

WESTINHOUSE

TOOL

SDT-1180

Date: 6/17/2010
Revision Number: 2.0
Manual Number: 11.0

Revision Sheet

Revision Number	Date	Revision Description
2.0	6/17/2010	Updated the manual.

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NO LIABILITY IS ASSUMED ON THE INFORMATION IN THIS MANUAL OR DIAGNOSTIC TOOL.

CHAPTER 1

KEYBOARD

The DT (Diagnostic Tool) keyboard keys are described below:

<u>KEY</u>	<u>FUNCTION</u>
F1 to F4	Enters functions.
F5 to F10	Not used.
CALL	Enters Call Mode for entry of calls.
STAT	Enters Status Mode for checking communications.
A to F	Entry of Hex number and special operations.
DISP	Enters Display Mode for showing memory addresses, FCB info, input signals and outputs signals.
PROF	Enters Profile Mode for viewing systems features.
TEST	Enters Test Mode,
ACT	Enters Active Mode.
0 to 9	Entry of numbers.
FRONT	Allows information entered or displayed to refer to the front door openings FRONT is the default.
REAR	Allows information entered or displayed to refer to the rear door openings.
COR U	In CALL mode, it allows you to view or enter up corridor calls. In TEST mode it allows you to test the UP car Lantern and handicap bell.
COR D	In CALL mode, it allows you to view or enter down corridor calls. In TEST mode it allows you to test the DOWN car Lantern and handicap bell.

<u>KEY</u>	<u>FUNCTION</u>
IR U	Not used with MPH 2 and 300A.
IR D	Not used with MPH 2 and 300A.
LOGON	Enables operation of DT with elevator system controller.
ENTER	Executes DT keyboard entries.
CAR CALL	In CALL mode, it allows you to view or enter car calls, if already viewing or entering corridor calls.
NEXT	Causes next screen to be displayed.
OWNER	Info of purchaser.
MFG	ECI information.

CHAPTER 2

LOGON

To use the DT, plug its DB 25 connector into the Main board in the elevator system.

Next, press the **LOGON** key. The screen displays the word LOGON as shown in Figure 2-1



Figure 2-1

Now enter the five (5) digit job number and press **ENTER**.

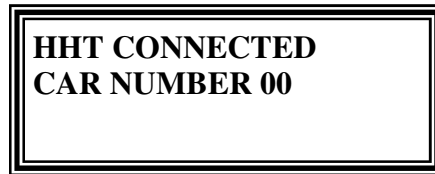


Figure 2-2

For figure 2-2 00 is the number of the car the DT is connected to.

If the logon is invalid the screen will remain unchanged.

After successful **LOGON** user may select an operating mode.

LOGOFF

To Logoff just unplug the DB 25 connector.

CHAPTER 3

CALL MODE

Descriptions:

Permits display or entry of car and corridor calls which enabled in the system. (300A and MPH 2)

To enter Call mode, press the **CALL** key. See Figure 3-1



Figure 3-1

The three functions that are available in this mode are described Below.

DSP Displays currently active calls within the
(F1) elevator systems.

The following are displayed:

Car calls for the elevator to which the DT is connected.
Up and down corridor calls for the car or bank of elevators.

ENT Allows you to enter car calls for the elevator to which the DT is
(F2) connected.

Up and down corridor calls for the car or bank of elevators can be entered from the Master elevator controller.

TRGT Displays targeted calls to which this car is currently assigned.
(F3)

CALL-DSP (display)

Figure 3-2 shows how to select. Call Mode-Display Calls function.

MODE = **CALL** FUNCTION = **F1**
F = **FRONT** C = **CAR CALL**



Figure 3-2

Where:

Call-DSP Line-F (front) or R (rear) is default

Type of call
C (Car Call) or
U (Up) corridor call or
D (Down) corridor call.

00—07 Line—Indicates no call
- 1—indicates a latched call

A car call is assumed of a corridor call key is not pressed (**COR U** or **COR D**). For car calls, the screen always displays **C**. The screen displays **F** as a default if neither the **FRONT** or **REAR** opening key is pressed.

If a corridor call key is pressed (**COR U** or **COR D**), the screen displays **F** as a default if neither the **FRONT** or **REAR** opening key is pressed.

CALL-ENT (Enter)

Enters front or rear car calls. Corridor calls can be entered only from the master elevator controller. Figure 3-3 shows Call Mode-Enter Calls function.

Key Sequence:

CALL + F2 + FRONT OR REAR + CAR CALL OR COR U
OR COR D + nn + ENTER

MODE = CALL
FUNCTION = ENT
DOORS = F—FRONT, R—REAR
C = CAR CALL, U = UP COR CALL.,
D = DOWN COR CALL
00 = FLOOR NUMBER

CALL ENT FC 00
CALL ENTERED
DSP ENT TRGT

Figure 3-3

(**CALL ENTERED**-appears on second line if call has been entered).

Note: That the term “ENTER” is used in two ways in this mode.

- Function key **F2** is pressed to initiate the Enter Call functions.
- The **ENTER** key is pressed to complete the data entry.

A car call is assumed if a corridor call key is not pressed (**COR U or COR D**). For car calls, the screen always displays **C**. The screen displays **F** as a default if neither the **FRONT or REAR** opening key is pressed.

NXT and PREV keys may also be used to enter calls.

CALL-TRGT (Target)

Displays current target information. Figure 3-4 shows typical displays when **CALL + F3 (TRGT)** keys are pressed.

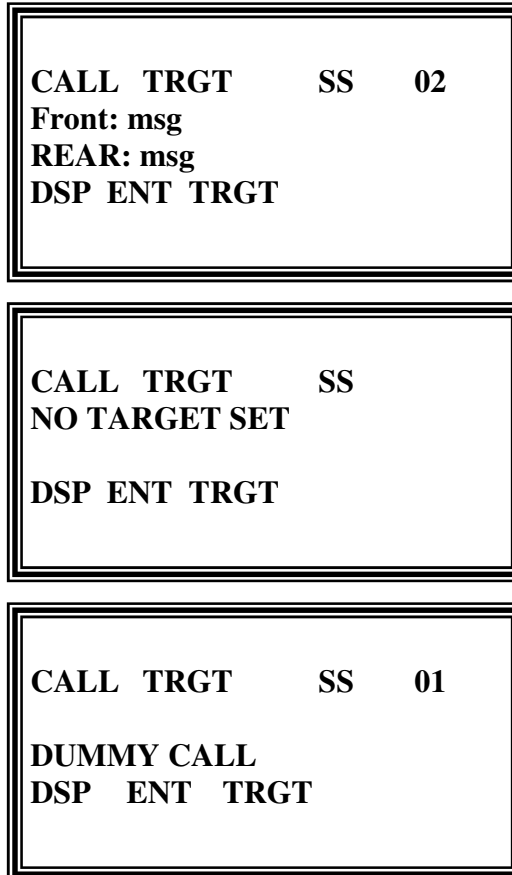


Figure 3-4

Use **NEXT** and **PREV** keys for current target information on the other floors.

CHAPTER 4

STATUS MODE

Description

Displays status of communication between Main Processor board and the following:

- Elevator Bank
- Individual car
- Floor controller boards
- Hoistway floor controller boards

To enter Status mode, press **STAT** key, see Figure 4-1

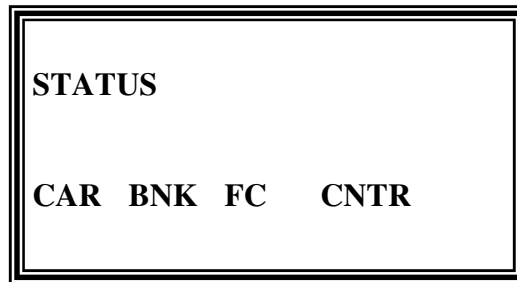


Figure 4-1

The four functions that are available in this mode are described below.

CAR Display status of car-service, run controller and doors.
(F1)

BNK Displays the status of the elevator bank when the DT is connected
(F2) to the elevator. This feature allows you to view the bank status without having to connect the **HHT** to each elevator controller in the elevator bank. It also allows you to quickly identify the elevator acting as dispatcher or master.

FC Display the state of FLOOR CONTROLLER STATUS PANEL
(F3) communications.

CNTR Displays current value of car's STOP COUNTER.
(F4)

CAR SERVICE STATUS

Service-status of the car is checked with the DT plugged into controller of the car being tested. To select the car-service status function press; **STAT + F1 (CAR) + F1 (SRV)**. The display shown in Figure 4-2 appears if the car is in normal bank service.

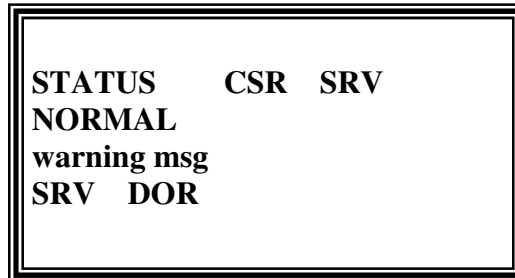


Figure 4-2

If the car is not in normal bank service. Figure 4-3 will appear.

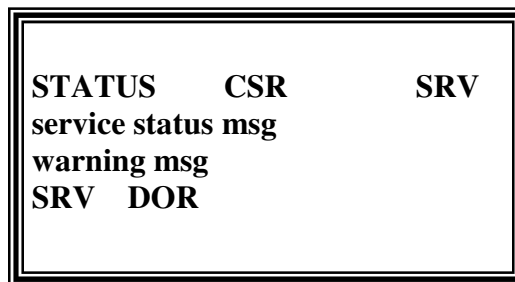


Figure 4-3

The service status msg (on line 2 of the screen) can be one or more of the following messages.

457T TIMEOUT	CAR IS LOST
DOOR CONTRACT TRB	DOOR LIMIT TRBL
EMER PRE-WARN	EMERGENCY STOP
EMP CAR SELECTED	EMP-NOT SELECTED
FC 00-01 PROBLEM	LOW OIL/AST
NO FR-DOOR PWR	NO RR-DOOR PWR
NO STATUS PANEL POWER	ON APE FEATURE
ON CAR-TO-LOBBY	ON CODE BLUE
ON EMT	ON FIRE PH1
ON FIRE PH2	ON HAND
ON HOSPITAL EMERGENCY	ON INDS
OVER TEMPUTURE	PHOTO-SW ERROR RE-LEVEL
PROBLEM	

The warning message indicates an abnormality in the system. The abnormality will not remove the car from the bank service. The warning msg (on line 3 of the screen) can be one or more of the following messages:

A DUMMY RUN	COLD OIL BYPASS
BATTERY RAM ERROR	FC LINK 1 PROBLEM
FR BYPASS ON	FC LINK 2 PROBLEM
SAF-T-EDGE PROBLEM	

Use **NXT** or **PREV** keys to go through the list and get any other car service-status and warning messages.

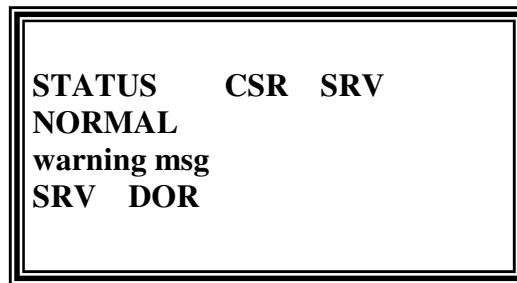
Status-Car-DOR

To get status of front doors press the following keys:

STAT + F1 (CAR) + F2 (DOR)

Screen shown in Figure 4-4 appears showing status of front doors.

(Front doors is the default) press **REAR** key to get rear door status.



A rectangular box with a double-line border containing the following text:
STATUS CSR SRV
NORMAL
warning msg
SRV DOR

Figure 4-4

Car door status messages (on line 2 of the screen) can be one of the following:

EMT DOORS	IS/HE DOORS
NO DOOR OPENING	NO DOOR POWER
NORMAL DOORS (default)	ON NUDGING
PHASE I DOORS	PHASE II DOORS

Car door conditioning messages (on line 3 of the screen) can be one of the following messages:

FULLY CLOSED	OPENING
FULLY OPENED	CLOSING

Use **FRONT** and **REAR** keys to view front or rear openings.

STATUS-BNK

Elevator bank status can be checked with the DT plugged into any controller in a bank of elevators.

To get bank status info, press the following keys:

STAT + F2 (BNK)

Figure 4-5 shows status of each car in the bank.

STATUS	CSR	SRV
NORMAL		
warning msg		
SRV	DOR	

MPH 2 Multi Car Bank

STATUS	CSR	SRV
NORMAL		
warning msg		
SRV	DOR	

300A Single Car

Figure 4-5

Car numbers are displayed on the second line. Third line displays items on the status list. The value (0 or 1) for each car is:

1 if the signal is true.
0 if the signal is not true

Bank status items are checked in the sequence shown below. For the next item on the list, press **NEXT**. For the previous item on the list, press **PREV**. To return to the first item on the list, press **F2**.

BANK STATUS LIST

COMP	Bank Communications Status
DISP	Bank Dispatcher Controller
FCMS	Floor Controller Master Controller
FC1P	Floor Controller Communications Problem Link 1
FC2P	Floor Controller Communications Problem Link 2
INSV	Cars in Service
AVAS	Available Cars
UPTR	Cars with UP Travel Directions
UPSV	Cars with UP Service Directions
AVP	Advanced Car Position
DRCL	Car door close (Close unit, interlocks and gate switch closed)
K29	Safety Circuit
LVZN	Car in Level Zone
EXLV	Exactly Level
DEC	Deceleration
INDS	Car on Independent Service
FIRE	Fire Return
AST	Anti-Stall Condition (car runs too long or low oil)
TEMP	Oil overheating or under-temperature

STATUS-FC

Status of floor controller, status panel communication is displayed. To get this display, press the following keys; **STATUS + F3 (FC)**.
Figure 4-6 shows Link 1 (floor controller in car station). Link 2 (floor controllers for hall), or communication status of status panel boards (**SPB**).

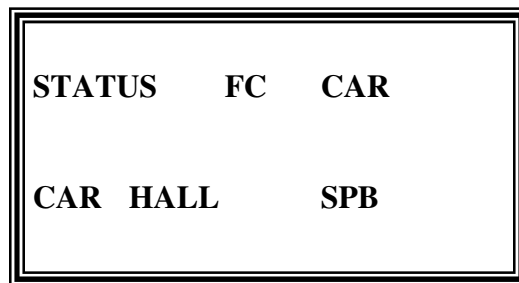


Figure 4-6

STATUS-FC-CAR

To check communication status of Link 1 floor controllers in the car station, press the following keys; **STATUS + F3 (FC + F1 (CAR))**.
Figure 4-7 shows if a Link 1 communication problem exists, and address of those floor controller boards affected.



Figure 4-7

Communication message (on line 2 of display) is as follows;

COMM OK if there are no Link 1 communication problems.

COMM PROBLEM if there are Link 1 communication problems.

The ff's (on line 3) are the addresses of the car floor controllers with communication problems. If there are no problems the line is blank. Car floor controller address are as follows;

MPH2

Main Car Station	ff
FC00	00
FC01	01
FC02	02
FC03	03
FC04	04
FC10	10
FC11	11
Aux Car Station	
FC05	05
FC06	06
P.I.	
FC70	70

300A

Car Station	ff
C10	00/01

STAT + F3 + F1

MPH2/300A

STATUS	FC	CAR
COMM OK		
CAR HALL SPB		

MPH2

STATUS	FC	CAR
COMM PROBLEM		
03		
CAR HALL SPB		

300A

STATUS	FC	CAR
COMM PROBLEM		
00	01	
CAR	HALL	SPB

Link1 communication problem with CIO Board

Figure 4-8

STAT US-FC-HALL

To check the communication status of Link2 push:

STATUS + F3 + F2

Figure 4-9 shows Link2 communication and hall control board address.

STATUS	FC	HALL
Communication msg		
hh	hh	hh
CAR	HALL	SPB

Figure 4-9

Communication messages follows;

NOT FC MASTER	MPH2-Car is not Master. Move Diagnostic Tool to Master.
COMM PROBLEM	Link2 communications problem.
COMM OK	Link2 communications OK.
hh	Hall control board addresses.

The **NEXT** and **PREV** keys move you through the list of hall control board addresses that have communication problems.

On MPH2s you can identify the floor controller master by Pushing.

STAT + F2

Now keep pushing NEXT until FCMS is displayed, the floor controller master has a "1" under the car number.

- Odd numbered FCBs are used for front door openings.
- Even numbered FCBs are used for rear door openings.
- FCBs 11-18 are used in the auxiliary riser when there are 3 or more cars or 2 cars with auxiliary riser enabled.
- HFC 78 is used in the emergency power station for cars 0 and 1.
- HFC 79 is used in the emergency power station for cars 2 and 3.
- HFCs 70-73 are used for the horizontal P.I for cars 0-3.

HFC 7C is used for the lobby EMT switch or for front Code Blue floors.
HFC 7D is used for rear Code Blue floors.
HFC 7B is used for local F.E.R. requirements.

STATUS-FC-SPB

To check the communication of the Status Panel Boards press the following keys:

STATUS + F3 (FC) + F3 (SPB)

Figure 4-10 shows if a Link2 communication problem exists with the SPB.

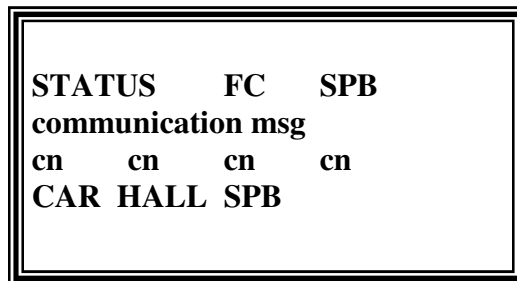


Figure 4-10

Communication message;

NOT FC MASTER	MPH-cards not floor controller Master. Plug HHT into car that is the floor controller Master.
COMM PROBLEM	Communication problems exists on LINK2.
COMM OK	LINK2 communication OK.
cn	Car number associated with SPB which has a LINK2 communication problem.

To identify the car that is FC master (MPH2 only), press:

STAT + F2

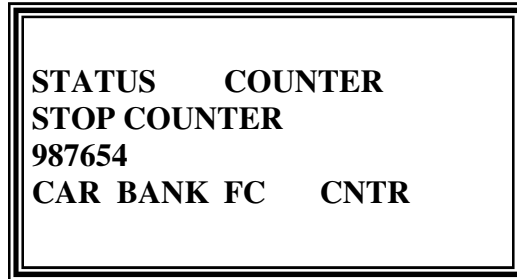
Keep press **NEXT** key until FCMS appears. The FC Master car ha a “1” under the car number.

STATUS-CNTR

To obtain the value of the car's STOP-COUNTER press the following keys:

STAT + F4

Figure 4-11 shows the number of stops the car has made.



A rectangular display box with a double-line border containing the following text:

STATUS	COUNTER
STOP COUNTER	
987654	
CAR BANK FC	CNTR

Figure 4-11

(987654 is the current value of the car's STOP COUNTER)

CHAPTER 5

DISPLAY MODE

To enter Display Mode push the DISP key. See figure 5-1 and description below.

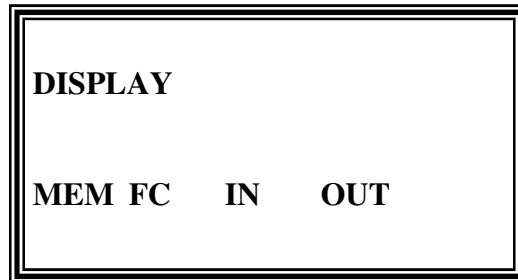


Figure 5-1

MEM (F1) Displays addresses of memory locations.

FC (F2) Displays floor controller info.

IN (F3) Displays car input signals.

OUT (F4) Displays output signals.

DISPLAY-MEM

Press **DISP + F1 (MEM)** to display memory contents.

Press **DISP + F1 + 5 digit address + ENTER** to display the contents of memory at that address.

Press **NEXT** for next address information.

Press **PREV** for previous address information.

See Figure 5-2.

DISPLAY	MEM 00000		
00	01	02	03
04	05	06	07
MEM FC	IN	OUT	

Figure 5-2

MPH2 memory address.
 00000 to 03FFF
 C2000 to C3FFF
 E0000 to EFFFF

300A memory addresses.
 Still to come.

Only valid address will get a response.

DISPLAY-F2

Press **DISP + F2** to display floor controller data. See Figure 5-3.

DISPLAY	FC
CAB HALL	SPB

Figure 5-3

Press **DISP + F2 + F1** to display the floor controller inputs and outputs.
 See Figure 5-4.

```
DISPLAY  FC  CAB  
  
CAB  HALL SPB
```

Figure 5-4

To display the floor controller input and output signals press
DISP + F2 + F1 + FCB # + ENTER.
See Figure 5-5

(IN and OUT displays 12 bits)

```
DISPLAY  FC  CAB  000  
IN      010101010101  
OUT     010101010101  
CAB  HALL      SPB
```

Figure 5-5

Press **NEXT** for the next FCB's information.

Press **PREV** for the previous FCB's information.

The following charts are input and output signals.

MPH 2 Car FCB or HVM Inputs
 (# = down is Address, across is Input #)

	11	10	9	8	7	6	5	4	3	2	1	0
00	KSTE				KDCL	KDOL	KDOB	KDOB	KTS2	KTS1		
01	KDCB	KTSA	3B	2B	1B	0B			KHD	KHU	KLD	KLU
02	7B	6B	5B	4B								
03	KSTE R				KDOL R	KDOL R	KDCB R	KDOB R	KTS2 R	KTS1 R	1BR	0BR
04	CS11	CS10	CS9	CS8	CS7	CS6	CS5	CS4	CS3	CS2	CS1	CS0
05	KDBC	KDOB			7B	6B	5B	4B	3B	2B	1B	0B
06	KDCB R	KDOB R							3BR	2BR	1BF	0BR
70												

MPH 2 Car FCB or HVM Inputs

	11	10	9	8	7	6	5	4	3	2	1	0
00	DNUIX	DCLOS	DOPE N									DTONE
01			3B	1B	0B	CLD	CLU					
02	7B	6B	5B	4B		3BR	2BR		1RELT			
03		DNUGR	DCLSR	DOPE NR							1BR	0BR
04												
05			CLD	CLU	7B	6B	5B	4B	3B	2B	1B	0B
06									3BR	2BR	1BR	0BR
70			AVP7	AVP6	AVP5	AVP4	AVP3	AVP2	AVPI	AVP0	UP	DN

300A Car CIO outputs
 (# = down is Address, across is Input #)

	11	10	9	8	7	6	5	4	3	2	1	0
00	KSTE	KDCL	KDOL	KDCB	KDOB	KTS 2	KTS 1	KHEM	KLD	KHU	KLD	KLU
01	CS0	CS1	CS2	KEMTCA R	KHC	KFCR		KFEM CM	CC3	CC2	CC1	CC0

300A Car CIO outputs
 (# = down is Address, across is Input #)

	11	10	9	8	7	6	5	4	3	2	1	0
00	DSTE	DNUDGE	DCLOSE	DOPEN	PI 3	PI 2	PI 1	PIU	PIDN	PIUP	CLD	CLU
01	SP7	SP6	SP5	SP4	STOVD2	DEMT	DTONE	DFRL	CC3	CC2	CC1	CC0

DISPLAY –FC HALL

Press **DISP + F2 + F2** to display the hoist way FCB inputs and outputs.
See Figure 5-6

DISPLAY	HALL	PC
CAB	HALL	SPB

Figure 5-6

Enter hoistway **FCB** number next to **HALL** and press **ENTER** to display the inputs and outputs. The display will be similar to figure 5-7.

DISPLAY	HALL	FC00
IN	010101010101	
OUT	010101010101	
CAB	HALL	SPB

Figure 5-7

The display shows the 12-bit input and output signals from the **FCB**.
Pressing **NEXT** or **PREV** will step you thru the different **FCB** boards in the systems.

The following tables show the inputs and outputs for the **MPH2**.

#	11	10	9	8	7	6	5	4	3	2	1	0
01		0BU		LU 00		LU 01	1BU	1BU	LD 10	LU10	LD11	LU11
02		0BUR		RLU 00		RLU 01	1BDR	1BU	RLD1 0	BLU1 0	RLD1 1	RLU1 1
03	2BD	2BU	LD 20	LU 30	LD 21	LU 21	3 BD	3BU	LD30	LU30	LD31	LU31
04	2BDR	2BRU	RLU 20	RLU 30	RLD 21	RLU 21	3BDR	3BU	RLD 30	RLU3 0	RLD3 1	RLU3 1
05	4BD	4BU	LD 40	LU 40	LD 41	LU 41	5 BD	5BU	LD 50	LU 50	LD51	LU52
06	4BDR	4BUR	RLD 40	RLU 40	RLD 41	RLU 41	5 BDR	5BU	RLD 50	RLU 50	RLD5 1	RLU5 1
07	6BD	6BU	LD 60	LU 60	LD 61	LU 61	7BD		LD 70		LD71	
08	6BDR	6BUR	RLD 60	RLU 60	RLD 61	RLU 61	7BDR		RLD 70		RLD7 1	
11		0BU		LU 02		LU 03	1BD	1 BU	LD 12	LU 12	LD13	LU13
12		0BUR		RLU 02		RLU 03	1BDR	1 BUR	RLD 12	RLU 12	RLD1 3	RLU1 3
13	2BD	2BU	LD 22	LU 22	LD 23	LU 23	3 BD	3 BU	LD 32	LU 32	LD33	LU33
14	2BDR	2BUR	RLD 22	RLU 22	RLD 23	RLU 23	3BDR	3 BUR	RLD 32	RLU 32	RLD3 3	RLU3 3
15	4BD	4BU	LD 42	LU 42	LD 43	LU 43	5 BD	5BU	LD 52	LU 52	LD53	LU53
16	4BDR	4BUR	RLD 42	RLU 42	RLD 43	RLU 43	5 BDR	5 BUR	RLD 52	RLU 52	RLD5 3	RLU5 3
17	68D	6BU	LD 62	LU 62	LD 63	LU 63	7 BD		LD 72		LD73	
18	6BDR	6BUR	RLD 62	RLU 62	RLD 63	RLU 63	7 BDR		RLD 72		RLD 73	
70			AVP 70	AVP 60	AVP 50	AVP 40	AVP 30	AVP 20	AVP 10	AVP 00	UP	DN
71			AVP 71	AVP 61	AVP 51	AVP 41	AVP 31	AVP 21	AVP 11	AVP 01	UP	DN
72			AVP 72	AVP 62	AVP 52	AVP 42	AVP 32	AVP 22	AVP 12	AVP 02	UP	DN
73			AVP 73	AVP 63	AVP 53	AVP 43	AVP 33	AVP 23	AVP 13	AVP 03	UP	DN
78							DEM P 1	DEM P 0			KEM P 1	KEM P 0
79			KOV D			DEM P 3	RCBC 2			KEM P 3	KEM P 2	
7C				RCBC 7	RCBC 6	RCBC 5	RCBC 4	RCBC 3	RCBC 2	RCBC 1	RCBC 0	EMTL
7D					RCBC 7	RCBC 6	RCBC 5	RCBC 4	RCBC 3	FCBC 2	RCBC 1	FCBC
7E	KSD M				ALD 03	RCBC 7	ALD O 1	ALD 00	MLD O 3	MLD O 2	MLD0 1	MLD0 0

DISP-FC- SPB

Pressing **DISP + F2 (FC) + F3 (SPB)** causes the diagnostic Tool to show the inputs and outputs from the **SPB** as shown below in Figure 5-8

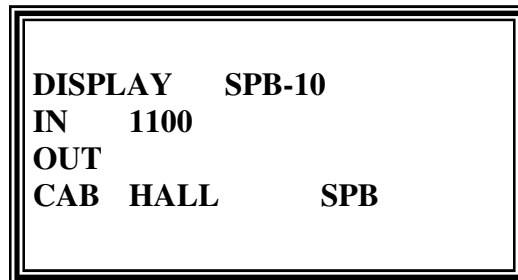
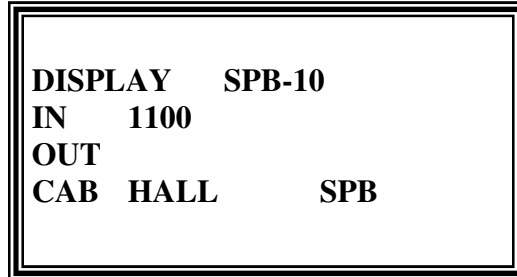


Figure 5-8

Press **NEXT** for the next SPB.

Inputs are 4-bit and outputs are 6-bit.

Communication problems will display **ERROR**.



```
DISPLAY SPB-10
IN 1100
OUT
CAB HALL SPB
```

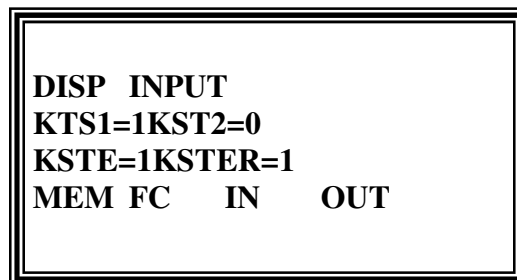
Figure 5-9

SPB Inputs and Outputs.

#	1	2	3	4	5	6
IN	PWR	INSV				
OUT	UP	DN	FIRE	INSV	PWR	PI2L

DISPLAY-IN

Pressing DISP + F3 (IN) displays the car inputs. See figure 5-10



```
DISP INPUT
KTS1=1KST2=0
KSTE=1KSTER=1
MEM FC IN OUT
```

Figure 5-10

Press **NEXT** to step thru.

Display-Car Inputs

INPUT	DEFINITIONS
KTS1	FRONT SAFTEY EDGE BEAM
KTS2	FRONT SAFETY EDGE BEAM
KSTE	FRONT SAFTEY EDGE
KSTER	REAR SAFTEY EDGE
KDOL	FRONT DOOR OPEN LIMIT
KDCL	FRONT DOOR CLOSE LIMIT
KDOB	FRONT DOOR OPEN BUTTON
KDCB	FRONT DOOR CLOSE BUTTON
KHU	UP HIGH SPEED SLOWDOWN
KHU	UP HIGH SPEED SLOWDOWN
KLU	UP LEVEL ZONE
KHD	DOWN HIGH SPEED SLOWDOWN
KLD	DOWN LEVERL ZONE
KHEM	HOSPITAL EMERGENCY
KHCS	ONE TRIP HANDICAP TONE ENABLE
KFMCM	FIRE PHASE II
KEMTC	EMT SWITCH IN CAR
KHOLD	FIRE PHASE II SWITCH HOLD POSITION
KFCL	FIRE CALL CANCEL
KTSIR	REAR SAFTEY EDGE BEAM
KTS2R	REAR SAFTEY EDGE BEAM
KDOBR	REAR DOOR OPEN BUTTON
KDCBR	REAR DOOR CLOSE BUTTON
KDOLR	REAR DOOR OPEN LIMIT
KDCLR	REAR DOOR CLOSE LIMIT
KTSA	TRAFFIC SENTINEL BEAM CUTOUT

Display-OUT

Pressing **DISP + F4 (OUT)** displays the car outputs. See figure 5-11

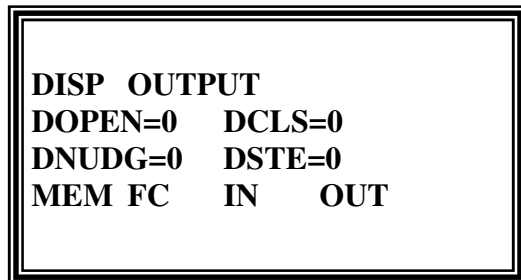


Figure 5-11

Press **NEXT** to step thru.

Display Outputs

OUTPUT	DEFINITIONS
DOPEN	FRONT DOOR OPEN
DCLS	FRONT DOOR CLOSE
DNUDG	FRONT DOOR NUDGING
DSTE	FRONT DOOR SAFTEY EDGE OVERRIDE
DOPNE	REAR DOOR OPEN
DCLSR	REAR DOOR CLOSE
DNDGR	REAR DOOR NUDGING
DSTER	REAR DOOR SAFTEY EDGE OVERRIDE
DEMTC	EMT LIGHT
DCLU	UP CALL RESPONSE
DCLD	DOWN CALL RESPONSE
SOVD2	STOP SWITCH OVERRIDE
DTONE	CHIME

CHAPTER 6

PROFILE MODE

The **Profile Mode** allows the user to display car or system features. Pressing PROF allows the use to enter into the **Profile Mode**. See figure 6-1

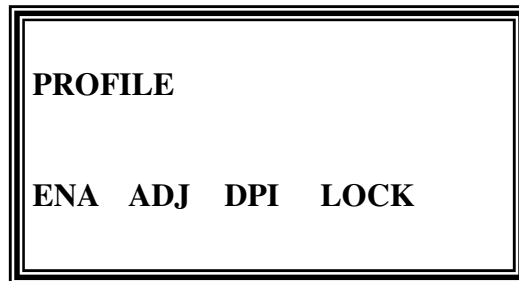


Figure 6-1

DEFINITIONS

ENA (F1)	DISPLAYS FRONT AND REAR OPENINGS EN- ABLED AND DISPLAYS THE COE IN THE EPROM.
ADJ (F2)	DISPLAYS ADJUSTABLE PARAMETERS.
DPI (F3)	DISPLAYS PI AND ALLOWS PI CHANGES.
LOCK (F4)	DISPLAYS BUTTONS ACCESS CODES AND SECU- RITY KEY CUTOUTS. ALLOWS CHANGING BUT- TON ACCESS CODES AND SECUTITY KEY CUT OUTS.

PROFILE ENABLE

Pressing **PROF + F1 (ENA)** displays a screen like figure 6-2.

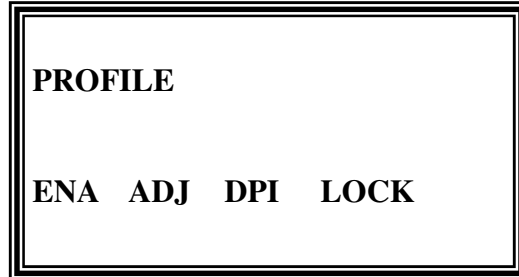


Figure 6-2

Press **NEXT** to step thru the features or **PREV** to back up.

DOOR INFORMATION	
TDCF4	THE FRONT DOOR OPERATOR IS A TDC
DCBF	THE FRONT DOOR OPERATOR IS A DCB
TDCR	THE REAR DOOR OPERATOR IS A TDC
DCBR	THE REAR DOOR OPERATOR IS A DCB
INDS	INDEPENDENT SERVICE
HOSP	HOSPITAL SERVICE

COE FEATURERS	
AEMP	AUTOMATIC EMERGENCY POWER
APE	ANTI-POWER OUTAGE ENTRAPMENT
AUXC	AUXILIARY CAR STATION
BAC	BUTTON ACCESS CODE
CDBL	CODE BLUE
CDPI	CAR DIGITAL PI
CHPI	CAR HORIZONTAL PI
CLAN	CAB LANTERN
CTLB	CAR TO LOBBY
DMNT	DOOR MONITOR
EMT	EMERGENCY TECHNICIAN FEATURE
HCIT	HANDICAP SINGLE TRIP GOING
HDPI	HOISTWAY DIGITAL PI
HHPI	HOISTWAY HORIZONTAL PI
HLAN	HALL LANTERN
KEYS	CAR STATION KEYED CUTOUTS
LCPI	LOW COST PI

DOOR INFORMATION

MEMP	MANUAL EMERGENCY POWER
PARK	PARKING
STIP	STATUS INDICATOR PANEL
SVTL	SERVICE MONITORING
TDS	TRAFFIC DIRECTOR'S STATION
TDS2	TRAFFIC DIRESCOTOR'S STATION

FIRE CODE

ALT	CPDO	FSDO	P12L	P2SW
APDO	DISP	HOEF	P10R	PHI
CCDC	FER	JPH1	P20R	SARF
CNFR	FODS	LDOB	P20R	
ISSO	FRCC	MPDC	P2EO	
CPDC	FRFS	MSDR	P2SO	

WARNING

THE OEM SHOULD HANDLE FIRE CODE CHANGES.

PROFILE-ADJUST

Press **PROF + F2 (ADJ)** to display changeable parameters.
See figure 6-3.

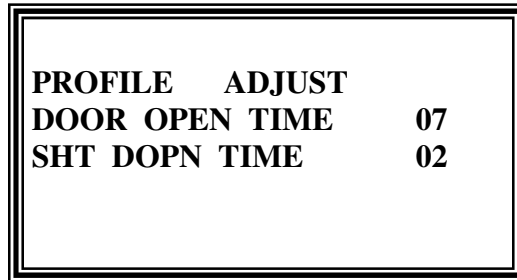


Figure 6-3

Press **NEXT** to step thru.
All times are in HEX and are in half-second increments.

VARIABLE	DESCRIPTION	DEFAULT
DOOR OPN TIME	DOORS WILL STAY OPEN FOR THIS LENGTH OF TIME	0-63 HEX
SHT DOPN TIME	LENGTH OR TIME DOORS WILL STAY OPEN AFTER A REOPEN.	0-63 HEX
NUDGING FTR	NUDGING, 01=ON, 00=OFF	
NUDGING TIME	NUDGING STARTS AFTER THE DOOR IS HELD OPEN FOR THIS LENGTH OF TIME	0-63 HEX
STALL TIME	IF THE DOORS STALL FOR THIS LENGTH OF TIME THEY WILL REVERSE AND TRY AGAIN,	0-63 HEX
MAIN TS TIME	MAIN TRAFFIC SENTINEL TIME, AT THE MAIN FLOOR AND THE DOORS ARE CLOSING AND A SAFTEY EDGE BEAM IS BROKE THE DOORS WILL REOPEN FOR THIS LENGTH OF TIME.	0-63 HEX
CORR TS TIME	CORRIDOR TRAFFIC SENTINEL TIME. WORKS LIKE MAIN TS TIME BUT WHEN ANSWERING A	0-63 HEX

	HALL CALL THAT IS NOT THE MAIN FLOOR.	
CAR TS TIME	CAR TRAFFIC SENTINEL TIME. WORKS LIKE MAIN TS TIME BUT WHEN RESPONDING TO A CAR CALL NOT AT THE MAIN FLOOR.	0-63 HEX
MAIN FLOOR	MAIN FLOOR FOR EMERGENCY POWER RETURN.	0-TOP
PARKING FLOOR	PARKING FLOOR IF FEATURE IS AVAILABLE.	0-TOP
PARK DOOR OPR	SETS WHICH DOOR/DOORS WILL CYCLE AT PARKING FLOOR.	01=FRONT 02=REAR 03=BOTH
CLD OIL	MAX COLD OIL BYPASS TIME.	0-0F HEX IN MINUTES
CALL ENT TONE	CALL ENTER TONE	Y=ON N=OFF
AEMP 1ST CAR	FIRST CAR DURING AUTOMATIC EMERGENCY POWER.	0-3 CAR #
AEMP 2ND CAR	SECOND CAR DURING AUTOMACTIC EMERGENCY POWER.	0-3 CAR #
AEMP 3RD CAR	THIRD CAR DURING AUTOMATIC EMERGENCY POWER.	0-3 CAR #
AEMP 4TH CAR	FOURTH CAR DURING AUTOMATIC EMERGENCY POWER.	0-3 CAR #

ADJUSTING VARIABLES

Press **NEXT** until you want to change comes up on the display.

(Blinking cursor indicates which line will be active.)

Pressing **ENTER** steps you to the second item on display.

To increase value press **F1**.

To decrease value press **F2**.

To save changes press **F3**.

POSITION INDICATOR

Press **PROF + F3 (DPI)** to display the DPI lowest scan slot and the PI's display. See figure 6-4

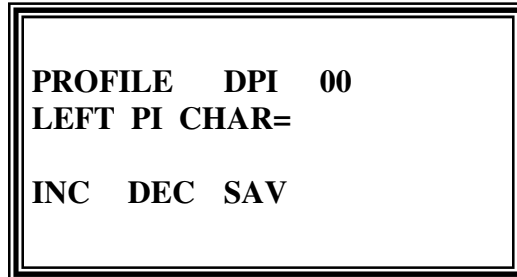


Figure 6-4

Press **NEXT** to display the **NEXT** floor # and **PREV** to display the previous #.

Press **ENTER** to display the right digit. See figure 6-5

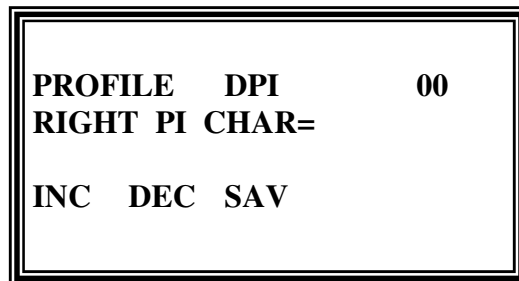


Figure 6-5

To increase value press **F1**.

To decrease value press **F2**.

To save changes press **F3**.

BUTTON ACCESS CODE

Press **PROF + F4 (LOCK)** to display the Button Access Code screen.
See figure 6-6

PROFILE	BAC
FRNT OPNG	3
HAS CODE	010
UPDT	SAV

Figure 6-6

Pressing **REAR** or **FRONT** will display the corresponding door.
Pressing **NEXT** or **PREV** will step up or down thru the floors.

To change a code press **F1 (UPDT)** now enter the new number code using the Diagnostic Tool's number keys. Now press **F2 (SAV)** to save the new code.

KEYED SECURITY CUTOUT

Press **PROF + F4 (LOCK)** to display the Keyed Security Cutout screen.
See figure 6-7

PROFILE	KEY#	00
FLOOR	01234567	
FRNT	01011010	
UPDT	SAV	

Figure 6-7

Pressing **REAR** or **FRONT** will display the corresponding door.
Pressing **NEXT** or **PREV** steps you thru the key numbers.

To change a setting press **ENTER** until the cursor is on the digit you want to change. Now press **F1 (UPDT)** to change the setting. Now press **F2 (SAV)** to save the change.

CHAPTER 7

TEST MODE

The elevator must be on HAND operation for the TEST mode to work. Pressing **TEST** gets you into test mode. See figure 7-1

PROFILE	BAC
FRNT OPNG	3
HAS CODE	010
UPDT	SAV

Figure 7-1

The diagnostic Tool needs to be connected to the Floor Controller Master unit to get accurate information.

Test Mode Operation

KEY	ITEM	DESCRIPTION
F1	PI	THE CAR AND HALL PI CAN BE TURNED ON FOR THE ENABLED FLOOR
F2	LANT	THE CAR AND HALL LANTERNS CAN BE TURNED ON FOR THE ENABLED FLOOR
F3	FC	SETS UP TO TEST EACH CHANNEL OF THE CAR FCB BOARD
F4	HFC	SET UP TO TEST THE HOISTWAY FSB BOARDS AND OTHER SIGNALS

PI TEST

To test a PI press **TEST + F1 + 1 + ENTER**. This sequence tests the PI at floor 1 as indicated by the 1 in the sequence. The Diagnostic Tool should respond with **ACTIVATED** if the PI is on.

Press **NEXT** or **PREV** to step up down thru the floors.

LANTERN TEST

To test the Lanterns press **TEST + F2 + COR U + 1 + ENTER**. This sequence tests the up lantern on floor 1.
Press **NEXT** or **PREV** to step up or down thru the floors.
Press **COR D** instead of **COR U** to test the down lanterns the same way.

CAR FCB BOARD TEST

To test the car FCB boards press **TEST + F3 + 0 + 1 + 2 + ENTER**.
TEST=Test Mode.
F3=Cab FCB Board.
0 + 1=The FCB board number which ranges from 00 to 11.
2=The FCB board's I/O channel.
ENTER=Finish entry.

Pressing **NEXT** or **PREV** will step you thru the I/O channels of that FCB.
Repeat sequence for other FCB boards.

HOISTWY FCB BOARD TEST

To test the hoistway FCB boards press
TEST + F3 + 0 + 1 + 2 + ENTER.
TEST=Test Mode.
F3=Cab FCB Board.
0 + 1=The FCB board number which ranges from 00 to 11.
2=The FCB board's I/O channel.
ENTER=Finish entry.

Pressing **NEXT** or **PREV** will step you thru the I/O channels of that FCB.
Repeat sequence for other FCB boards.

Hoistway FCB Board # s
Main

FLOOR #	FRONT	REAR	CAR 0	CAR 1
0-1	HFC01	HFC02		
2-3	HFC03	HFC04		
4-5	HFC05	HFC06		
6-7	HFC07	HFC08		
		PI	HFC70	HFC71
		STATUS PANEL	SPB0	SPB1
		EMERGENCY POWER PANEL	HFC78	HFC 78
		FIRE CODES	HFC7E	HFC7E
		EMT	HFC7C	HFC7C
		CODE BLUE	HFC7D	HFC7D

Aux

FLOOR #	FRONT	REAR	CAR 0	CAR 1
0-1	HFC11	HFC12		
2-3	HFC13	HFC14		
4-5	HFC15	HFC16		
6-7	HFC17	HFC18		
		PI	HFC72	HFC73
		STATUS PANEL	SPB\2	SPB3
		EMER- GENCY POWER PANEL	HFC79	HFC 79
		FIRE CODES	HFC7E	HFC7E
		EMT	HFC7C	HFC7C
		CODE BLUE	HFC7D	HFC7D

CHAPTER 8

ACTIVE MODE

INDEPENDENT SERVICE AND HOSPITAL EMERGENCY
Pressing **ACT** gets you into **ACTIVE** mode. See figure 8-1.

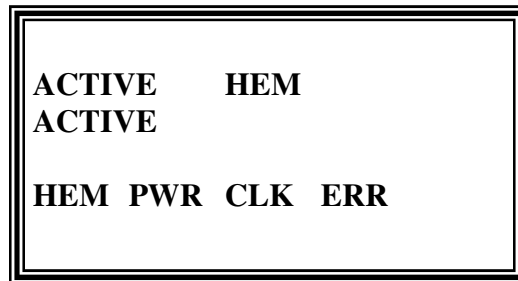


Figure 8-1

APPENDIX HEX CHART

HEX	BIN	HEX	BIN	HEX	BIN	HEX	BIN
00	00	1E	30	3C	60	5A	90
01	01	1F	31	3D	61	5B	91
02	02	20	32	3E	62	5C	92
03	03	21	33	3F	63	5D	93
04	04	22	34	40	64	5E	94
05	05	23	35	41	65	5F	95
06	06	24	36	42	66	60	96
07	07	25	37	43	67	61	97
08	08	26	38	44	68	62	98
09	09	27	39	45	69	63	99
0A	10	28	40	46	70		
0B	11	29	41	47	71		
0C	12	2A	42	48	72		
0D	13	2B	43	49	73		
0E	14	2C	44	4A	74		
0F	15	2D	45	4B	75		
10	16	2E	46	4C	76		
11	17	2F	47	4D	77		
12	18	30	48	4E	78		
13	19	31	49	4F	79		
14	20	32	50	50	80		
15	21	33	51	51	81		
16	22	34	52	52	82		
17	23	35	53	53	83		
18	24	36	54	54	84		
19	25	37	55	55	85		
1A	26	38	56	56	86		
1B	27	39	57	57	87		
1C	28	3A	58	58	88		
1D	29	3B	59	59	89		