The <STU> and <STD> commands can be used while in automatic operation to provide a one (1) floor run up or down respectively.
STM	SeT Up Mode: This command allows car to run on inspection mode without the Digital Position Pulse while setting up the car. This operating mode bypasses the normal safety check and prevents car from shutting down. This operating mode can also be initiated from front panel push buttons in the circuit breaker panel. While elevator is on inspection mode, press and hold SPU push button on front panel of the controller for approximately 3 seconds: DISPLAY button will then light green. Release SPU push button and then press DISPLAY push button momentarily. DISPLAY button lights red and green alternately, indicating car is in Setup mode. If car loses power or if inspection switch is moved to automatic mode, elevator will automatically be removed from Setup mode.
STU	STart Up (similar to the Attendant Buttons): The <STU> and <STD> commands can be used while in automatic operation to provide a one (1) floor run up or down respectively.
SUC _n	Set Up Call at floor (n)
TIM	Computer up TIME since the last power-up (day-hour:min:sec)
TIME	Set real TIME calendar clock. Time is entered as hour:min:sec followed by ‘a’ for am or ‘p’ for pm. To exit this command without changing the time, hit <enter ↵> before typing new time value. Eg: Current time: 11:12:32p Enter new time: 10:22:30 a
UCS	Up Call pilot Status (See CCS for explanations.)



ULBn	Car Velocity when the Up Limit(n) first Break open: This command is useful when adjusting TSV. It permits "freezing" the car velocity at the instant each terminal limit switches open.																																								
VEL	Actual Car VELOCITY in FPM																																								
VER	Displays software VERsions for all communications boards. See <CMC> command for description of devices: <p style="text-align: center;">DEVICE VERSION</p> <p style="text-align: center;">(SYS= system; LOC= local; DRV= drive; HC= hall call)</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>SYS</th> <th>Ver</th> <th>LOC</th> <th>Ver</th> <th>CAR</th> <th>Ver</th> <th>DRV</th> <th>Ver</th> <th>HC</th> <th>Ver</th> </tr> </thead> <tbody> <tr> <td>201</td> <td>010</td> <td>9</td> <td>008</td> <td>8</td> <td>006</td> <td>2</td> <td></td> <td>44</td> <td>006</td> </tr> <tr> <td>202</td> <td>010</td> <td>11</td> <td>008</td> <td>18</td> <td>005</td> <td></td> <td>211</td> <td>006</td> <td></td> </tr> <tr> <td>212</td> <td>003</td> <td>12</td> <td>007</td> <td>19</td> <td>006</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	SYS	Ver	LOC	Ver	CAR	Ver	DRV	Ver	HC	Ver	201	010	9	008	8	006	2		44	006	202	010	11	008	18	005		211	006		212	003	12	007	19	006				
SYS	Ver	LOC	Ver	CAR	Ver	DRV	Ver	HC	Ver																																
201	010	9	008	8	006	2		44	006																																
202	010	11	008	18	005		211	006																																	
212	003	12	007	19	006																																				
VFC	<p>Velocity Fault Controller Status:</p> <p style="text-align: center;"><u>Velocity Fault Controller Status</u></p> <p><i>*Slowdown Limit Fault</i></p> <p><i>*Inspection Speed Fault</i></p> <p><i>*Gate and Lock Speed Fault</i></p> <p><i>*GL Velocity: 150 fpm (0.76 m/s)</i></p> <p><i>*Emergency Terminal Limit Fault</i></p> <p><i>*ETS Velocity: 350 fpm (1.78 m/s)</i></p> <p><i>Moving Dn</i></p> <p><i>Moving Up</i></p> <p><i>VFC Velocity: 500 fpm (2.54 m/s)</i></p> <p>Note: Car must be traveling at velocity greater than 52 fpm (0.26 m/s) for VFC board to display velocity greater than 0. * Displayed only if corresponding fault condition occurs.</p>																																								
VLT	Velocity Limit Test. Sets a test variable to disable the SPU from limiting the velocity when a slowdown limit is hit. This flag is set for a single run.																																								
WRT	WriTe parameters to EEPROM: This command stores changes in non-volatile memory. <p>Note: It is not necessary to write <WRT> altered parameters immediately to EEPROM. You can test operation, continue to operate elevator, and store to EEPROM when satisfied. In case of removal of power to CPU, or if terminal is disconnected, parameters are restored to former value (no change occurs).</p>																																								
ZON	ZONE floor: Displays floor to which car is zoning.																																								
ZPS	Zone Pilot Status (Refer to <CCS> command for explanation)																																								

