## 7.7 HUMAN INTERFACE COMMANDS - GROUP CONTROLLER

The commands described in this section, are supplied with the SWIFT Operating System to enable you to interact with the computer to List, Alter, Monitor, Change system functions, and to invoke the SWIFT Diagnostic. All commands are a three (3) character sequence followed by:

a. <ENTER> (list)
b. A decimal number and/or characters followed by <ENTER>.
c. '=', to Alter its value.

NOTE: To terminate a command sequence you must hit the <ENTER> key.

When you request to change a value, or the command requires a decimal number to operates, the SWIFT Operating System always checks the number or new value against limits (range) in order to trap any entry errors. For example,the Operating System will not permit entering a short-door-time longer than a long-door-time or a short-door-time longer than five (5) seconds.

Any changes entered from the human interface will take effect immediately, but are not permanently stored in the computer nonvolatile memory (EEPROM).

The following sections list the available commands to interact with the SWIFT Operating System. The commands have the following format:

n is an integer number between 0 and 65,529. It must not contain spaces, commas or other punctuation.

A is the Alter character. Some commands permit to review or Alter the related data.

p is a Position integer in the range of 1000 to the top floor position reference.

v is a velocity integer.

= indicates to change the value of the related parameter with the integer number following.

[] indicates an optional instruction.

tu Time Unit. Equivalent to 1/16 second. The ETA is calculated in Time Unit.

c Car number (value of 1 thru 8)

f Floor Number (value from 1 thru number of floors in group)

nf Total number of floors in group

nc Total number of cars in Group

### 7.7.1 Group System Parameters

These parameters are always referred to as System Parameters (when REE = 0) or Car Parameters (when REE = a car number). Refer to the REE command.

The System parameters are used for operations or functions which affect all the cars in the group while the Car parameters are for operations or functions which affect only that car. Note that the Car within the group is different than the car controller parameters. The Car parameters are mainly used for dispatching purposes during the ETA assignments.

NOTE: REE must be equal to zero to access these parameters.

| COMMAND | UNIT | RANGE | DEFINITION |
|---|---|---|---|
| LER [=n] | c | 0-nc | Lobby Elevator Request. The number of cars that must be at the lobby floor is equal 'n'. |
| LBY [=f] | f | 1-nf | Main Lobby floor. |
| ALY [=f] | f | 1-nf | Alternate Lobby floor (not implemented) |
| FIR [=f] | f | 1-nf | Fire Recall Floor |
| FAL [=f] | f | 1-nf | Fire Alternate floor |
| SFL [=f] | f | 1-nf | Security Floor (not implemented) see CS4, 7 |
| EPF [=f] | f | 1-nf | Emergency Power return floor — CS3, 8 & 9 |
| MEP [=c] | c | 1-nc | Maximum number of cars which can operate simultaneously under Emergency Power |
| ZN1 [=f] | f | 1-nf | Zone (1) Floor pointer. (not implemented) The car stays at the last floor served for normal operation. |
| ZN2 [=f] | f | 1-nf | Zone (2) Floor pointer. (not implemented) |
| ZN3 [=f] | f | 1-nf | Zone (3) Floor pointer. (not implemented) |
| ZN4 [=f] | f | 1-nf | Zone (4) Floor pointer. (not implemented) |
| ZN5 [=f] | f | 1-nf | Zone (5) Floor pointer. (not implemented) |
| ZN6 [=f] | f | 1-nf | Zone (6) Floor pointer. (not implemented) |
| TZP [=n] | n | 0-6 | Top Zone Pointer. The maximum number of zone floors as set by ZN1 thru ZN..(TZPTR). |

NZN[=n]

| COMMAND | UNIT | RANGE | DEFINITION |
|---|---|---|---|
| ULC [=n] | n | 1-20 | Up-Peak Load sw Count trigger. Number of trips (in a time interval) from the lobby floor which will trigger Up Peak operation. |
| UCC [=n] | n | 1-20 | Up-Peak Car-call Count trigger. Number of trips (in a time interval) with more than 2 Car Calls registered from the lobby floor which will trigger Up Peak operation. |
| UDT [=n] | sec | 10-255 | Up-Peak Duration Time. The minimum duration of Up Peak after being triggered. |
| UDP [=n] | tu | 10-960 | Up-Peak Dispatch Penalty time. |
| DTT [=n] | tu | 10-960 | Down-Peak detection average forecast Trigger Time. If the average Down Call ETA exceeds this value, Down Peak operation will occur. |
| DDT [=n] | sec | 10-255 | Down-Peak Duration Time. The minimum duration of Down Peak after being triggered. |
| NDP [=n] | tu | 10-1440 | Next-car-up Dispatch Penalty time. When a car is Next-up, a call's ETA must be greater than NDP to be assigned to the Next-up car.<br><br>For better traffic handling, this value should be smaller in a Duplex operation. This permit the lobby car to be more responsive. |
| NDH [=n] | 1/16s | 5-480 | Next-Up Door Hold time at lobby terminal. Note that when calls are registered, this value becomes smaller in order to release the car faster. |
| BDP [=n] | tu | 0-720 | Blind-crossing Dispatch Penalty time. This is valid only when thre is an express hoistway. This prevents assigning calls across the express hoistway when cars are available. |
| GSI [=n] | 1/16s | 0-160 | Generator Sequencing time Interval. This is the required time interval between starting the MG sets. For SCR cars, this value is meaningless. |
| MTT [=n] | tu | 0-960 | Max allowed Travel Time (ETA) to lobby in order to consider a car in a good position to become next-up or to be dispatched to the Lobby floor. |

| COMMAND | UNIT | RANGE | DEFINITION |
|---|---|---|---|
| MXD [=n] | tu | 0-60 | Max differential ETA during call SCAN to force a reassignment. For example, if MXD is set for 2 seconds (32), an other car must be in a better position by more than MXD to force a reassignment to that car. |
| MID [=n] | tu | 0-32 | Min differential ETA during call SCAN to prevent reassignment. For example, if MID is set at 3/4 sec (12), no calls will be reassign if the Minimum ETA is less than MID. |
| AST [=n] | 1/16s | 0-1600 | Automatic Service protection Time. This is similar than the car controller AST. It must always be set higher than the Car AST by a min. of 15 seconds (n=240). |
| CSW [=n] | n | 0-max | Control Status Word for the Group. See sections 7.7.1.2 and 7.7.1.3 |
| CS1[=n](PSW) | bit | 0-max | Extra Control Status Word for the Group. See sections 7.7.1.2 and 7.7.1.4 |
| CS2[=n](OSW) | bit | --- | Extra Control Status Word. See sections 7.7.1.2 and 7.7.1.5 |
| CS3[=n] | bit | --- | Extra Control Status Word. See sections 7.7.1.2 and 7.7.1.6 |
| BE1 [n=n] | n | 0-98 | Building elevator number designation for car number one. Similar to BED for the Car controller. |
| BE2 thru BE8 | | | Refer to BE1 but for cars 2 thru 8. |
| C01 thru C08 [=c] | | | Car order which is displayed on Video Screen. These parameters can change the left-to-right relationship of cars 1 thru 8 respectively. This is for the Dispatch screen. |
| CBH [=n] | sec | 0-120 | Code Blue door hold time. This is the time that the doors will remain opened at the code blue designated floor. If after this time, the Hospital service switch has not been activated the doors will close and the car will return to normal operation. |

| COMMAND | UNIT | RANGE | DEFINITION |
|---|---|---|---|
| CB1 [=c] | c | 1-c | Code Blue car pre-selection order priority one (1). It is possible to established the better cars to respond to a code-blue call and prioritized these cars in CB1 thru CB8. When there is a code-blue call, the car designated by CB1 will be evaluated first, then the CB2 car if the first one was not available.<br><br>Note that the car number must be the SWIFT group car numbering, that is number one thru number eight. |
| CB2 thru CB8 | | | Same as CB1 but for priorities 2 thru 8. Note that CB1 has the highest priority. Note that the car number must be the SWIFT group car numbering, that is number one thru number eight. |
| EP1 [=c] | c | 1-nc | Emergency power car selection order priority one (1). During an Emergency power automatic recall operation, all the cars must be returned to the designated floor. The car at EP1 will be the first car to be returned, followed by EP2 thru EP8.<br><br>For normal operation, set EP1 to 1, EP2 to 2, ... EP8 to 8. Note that the car number must be the SWIFT group car numbering, that is number one thru number eight. |
| ALR [=f] | | | Alternate lobby minimum car request. |
| DLB [=f] | | | Dual lobby floor |
| DLR [=n] | | | Dual lobby number of car request |
| RLB [=f] | | | REAR lobby floor |
| RLR [=n] | | | Rear lobby number of car request |
| PFT [=n] | | | Time the car must be free to park it |
| LRP [=tu] | | | Lobby request penalty time |

### 7.7.1.2 Bit Command For Control Status Word

Bit command for jobs prior to CEC 1266:

The following command (BIT) is used to set the individual control flags of the CSW and PSW parameters. The CSW and PSW bit designation follows.

BIT|R,S||C,P|n  0-15  Set or Reset Bit (n) of CSW or PSW.
|R,S| Choose one... Reset 'R' or 'S' the flag
|C,P| Choose one... CSW 'C' or PSW 'P' parameter
n = flag (bit) number to set or reset.

For example, to cancel all the car calls when the car makes a stop on Independent operation bit 10 of CSW must be set. The following command must be used:

BITSC10<return>

Note that the Control Status Words (CSW) have been increased to 6 (CSW, CS1, CS2, CS3, CS4 AND CS5).

Note that PSW and OSW are now refered to as CS1 and CS2 respectively.

Bit command for jobs after CEC 1266:

BIT|D|[|R,S|s,n]

D Display all the Control Status Words (0 thru 5) (CSW, CS1, CS2, CS3,CS4 & CS5)

R,S Reset or Set the Control Status Word (s) Bit (n)

For example to set bit 10 of CSW type the following command:

BITS0,10<return>

For example to reset bit 4 of CS1 (PSW) type the following command:

BITR1,5<return>

For example, to display all CSW words type:

BITD<return>

7.7.1.3 CSW Bit Designation (* = Default or normal value)

***** CSW ***** (Control Status 0)

| Bit | * | Function |
|---|---|---|
| 0 | R | Hall Call Latching (Reset) or Cancelling (Set) mode of operation. During installation it is sometimes useful to cross-cancel the hall calls with the existing dispatch controller. This bit would have to be Set to accomplish this |
| 1 | R | When Set, the doors will close on the Next-up car after the initial Next-up courtesy time as set by NDH. When Reset the doors remain opened until the MG set shuts-down. |
| 2 | R | (Optional) Same as bit 1 but for rear Next-up operation. |
| 4 | R | If Set then park the free cars at zone floors (ZN1 thru ZN5) |
| 5 | R | If Set then park the Free cars at specific floors by priority. |
| 6 | R | If Set then park the cars not required at lobby floor to the zone as per (ZN1 thru ZN5). |
| 8 | R | Controls the assignment of a Code Blue call. When reset a CB call is assigned to the closest car that can respond. When Set, a CB call is assigned in a pre-established order as defined by the commands CB1 thru CB8. |
| 9 | R | If set then use the Alternate lobby next-up floor (ALY) parameter instead of the normal lobby floor (LBY). |
| 10 | R | When set go into DUAL Lobby next-up mode. |
| 11 | R | When Set and there are rear cars, go into rear lobby next-up mode. |
| 15 | R | REAR Hall Call Latching (Reset) or Cancelling (Set) mode of operation. During installation it is sometimes useful to cross-cancel the REAR hall calls with the existing dispatch controller. This bit would have to be Set to accomplish this. |

7.7.1.4 CS1 (PSW) Bit Designation (* = Default or normal value)

***** PSW ***** Control Status 1
(Formerly PSW)

| Bit | * | Function |
|---|---|---|
| 0 & 1 | R | Human Interface Baud rate. |

| 1 | 0 | Baud Rate |
|---|---|---|
| R | R | 1200 (normal mode) |
| R | S | 300 |
| S | R | 600 |
| S | S | 2400 |

| | | |
|---|---|---|
| 7 | R | Fire Operation (only when configured on PMI). When set the fire Light for hallway will flash On and Off. |
| 8 | R | If Set then no hall call latching if the call cannot be assigned (on certain jobs only) |
| 9 | R | If Set then no Code Blue call latching if the call cannot be assign to an automatic operation car. |
| 10 | R | If Set then no Rear hall call latching if the call cannot be assigned (on certain jobs only) |
| 11 | R | If Set then the VIP call is self latching. (Configured on certain jobs only). The job must be purchase with VIP call option. |

7.7.1.5 CS2 (OSW) Bit Designation (* = Default or normal value)

***** OSW ***** Control Status 2
(Formerly OSW)

| Bit | * | Function |
|---|---|---|
| 0-7 | S | This bit must be set to allow a car to answer a VIP call. Bit 0 is for Car # 1, Bit 1 for car # 2, .... etc. |

7.6.1.7 CS3 Bit Designation

***** CS3 *****

| Bit | * | Function |
|---|---|---|
| 0 | R | If Set.then the video controller is programmed for 50 Hertz, else it is for 60 hertz. |

### 7.7.3 Diagnostics/Monitoring Commands

| COMMAND | DEFINITION |
|---|---|
| REE [=e] | Set the reference Elevator. Many commands require that REE is set to either the System (REE = 0) or to a car (REE = 1 thru 8) for cars 1 thru 8. |
| PAR [\|A,I\|] | Review or Load the above System or Car Parameters as defined by REE. |
| | PAR — Review all the (REE) parameters. |
| | PARA — Alter/Load all the REE parameters with prompting. Each parameter is listed with its value. Pressing RETURN will leave it unchanged. Entering a value and then pressing RETURN will alter this parameter with the new value which is displayed. |
| | PARI — Initialize the REE parameters as per factory default (as shipped). |
| SCA [\|A,I\|] | Review or Load the Scan Assignment Table of all floors for a specific car as set by REE (1 thru 8). |
| | SCA — Review the floor scan assignment table for Car 'REE' |
| | SCAA — Alter/Load the floor scan assignment Table for Car 'REE'. |
| | SCAI — Initialize the floor Scan Assignment for Car 'REE as per factory default (as shipped). |

The following values with their designations can be entered with the SCA command.

| Value | Definition |
|---|---|
| 0 | Do not accept Up or Down Hall Calls for that floor |
| 1 | Accept only Up Hall Calls for that floor |
| 2 | Accept only Down Hall Calls for that floor |
| 3 | Accept both Up and Down Hall Calls for that floor |

GROUP CONTROLLER

ADDENDUM TO CSW BIT DEFINITIONS, ERROR CODES AND COMMANDS

7.7.1 Group System Parameters

| COMMAND | UNIT | RANGE | DEFINITION |
|---|---|---|---|
| VP1 [=f] | f | 1-nf | Selects the floor at which the vip 1 input is used for. i.e. if set to 4 then floor 4 would be the vip floor when the vip 1 input is activated. (This operation is optional). |
| VP2 [=f] | f | 1-nf | Selects the floor at which the vip 2 input is used for. i.e. if set to 4 then floor 4 would be the vip floor when the vip 2 input is activated. (This operation is optional). |
| RTO [=n] | 1/4s | 5-max | Remote car time out during emergency power recall operation. The time delay for a remote car to give a drive running signal after the group has given a drive enable signal. (This operation is optional). |
| RST [=n] | 1/4s | 0-max | Remote car sequence time. Time delay to select the next remote car during emergency power recall operation. (This operation is optional). |
| RTT [=n] | 1/4s | 5-max | Remote car travel time. Time allowed for the remote car to travel to the emergency power floor during the recall operation. (This operation is optional). |

7.7.1.3 CSW Bit Designation (* = Default or normal value):

***** CSW ***** (Control Status 0)

| Bit | * | Function |
|---|---|---|
| 3 | R | Controls the door operation during Next-Up. When set the doors close after courtesy time. |

7.7.1.4 CS1 (PSW) Bit Designation (* = Default or normal value):

***** CS1 ***** Control Status 1
(Formaly PSW)

| Bit | * | Function |
|---|---|---|
| 12 | R | If set, then VIP calls are self latching. |
| 15 | R | If set then all cars are requested to Lobby during Up Peak. |

7.7.1.6 CS3 Bit Designation (* = Default or normal value):