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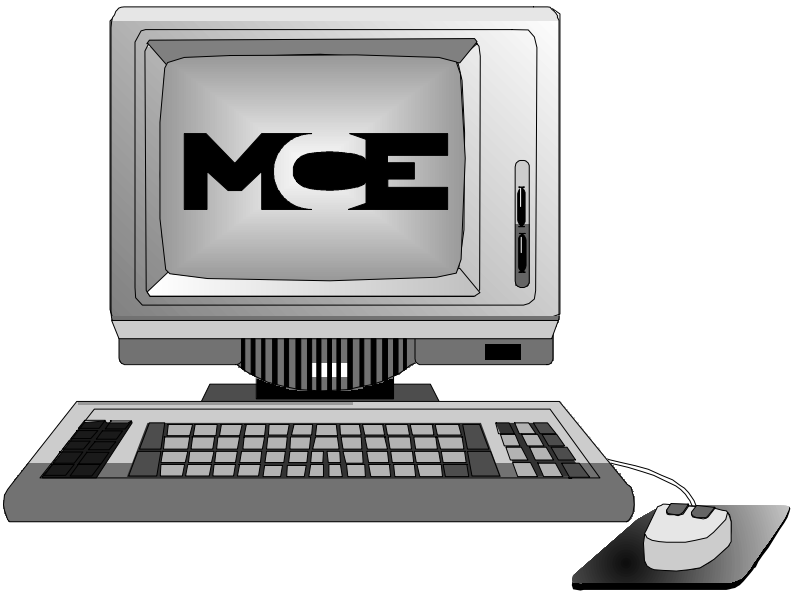
MCE COMPUTER PERIPHERALS MANUAL



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The MCE CRT Display Terminal or Terminal Emulator is an easy-to-use, menu driven diagnostic tool that is designed to provide essential information about the elevator system to the serviceman, building staff, security guard, or passengers and can be used for diagnostics, security, observation or other purposes.

A *CRT Display Terminal* consists of either a monochrome or color CRT (Cathode Ray Tube) Display and an IBM style keyboard. The monochrome CRT Display Terminal used with MCE Controllers is an industry standard Wyse WY-60 Terminal or the equivalent LINK MC5 Terminal, while the color CRT Display Terminal used with the MCE Controller is the Wyse WY325 color Terminal.

A *Terminal Emulator* consists of computer monitor, IBM style keyboard and an emulator which behaves the same as a CRT terminal. Currently the terminal emulator used with MCE Controllers is either the Esprit 250C or the ADDS 260LF.

MCE supports different configurations of terminals and emulators depending upon the requirements of the job. The following are the three most common configurations used.

a. THE MACHINE ROOM CRT WITH KEYBOARD (OPTIONAL):

The Machine Room CRT terminal or terminal emulator with keyboard is designed to provide the serviceman with all diagnostic information about the elevator system and enable him to troubleshoot and evaluate the elevator system performance. This terminal can be installed in the control cabinet (optional) or anywhere in the machine room.

b. THE REMOTE CRT WITH KEYBOARD (OPTIONAL):

The Remote CRT terminal or terminal emulator with keyboard can be used for different applications by placing it in alternate locations such as a lobby, security room or fire control center for use by the building, maintenance or security staff. To have a CRT in a remote location away from the machine room (further than 50' from the controller), RS-232 line drivers or modems are necessary. The Remote CRT with keyboard can be located up to two miles away from the machine room when using line drivers. When modems are used, the distance is limited only by the telephone network.

Configurations (a) and (b) both support the following features:

MENU DRIVEN FORMAT: Accessing information on the CRT terminal or terminal emulator is accomplished by single keystrokes with the convenient menus presented on the display.

JOB SUMMARY: This page gives a brief description of the system, including number of cars, number of landings per car, parking floors, type of fire service, options, etc.

ELEVATOR SYSTEM PERFORMANCE: This displays, in a graphical form, the elevator System Performance based on hall call waiting times. Average waiting times and quantity of both up calls and down calls are maintained on hourly intervals for the previous seven days and may be displayed in 12 hour segments.

GRAPHIC DISPLAY OF ELEVATOR: The action of the system can be conveniently monitored by viewing the graphic display menu selection. All of the cars' positions, their

directions of travel, door status, status of the MG set, car calls, hall calls, the system demand and its distribution can be seen in an easy to understand format.

CHANGING CONTROLLER PARAMETERS: Various computer parameters (timing values and programmed values) are displayed and can be changed from the CRT display terminal.

SPECIAL EVENT CALENDAR: The Special Event Calendar documents important fault conditions or events and displays them in a chronological table to be examined or reviewed at your convenience. Data displayed includes the type of fault or event, the date and time the fault/event occurred, the position of the car at the time the fault/event occurred and the date and time it was corrected. It also lists the probable causes of the fault or event and tells you where you might start to correct it.

COMPLETE LIST OF INPUT AND OUTPUT STATUS: Virtually all of the input and output signals to and from the computer can be viewed simultaneously to detect important sequential events.

CAR STATUS: Each individual car's status is monitored and displayed either on the Graphic Display of Elevator page or on its own page.

c. THE REMOTE LOBBY CRT WITHOUT KEYBOARD (OPTIONAL):

The Remote Lobby CRT terminal or terminal emulator is typically located in the lobby for the purpose of informing the passengers or lobby personnel of car position and direction of travel, calls registered and calls assigned.

SECTION 1
INSTALLATION INSTRUCTIONS

1.0 GENERAL INFORMATION

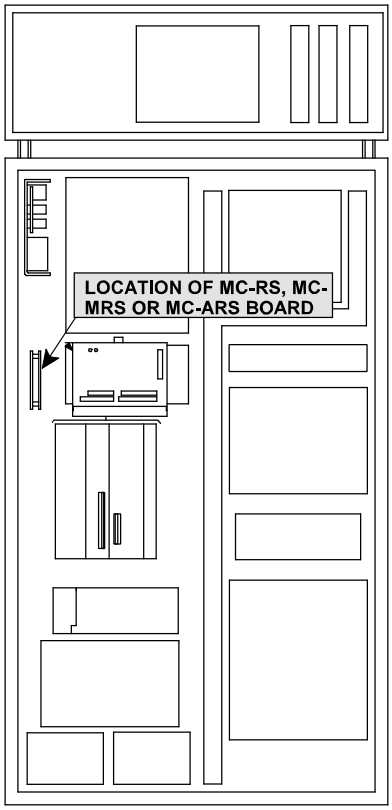
This section covers installation of CRT terminals, terminal emulators, PCs and printers in direct or remote connection with the controller. Installation will vary depending upon controller, peripheral and connecting device. Therefore, identify the type of Communication Interface board, the peripheral and the type of connection first. Then follow the instructions pertaining to this job.

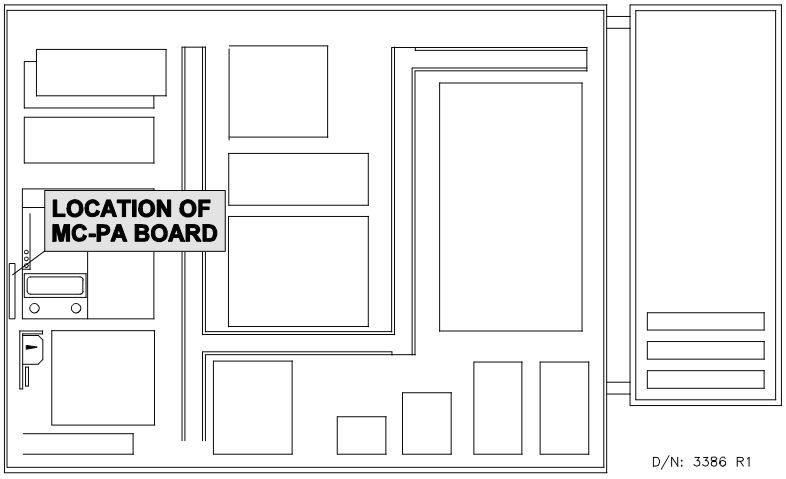
1.1 PREPARATION FOR INSTALLATION

Depending on the controller, one of the following Communication Interface boards will connect to the peripheral. The connecting port on the Communication Interface board will be referred to as the **COM port** in this manual. The following steps prepare for installation and should speed up the process:

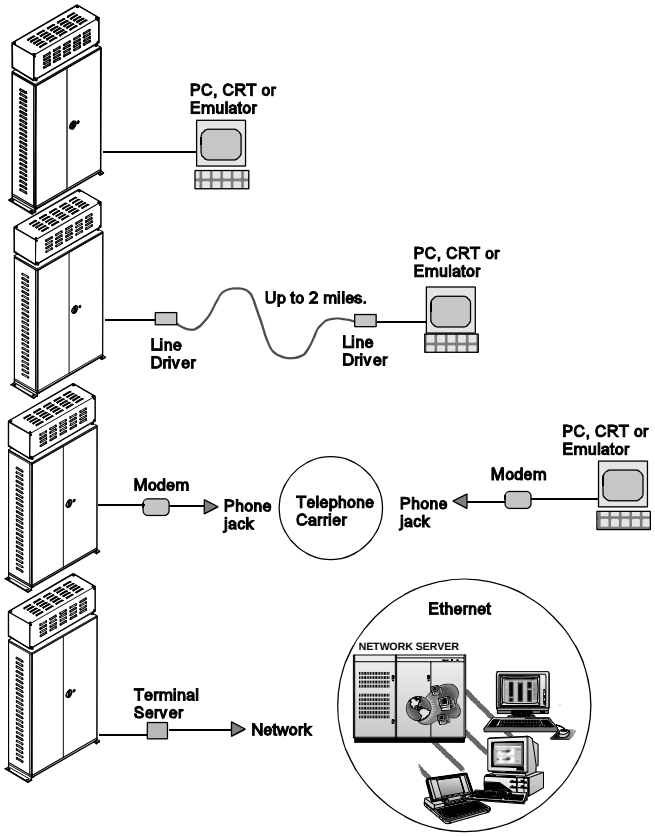
STEP 1 Identify the type of Communication Interface board on the controller:

- **MC-RS**
- **MC-PA** (**MC-PCA** if this is an Overlay Monitoring Interface Installation)
- **MC-MRS** (with or without optional MC-ARS board for additional COM ports)





STEP 2. Identify the connecting medium:



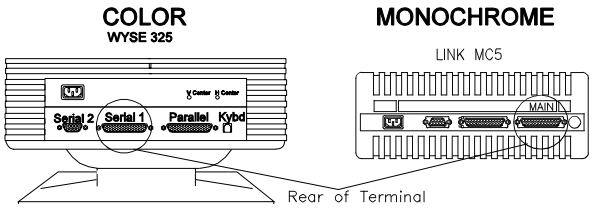
DIRECT CABLE - connects the CRT terminal, terminal emulator or PC when they are installed in the machine room near the controller. The cable provided will connect the CRT, emulator or PC to the communication interface board (MC-RS, MC-PA, or MC-MRS). Cables vary for type of controller and peripheral. See the following pages for specific cable types.

LINE DRIVERS - used when the peripheral is more than 50 feet from the controller but less than two miles away. Two twisted pair of wires span the distance with a line driver on each end to boost the signal

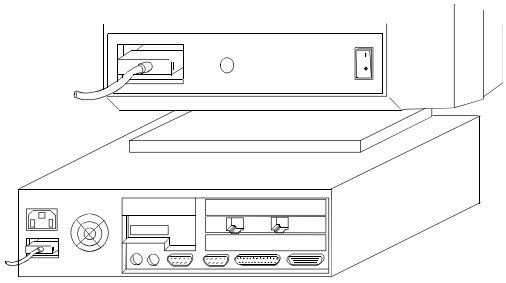
MODEMS - carry computer signals over long distances to a remote location using commercial phone lines. Most manufacturers build modems to an industry standard specification. MCE may provide different brands of modems depending on their availability. One modem connects to the Controller's Communication Interface board (MC-RS, MC-PA, or MC-MRS) and a phone jack in the machine room. The other modem connects to the CRT terminal, terminal emulator or PC and a phone jack at the remote location.

STEP 3. Identify the type of peripheral (CRT terminal, terminal emulator or PC):

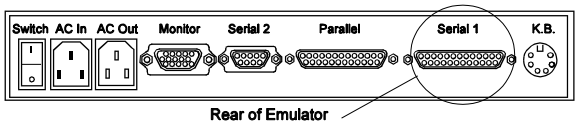
CRT terminals come in both monochrome and color. Where to connect the cable or line driver varies.



PCs require either CMS or Emulation Software.

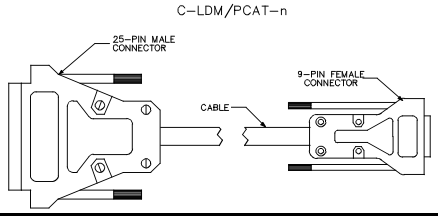
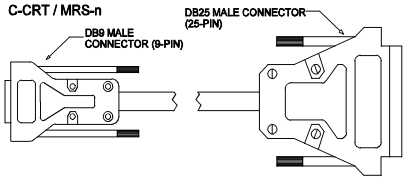
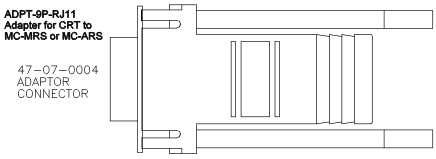
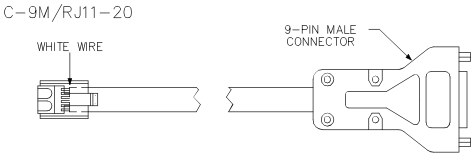
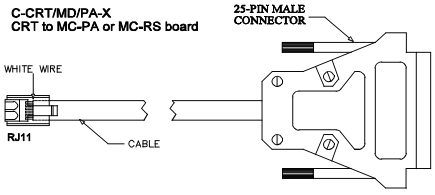
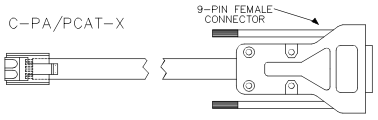


Terminal emulators behave like a terminal but use a standard PC keyboard and monitor.



STEP 4 Familiarize yourself with the type of cable used in this job

Table 1.1 Connector Quick Reference

	C-LDM/PCAT-n C-LD/PCAT-n 25pin female to 9pin male	Connects a female line driver to a PC. Cable connects a male line driver (25pin) to a PC (9pin serial port).
	C-CRT/MRS-n 9pin male to 25pin male	Cable connects a CRT (25pin) directly to the MC-MRS or MC-ARS board (9pin) COM port.
	ADPT-9P-RJ11 “gender changer”	Cable connects a C-CRT/MD/PA-x cable into a MC-MRS or MC-ARS board COM port.
	C-9M/RJ11-x RJ11 to 9pin male	Cable connects both 56K modems (9pin male) to a MC-RS or MC-PA board COM port (RJ11).
	C-CRT/MD/PA-x RJ11 to 25pin male	Cable connects a CRT terminal, terminal emulator or the newer 56K modems (25 pin female) to a MC-RS or MC-PA board COM port (RJ11).
	C-PA/PCAT-x RJ11 to 9pin female	Cable connects a MC-RS or MC-PA COM port (RJ11) to a PC or laptop (9pin female).
graphic not available	C-CRT/MD-x	Cable connects a remote site modem to the CRT terminal

1.2 MACHINE ROOM CONNECTIONS

Connect the cable to the Communication Interface board (MC-RS, MC-PA or MC-MRS) and verify that the COM Port (DTE/DCE switch or jumpers on the board) is set correctly for the type of peripheral. This step varies depending on the type of Communication Interface board in the controller, the type of peripheral and the connection medium used. Refer to the table and picture that apply, depending on the type of Communication Interface board used on this job:

- MC-RS board - Section 1.2.1
- MC-PA board - Section 1.2.2
- MC-PCA-S2SR board (OMI installation) - Section 1.2.3
- MC-MRS (MC-ARS) board - Section 1.2.4

1.2.1 MC-RS BOARD CONNECTIONS

If line drivers were specified with this job, the line driver will be mounted inside the controller and pre-connected to the Communication Interface board COM port via a junction box. Locate the line driver mounted inside the controller and verify the cable connection between it and the Communication Interface board, then go to Section 1.3. If no line driver was specified, continue to hook up the communication board as follows:

a. Using Table 1.2, find the cable appropriate for this job and plug it into COM Port 1. Verify the DTE/DCE switch setting. EXAMPLE: To connect the MC-RS board to a modem, a C-CRT-MD/PA-x cable is used with the DCE/DTE switch set to DTE.

FIGURE 1.1 MC-RS Board COM Port and selection switch location

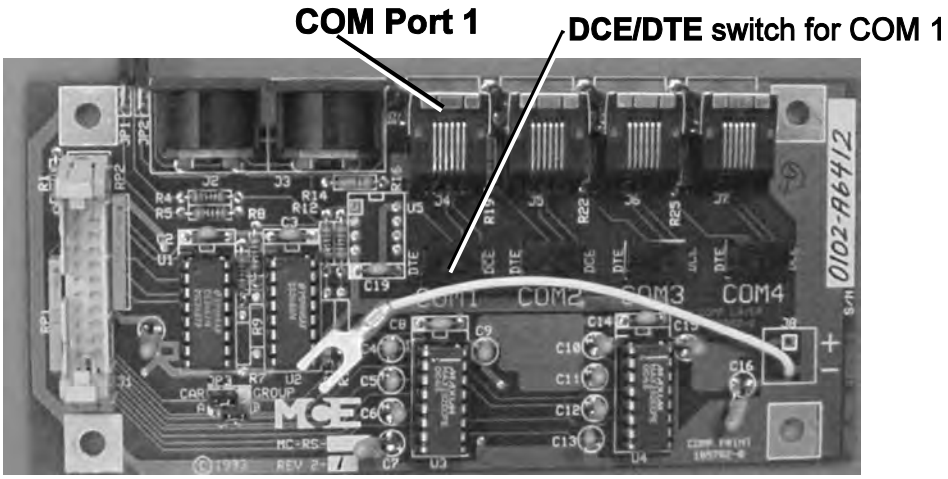


TABLE 1.2 MC-RS Cable and COM Port Switch Setting

CONNECT TO	WITH CABLE	COM PORT SWITCH
CRT terminal or terminal emulator	C-CRT/MD/PA-x	DCE
PC or Laptop	C-PA-PCAT-x	DCE
Network	Device specific	DCE
Line Driver	C-LD/PA-6'-KT	DTE
Modem	C-CRT/MD/PA-x	DTE

b. Go the Section 1.2.5 *Peripheral Device Connection*.

1.2.2 MC-PA BOARD CONNECTIONS

If line drivers were specified with this job, the line driver will be mounted inside the controller and pre-connected to the Communication Interface board COM port via a junction box. Locate the line driver mounted inside the controller and verify the cable connection between it and the Communication Interface board, then go to Section 1.3.

If no line driver was specified, continue to hook up the communication board as follows:

a. Using Table 1.3, find the cable appropriate for this job and plug it into COM Port 1. Verify the COM Port switch setting. EXAMPLE: To connect the MC-PA board to a modem, a C-CRT/MD/PA-x cable is used and the COM Port switch should be set to DTE.

FIGURE 1.2 MC-PA Board COM Port and Selection Switch Location

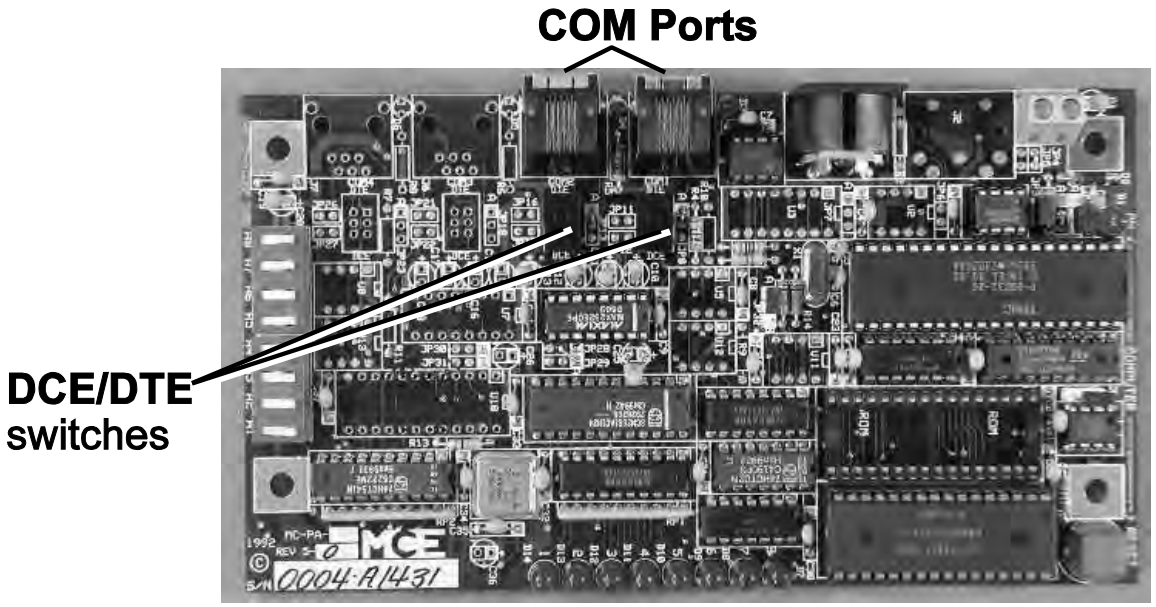


TABLE 1.3 MC-PA Cable and COM Port Switch Setting

CONNECT TO	WITH CABLE	COM PORT
CRT terminal or terminal emulator	C-CRT/MD/PA-X	DCE
PC or LAPTOP	C-PA-PCAT-x	DCE
NETWORK	Device specific	DCE
LINE DRIVER	C-LD/PA-6'-KT	DTE
MODEM	C-CRT/MD/PA-x	DTE

b. Go the Section 1.2.5 *Peripheral Device Connection*.

1.2.3 MC-MRS BOARD WITH OR WITHOUT OPTIONAL MC-ARS BOARD

If line drivers were specified with this job, the line driver will be mounted inside the controller and pre-connected to the Communication Interface board COM port via a junction box. Locate the line drivers mounted inside the controller and verify the cable connection between it and the Communication Interface board, then go to Section 1.3.

If no line driver was specified, continue to hook up the communication board as follows:

a. Using Table 1.4, find the cable appropriate for this job and plug it into COM Port 1. Verify the COM Port switch setting. EXAMPLE: To connect the MC-MRS board to a CRT terminal or terminal emulator, a C-CRT/MRS-x cable is used and the COM Port jumpers are set JP6 - A, JP7 - B.

FIGURE 1.3 MC-MRS Board COM Port and Selection Jumper Location

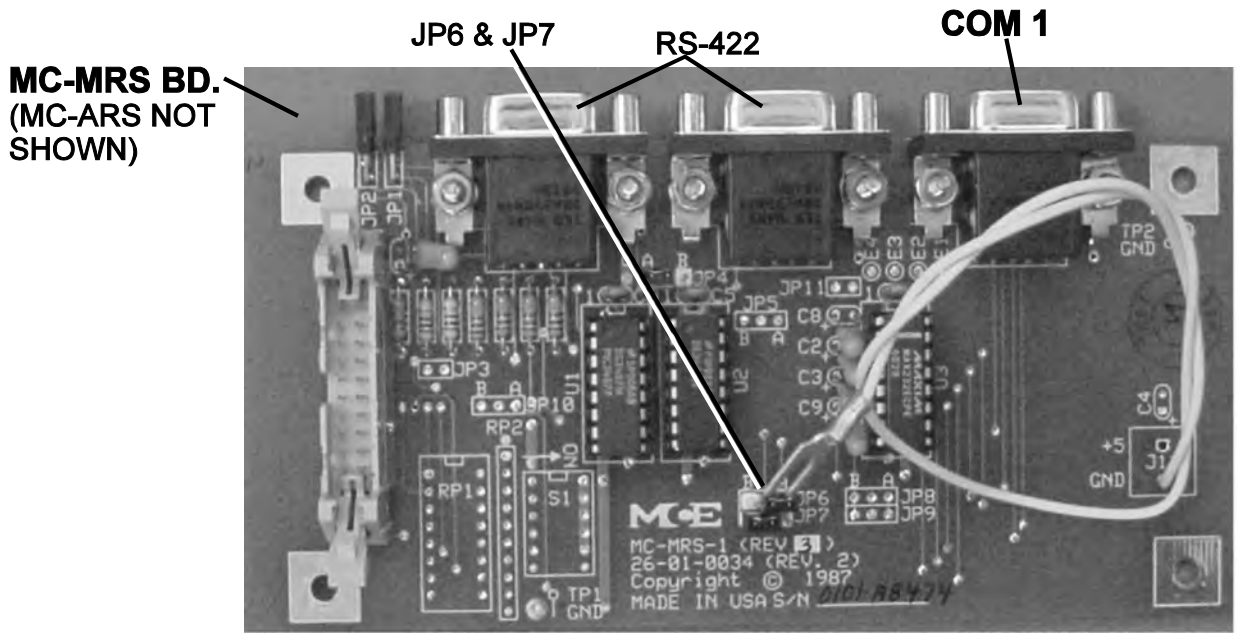
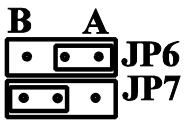


TABLE 1.4 MC-MRS Cable and COM Port Jumpers			
Cabling		**COM Port 1 Jumpers**	
CONNECTS TO	**WITH CABLE**	**JP6**	**JP7**
CRT terminal or terminal emulator	C-CRT/MRS-x	A	B
CRT cable	ADPT-9P-RJ11		
PC	C-PA/PCAT-n, ADPT-9P-RJ11	B	A
LINE DRIVER	C-LD/MRS-n	B	A
MODEM	C-MD/MRS-n	B	A

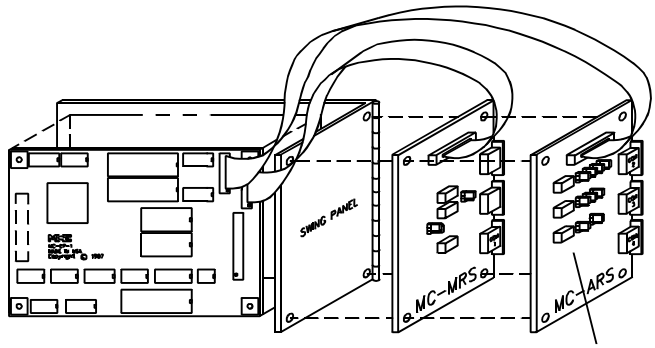
Example: If connecting a CRT terminal or terminal emulator to the MC-MRS board with cable C-CRT/MRS-x the jumpers would be set as shown.



b. Go the Section 1.2.5 *Peripheral Device Connection*.

MC-ARS BOARD - The MC-ARS board is an optional board used to add COM ports for connecting additional peripherals. The MC-ARS uses the same cables as the MC-MRS. The COM Port selection jumpers differ depending on the COM Port used. Match the jumpers to the COM Port and set the jumpers as follows:

FIGURE 1.4 MC-ARS Board COM Port and Selection Jumper Location

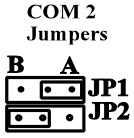


Rear view of Controller **MC-ARS bd.**

TABLE 1.5 MC-ARS COM Port Jumpers (Cable is the same as MC-MRS)

COM Port Jumpers			Jumper Settings			
When using COM 2 set:	When using COM 3 set:	When using COM 4 set:	CRT or emulator	PC	Line Driver	Modem
JP1	JP3	JP5	A	A	B	B
JP2	JP4	JP6	B	B	A	A
JP7	JP9	JP11	–	–	B	–

Example: To connect a CRT terminal or terminal emulator to the MC-ARS board COM 2 the jumpers would be set as below:



1.2.4 PERIPHERAL DEVICE CONNECTIONS

Direct Connection - If you are making a direct connection from the Communication Interface board to a CRT terminal, terminal emulator or PC, connect the cable to the device jack indicated in the table and then go to Section 1.7 *COMMUNICATION PORT SETTINGS* for instructions on verifying / programming the Communication board's COM port media and device settings. Finally, go to the device setup section indicated and perform the setup instructions.

PERIPHERAL DEVICE	DEVICE JACK	DEVICE SETUP
Esprit 250C Terminal Emulator	Serial 1	Section 2.1
ADDS 260LF Terminal Emulator	EIA	Section 2.2
Link MC5 Monochrome Terminal	MAIN	Section 2.3
Wyse WY325ES Color Terminal	Serial 1	Section 2.4
Wyse WY-370 Color Terminal	Serial Port A	Section 2.5

Other Device Connection - For other device connections go to one of the following sections:

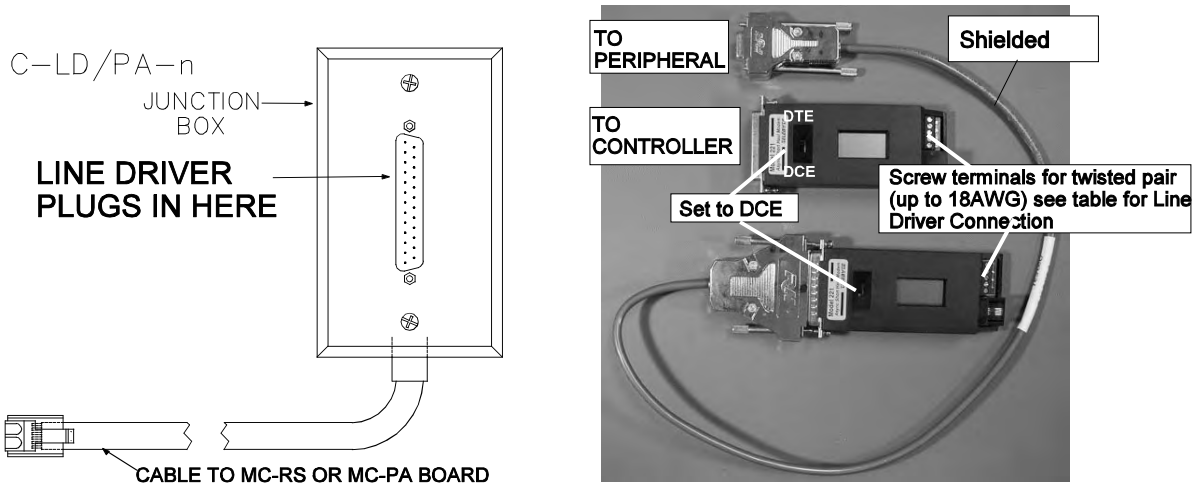
- Line Driver - Section 1.3
- Modem - Section 1.4
- Data Switch Box - Section 1.5
- Device Server (Ethernet) - Section 1.6

1.3 INSTALLING LINE DRIVERS

Line drivers are used to carry RS-232 computer signals up to two miles (3.3 km). One line driver is connected to the controller and the other is connected to the peripheral. The controller is pre-wired and shipped with the COM ports configured at the communication interface board (MC-RS, MC-PA, MC-MRS). The installer needs only to connect the communication cable between the line driver in the machine room and the line driver located at the peripheral remote site.

If line drivers were specified with this job, the line driver will be mounted inside the controller and pre-connected to the Communication Interface board COM port via a junction box. Locate the line driver (see figure 1.1) mounted inside the controller.

FIGURE 1.5 Line Drivers



The communication cable must consist of two twisted pairs of wire with ground shielding (18-24AWG with a maximum capacitance of 25pF per foot). The cable must also have DC continuity and reach from the controller COM port located in the machine room to the remote peripheral. It is highly desirable to use a single continuous cable between these two locations, thereby avoiding the need to splice the communication cable. Use different colored wires to eliminate confusion. For example: blue and white for one pair of twisted wires, and red and white for the other. **This communication cable is not supplied by MCE.**

1.3.1 INSTALLATION REQUIREMENTS:

- Peripheral device (CRT terminal or terminal emulator - use line driver without cable, PC - use line driver with cable) see Figure 1.5.
- Communication cable (2 twisted pair 18-24AWG wire - not supplied by MCE)
- Machine Room Line Driver (connected to Communication Interface Board)
- Remote Line driver
- Cable from controller to line driver junction box

1.3.2 MACHINE ROOM CONNECTIONS (see Table 1.6, Figure 1.6)

1. Lay the communication cable (twisted pair) from the controller cabinet Line Driver to the Peripheral Line Driver.

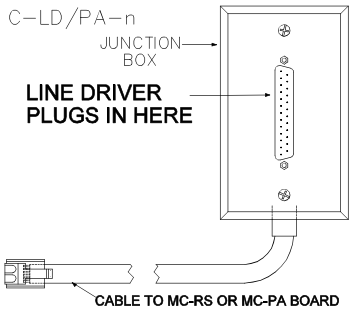
2. Connect one twisted wire pair of the communication cable to the controller's male line driver terminals labeled RD+ and RD–.

3. Connect the other twisted wire pair of the communication cable to the controller's male line driver terminals labeled TD+ and TD–.

4. Make a note indicating which wire goes to which terminal of the line driver.

5. Crimp the non-insulated ground wires (shielding) of the twisted wire pairs into a #8 fork lug and connect it to the ground terminal located on the subplate next to the line driver. The non-insulated ground wires must be connected to ground at THE CONTROLLER END ONLY.

6. Verify that the the RJ11 or 9-pin DB connector from the junction box is connected to the appropriate Communication Interface board COM port. The connector is set at the factory, however connection to the correct COM port should be verified.



7. Plug the line driver into the 25-pin DB connector of the junction box cable (at right).

8. Set the line driver DCE/DTE switch to DCE.

9. If the Communication Interface board (MC-RS, MC-PA, MC-MRS) COM port switch or jumpers have not been set to Line Driver, do so now.
   - MC-PA or MC-RS: set switch to DTE.
   - MC-MRS or MC-ARS: see jumper settings in Tables 1.4 and 1.5.

10. Go to Section 1.7 *COMMUNICATION PORT SETTINGS* for instructions on verifying or programming the Communication board's COM port media and device settings.

FIGURE 1.6 CRT Terminal Connected With Line Drivers

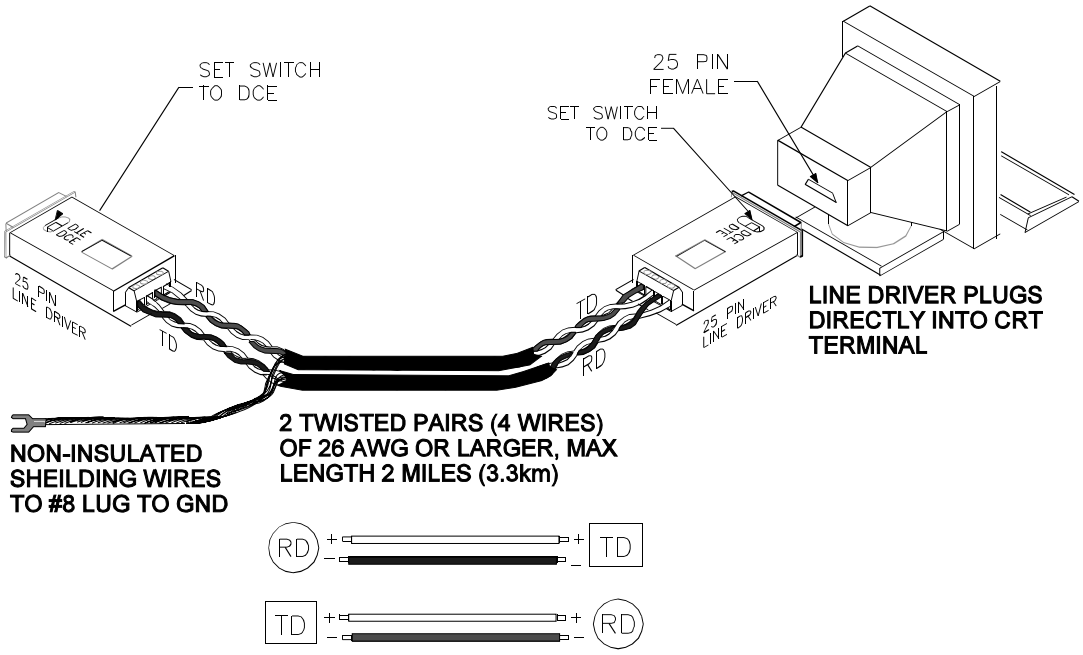


TABLE 1.6 Line Driver Terminal Connection and Cable Connection

LINE DRIVER TERMINAL CONNECTION (twisted pair up to 18 AWG)	
Controller side	Peripheral side
RD+	TD+
RD-	TD-
TD+	RD+
TD-	RD-

LINE DRIVER CABLE CONNECTIONS	
To CRT terminal or terminal emulator	plugs in directly, no cable required
To PC	C-LD/PCAT-n C-LDM/PCAT-n
To PC's DCE cable	no cable required

1.3.3 REMOTE SITE CONNECTIONS

1. Locate the twisted wire pair which is connected to the controller line driver terminals labeled RD+ and RD– and insert them into the remote peripheral female line driver terminals labeled TD+ and TD– respectively (see Figure 1.6).

2. Locate the twisted wire pair which is connected to the controller line driver terminals labeled TD+ and TD– and insert them into the remote peripheral female line driver terminals labeled RD+ and RD– respectively (see Figure 1.6).

3. Set the line driver DCE/DTE switch to DCE.

4. If connecting the line drivers to a CRT terminal or terminal emulator, plug the line driver into the device jack indicated in the table. Then go to the device setup section indicated and perform the setup instructions.

PERIPHERAL DEVICE	DEVICE JACK	DEVICE SETUP
Esprit 250C Terminal Emulator	Serial 1	Section 2.1
ADDS 260LF Terminal Emulator	EIA	Section 2.2
Link MC5 Monochrome Terminal	MAIN	Section 2.3
Wyse WY325ES Color Terminal	Serial 1	Section 2.4
Wyse WY-370 Color Terminal	Serial Port A	Section 2.5

Refer to the CMS User's Guide if connecting to a PC with CMS for Windows Software.

1.4 INSTALLING MODEMS

Modems are used to carry computer signals over long distances to a remote location using commercial phone lines. Most manufacturers build modems to an industry standard specification. MCE may provide different brands of modems depending on their availability.

Two modems must be installed when the peripheral connection is not feasible with serial cable or line drivers. One modem is located in the machine room, close to the controller. The second modem is located at the remote location. Modems are typically used with a CRT terminal, terminal emulator or a PC for monitoring the elevator system from a remote site.

NOTE: Modem phone lines should use RJ11 connectors and plug into "direct" phone lines to the phone company without features such as call waiting. We cannot guarantee that "analog lines" from PBX or PCBX equipment will be compatible. If direct lines are not available, work with the provider of your PBX equipment to resolve any compatibility issues.

1.4.1 INSTALLATION REQUIREMENTS:

- Color or monochrome CRT terminal, terminal emulator or PC located at a remote site
- Modem located close to the controller and power supply
- Modem located close to the CRT terminal, terminal emulator or PC and power supply
- Communication cable connecting the modem to the designated controller COM port
  - Cable for **MC-MRS or MC-ARS** boards: MCE part #C-MD/MRS
  - Cable for **MC-RS or MC-PA** board: MCE part #C-CRT/PA
- Communication cable connecting the modem to CRT terminal, terminal emulator or PC
  - Color or monochrome CRT terminal or terminal emulator: MCE part #C-CRT/MD
  - PC: Provided by modem manufacturer and is shipped with modem. This is a standard serial cable with a RJ11 or female 9-pin DB connector for the PC connection and 25-pin DB connector on the modem end.
- Dedicated phone line in machine room
- Two phone patch cords (RJ11 connectors on each end) connecting phone jack to modem

FIGURE 1.7 Modem Connections

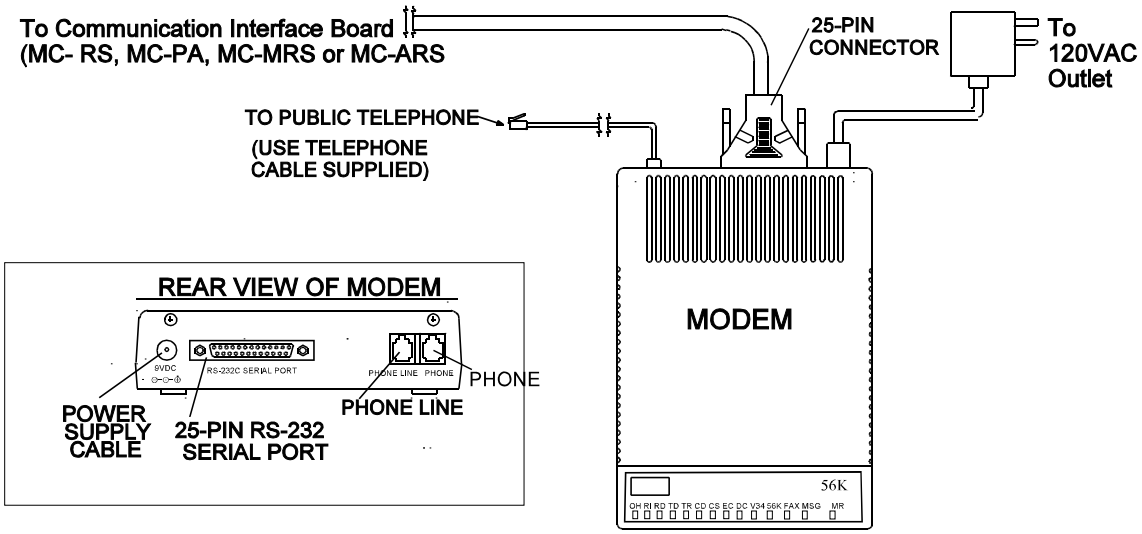
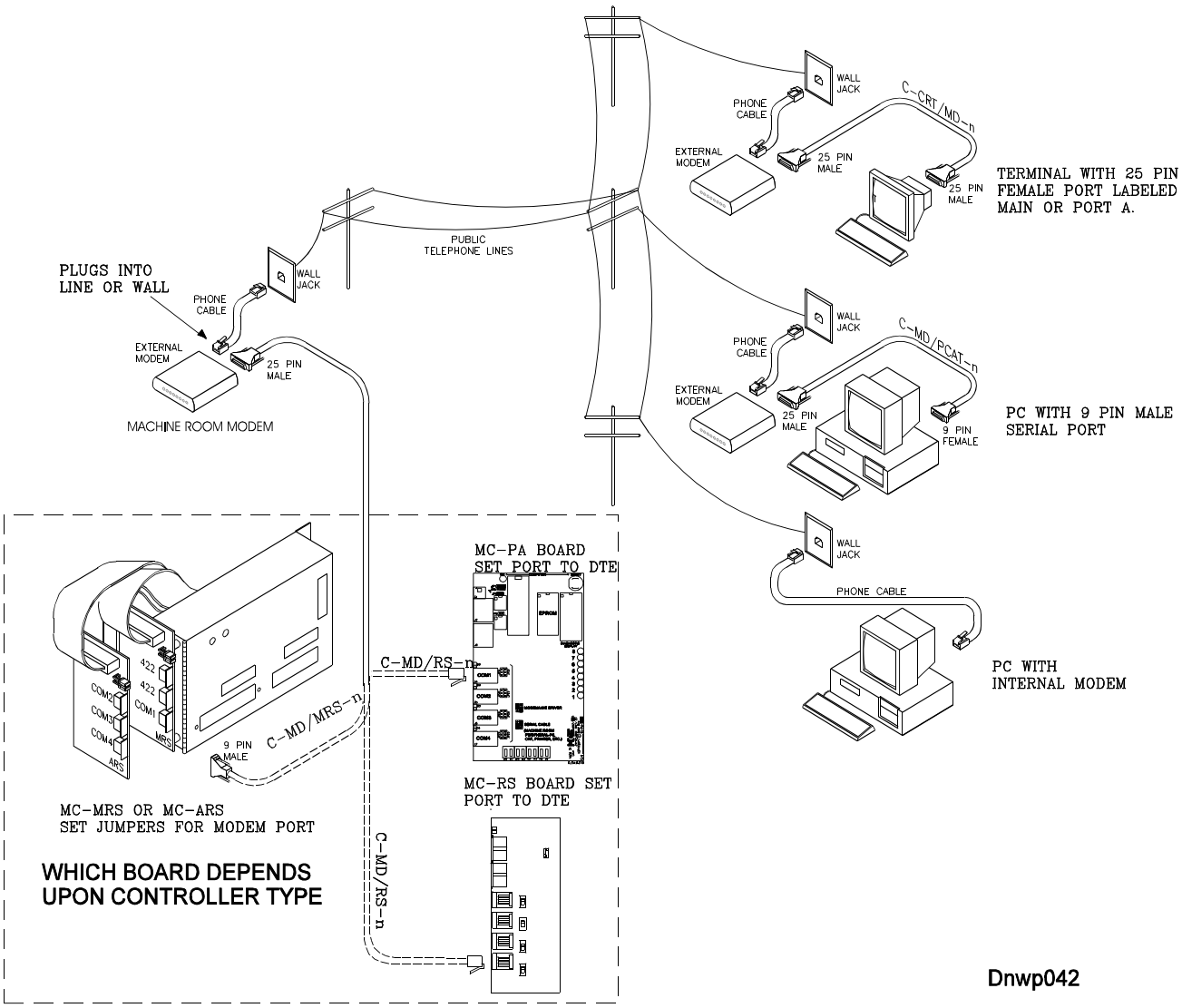


FIGURE 1.8 Devices Connected via Modems



1.4.2 MACHINE ROOM MODEM INSTALLATION

1. Verify that the modem is turned off. The power switch is located in the back of the modem.

2. Attach the modem power cord between the modem's circular connector (located in the rear of modem) and a 120V, 60Hz AC power outlet. The outlet should be grounded or a grounding adaptor used to provide maximum safety.

3. With modem power OFF, attach the 25-pin male connector of the controller/modem cable into the 25-pin female plug located at the rear of the modem. Tighten both screws on this connector (see Figure 1.7).

4. Attach the other end of the cable to the Communication Interface board's COM port. If connecting to the MC-MRS or MC-ARS boards, tighten both screw of the DB-9 connector.

5. If you have not already done so, set the Communication Interface board's COM port switch or jumpers for a modem:
   - MC-PA or MC-RS: Set switch to DTE.
   - MC-MRS or MC-ARS: See Tables 1.4 and 1.5.

6. Attach one end of the supplied telephone cable into a dedicated phone jack. Attach the other end of this cable into the rear of the modem labeled *phoneline*. If the cable is not long enough, you can substitute a standard telephone cable up to 25 feet (8 meters) in length.

7. A standard telephone may be connected to the modem by connecting its cable to the modem's *phone* jack.

8. Go to Section 1.7 *COMMUNICATION PORT SETTINGS* for instructions on verifying or programming the Communication board's COM port media and device settings.

9. Turn on the modem.

1.4.3 REMOTE SITE MODEM INSTALLATION

1. Verify that the modem is turned OFF. The power switch is located in the back of the modem.

2. Attach the modem power cord between the modem's circular connector (located in the rear of the modem) and a 120V, 60Hz AC power outlet. The outlet should be grounded or a grounding adaptor used to provide maximum safety.

3. Attach one end of the supplied telephone cable into a dedicated phone jack. Attach the other end of this cable into rear of the modem labeled *phoneline*. If the cable is not long enough, you can substitute a standard phone cable up to 25 feet (8 meters) in length.

4. A telephone may be connected to the modem by connecting its cable to the modem's *phone* jack.

5. Attach the 25-pin male connector of the serial cable into the plug located at the rear of the modem. Tighten both screws on this connector (see Figure 1.7).

6. Attach the other end of the cable to the peripheral device as indicated in the table. Then go to the device setup section indicated and perform the setup instructions. Finally, go to Section 2.6, *Establishing Modem Communication*.

PERIPHERAL DEVICE	DEVICE JACK	DEVICE SETUP
Esprit 250C Terminal Emulator	Serial 1	Section 2.1
ADDS 260LF Terminal Emulator	EIA	Section 2.2
Link MC5 Monochrome Terminal	MAIN	Section 2.3
Wyse WY325ES Color Terminal	Serial 1	Section 2.4
Wyse WY-370 Color Terminal	Serial Port A	Section 2.5

Refer to the CMS User's Guide if connecting to a PC with CMS for Windows Software.

1.5 INSTALLING A DATA SWITCH BOX

Switch boxes are used to share resources. The use of a switch box may vary depending on the application. Typically, switch boxes are used to share a single CRT terminal or terminal emulator among several elevator controllers using serial cables or line drivers. One example is a security office which has a single CRT terminal or terminal emulator in a building with two banks of elevators. Using a switch box, the security personnel can view each elevator system by selecting the appropriate switch position on the switch box. A switch box can also be used to share one controller among multiple peripherals.

A switch box may be used with a CRT terminal or lobby CRT display (no keyboard). The application is different; however, the installation is the same.

1.5.1 INSTALLATION REQUIREMENTS

- Communication cable from the elevator controller COM port to the data switch box
- Communication cables from the switch box to each peripheral
- Data switch box

It is important to note that all cables connected to a switch box must be wired in such a way that each pin on one end is connected to the same corresponding pin on the other end.

Line Driver installations (see Figure 1.9):

DB-25 connector pins	1	2	3	4
to Line Driver terminals	RD+	RD-	TD+	TD-

By placing a line driver between the CRT terminal, terminal emulator or PC and the switch box, fewer line drivers will be necessary to complete the installation.

1.5.2 DATA SWITCH BOX INSTALLATION.:

1. Place data switch box next to CRT terminal, terminal emulator or PC. Connect a communication cable from each elevator controller's Communication Interface board COM port to switch box connector A, B, or C.

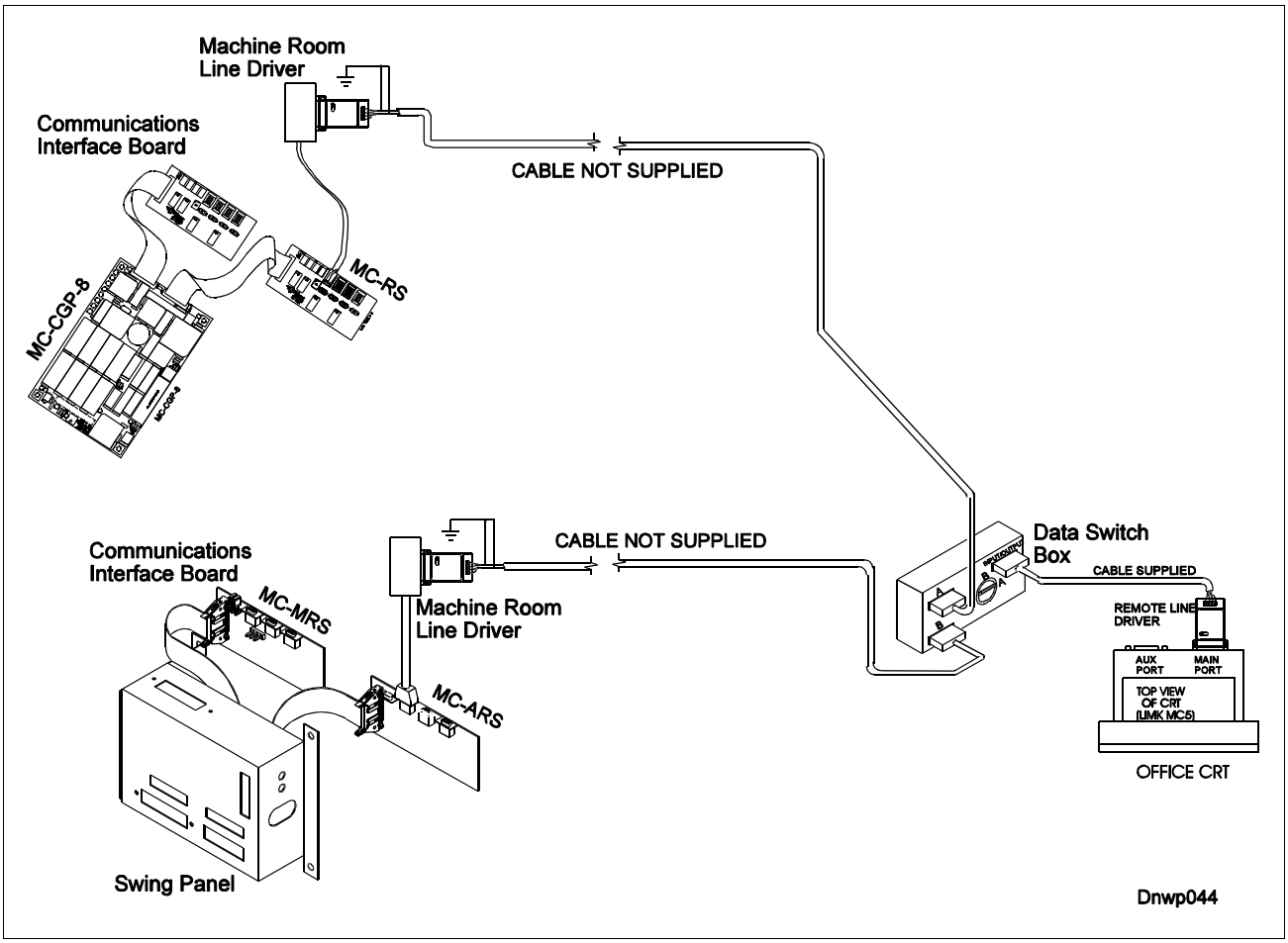
3. Go to Section 1.7 *COMMUNICATION PORT SETTINGS* for instructions on verifying or programming the Communication board's COM port media and device settings.

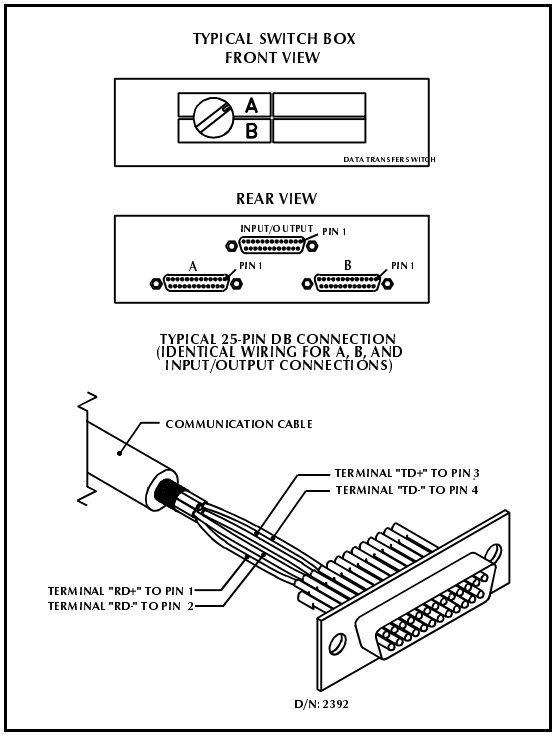
3. Connect a communication cable from the switch box to the CRT terminal, terminal emulator or PC as indicated in the table. Then go the device setup section indicated and perform the setup instructions.

PERIPHERAL DEVICE	DEVICE JACK	DEVICE SETUP
Esprit 250C Terminal Emulator	Serial 1	Section 2.1
ADDS 260LF Terminal Emulator	EIA	Section 2.2
Link MC5 Monochrome Terminal	MAIN	Section 2.3
Wyse WY325ES Color Terminal	Serial 1	Section 2.4
Wyse WY-370 Color Terminal	Serial Port A	Section 2.5

Refer to the CMS User's Guide if connecting to a PC with CMS for Windows Software.

FIGURE 1.9 Data Switch Box Installation Diagram





1. Solder the wire coming from terminal "RD+" of the machine room line driver into pin 1 (shown below) of the 25-pin DB connector.
2. Solder the wire coming from terminal "RD-" of the machine room line driver into pin 2 (shown below) of the 25-pin DB connector.
3. Solder the wire coming from terminal "TD+" of the machine room line driver into pin 3 (shown below) of the 25-pin DB connector.
4. Solder the wire coming from terminal "TD-" of the machine room line driver into pin 4 (shown below) of the 25-pin DB connector.
5. Follow step 1 thru 4 above for other machine room communication cable.
6. Install protective back-shell (or hood) as per instructions supplied.
7. Install both connectors into back of A/B switch box labeled A and B respectively.
8. Tighten back-shell screws firmly to A/B switch box.
9. Install supplied cable (with line driver) with 25-pin DB connector into A/B switch box labeled "INPUT-OUTPUT" and firmly tighten back-shell screws.
10. Attach the line driver end of the supplied cable into the CRT terminal port (MAIN or PORT A), terminal emulator port (Serial 1 or EIA) or PC COM port (COM1, COM2, COM3 or COM4) and tighten back-shell screws.

Refer to REMOTE LINE DRIVER CRT TERMINAL INSTALLATION DIAGRAM or REMOTE LINE DRIVER PC INSTALLATION DIAGRAM for additional Information.

1.6 INSTALLING A DEVICE SERVER (ETHERNET)

MCE currently supports three device servers. The following MCE documents provide instructions for setting up the device servers:

- Lantronix CoBox-FL-01 Device Server Setup 42-IS-0058
- Digi PortServer TS2 Setup Instruction 42-IS-0060
- Digi PortServer TS2 MEI Setup Instruction 42-IS-0082

These documents may be ordered from MCE Technical Support.

1.7 COMMUNICATION PORT SETTINGS

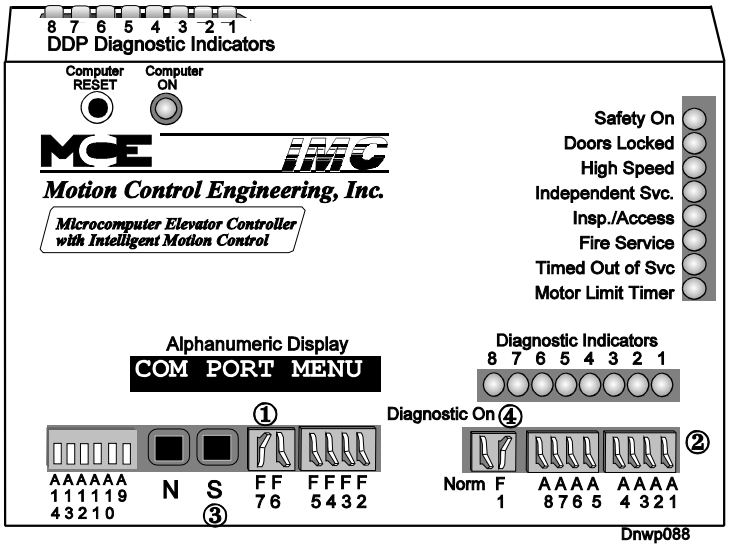
The communication ports are programmed at the factory for the original hardware, based on customer-provided information. Changing a communication port setting may be necessary if equipment is changed or added.

Verify / program the COM port settings before performing the CRT terminal, terminal emulator or PC setup. If the COM port settings are not correct for the media (Line Drivers, Modems) and device (CRT terminal, terminal emulator or PC), make the necessary changes using the following instructions. For PTC / PHC Controllers with MC-PA Communication Interface boards, go to Section 1.7.2 for instructions. For Swing Panel Controllers with MC-RS, MC-MRS or MC-ARS Communication Interface boards, go to Section1.7.1 for instructions.

1.7.1 VERIFYING / PROGRAMMING COM PORT SETTINGS ON SWING PANEL CONTROLLERS

Refer to Table 1.8 *COM Port Media Selections* and Table 1.9 *COM Port Device Selections* to determine the correct Media and Device setting for the communication port(s) being used. Communication ports are programmed using System Mode. To access the System Mode:

First move all switches on the Controller's Swing Panel to their down (off) position.



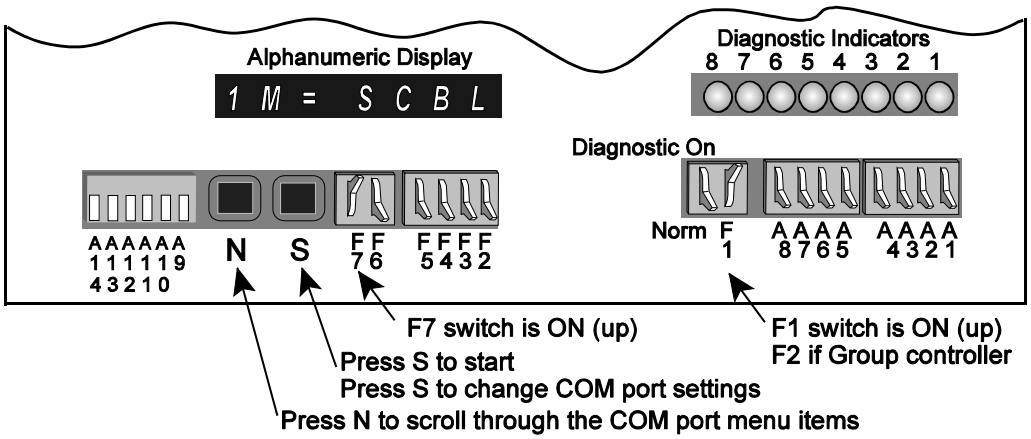
① Move the F7 switch to the up (on) position. You should see PASSWORD on the alphanumeric display.

② If a password was specified for this job, set switches A1-A8 to the password value.

③ Press and hold the ***S*** push-button until *SYSTEM* appears on the display.

④ Move the F1 switch (F2 if Group Controller) to the up (on) position. When the COM port menu is accessed, you will see COM PORT MENU PRESS S TO START *scrolling* across the alphanumeric display.

5. Press ***S*** to enter the COM Port menu (see Table 1.7).The alphanumeric display should change to “1M :” followed by the current media selected (in this example “SCBL” for serial cable).



If nothing happens or "NO COMS" appears on the display, the COM ports may not be programmable or none are available.

TABLE 1.7 Communication Port Menu

DISPLAY	DESCRIPTION
NO COM	No COM port option has been enabled
1M	COM Port 1 Media
1D	COM Port 1 Device
2M	COM Port 2 Media
2D	COM Port 2 Device
3M	COM Port 3 Media
3D	COM Port 3 Device
4M	COM Port 4 Media
4D	COM Port 4 Device
SAVE?N/S	Save the changes? N for no or continue, S for save

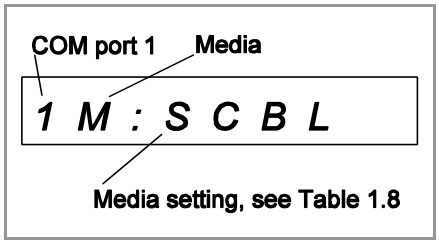
6. Press **N** to scroll and select the desired COM port (1 to 4) and media (M) or device (D).
7. Press ***S*** to change the media (Table 1.8) or device (Table 1.9) setting

   or

   press ***N*** to view / program the next COM port.
8. When “SAVE?N/S” is displayed:

   Press ***S*** to Save the COM port parameters.

   Press ***N*** to loop back to COM port 1.
9. To exit, place the Swing Panel switches in the down (off) position.



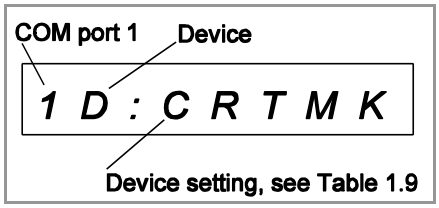


TABLE 1.8 COM Port Media Selections

DISPLAY	DESCRIPTION
NONE	No Media - the port is not being used
SCBL	Serial Cable - direct connection to a CRT terminal or terminal emulator
LDRV	Line Driver - connection to a CRT terminal or terminal emulator at a distance of over 40 feet using a line driver
MODM	Modem - phone line connection to a Personal Computer using modems

TABLE 1.9 COM Port Device Selections

DISPLAY	DESCRIPTION
NONE	No Device - the port is not being used
CRTMK	Use for these terminals or emulators with keyboard (Link MC5, Wyse WY-325ES, Esprit 250C Emulator or ADDS 260LF Emulator)
CRTM	Use for these terminals or emulators without keyboard (Link MC5, Wyse WY-325ES, Esprit 250C Emulator or ADDS 260LF Emulator)
PC	Use for Personal Computer with CMS / MSD
PCGD	Personal Computer Graphic Display (no longer used)
CRTCK	Use for these terminals with keyboard (Link MC-70, Wyse WY-370)
CRTC	Use for these terminals without keyboard (Link MC-70, Wyse WY-370)

NOTES:
1. Not all devices are available on all controllers. The device options available depend on the controller and the options purchased.
2. If either media or device are programmed as "NONE" both the media and the device will be set to "NONE."
3. A device of *without keyboard* (CRTM or CRTC) cannot have a media of Modem (MODM). If Modem (MODM) is selected, the device will be changed to *with keyboard* (CRTMK or CRTCK).

Finally, go to Section 2, *CRT Terminal and Terminal Emulator Setup* and perform the setup instructions for the CRT terminal or terminal emulator being used.

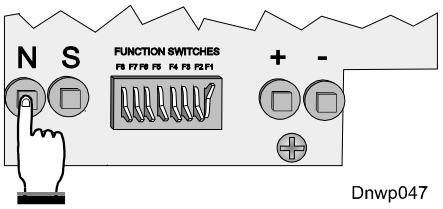
1.7.2 VERIFYING / PROGRAMMING COM PORT SETTINGS ON PTC/PHC CONTROLLERS

With PTC/PHC Series Controllers (MC-PCA / MC-PA boards) the car must be on Inspection to change the COM port parameters.

1. Enter Program mode by moving the ***F1*** switch on the MC-PCA board to the up (on) position. The Start Message appears:

```
PROGRAM MODE
PRESS N TO BEGIN
```

2. Press the ***N*** push-button, and release it.



Dnwp047

The first Menu Message will appear:

```
*BASIC FEATURES*
*    MENU      *
```

3. Keep pressing the ***N*** push-button until the extra features menu appears:

```
*EXTRA FEATURES*
*    MENU      *
```

4. Press the ***S*** push-button to enter the menu. Then press ***N*** until the display shows:

```
PERIPHERAL DEVICE?
        YES
```

If the peripheral device is set to *NO*, set it to *Yes* by pressing the ***S*** push-button.

5. Press the ***N*** push-button to advance to:
The current media setting is displayed.

```
PA COM 1 MEDIA:
        MODEM
```

6. One of the following media may be selected by pressing the ***S*** pushbutton:

- serial cable
- line drivers
- modem
- none (if none is selected for media, device is not programmable)

7. Press ***N*** again to select the peripheral device to connect to COM port 1. The display will read:

8. One of the following peripherals may be selected by pressing the ***S*** pushbutton:

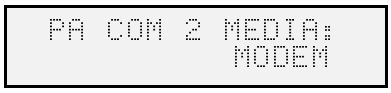
   - CRT – NO KEYBOARD (color or monochrome)
   - CRT AND KEYBOARD (color or monochrome)
   - PERSONAL COMPUTER (To be used with CMS)

9. Press ***N*** If a CRT (terminal) option was selected, the display prompts: COLOR CRT?

   IMPORTANT: Select ***S*** for yes only if a Link MC-70 or Wyse 350 terminal is being used. For all other CRT terminals and terminal emulators (color or monochrome), select ***N*** for no.

   If PERSONAL COMPUTER was selected as the peripheral device, the next option will be FUNCTION. Select CMS. The ***S*** pushbutton is used for selection.

10. Press ***N*** to select COM 2 and repeat the above instructions to program media and device.



Each communication port (COM1 and COM 2) must be programmed for a media and a device according to the particular job specifications to allow the particular peripheral device to operate properly.

Whenever options or values are changed in Program mode, this information must be saved in the computer's memory.

11. When the changes are complete, press the ***N*** push-button until the following message appears:

12. Press the ***S*** push-button to save the changes and the following display will appear:

13. Now press the ***N*** push-button, and the Start Message will appear again.

14. When programming is complete, move the ***F1*** switch to the down (off) position.

Finally, go to Section 2, *CRT Terminal and Terminal Emulator Setup* and perform the setup instructions for the CRT terminal or terminal emulator being used.

SECTION 2
CRT TERMINAL AND TERMINAL EMULATOR SETUP

2.0 GENERAL

This section contains setup information for the controller COM ports and for the following terminals and terminal emulators:

This section also provides the following:

2.1 ESPRIT 250C TERMINAL EMULATOR SETUP

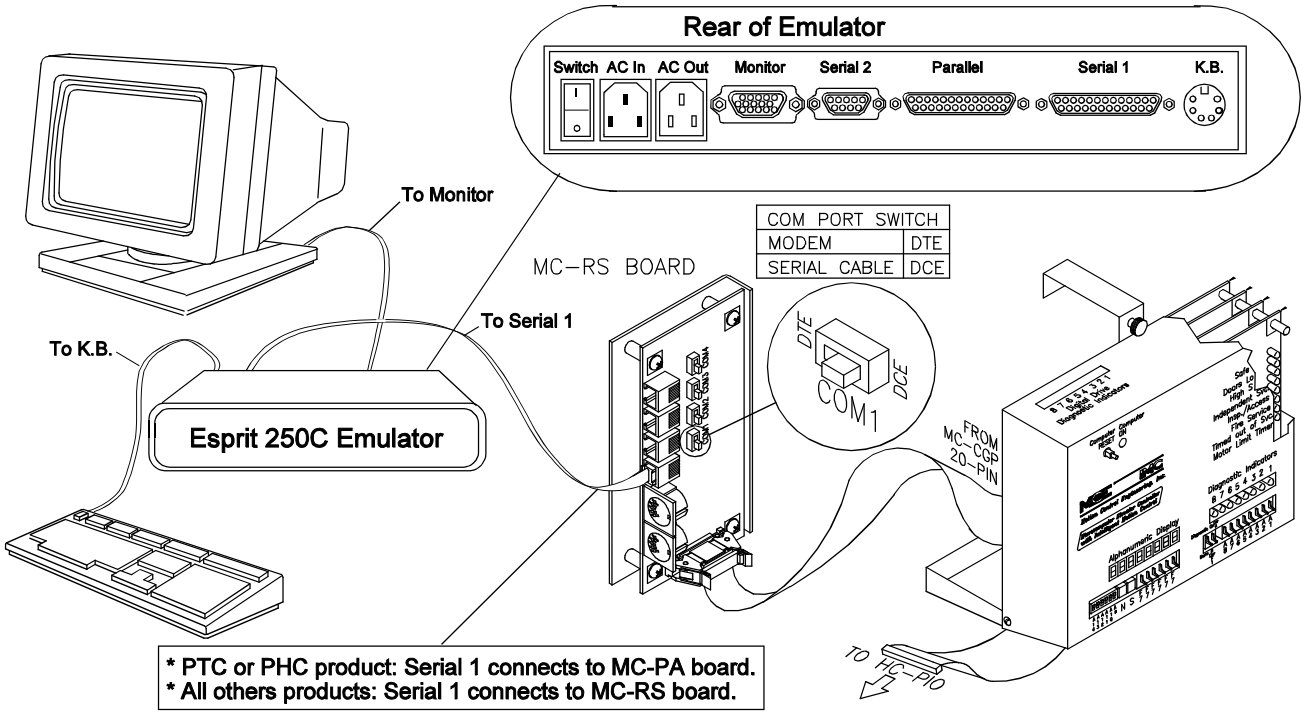
The ESPRIT 250C terminal emulator, along with a standard monitor and keyboard, is used in place of a traditional terminal.

2.1.1 CONTROLLER COM PORT SETTING (ESPRIT 250C)

Swing Panel Controller - Refer to Section 1.7.1 *Verifying / Programming the COM Port Settings on Swing Panel Controllers* for instructions on viewing and changing the controller Communication Port settings. For the ESPRIT 250C Emulator the COM port ***Device*** option must be set to ***CRTMK***.

PTC / PHC Controller - Refer to Section 1.7.2 *Verifying / Programming COM Port Settings on PTC / PHC Controllers* for instructions on viewing and changing the controller Communication Port settings. For the ESPRIT 250C Emulator the ***COLOR CRT*** option must be set to ***NO***.

2.1.2 ESPRIT 250C TERMINAL EMULATOR CONNECTIONS



- Connect the monitor's signal cable to the Monitor jack (DB-15) on the rear of the emulator.
- Connect the keyboard cable to the K.B. jack (Din) on the rear of the emulator.
- Connect the controller's communication interface board (MC-RS or MC-PA) to the Serial 1 jack (DB-25) on the rear of the emulator using a C-CRT/MD/PA-x cable (x = length in feet).
- Connect the printer, if applicable, to the Parallel jack (DB-25) on the rear of the emulator.
- Connect AC In jack on the rear of the emulator to the Group controller's AC outlet using the cord supplied with the emulator.

2.1.3 ESPRIT 250C TERMINAL EMULATOR SETUP

The Esprit 250C Emulator has certain parameters which must be configured properly in order to function with MCE controllers. Disconnect the emulator from the controller while setting these parameters. In order to examine and/or modify these parameters, enter the Emulator setup mode. Press and hold the ***Alt*** key while pressing the ***Esc*** key.

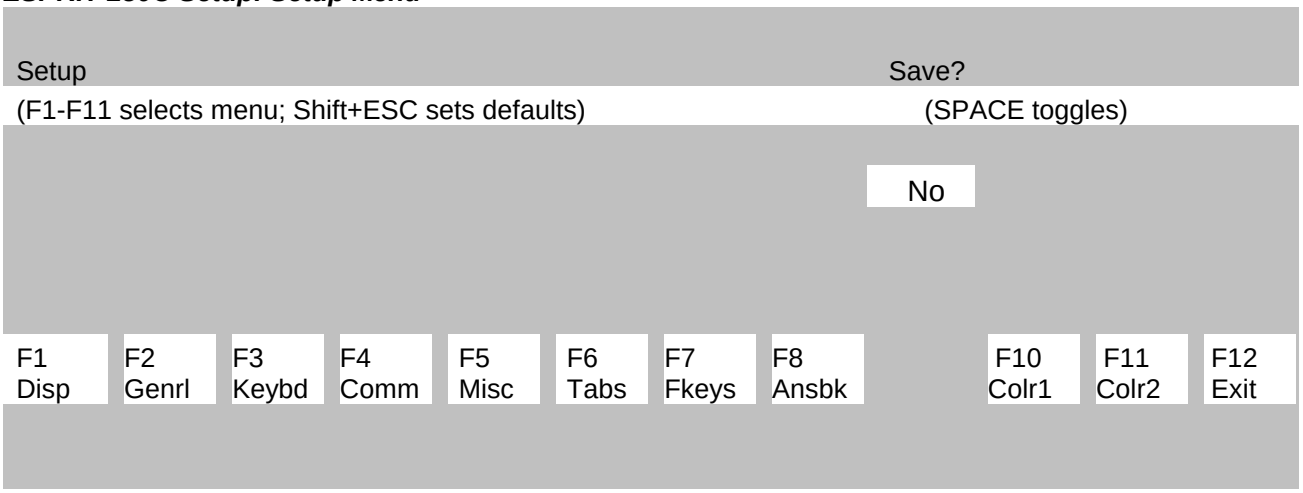
TABLE 1 Setup Mode Keyboard Commands

KEY	COMMAND FUNCTION
Arrow Keys	Used to select an item on the menu.
Space Bar	Press the space bar to change the setting

Step 1 With the emulator disconnected from the controller, hold down ***Alt*** and press ***Esc*** to put the terminal into Setup mode. The Esc key is in the upper left corner of the keyboard.

Step 2 From the Setup menu press ***Shift+Esc*** to default all parameters.

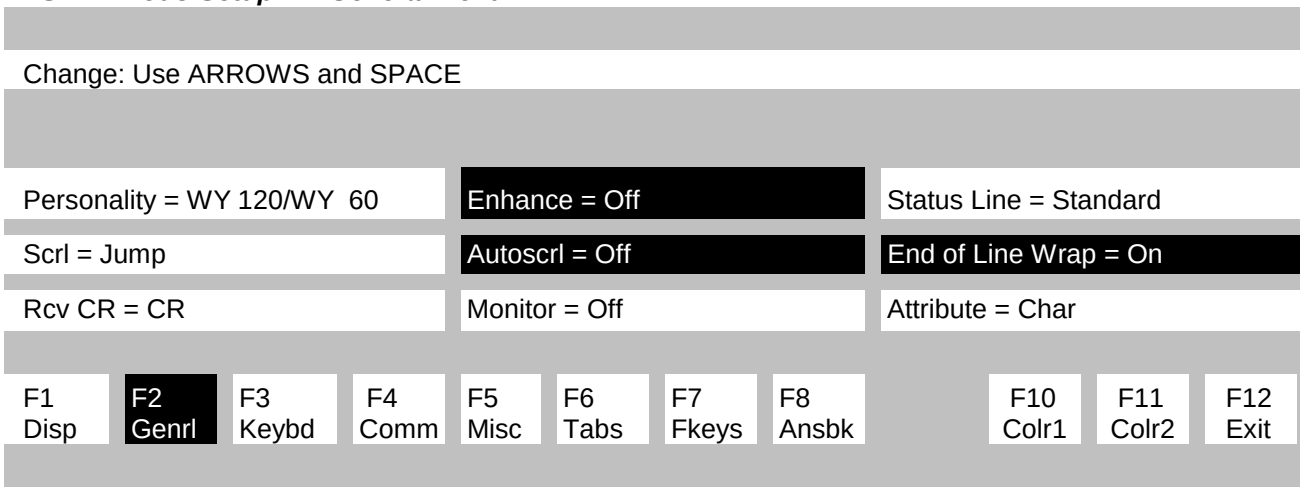
ESPRIT 250C Setup: Setup Menu



Step 3 From the Setup menu press **F2** to enter the General Menu. Use the **Arrow keys** to highlight **Enhance** and press the ***Spacebar*** to change the option to **Off**. Use the **Arrow keys** to highlight **Autoscrl** and press the ***Spacebar*** to change the option to **Off** .

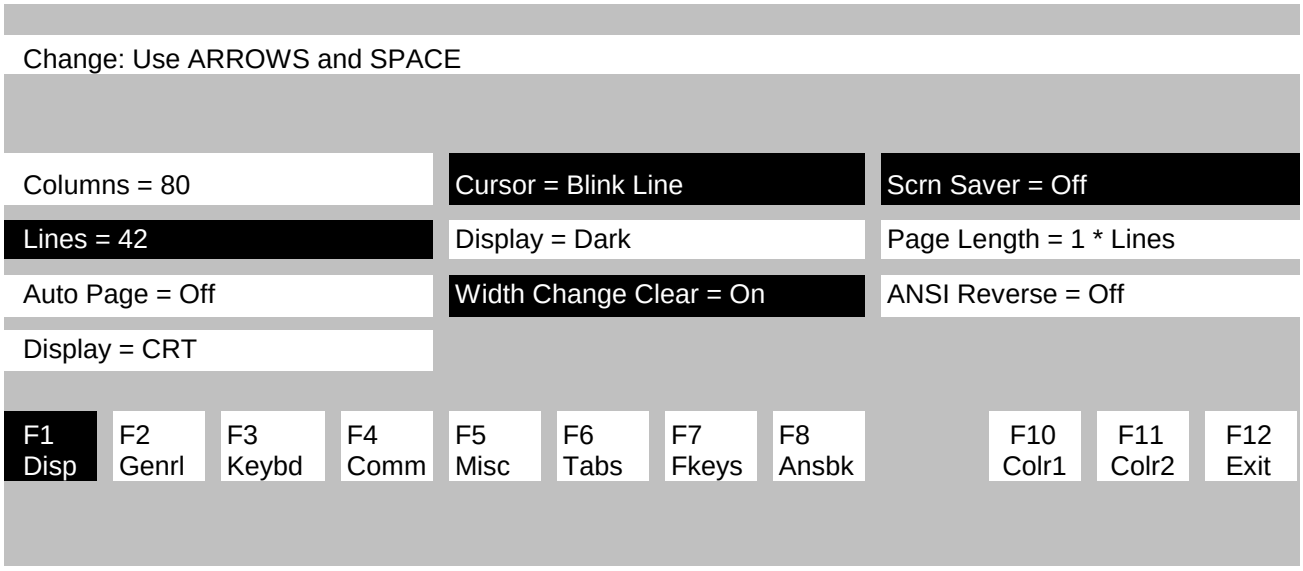
Step 4 Use the **Arrow keys** to highlight **End of Line Wrap** and press the ***Spacebar*** to change the option to **On**.

ESPRIT 250C Setup: F2 General Menu



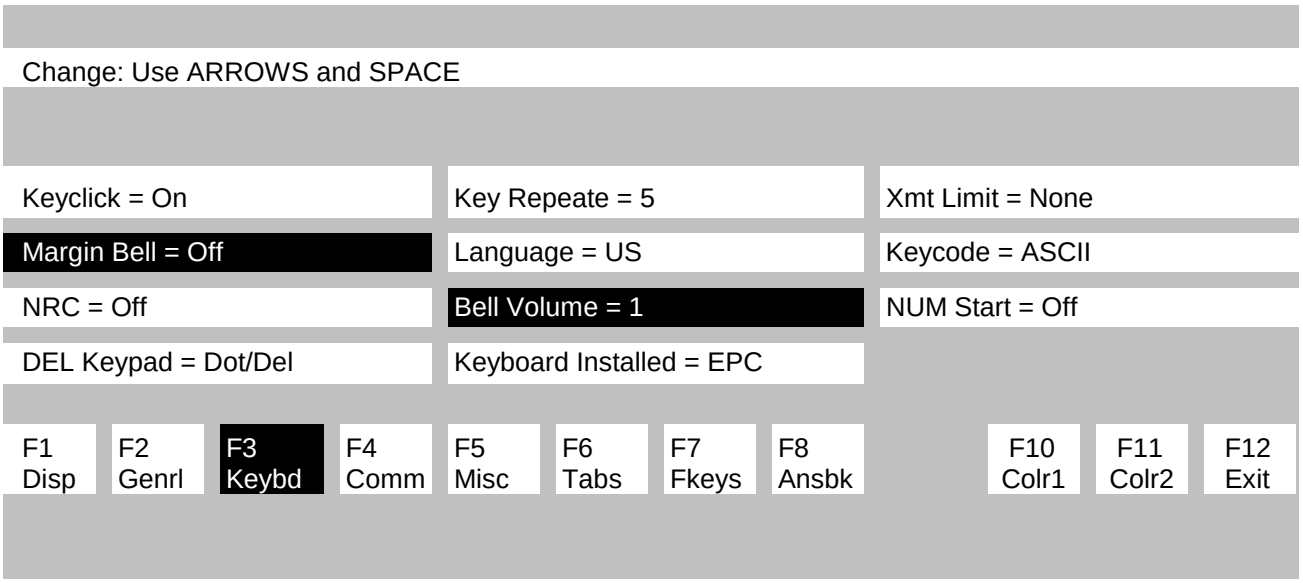
Step 5 Press **F1** to enter the Display Menu. Use the **Arrow keys** to highlight **Lines** and press the ***Spacebar*** to change the option to **42**. Use the **Arrow keys** and **Spacebar** to set **Cursor = Blink**, **Scrn Saver = Off** and **Width Change Clear = On**.

ESPRIT 250C Setup: F1 Display Menu



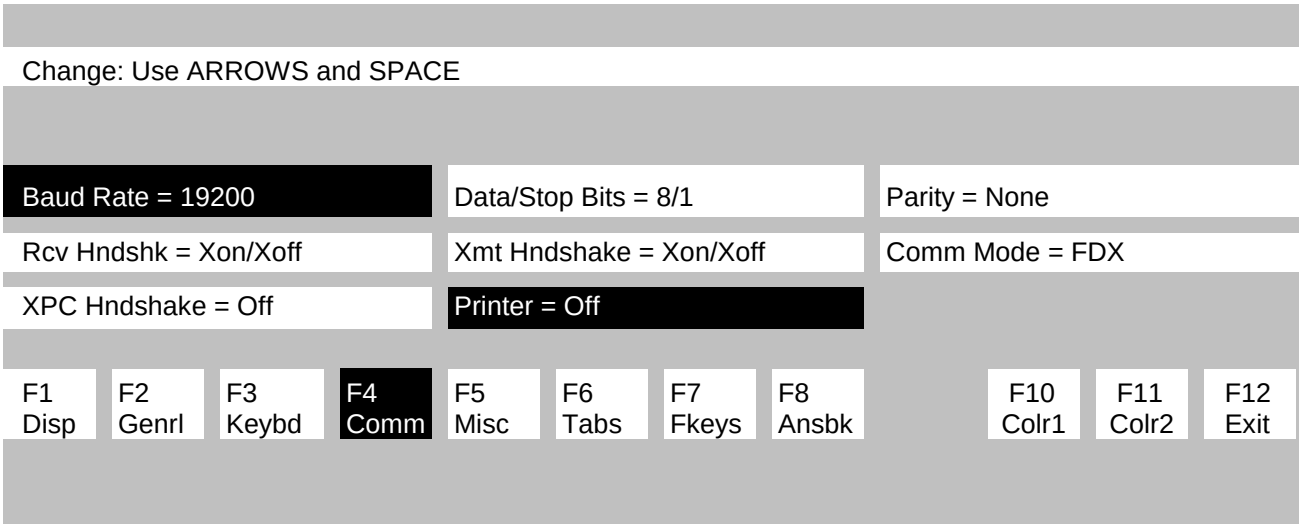
Step 6 Press **F3** to enter the Keybd Menu. Use the **Arrow keys** and ***Spacebar*** to set **Margin Bell = Off** and **Bell Volume = 1**.

ESPRIT 250C Setup: F3 Keybd Menu



Step 7 Press **F4** to enter the COMM Menu. Use the **Arrow keys** and ***Spacebar*** to set **Baud Rate = 19200** and **Printer = Off**.

ESPRIT 250C Setup: F4 COMM Menu



NOTE: If a line driver is used between the controller and the terminal emulator, set **Baud Rate = 9600**.

Step 8 Press **F10** to enter the Colr1 Menu. Use the **Arrow keys** and ***Spacebar*** to change colors for best viewing. The recommended colors are:

Normal = Light Blue Blink = Light Green Rev. = Yellow Dim = White

ESPRIT 250C Setup: F10 Colr1 Menu

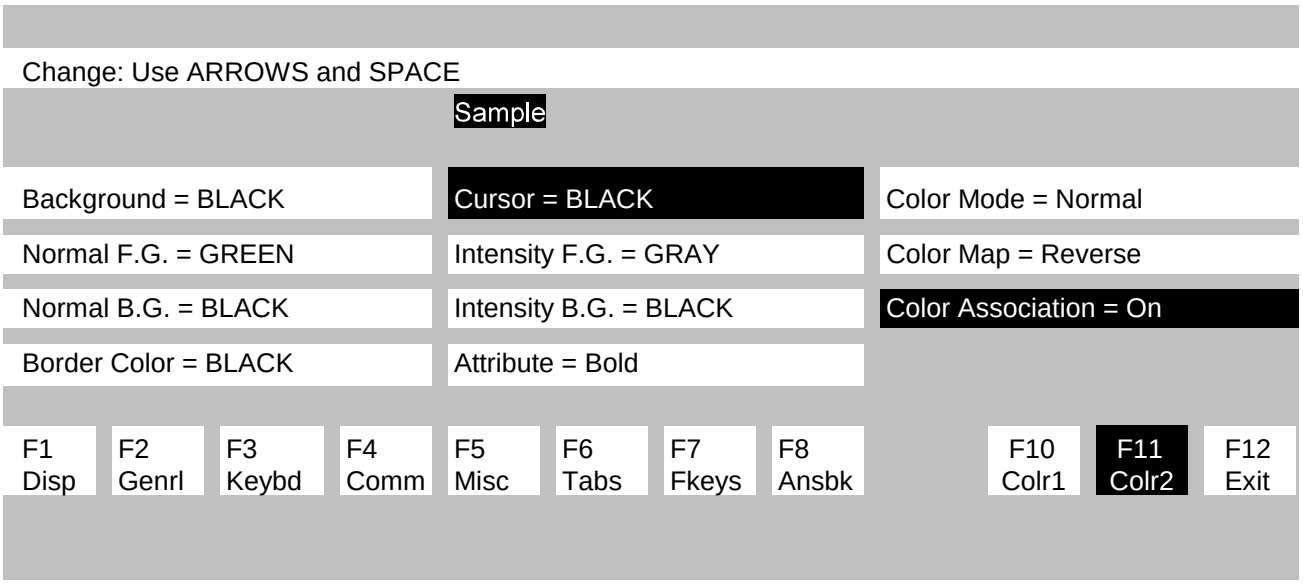
Change: Use Arrows, Space for Forground, Shift+Space for Background colors

Normal		Dim	
Normal =	Light Blue	Dim =	White
Blank =	White	Blank =	White
Blink =	Light Green	Blink =	White
Blink Blank =	White	Blink Blank =	White
Rev. =	Yellow	Rev. =	White
Rev. Blank =	White	Rev. Blank =	White
Rev. Blink =	White	Rev. Blink =	White
Rev. Blink Blank =	White	Rev. Blink Blank =	White
Undl. =	White	Undl. =	White
Undl. Blank =	White	Undl. Blank =	White
Undl. Blink =	White	Undl. Blink =	White
Undl. Blink Blank =	White	Undl. Blink Blank =	White
Undl. Rev. =	White	Undl. Rev. =	White
Undl. Rev. Blank =	White	Undl. Rev. Blank =	White
Undl. Rev. Blink =	White	Undl. Rev. Blink =	White
Undl. Rev. Blink Blank =	White	Undl. Rev. Blink Blank =	White

F1 Disp | F2 Genrl | F3 Keybd | F4 Comm | F5 Misc | F6 Tabs | F7 Fkeys | F8 Ansbk | F10 Colr1 | F11 Colr2 | F12 Exit

Step 9 Press **F11** to enter the Colr2 Menu. Use the **Arrow keys** and ***Spacebar*** to set **Cursor = BLACK** and **Color Association = On**.

ESPRIT 250C Setup: F11 Colr2 Menu



Step 10 Press **F12** to return to the Setup menu and press the ***Spacebar*** to change **Save** to **Yes**. Press **F12** to save the parameters and exit the Setup Menu.

2.1.4 PARALLEL PRINTER SETUP (ESPRIT 250C)

Printers are typically used to create a hard copy of system parameters, controller screens, or simple reports. MCE currently supports two Epson dot-matrix printers (Epson FX 85 and Epson LQ 570) and their equivalents. For nicer looking reports with the printer of your choice, MCE recommends using a PC connected to the controller. Central Monitoring System software or WYSE emulation software may be used to print screens from the PC. Contact the sales department at Motion Control Engineering for further information.

NOTE: The ESPRIT 250C emulator is set up by default with the printer option turned off. A serial interface card on the printer is not required with this emulator. Display screens wider than 80 columns will not be formatted properly. This model of emulator supports any IBM PC compatible printer.

Step 1 Press **F4** to enter the COMM Menu. Use the **Arrow keys** and ***Spacebar*** to set **Printer = Parallel**.

ESPRIT 250C Setup: F4 COMM Menu

Change: Use ARROWS and SPACE

Baud Rate = 19200	Data/Stop Bits = 8/1	Parity = None
Rcv Hndshk = Xon/Xoff	Xmt Hndshake = Xon/Xoff	Comm Mode = FDX
XPC Hndshake = Off	Printer = Parallel	

F1 Disp | F2 Genrl | F3 Keybd | F4 Comm | F5 Misc | F6 Tabs | F7 Fkeys | F8 Ansbk | F10 Colr1 | F11 Colr2 | F12 Exit

Step 2 Press **F7** to enter the Fkeys Menu (Figure 9). Press **Ctrl** + **Print Scrn** (press and hold the Ctrl key, then press the Print Scrn key). To edit **Print =**, press the keys shown in **bold** in the following order:

Ctrl + **[** then **Shift** + **P** then **Ctrl** + **M** then **Ctrl** + **J**

The text should look as shown next to **Print =** in Figure 9. Press the **Enter** key on the ***numeric*** keypad to set **Unshifted Direction = Local**.

Step 3 Press the **down Arrow** key and repeat Step 2 to set **sPrint =** and **Shifted Direction = Local**.

Press **F12** to return to the Setup menu and press the ***Spacebar*** to change **Save** to **Yes**. Press **F12** to save the parameters and exit the Setup Menu.

ESPRIT 250C Setup: F7 Fkeys

Change: Use ARROWS and SPACE

Unshifted Direction = Local	Shifted Direction = Local	
Print =	^P^R^F	
sPrint =	^P^R^F	

F1 Disp | F2 Genrl | F3 Keybd | F4 Comm | F5 Misc | F6 Tabs | F7 Fkeys | F8 Ansbk | F10 Colr1 | F11 Colr2 | F12 Exit

Step 4 Verify that the emulator is connected to the MCE controller through the rear port labeled SERIAL 1.

Step 5 Verify that the printer's DIP switches are set correctly (refer to Table below).

Parallel Printer DIP Switch Settings

PRINTER	EPSON FX 85		EPSON LQ 570	
SETTING	**ON**	**OFF**	**ON**	**OFF**
DIP SW1	6, 7, 8	1, 2, 3, 4, 5	1, 2, 3, 4	5, 6, 7, 8
DIP SW2	1	2, 3, 4		1, 2, 3, 4

Step 6 Connect the 25-pin male DB connector end of the parallel printer cable into the PARALLEL port located in the rear of the emulator. Connect other end of the parallel printer cable into the Centronics connector in the rear of the printer. Use the clips on the connector to secure the cable.

Step 7 Feed the paper through the paper guide and line up the perforation with the top of the print head. Refer to the printer manual for operation and proper care of the printer.

Step 8 Plug the printer into a 120VAC outlet and turn on power to both the emulator and printer.

2.1.5 PRINTING SCREENS WITH THE ESPRIT 250C TERMINAL

To print the screen being viewed follow the steps below.

Step 1 Verify printer is connected to the CRT.

Step 2 Turn on the power to the printer and load it with paper.

Step 3 Press the Print Screen key on the keyboard.

2.2 ADDS 260LF TERMINAL EMULATOR SETUP

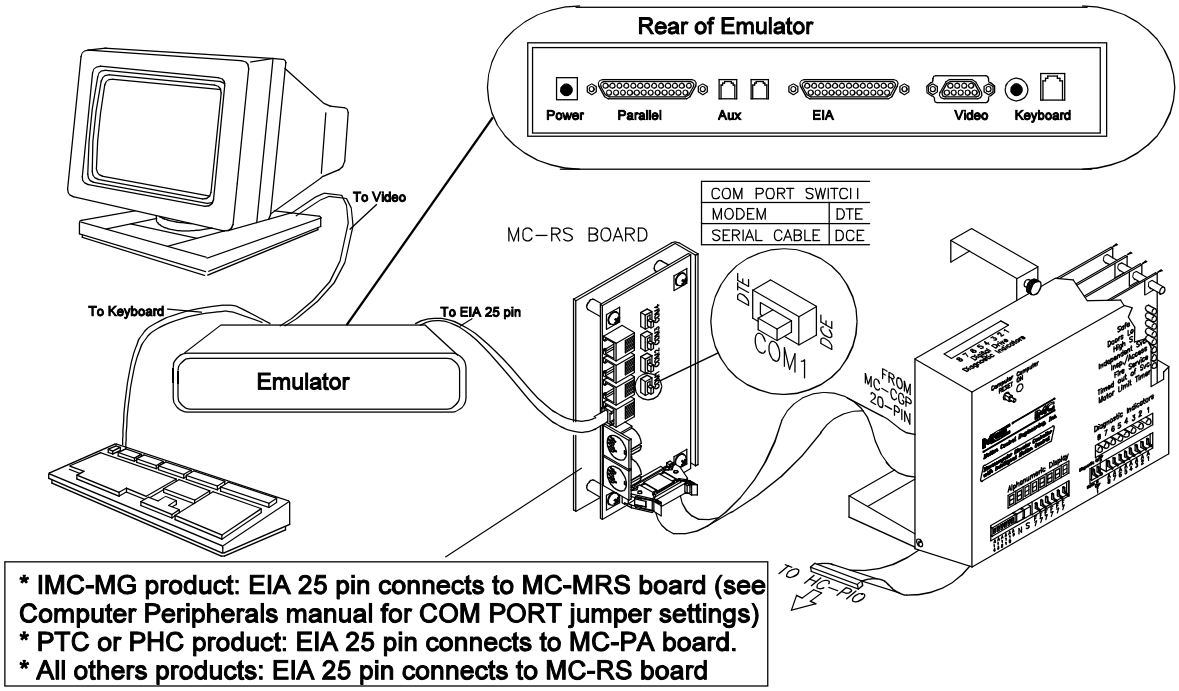
The ADDS 260LF terminal emulator, along with a standard monitor and keyboard, is used in place of a traditional terminal.

2.2.1 CONTROLLER COM PORT SETTINGS (ADDS 260LF)

Swing Panel Controller - Refer to Section 1.7.1 *Verifying / Programming the COM Port Settings on Swing Panel Controllers* for instructions on viewing and changing the controller Communication Port settings. For the ADDS 260LF Emulator, the COM port ***Device*** option must be set to ***CRTMK***.

PTC / PHC Controller - Refer to Section 1.7.2 *Verifying / Programming COM Port Settings on PTC / PHC Controllers* for instructions on viewing and changing the controller Communication Port settings. For the ADDS 260LF Emulator, the ***COLOR CRT*** option must be set to ***NO***.

2.2.2 ADDS 260LF TERMINAL EMULATOR CONNECTIONS



- Connect the monitor's signal cable to the Video jack (DB-15) on the rear of the emulator.
- Connect the keyboard cable to the Keyboard jack on the rear of the emulator.
- Connect the controller's communication interface board (MC-RS or MC-PA) to the EIA jack (DB-25) on the rear of the emulator using a C-CRT/MD/PA-x cable (x = length in feet).
- Connect the printer, if applicable, to the Parallel jack (DB-25) on the rear of the emulator.
- Connect Power jack on the rear of the emulator to the Group controller's AC outlet using the cord supplied with the emulator.

2.2.3 ADDS 260LF TERMINAL EMULATOR SETUP

Step 1 Disconnect the cable connecting the emulator to the elevator communication board.

Step 2 Hold down the ***Ctrl key*** and press ***Scroll Lock*** to enter the setup mode. The F1 Screen comes up automatically.

Step 3 Press the ***Print Screen*** key to access the Print Exec Screen.

Step 4 Using the right arrow key, move the cursor right to highlight Default Terminal. Press ***Enter***.

F1 Quick	F2 Genrl	F3 Displ	F4 Kybd	F5 Keys	F6 Ports	F7 Host	F8 Print	F9 Emul	F10 Tabs	F11 AnsBk	F12 Prog	**Print Exec**

Parameters

Save Terminal	Recall Terminal	**Default Terminal**
Save Session	Recall Session	Default Session
Reset Terminal	Rest Session	Reset Ports
Clear Screen	Default Session UDKs	

Choices

Use Enter Key To Execute Action

Select

← ↑ → ↓ : Parameter | Enter/S-Enter : Next/Prev Choice | Exit : Esc Key

The terminal will default with all required settings for a serial connection to MCE controllers. After the unit has been defaulted, cursor position is highlighted, default choices are in bold. Verify the following parameters, press the ***Pause/Break*** key to save the settings.

Step 5 Press the ***F1 key***. On the **F1 Quick** Menu verify the following Parameters.

F1 Quick	F2 Genrl	F3 Displ	F4 Kybd	F5 Keys	F6 Ports	F7 Host	F8 Print	F9 Emul	F10 Tabs	F11 AnsBk	F12 Prog	Print Exec

Parameters

Emulation = Wyse-60	EIA Baud Rate = 19200	EIA Data Format = 8/1/N
Enhanced = Off	Aux Baud Rate = 9600	Aux Data Format = 8/1/N
Comm Mode = Full Duplex	Language = U.S.	Sessions = One
Host/Printer = EIA/None(SEE NOTE)		

Choices

ADDS-VP	**Wyse-60**	Wyse-325	Wyse-50+	Wyse-350	PC-Term	TVI-925
VT-300-7	VT-300-8	Intecolor	VT-200-7	VT-200-8	VT-100	SCO Console
AT386						

Select

← ↑ → ↓ : Parameter | Enter/S-Enter : Next/Prev Choice | Exit : Esc Key

NOTE: Set Host/Printer to EIA/Para only if you are connecting a parallel printer. If not, set Host Printer to EIA/None. With no printer connected, the EIA/Para setting may cause your emulator to generate an error (TRANSMIT CONDITION PARALLEL PRINTER NO PRINTER) and be unable to communicate with the Controller.

NOTE: If a line driver is used between the controller and the terminal emulator, set the baud rate to 9600.

Step 6 On the **F2 Genrl** Menu verify the following Parameters.

F1 Quick	**F2 Genrl**	F3 Displ	F4 Kybd	F5 Keys	F6 Ports	F7 Host	F8 Print	F9 Emul	F10 Tabs	F11 AnsBk	F12 Prog	Print Exec

Parameters

Emulation = Wyse-60	Enhanced = Off	Auto Wrap = On
Auto Font Load = On	Auto Page = Off	Curs Dir = Left to Right
Auto Scroll = On	Monitor Mode = Off	Screen Saver = Off
Bell Volume = 03	Warning Bell = On	Bell Length = 140 ms
Sessions = One		

Choices

ADDS-VP	**Wyse-60**	Wyse-325	Wyse-50+	Wyse-350	PC-Term	TVI-925
VT-300-7	VT-300-8	Intecolor	VT-200-7	VT-200-8	VT-100	SCO Console
AT386						

Select

← ↑ → ↓ : Parameter	Enter/S-Enter : Next/Prev Choice	Exit : Esc Key

NOTE: The Screen Saver function will only blank the screen after the specified time set if the emulator loses communication with the controller. Therefore, turn off the VGA monitor (and only the VGA monitor) when not in use. Screen Saver settings are Off, 2, 5,15 and 30 min.

Step 7 On the **F3 Displ** Menu verify the following Parameters.

F1 Quick	F2 Genrl	**F3 Displ**	F4 Kybd	F5 Keys	F6 Ports	F7 Host	F8 Print	F9 Emul	F10 Tabs	F11 AnsBk	F12 Prog	Print Exec

Parameters

Display Cursor = Off	Cursor = Blink Block	Auto Adjust Cursor = Off
Page Length = 42	Screen Length = 44 Lines	Screen Video = Normal
Columns = 80	Scroll = Jump	Width Change Clear = On
Speed = Fast	**Palette Number = Soft 1**	

Choices

Off ON

Select

← ↑ → ↓ : Parameter	Enter/S-Enter : Next/Prev Choice	Exit : Esc Key

Step 8 On the **F4 Kybd** Menu verify the following Parameters.

F1 Quick	F2 Genrl	F3 Displ	F4 Kybd	F5 Keys	F6 Ports	F7 Host	F8 Print	F9 Emul	F10 Tabs	F11 AnsBk	F12 Prog	Print Exec

Parameters

Language = U.S.	Char Set = Multinational	Code Page = CP 437
Key Mode = ASCII	Keyclick = On	Key Repeat = On
Key Rate = 20 cps	Margin Bell = Off	Key Lock = Caps
Caps Lock = Toggle	Num Lock = Toggle	

Choices

U.S.	U.K.	Danish	Finnish	French	German	Norwegian
Portuguese	Spanish	Swedish	Dutch	Belgian-Flemsh	Fr-Canadian	Italian
Latin-American	Swiss-German	Swiss-French				

Select

← ↑ → ↓ : Parameter	Enter/S-Enter : Next/Prev Choice
	Exit : Esc Key

Step 9 On the **F5 Keys** Menu verify the following Parameters.

F1 Quick	F2 Genrl	F3 Displ	F4 Kybd	**F5 Keys**	F6 Ports	F7 Host	F8 Print	F9 Emul	F10 Tabs	F11 AnsBk	F12 Prog	Print Exec

Parameter

Enter Key = < CR >	Return Key = < CR >	Backspace = < BS > / < DEL >
Alt Key = Funct	Disconnect = Pause	Desk Acc = Ctrl←
Pound Key = U.S.	Return Key Repeat = Off	UDKs = User Dependent

Choices

< CR >	< CR >< LF >	< TAB >

Select

← ↑ → ↓ : Parameter	Enter/S-Enter : Next/Prev Choice
	Exit : Esc Key

Step 10 On the **F6 Ports** Menu verify the following Parameters.

F1 Quick	F2 Genrl	F3 Displ	F4 Kybd	F5 Keys	**F6 Ports**	F7 Host	F8 Print	F9 Emul	F10 Tabs	F11 AnsBk	F12 Prog	Print Exec

Parameters

EIA Baud Rate = 19200	EIA Data Format = 8/1/N	EIA Parity Check = Off
Aux Baud Rate = 9600	Aux Data Format = 8/1/N	Aux Parity Check = Off
EIA Xmt = No Protocol	EIA Recv = Xany - Xoff (XPC)	EIA Xmt Pace = Baud
Aux Xmt = Xon - Xoff	Aux Recv = No Protocol	Aux Xmt Pace = Baud

Choices

110	150	300	600	1200	1800	2000	2400	4800	9600
19200	38400	57600	76800	115200					

Select

← ↑ → ↓ : Parameter	Enter/S-Enter : Next/Prev Choice
	Exit : Esc Key

Step 11 On the **F7 Host** Menu verify the following Parameters.

F1 Quick	F2 Genrl	F3 Displ	F4 Kybd	F5 Keys	F6 Ports	**F7 Host**	F8 Print	F9 Emul	F10 Tabs	F11 AnsBk	F12 Prog	Print Exec

Parameters

Comm Mode = Full Duplex	Local = Off	Null Suppress = On
Break = 250 ms	Modem Control = Off	Disconnect = 2 sec
Recv < CR > = < CR >	Recv < DEL > = Ignore	Send ACK = On
Alt Input Data = Off	Send Line Term = < US >	Send Block Term = < CR >

Choices

Full Duplex Half Duplex Full Block Half Block

Select

← ↑ → ↓ : Parameter Enter/S-Enter : Next/Prev Choice Exit : Esc Key

Step 12 On the **F8 Print** Menu verify the following Parameters.

F1 Quick	F2 Genrl	F3 Displ	F4 Kybd	F5 Keys	F6 Ports	F7 Host	**F8 Print**	F9 Emul	F10 Tabs	F11 AnsBk	F12 Prog	Print Exec

Parameters

Prnt Line Term = < CR > < LF >	Prnt Block Term = < CR >	Secondary Recv = Off

Choices

< US > **< CR > < LF >**

Select

← ↑ → ↓ : Parameter Enter/S-Enter : Next/Prev Choice Exit : Esc Key

Step 13 On the **F9 Emul** Menu verify the following Parameters.

F1 Quick	F2 Genrl	F3 Displ	F4 Kybd	F5 Keys	F6 Ports	F7 Host	F8 Print	**F9 Emul**	F10 Tabs	F11 AnsBk	F12 Prog	Print Exec

Parameters

Attribute = Character	Page Edit = Off	WPRT Intensity = Normal
WPRT Reverse = Off	WPRT Underline = Off	WPRT Blink = Off
Display NV Labels = Off	Save Labels = On	Char Set = Multinational
Status Lines = Extended	Fkey Speed = Normal	WP-Graphics = On

Choices

Character Line Page

Select

← ↑ → ↓ : Parameter Enter/S-Enter : Next/Prev Choice Exit : Esc Key

Step 14 On the **F10 Tabs** Menu verify the following Parameters.

F1 Quick	F2 Genrl	F3 Displ	F4 Kybd	F5 Keys	F6 Ports	F7 Host	F8 Print	F9 Emul	**F10 Tabs**	F11 AnsBk	F12 Prog	Print Exec

Parameters

Auto Init Tabs = Off | Default Tabs

10 20 30 40 50 60

70 80 90 100 110 120 130

Choices

Off On

Select

← ↑ → ↓ : Parameter | Enter/S-Enter : Next/Prev Choice | Exit : Esc Key

Step 15 On the **F11 AnsBk** Menu verify the following Parameters.

F1 Quick	F2 Genrl	F3 Displ	F4 Kybd	F5 Keys	F6 Ports	F7 Host	F8 Print	F9 Emul	F10 Tabs	**F11 AnsBk**	F12 Prog	Print Exec

Parameters

Answerback Mode = Off | Answerback Conceal

Answerback Message:

Bytes Remaining : 0542

Choices

Off On

Select

← ↑ → ↓ : Parameter | Enter/S-Enter : Next/Prev Choice | Exit : Esc Key

Step 16 On the **F12 Prog** Menu verify the following Parameters.

F1 Quick	F2 Genrl	F3 Displ	F4 Kybd	F5 Keys	F6 Ports	F7 Host	F8 Print	F9 Emul	F10 Tabs	F11 AnsBk	**F12 Prog**	Print Exec

Parameters

Key = F1	Program = F Key	Key Dir = Host

Text:

Label:

Bytes Remaining : 0542

Choices

F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 F12 F13 F14 F15 F16

Select

← ↑ → ↓ : Parameter	Enter/S-Enter : Next/Prev Choice	Exit : Esc Key

Step 17 If you are not setting up a modem, but are setting up a parallel printer, go to step 21. If you are setting up a modem, continue to step 18. Otherwise, press ***Esc*** then ***Y*** to save.

Step 18 If you are setting up a modem, change the following highlighted settings when connecting with a modem.

F6 Ports *EIA Xmt = Xon - Xoff*
EIA Recv = No Protocol

F1 Quick	F2 Genrl	F3 Displ	F4 Kybd	F5 Keys	**F6 Ports**	F7 Host	F8 Print	F9 Emul	F10 Tabs	F11 AnsBk	F12 Prog	Print Exec

Parameters

EIA Baud Rate = 19200	EIA Data Format = 8/1/N	EIA Parity Check = Off
Aux Baud Rate = 9600	Aux Data Format = 8/1/N	Aux Parity Check = Off
EIA Xmt = Xon - Xoff	**EIA Recv = No Protocol**	EIA Xmt Pace = Baud
Aux Xmt = Xon - Xoff	Aux Recv = No Protocol	Aux Xmt Pace = Baud

Step 19 Change the following parameters when using line drivers, set EIA Baud Rate to 9600.

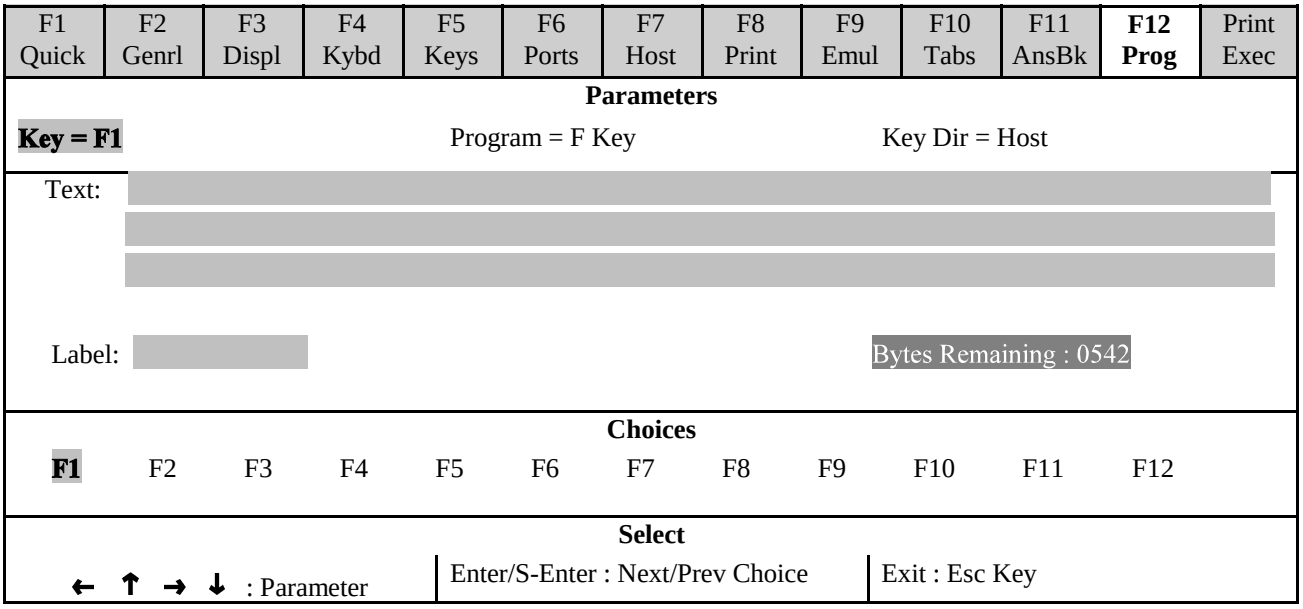
F1 Quick	F2 Genrl	F3 Displ	F4 Kybd	F5 Keys	**F6 Ports**	F7 Host	F8 Print	F9 Emul	F10 Tabs	F11 AnsBk	F12 Prog	Print Exec

Parameters

EIA Baud Rate = 9600	EIA Data Format = 8/1/N	EIA Parity Check = Off
Aux Baud Rate = 9600	Aux Data Format = 8/1/N	Aux Parity Check = Off
EIA Xmt = No Protocol	EIA Recv = Xon - Xoff (XPC)	EIA Xmt Pace = Baud
Aux Xmt = Xon - Xoff	Aux Recv = No Protocol	Aux Xmt Pace = Baud

Step 20 If you are connecting a parallel printer go to Step 21. If you are not connecting a parallel printer, press the ***Esc*** Key, then press ***Y*** to save.

Step 21 Follow these instructions to connect a parallel printer. Go to the **F12 Prog** screen.



On the ***F12 Prog*** screen, you can assign special programming to different keys. All data that is sent to the printer with a Print Screen function will format in a basic 80-column mode. Print screen features will not print screens wider than 80 columns without offsetting the format, making the page difficult to read. Basic formatting also does not print the last 3 to 4 lines of information that is on the screen. To improve the print function the following steps can be taken.

Step 1 Cursor right one position until the ***Program = F Key*** is highlighted.

Step 2 Press the ***Spacebar*** four times to change to ***=Edit Key***.

Step 3 Cursor ***Left*** one position until ***Key = TAB*** is highlighted.

Step 4 Hold down the ***Shift*** key and press the ***Spacebar*** twice change to ***=Print***.

Step 5 Cursor down one time to the ***Text*** edit area. Press the ***Shift +Backspace*** key to delete any text or characters before entering the following.

Step 6 Type the following keys in the exact order as shown. Keys indicated with a "+" require holding the first key listed and pressing the second one.

Ctrl+[Shift+P Ctrl+M Ctrl+J

the text entered will look similar to this: **P** CR LF

Step 7 Cursor up once. Cursor Right twice to highlight ***Key Dir***, if not set to ***=All***, hold down the ***Shift*** key and press the ***Spacebar*** to change to ***=All***.

Step 8 Change the Host/Printer option on the F1 screen to EIA/Para.

Step 9 Press the ***Esc*** key and then the letter ***Y*** to save your changes.

Step 10 Make sure that your F1 screen Host/Printer setting is EIA/Para.

When you are finished configuring your emulator, reconnect the cable between the emulator and the elevator controller.

2.2.4 ADJUSTING PALETTE COLORS

It is a good idea to adjust the colors used by the emulator to display MCE screens on the monitor so that it is easier to see if a flag is ON or OFF when viewing diagnostics.

Step 1 While viewing any of the MCE screens, press and hold the ***Ctrl*** key and then press the ***left arrow***. This brings up a menu for the desktop accessaries.

Step 2 Press ***F6*** to change the palette colors. Use the ***right*** and ***left arrow*** keys to adjust the foreground and background colors. Use the ***up*** and ***down arrow*** keys to select the option you want to change colors on.

The color table chart below shows the default colors and the colors MCE recommends for easy viewing. The highlighted MCE Recommended settings are different from the default settings.

Step 3 When finished, press ***Esc*** to exit the desk accessories.

Changes to these colors must be saved or they will be lost when the unit is powered off. To save your color settings:

Step 4 Disconnect the cable between the emulator and the elevator controller.

Step 5 Press ***Ctrl*** and ***Scroll Lock*** to enter setup mode.

Step 6 Press the ***Pause/Break*** key to save the settings.

Step 7 Reconnect the cable between the emulator and the elevator controller.

Color Table

Attributes	Default Setting Fore/Back	MCE Recommended Fore/Back
Normal	Green / Black	Light Gray / Black
Rev	Black / Green	Light Green **/** Blue
Int	Yellow / Black	Green / Black
Rev, Int	Black / Yellow	Black / Yellow
Und	Light Red / Black	Light Red / Black
Und, Rev	Black / Light Red	Black / Light Red
Und, Int	Light Blue / Black	Light Blue / Black
Und, Rev, Int	Black / Light Blue	Black / Light Blue

2.2.5 TROUBLESHOOTING

If you experience problems using your terminal emulator, please refer to the following table.

Symptom	Cause	Solution
Keyboard not responding to keys pressed.	Possible locked keyboard	If the upper left corner of the display screen shows the word LOCK use the following keystrokes to unlock the keyboard: Shift+Scroll Lock
Screen displays message: “Transmit condition EIA port XOFF To cancel type (Shift + CTRL + Tab)”	Emulator is connected to controller when attempting to save changes to the setup.	Turn off the emulator and wait 5 seconds. Do not attempt to make changes in the emulator setup while the emulator is connected to the controller. Turn the emulator back on.
Screen displays message “Transmit Condition Parallel Port No Printer.”	Printing was attempted with no active printer connected to the emulator.	Enter setup and change the F1 screen, Host/Printer setting to EIA/None if a printer is not being used.

2.3 LINK MC5 MONOCHROME TERMINAL SETUP

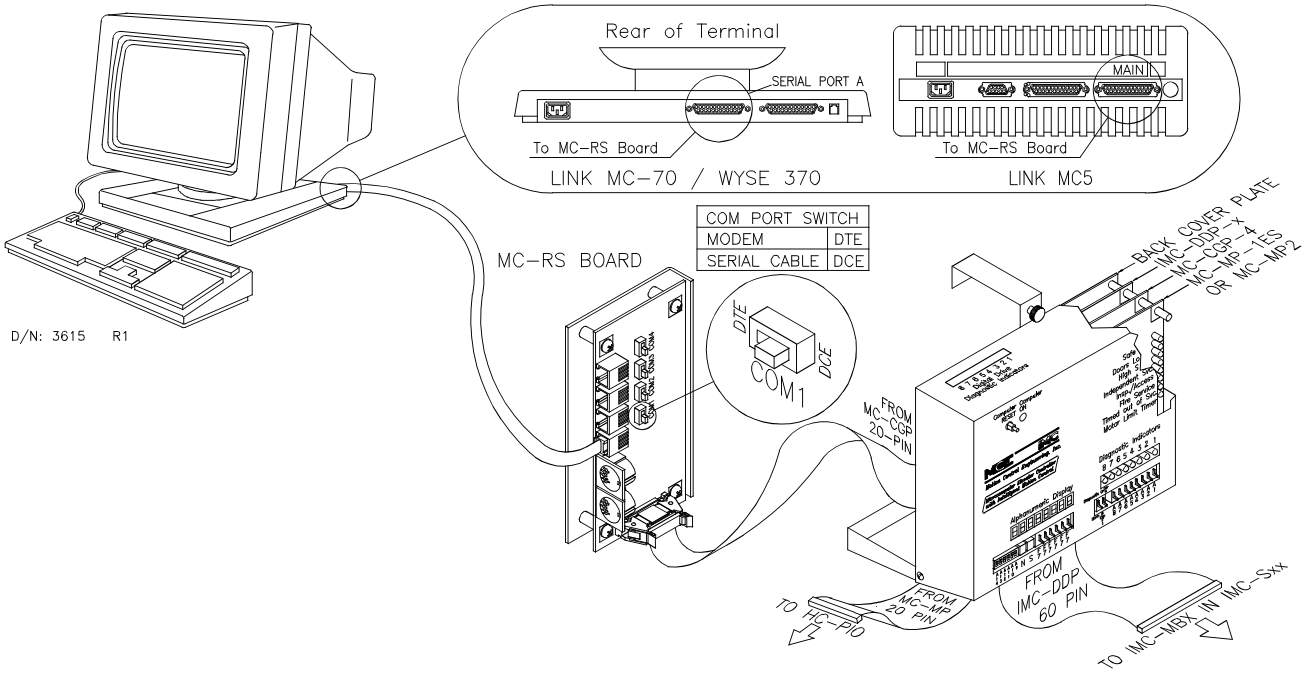
If you are using a Link MC5 monochrome terminal to configure the elevator controller, set the terminal up as described in this section.

2.3.1 CONTROLLER COM PORT SETTING (LINK MC5)

Swing Panel Controller - Refer to Section 1.7.1 *Verifying / Programming the COM Port Settings on Swing Panel Controllers* for instructions on viewing and changing the controller Communication Port settings. For the LINK MC5 terminal the COM port ***Device*** option must be set to ***CRTMK*** (with keyboard) or ***CRTM*** (without keyboard).

PTC / PHC Controller - Refer to Section 1.7.2 *Verifying / Programming COM Port Settings on PTC / PHC Controllers* for instructions on viewing and changing the controller Communication Port settings. For the LINK MC5 terminal the ***COLOR CRT*** option must be set to ***NO***.

2.3.2 LINK MC5 MONOCHROME TERMINAL CONNECTIONS



- Connect the DB-25 (25-pin plug) of the signal cable, C-CRT/MD/PA-x (x = length in feet) into the MAIN jack on the rear of the terminal. Use the screws on the cable hood to secure the cable to the terminal.
- Plug the RJ-11 plug of the signal cable into a COM port jack (usually COM 1) on the controller's communication interface board (MC-RS or MC-PA).
- If the terminal is connected directly to the communication interface board, set the COM port switch to DCE. If the terminal is connected to the communication interface board through a modem or line driver, set the COM port switch to DTE.
- Connect the printer, if applicable, to the Parallel jack (DB-25) on the rear of the terminal.
- Connect the AC jack on the rear of the terminal to the controller's AC outlet using the cord supplied with the terminal.

2.3.3 LINK MC5 TERMINAL SETUP

Setup Mode Keyboard Commands

KEY	COMMAND FUNCTION
↑ or ↓	Used to select the operating parameter to be set
← or →	Used to change the active setting for the selected operating parameter.
TAB	Moves the highlight cursor to the opposite parameter column.
P	Toggles the communication port between Main and Auxiliary.
D	Restores the default settings.
S	Saves current settings in nonvolatile memory. The settings stored in nonvolatile memory are used at power-up.
R	Restores the most recently saved settings.
E	Exits setup mode.

Step 1 Disconnect the cable connecting the terminal to the elevator controller.

Step 2 Press and hold the ***Shift*** key while pressing the ***Select*** key to enter setup mode.

Step 3 With the CRT disconnected from the Controller, press ***D*** to default the CRT terminal parameters. (You should see the message “Setup Defaulted”).

Step 4 Use the *arrow keys* to set the following **highlighted** General Setup parameters:

General Setup Screen

Link MC5	General Setup		Ver. X.XX
Emulation	**Wyse 60**	Auto Page	Off
Enhancements	Off	Warning Bell	Off
Virtual Terminal	Off	Margin Bell	Off
Scroll Style	Jump	Bell Sound	1
Auto Scroll	On	Block Terminator	US/CR
Auto Wrap	On	**Send ACK**	**On**
Received CR	CR	Monitor Mode	Off
	Setup Defaulted		

Step 5 Press the ***F2*** key to go to the Communications Setup screen.

Step 6 Use the *arrow keys* to set the following **highlighted** Communications Setup parameters. NOTE: Set Main baud rate to 19200 for everything *except Line Drivers*. For Line Drivers the baud rate should be set to *9600*. If a printer is to be used, set the lighter **highlighted** parameters.

Communications Setup Screen

Link MC5	Communications Setup	Ver. X.XX	
Main Baud	**19200**	**Aux Baud**	**9600**
Main Data/Parity	8/None	Aux Data/Parity	8/None
Main Stop bits	1	Aux Stop Bits	Off
Main Rcv Hndsk	XON/XOFF	**Aux Rcv Hndsk**	**None**
Main Xmt Hndsk	None	**Aux Xmt Hndsk**	**XON/XOFF**
Main Rcv Level	50%	Aux Rcv Level	50%
Ignore 8th bit	Off	Aux Port	RS232
Comm Mode	Full Duplex	Aux Interface	RS232
Disconnect	2 Sec	**Printer**	**Parallel**

Step 7 Press the ***F3*** key to go to the Display Setup screen.

Step 8 Use the *arrow keys* to set the following **highlighted** Display Setup parameters:

Display Setup Screen

Link MC5	Display Setup	Ver. X.XX	
Columns	80	Background	Dark
80/132 Clear	On	Attributes	Char
Lines	**42**	**Wprt Intensity**	**Normal**
Pages	1xLines	Wprt Reverse	Off
Status Line	Ext	Wprt Underline	Off
Cursor Style	**Blink Line**	Refresh Rate	60Hz
Cursor	**Off**	Pound Char	US
Screen Saver	15 Min	Auto Font Load	On

Step 9 Press the ***S*** key to save the changes.

Step 10 If you are installing a printer. Press ***F6*** to go to the Function Keys Setup screen to make the print screen key operational.

10a Press both the ***Ctrl*** and ***Print screen*** keys simultaneously to change “sF1=” and “F1=”, to “sPRINT=” and “PRINT=.”

10b Use the *numeric keypad* ***Enter*** key to toggle “Remote” to “Local.”

Function Key Setup Screen

Link MC5	Function Keys Setup		Ver. X.XX
		Direction:	Remote
sF1 =			
F1 =			
Host is on Main	Port	F1 Gen F2 Comm F3 Disp F4 Kbd F5 ANSI	F6 Fkeys F7 Tabs F8 Ansbk F9 Exit
CTRL+Key . . Select Key arrow keys . . Select Field END/F13 . . . Default Keys	← . . . . . .Erase Char HOME/F14 . Erase Field ENTER . . . . .Change Dir		

Step 11 Press ***F9*** to exit the setup mode.

When you are finished configuring your terminal, reconnect the cable between the terminal and the elevator controller.

2.4 WYSE WY-325ES COLOR TERMINAL SETUP

If you are using a Wyse WY-325S color terminal to configure your elevator controller, follow the instructions in this section.

2.4.1 CONTROLLER COM PORT SETTING (WYSE WY-325ES)

Swing Panel Controller - Refer to Section 1.7.1 *Verifying / Programming the COM Port Settings on Swing Panel Controllers* for instructions on viewing and changing the controller Communication Port settings. For the Wyse WY-325ES color terminal the COM port ***Device*** option must be set to ***CRTMK*** (with keyboard) or ***CRTM*** (without keyboard).

PTC / PHC Controller - Refer to Section 1.7.2 *Verifying / Programming COM Port Settings on PTC / PHC Controllers* for instructions on viewing and changing the controller Communication Port settings. For the Wyse WY-325ES color terminal the ***COLOR CRT*** option must be set to ***NO***.

2.4.2 WYSE WY-325ES COLOR TERMINAL CONNECTIONS

- Connect the DB-25 (25-pin plug) of the signal cable, C-CRT/MD/PA-x (x = length in feet) into the SERIAL 1 jack on the rear of the terminal. Use the screws on the cable hood to secure the cable to the terminal.
- Plug the RJ-11 plug of the signal cable into a COM port jack (usually COM 1) on the controller's communication interface board (MC-RS or MC-PA).
- If the terminal is connected directly to the communication interface board, set the COM port switch to DCE. If the terminal is connected to the communication interface board through a modem or line driver, set the COM port switch to DTE.
- Connect the printer, if applicable, to the Parallel jack on the rear of the terminal.
- Connect the AC jack on the rear of the terminal to the controller's AC outlet using the cord supplied with the terminal.

2.4.3 WYSE WY-325ES COLOR TERMINAL SETUP

Step 1 Disconnect the cable between the terminal and the elevator controller before proceeding with setting up the terminal.

Step 2 Press and hold the ***Shift*** key while pressing the ***Select*** key to enter setup mode.

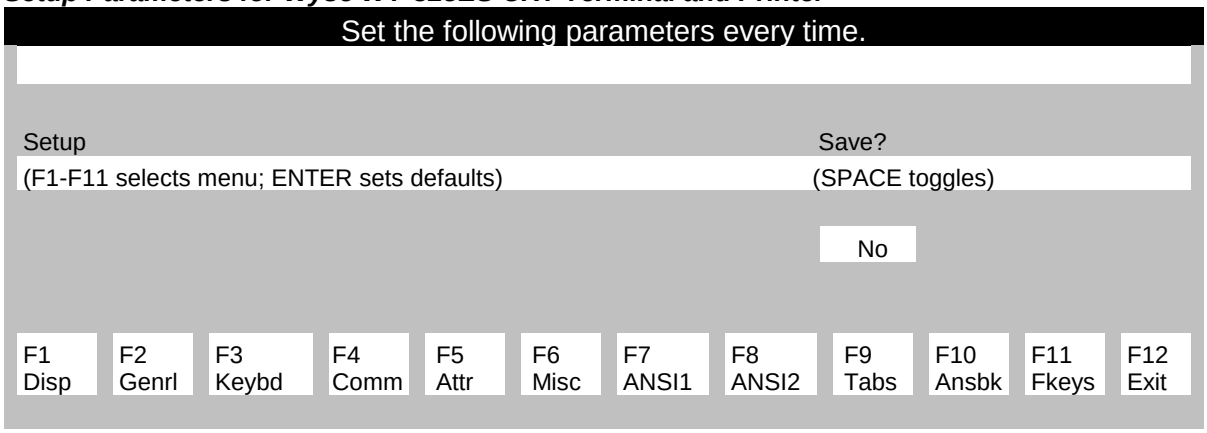
NOTE: If the CRT terminal will not enter Setup mode, try powering the terminal ON while holding down the ***Select*** key until the screen is displayed (about 5 seconds).

Setup Mode Keyboard Commands

KEY	COMMAND FUNCTION
↑ or ↓	Used to select an item on the menu.
← or →	Used to select items on the Menu Bar (top line).
SPACE BAR	Press the space bar to change the setting.

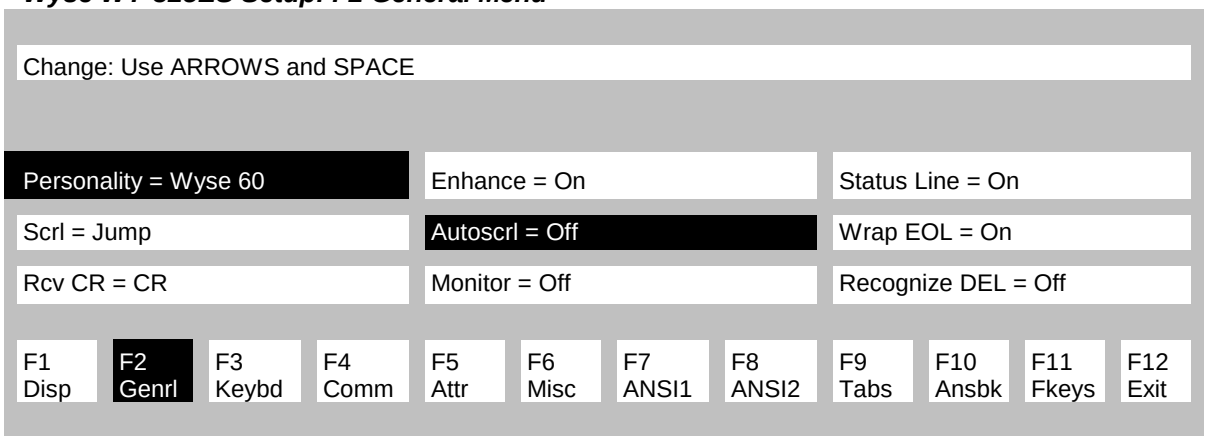
Step 3 With the CRT disconnected from the Controller, press the ***Enter*** key to Default all parameters.

Setup Parameters for Wyse WY-325ES CRT Terminal and Printer



Step 4 Press ***F2*** to enter the General Menu. Use the ***arrow keys*** to highlight Personality and press the ***Spacebar*** to change the option to **"Wyse 60."**

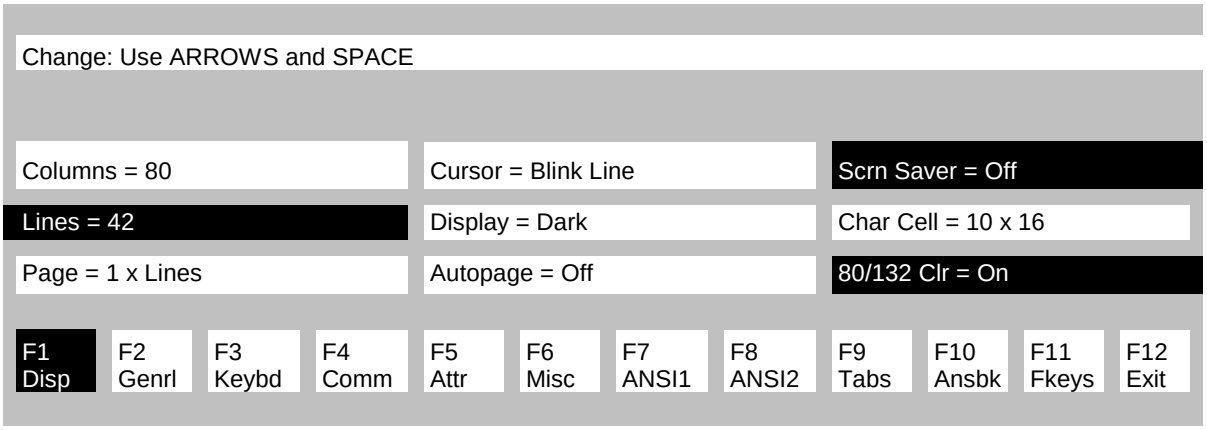
Wyse WY-325ES Setup: F2 General Menu



Step 5 Use the ***arrow keys*** to highlight Autoscrl and press the ***Spacebar*** to change the option to "Off."

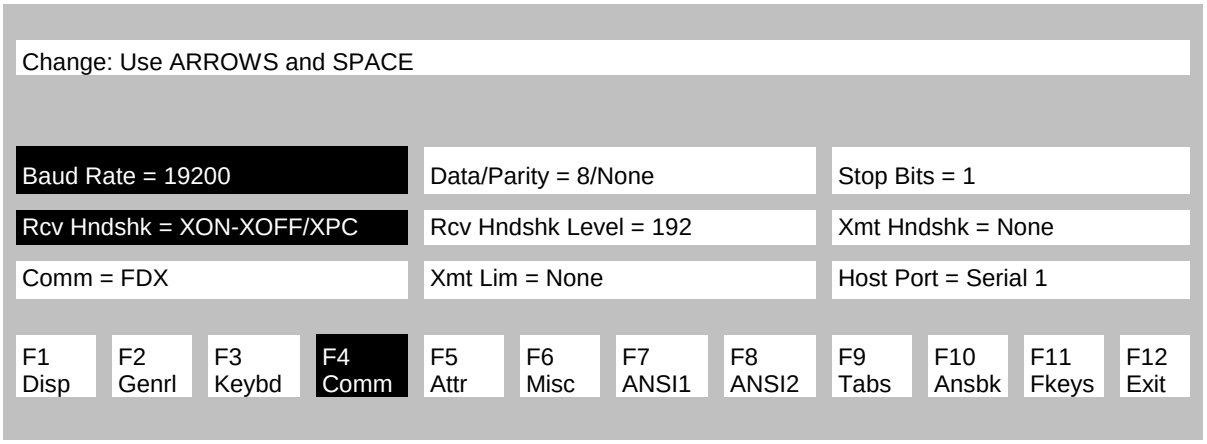
Step 6 Press ***F1*** to enter the Display Menu. Use the ***arrow keys*** to highlight Lines and press the ***Spacebar*** to change the option to “42.” Use the ***arrow keys*** and the ***Spacebar*** to change Scrn Saver to “Off” and 80/132 Clr to “On.”

Wyse WY-325ES Setup: F1 Display Menu



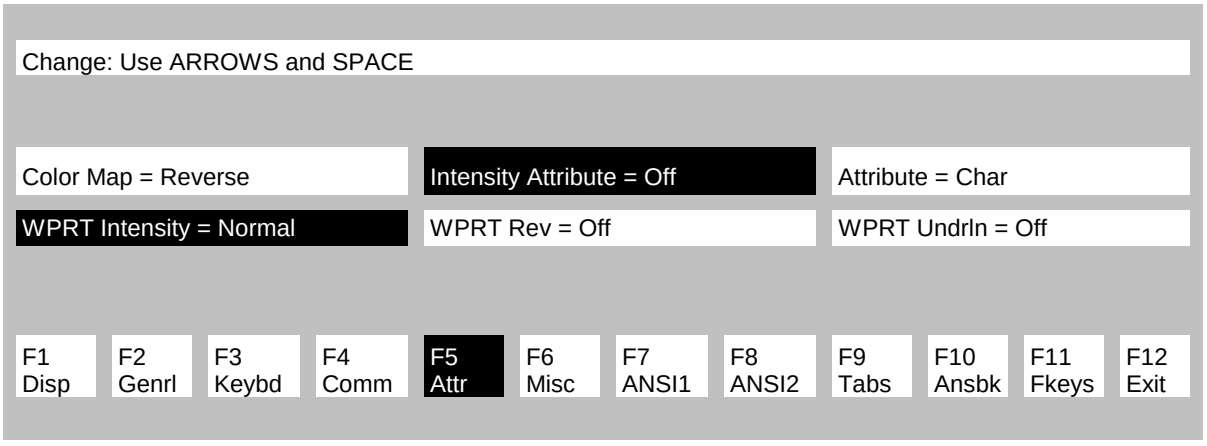
Step 7 Press ***F4*** to enter the COMM Menu. Use the ***arrow keys*** and ***Spacebar*** to change Baud Rate to “19200” and Rcv Hndshk to “XON-XOFF/XPC.”

Wyse WY-325ES Setup: F4 COMM Menu



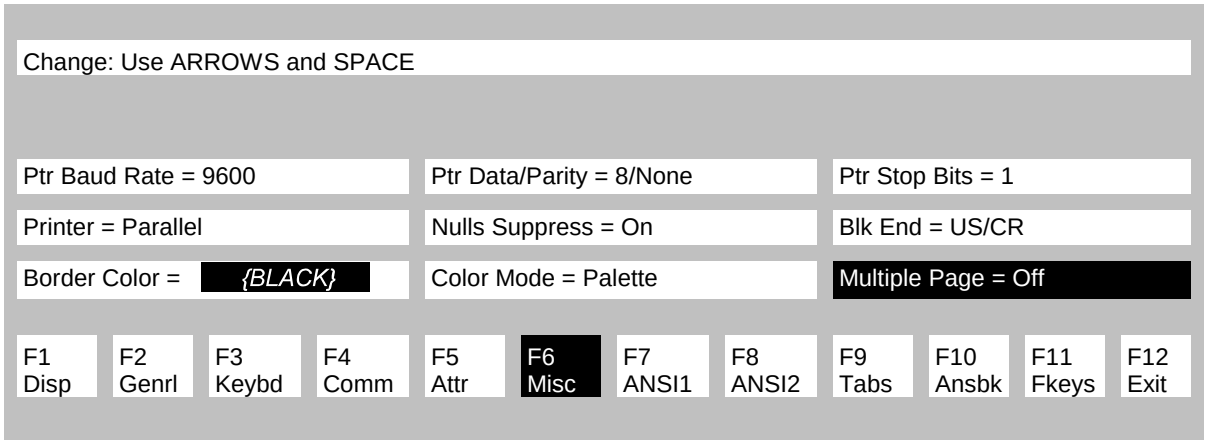
Step 8 Press ***F5*** to enter the Attribute Menu. Use the ***arrow keys*** and ***Spacebar*** to change WPRT Intensity to “Normal” and Intensity Attribute to “Off.”

Wyse WY-325ES Setup: F5 Attribute Menu



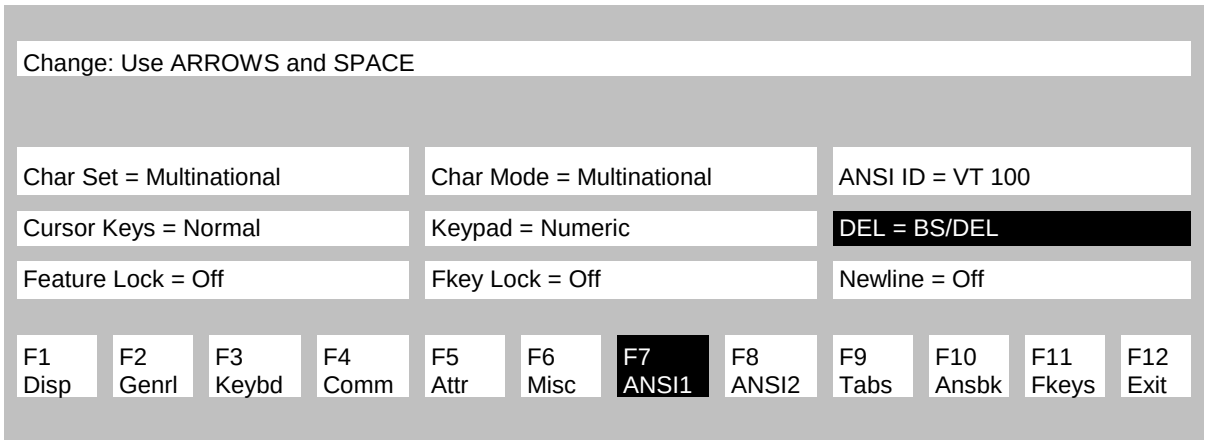
Step 9 Press ***F6*** to enter the Miscellaneous Menu. Use the ***arrow keys*** and ***Spacebar*** to change Multiple Page to “Off.”

Wyse WY-325ES Setup: F6 Miscellaneous Menu



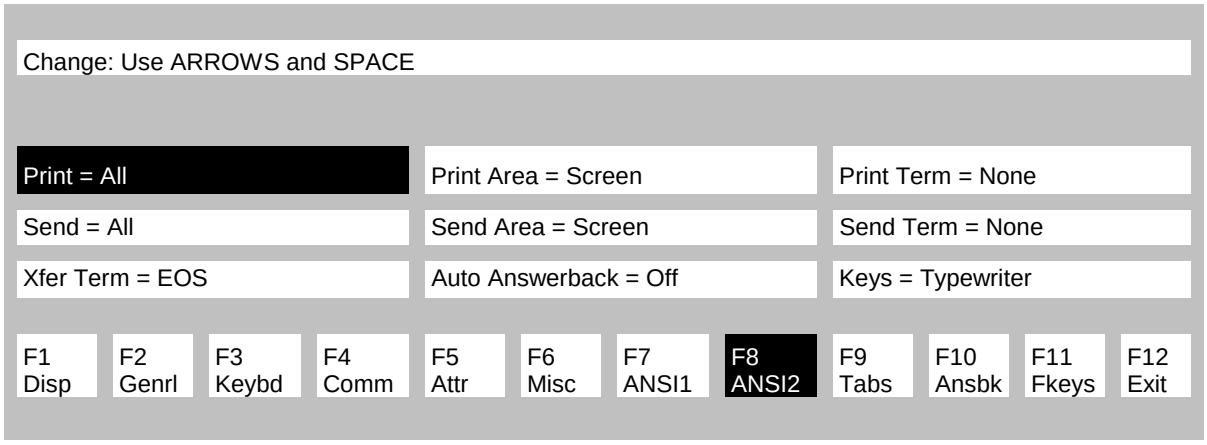
Step 10 Press ***F7*** to enter the ANSI 1 Menu. Use the ***arrow keys*** and ***Spacebar*** to change DEL to “BS/DEL.”

Wyse WY-325ES Setup: F7 ANSI 1 Menu



Step 11 Press ***F8*** to enter the ANSI 2 Menu. Use the ***arrow keys*** and ***Spacebar*** to change Print to “ALL.”

Wyse WY-325ES Setup: F8 ANSI 2 Menu



Step 12 Press ***F12*** to return to the Setup menu and press the ***Spacebar*** to change the save option to "Yes." Press ***F12*** to save the parameters and exit the Setup Menu.

The Wyse WY-325ES CRT has 10 color palettes numbered 0 to 9. To change the screen colors, hold down the ***CTRL*** key and press ***(a number)*** on the numeric keypad. The recommended color palette is *9*. Other palettes that work well are 1, 2, 3 and 8.

When you are finished configuring your terminal, reconnect the cable between the terminal and the elevator controller.

2.4.4 PRINTER SETUP

Printers are typically used to print a hard copy of system parameters, controller screens, or reports. MCE currently supports two Epson dot-matrix printers (Epson FX 85 and Epson LQ 570) and their equivalents. For nicer looking reports with the printer of your choice, MCE recommends using a PC connected to the controller. Central Monitoring System software or WYSE emulation software may be used to print screens from the PC. Contact the sales department at Motion Control Engineering for further information.

Step 1 Verify that the CRT terminal is connected to the MCE controller through the rear port labeled MAIN.

Step 2 Set the printer DIP switches as shown:

Parallel Printer DIP Switch Settings

PRINTER	EPSON FX 85		EPSON LQ 570	
SETTING	**ON**	**OFF**	**ON**	**OFF**
DIP SW1	6, 7, 8	1, 2, 3, 4, 5	1, 2, 3, 4	5, 6, 7, 8
DIP SW2	1	2, 3, 4		1, 2, 3, 4

Step 3 Connect the 25-pin male DB connector end of the parallel printer cable to the PARALLEL port on the back of the CRT terminal. Connect the other end of the parallel printer cable to the printer. Lock the clips on the connectors to secure the cable.

- Feed the paper through the paper guide and line up the perforation with the top of the print head. Refer to the printer manual for operation and proper care of the printer.
- Plug the printer into a 120VAC outlet and turn on power to both the CRT terminal and printer.

2.4.5 PRINTING SCREENS

After the printer is connected to the CRT, powered ON, and paper has been loaded, screen data may be printed:

Mono CRT Set the Function Keys as described in Section 2.3 Step 9. To print, press the ***Print Screen Key***.

Color CRT If the Num Lock light is *ON* (upper right area of the keyboard) press the *Num Lock key* once, to turn it off. To print, hold down the ***SHIFT*** and ***CTRL*** keys at the same time and momentarily press "**.**" *(Period key)* on the numeric keypad.

2.5 WYSE WY-370 COLOR TERMINAL SETUP

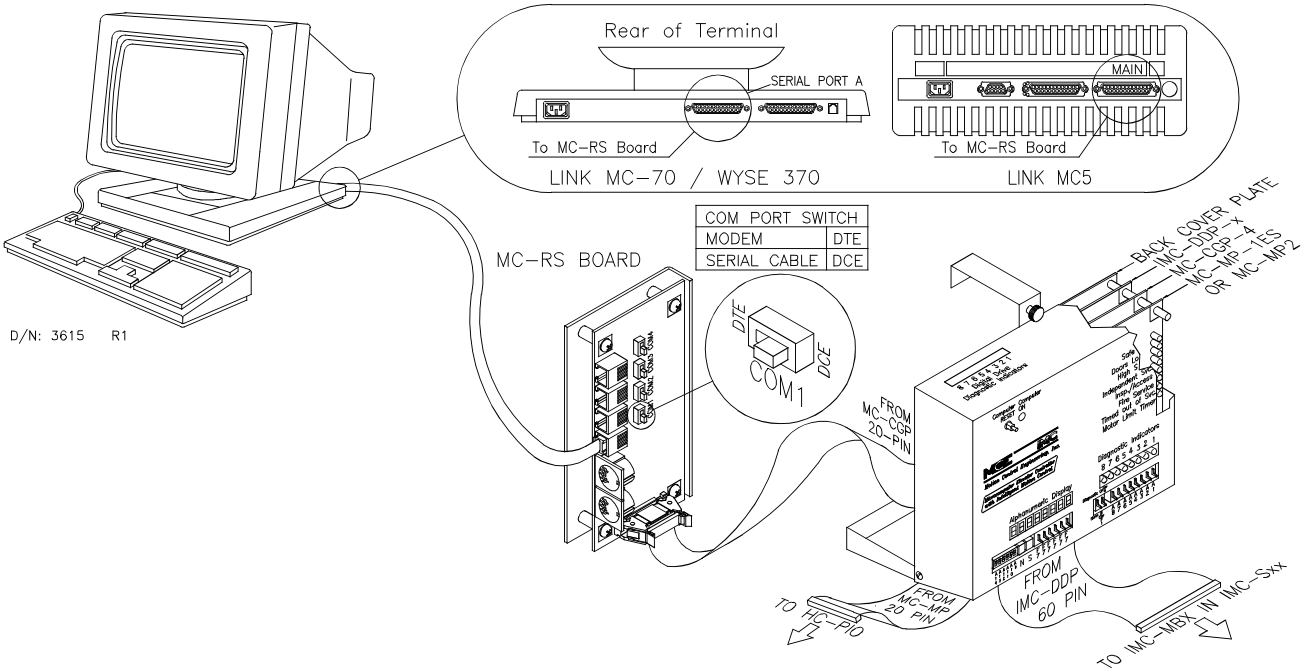
If you are using a Wyse WY-370 color terminal to configure the elevator controller, set the terminal up as described in this section.

2.5.1 CONTROLLER COM PORT SETTING (WYSE WY-370)

Swing Panel Controller - Refer to Section 1.7.1 *Verifying / Programming the COM Port Settings on Swing Panel Controllers* for instructions on viewing and changing the controller Communication Port settings. For the Wyse WY-370 color terminal the COM port ***Device*** option must be set to ***CRTCK*** (with keyboard) or ***CRTC*** (without keyboard).

PTC / PHC Controller - Refer to Section 1.7.2 *Verifying / Programming COM Port Settings on PTC / PHC Controllers* for instructions on viewing and changing the controller Communication Port settings. For the Wyse WY-370 color terminal the ***COLOR CRT*** option must be set to ***YES***.

2.5.2 WYSE WY-370 COLOR TERMINAL CONNECTIONS



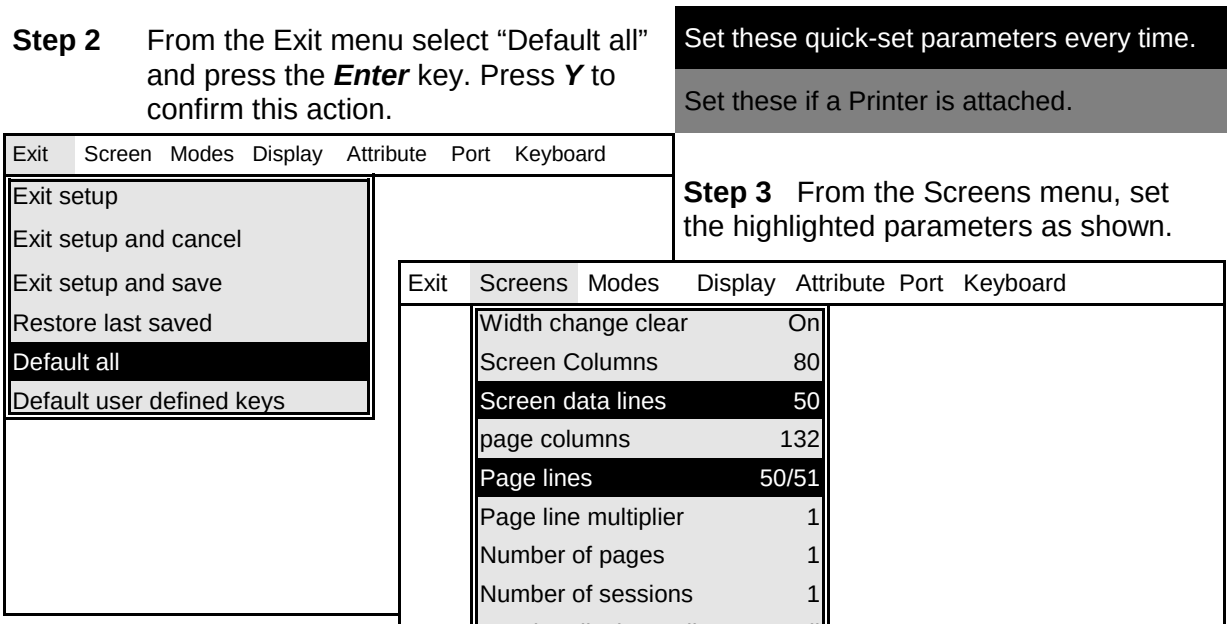
- Connect the DB-25 (25-pin plug) of the signal cable, C-CRT/MD/PA-x (x = length in feet) into the SERIAL PORT A jack on the rear of the terminal. Use the screws on the cable hood to secure the cable to the terminal.
- Plug the RJ-11 plug of the signal cable into a COM port jack (usually COM 1) on the controller's communication interface board (MC-RS or MC-PA).
- If the terminal is connected directly to the communication interface board, set the COM port switch to DCE. If the terminal is connected to the communication interface board through a modem or line driver, set the COM port switch to DTE.
- Connect the printer, if applicable, to the Serial Port B jack on the rear of the terminal.
- Connect the AC jack on the rear of the terminal to the controller's AC outlet using the cord supplied with the terminal.

2.5.3 WYSE WY-370 COLOR TERMINAL SETUP

Step 1 Press ***Select*** to put the terminal into Setup mode. The Select key is in the upper right corner of the keyboard. If you can't get the terminal into Setup mode, try powering the terminal ON with the "Select" key held down until the screen comes up (about 5 seconds).

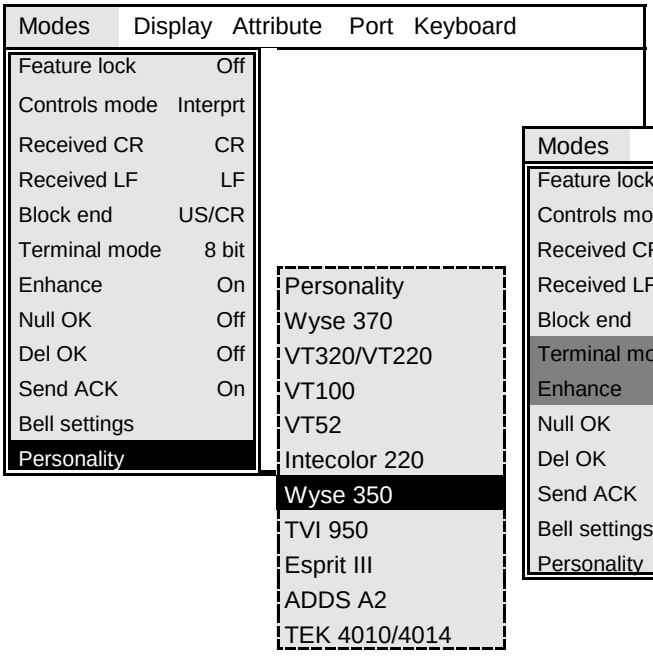
- Press the left and right arrow keys to select items on the Menu Bar (top line).
- Press the up and down arrow keys to select an item on a menu.
- Press the space bar to change the setting

Step 2 From the Exit menu select "Default all" and press the ***Enter*** key. Press ***Y*** to confirm this action.

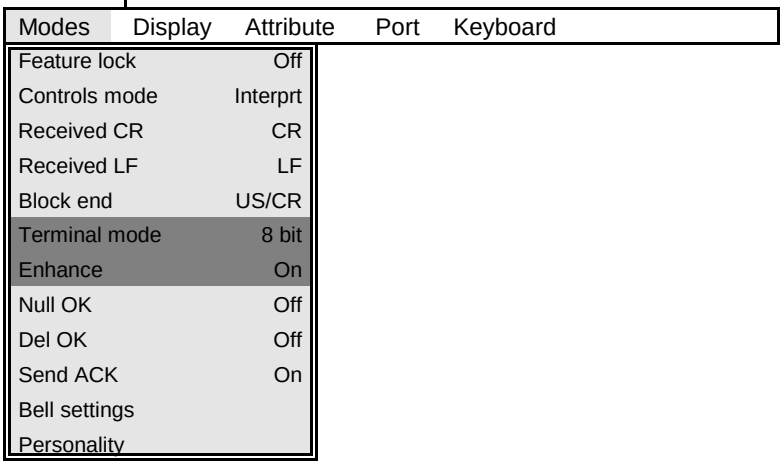


Step 3 From the Screens menu, set the highlighted parameters as shown.

Step 4 From the Modes menu select "Personality". From the Personality sub-menu select "Wyse 350."



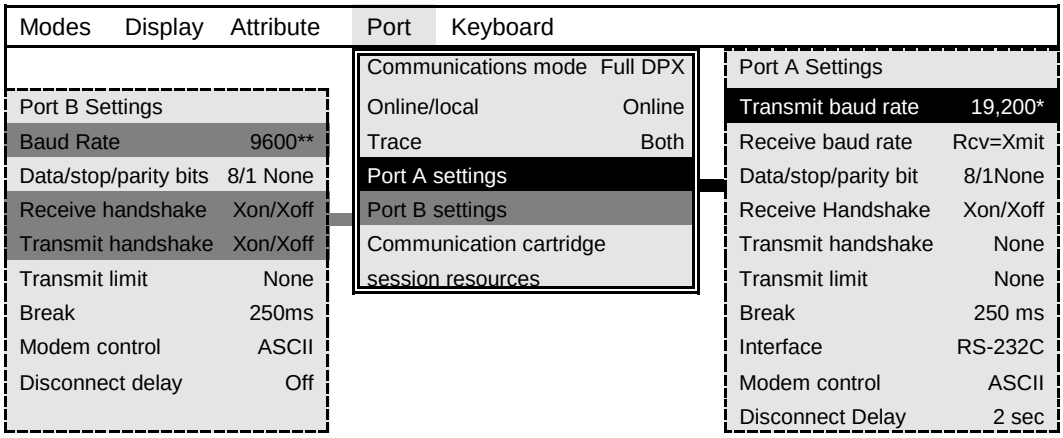
Step 5 If you plan to use a printer, set "Enhance" and "Terminal mode" to the values shown (use the space bar to toggle).



Step 6 From the “Port” menu, select “Port A settings” and press Enter. Set the Transmit baud rate as follows:

* IMC Car controller with MC-CGP board = 19,200
* Group or Car controller with MC-CPA board = 19,200
* Group controller with MC–CGP board = 19,200
* Line Driver = 9600
* Modem = 19,200

Press ***Shift-Up arrow*** when done.



Step 7 Do the following only **if you plan to attach a printer** to the terminal. From the “Port” menu select “Port B settings” and press Enter. Set the highlighted Port B Settings as shown. Press Shift-Up arrow when done.
** Printer port (Port B) : baud rate should always be 9600. Note: This port must be connected to a ***serial port*** on the printer.

Step 8 Return to the Exit menu. Select “Exit setup and save”. Press ***Enter*** and then ***Y*** for yes.

2.6 ESTABLISHING MODEM COMMUNICATION

These instructions apply to installations using modems to connect a CRT terminal or terminal emulator to a controller.

2.6.1 MACHINE ROOM MODEM

When an incoming call is detected, the modem automatically answers the call by taking the phone "off hook". The modem makes a rather loud sound while it tries to establish a carrier over the phone line (this also notifies you of an incoming call). In order for the modem to establish the connection, the machine room system must be configured correctly.

PTC / PHC Controllers - Please refer to Appendix B, Section B.2 *Setting Modem Defaults on the MC-PA board.*

Swing Panel Controllers - For 14.4K baud modems the default settings will work, but for the 56K baud modems, set the parameters on the media configuration (Modem Strings) screen as follows:

```
Command line String   :,,+++,,
Hang up string        :ATH0
Reset string          :AT&F
Initialization string = (see Table 2.4)
```

Table 2.4 Modem Initialization String

Model of Modem	Initialization String
Boca 56K External	&K4%C0E0V0S0=2
BestData 56-SX V.90 External	&K4%C0E0V0S0=2
BestData 56-SX2 V.92 External	&D0&K0%C0E0V0S0=2
USRobotics 5686 V.92 External	&F2&D0&K0B1E0V0S0=2
Zoom 3049 56K V.92 External	&K4%C0B0E0V0S0=2

2.6.2 REMOTE CRT TERMINAL OR EMULATOR AND MODEM

DIALING THE MACHINE ROOM - Verify that the modem is ON, the switches located on the bottom of the modem are set correctly (if the modem has them), and the remote CRT terminal / emulator's modem port (Main or PORT A) baud rate is set for 19,200. Refer to the terminal or emulator setup instructions.

To dial the machine room modem:

1. Type **AT&F** and press **Enter**. (NOTE: What you type will **not** appear on the screen)

   OK should appear on the screen.

2. Type **AT** followed by the ***initialization string*** from Table 2.4, then **DT** followed by the ***telephone number*** and press **Enter**.

   Example: AT *{initialization string}* DT 555 555 5555 (Enter)

Once the phone number is entered, the modem engages and dials the number (tones followed by a high pitch sound will follow). Several attempts may be necessary depending on the quality of the phone line or connection. After a successful connection the screen shows "CONNECT 19200."

CONNECTED TO THE CONTROLLER - Once connected to the controller the first screen displays the MCE logo, the job name, the time connected and prompts for the password. Type in your six digit password. **You should NOT press "Enter" after you type in the password.** If the password is entered incorrectly three times, the system disconnects. Once entered correctly, and after a few second pause, the screen displays "Press any function key to initialize the CRT terminal . . . " The remote CRT terminal now operates as a standard machine room terminal.

Your password is: _____

There are three ways to “hang-up” or disconnect the modem.

1. Select "Modem Disconnection (Hang-Up)” (F10) on the CRT terminal Main Menu.

2. Enable the "Modem Disconnect Timer" (Swing Panel Controllers only). This timer forces a “Hang-Up” when the CRT terminal has been idle for ten minutes. The "Modem Disconnect Timer" is a safety feature designed to hang-up if the CRT terminal is abandoned or forgotten. It is located on the Computer Parameters page (F6) and can either be enabled or disabled. If enabled the controller will force a hang-up ten minutes after the last key is pressed. Both of these hang-up functions will display the connect time, disconnect time and the length of connection time.

3. Turn off the modem (not recommended).

2.7 ETHERNET DEVICE SERVER SETUP DOCUMENTS

MCE currently supports three device servers. The following MCE documents provide instructions for setting up the device servers:

- Lantronix CoBox-FL-01 Device Server Setup 42-IS-0058
- Digi PortServer TS2 Setup Instruction 42-IS-0060
- Digi PortServer TS2 MEI Setup Instruction 42-IS-0082

These documents may be ordered from MCE Technical Support.

SECTION 3
PTC / PHC CONTROLLER OPERATING INSTRUCTIONS

3.0 GENERAL INFORMATION

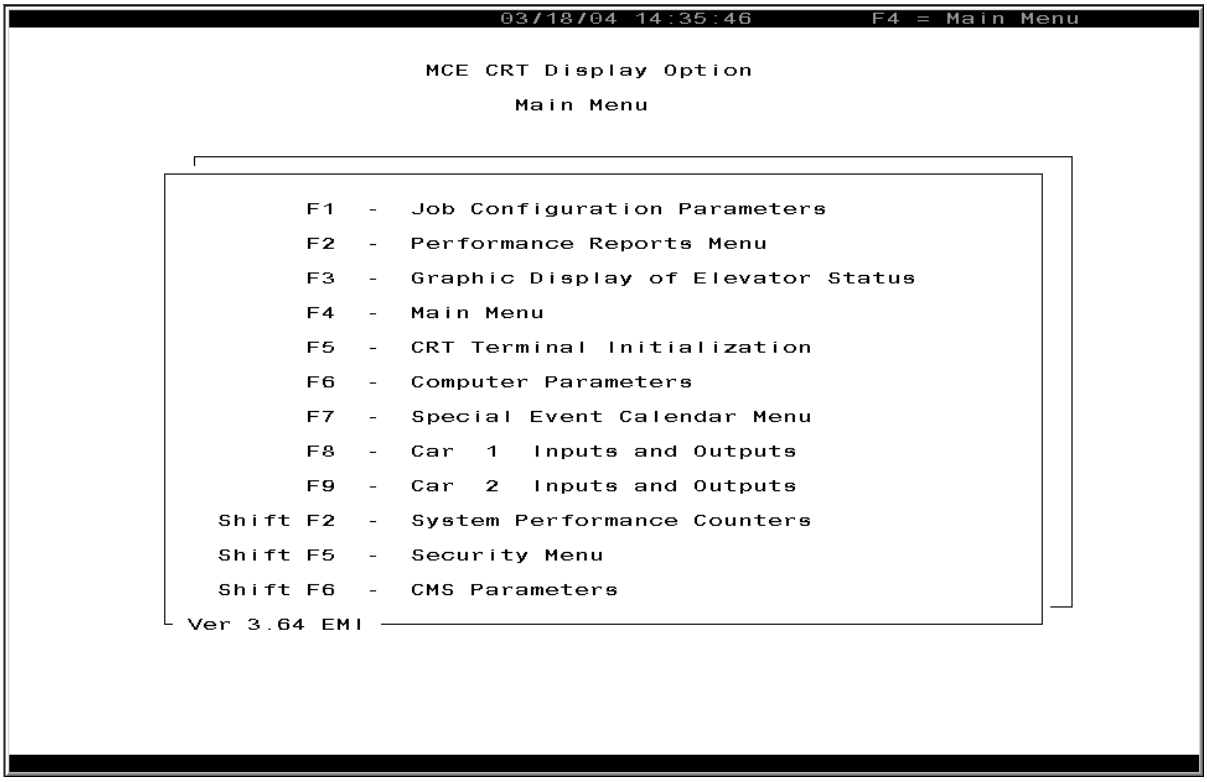
This section describes the information and functions available for PTC and PHC controllers on CRT terminal and terminal emulator screens. Users with PCs running Central Monitoring System (CMS) software should consult the *CMS for Windows* manual. Group Supervisor and IMC Controller manuals contain screen information specific to those controllers and should be referenced instead of this generic overview.

3.1 PROGRAMMABLE CONTROLLER (PTC / PHC) SCREENS

3.1.1 MAIN MENU (F4)

Once the CRT terminal is initialized, the Main Menu will display on the screen. At this point all the display functions are available to the operator at the stroke of a single function key. Every Main Menu function can be accessed directly from any other Main Menu function. It is not necessary to return to the Main Menu prior to entering a different display screen. Once the operator becomes familiar with the function key definitions, accessing information with the terminal becomes a quick and easy process.

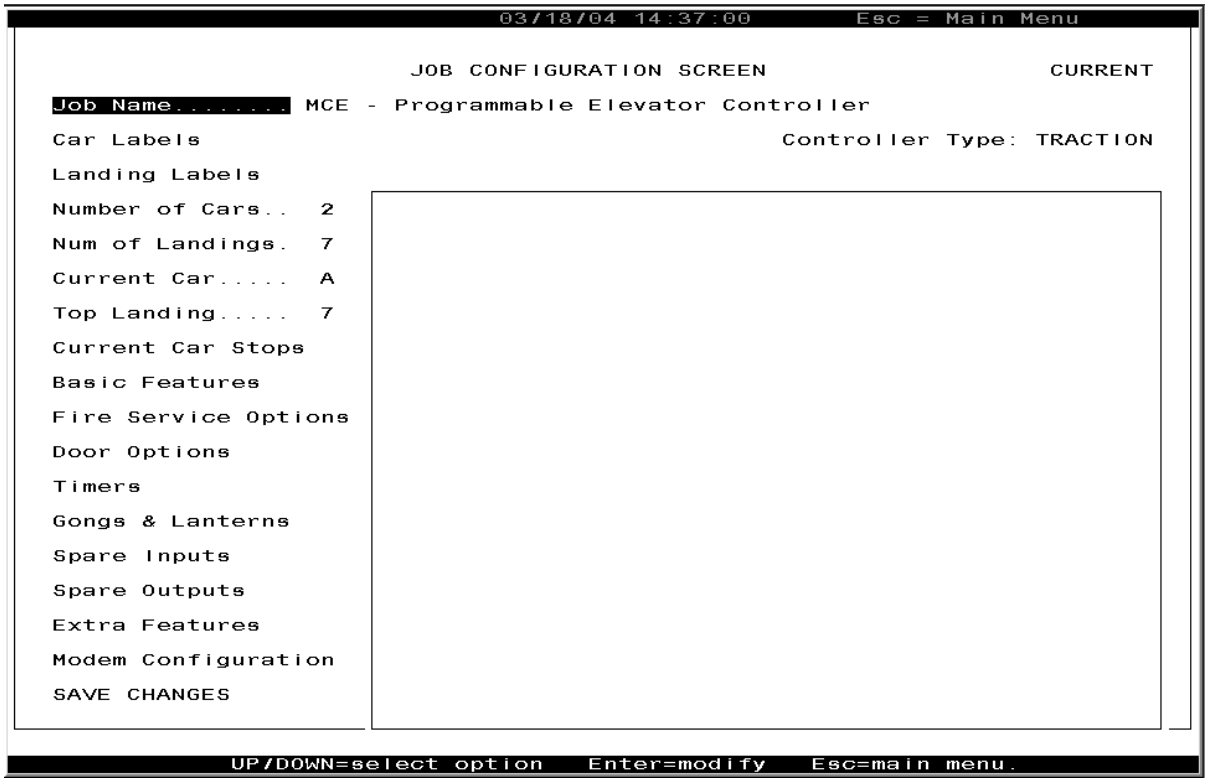
FIGURE 3.1 MCE CRT Terminal Display Option (Main Menu)



3.1.2 JOB CONFIGURATION SUMMARY (F1)

The Job Configurations Summary (F1) screen provides a wealth of information about the controller's configuration. In addition, it provides a means of programming the job name, car labels, landing labels and modem parameters.

FIGURE 3.2 Job Configuration Summary (F1) Screen



Job Name - To modify the Job Name:

1. Use the Up Arrow or Down Arrow keys to move the cursor to the Job Name field, then press ENTER.
2. Use the alphanumeric keys to enter the desired Job Name, then press ENTER.

Car Labels - To modify the Car Labels (see Figure 3.3):

1. Use the ↑ ↓ arrow keys to move the cursor to the Car Labels field, then press Enter.
2. Use the ↑ ↓ arrow keys to select the desired car, then press ENTER.
3. Use the alphanumeric keys to enter a new label (up to three characters), then press ENTER.
4. Press ESC to exit the Car Labels edit screen.

Landing Labels - To modify the Landing Labels (see Figure 3.4):

1. Use the ↑ ↓ arrow keys to move the cursor to the Landing Labels field, then press ENTER.
2. Use the ↑ ↓ arrow keys to select the desired landing, then press ENTER.

3. Use the alphanumeric keys to enter a new landing label (up to two characters), then press ENTER.
4. Press ESC to exit the Landing Labels edit screen.

FIGURE 3.3 Job Configuration Screen - Car Labels

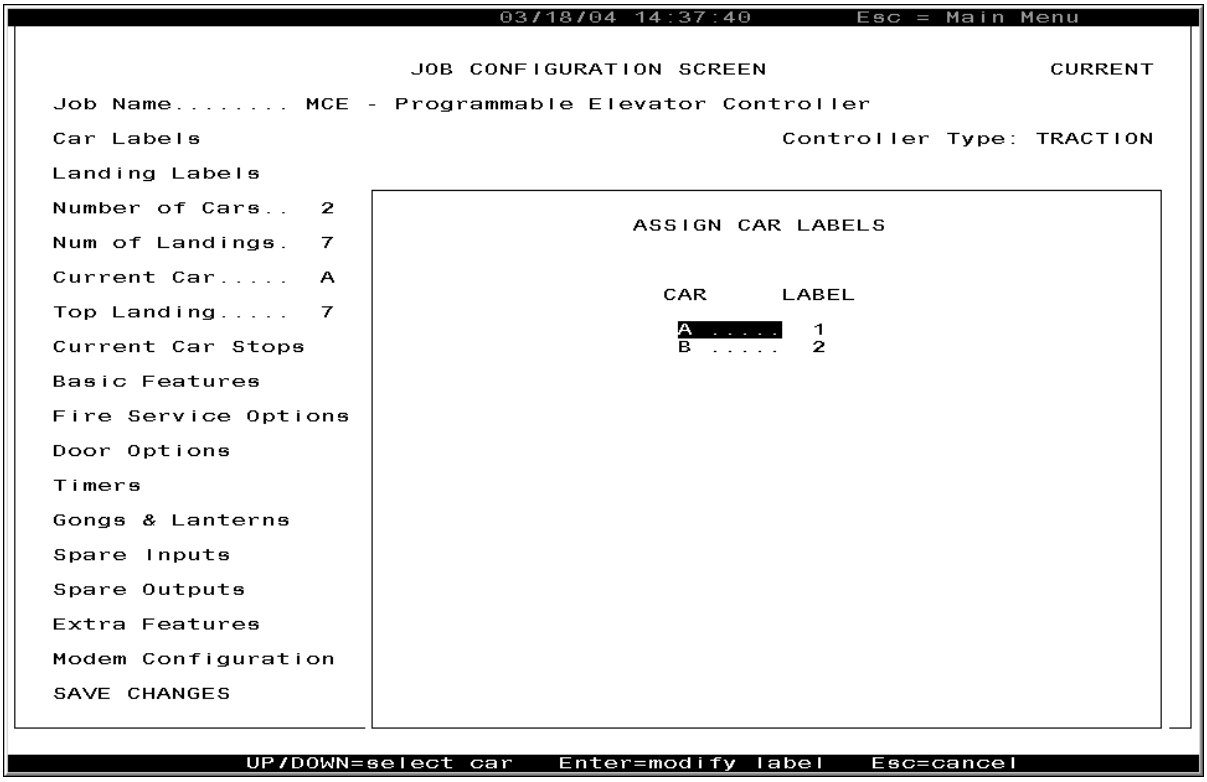
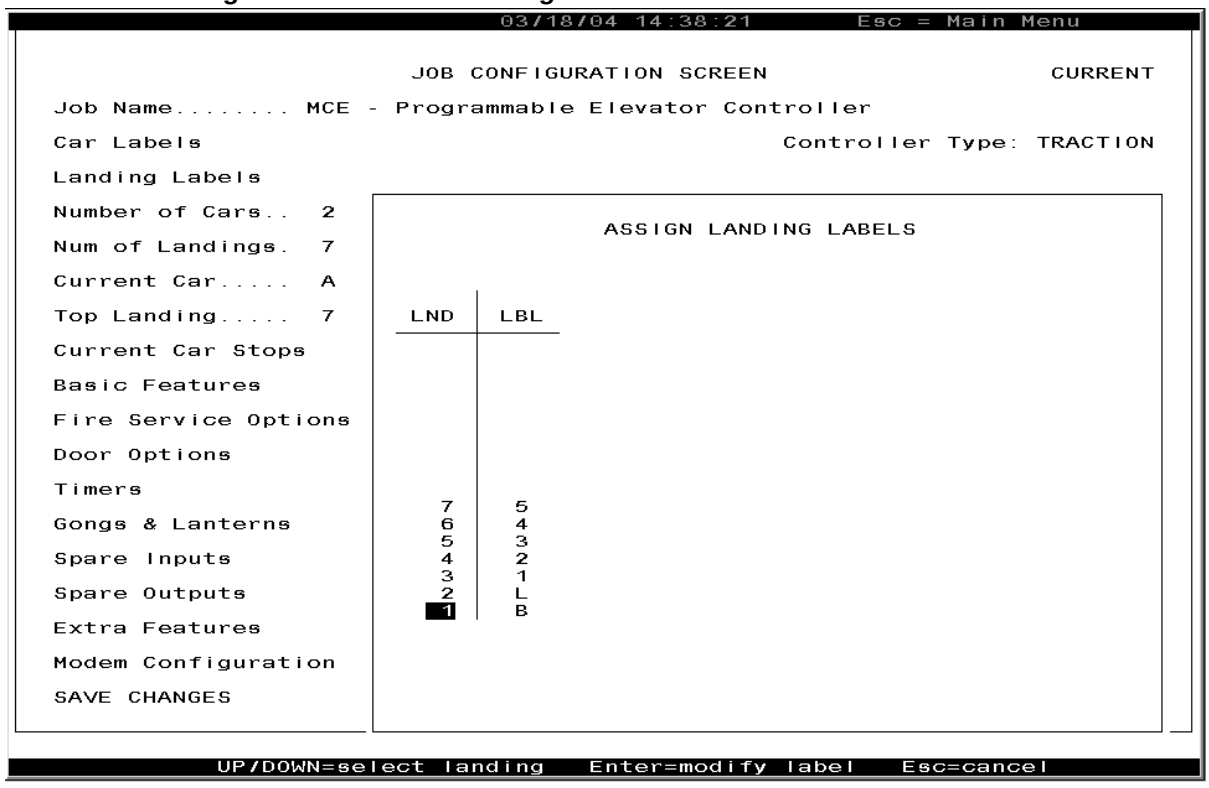


FIGURE 3.4 Job Configuration Screen - Landing Labels



Number of Cars - Indicates one if Simplex and two if Duplex is programmed for the SIMPLEX OR DUPLEX? parameter (see Basic Features Menu Options in the Controller Installation manual).

Number of Landings - Indicates the number of floors based on the highest floor served by either car as determined by the TOP LANDING SERVED? (simplex) or TOP LANDING FOR THIS CAR? (duplex) parameters (see Basic Features Menu Options in the Controller Installation manual).

Current Car - If this is a duplex car, you can select which car's parameters are being displayed. To change the Current Car:

1. Use the Up or Down Arrow keys to move the cursor to the Current Car field, then press ENTER.
2. Use the ← → arrow keys to change the setting, then press ENTER.

Top Landing - Indicates the highest floor served by this car as determined by the TOP LANDING SERVED? (simplex) or TOP LANDING FOR THIS CAR? (duplex) parameters (see Basic Features Menu Options in the Controller Installation Manual).

Current Car Stops - Displays the YES / NO settings in the CAR SERVES FRNT/FLR n? parameters (see Basic Features Menu Options in the Controller Installation Manual). Use the ↑ ↓ arrow keys to select Current Car Stops, then press ENTER. Press ESC to exit.

Basic Features - Displays current settings for some of the Basic Feature parameters (see Basic Feature Menu Options in the Controller Installation Manual). Use the ↑ ↓ arrow keys to select Basic Features, then press ENTER. Press ESC to exit.

Fire Service Options - Displays the settings for some of the Fire Service parameters (see Fire Service Menu Options in the Controller Installation Manual). Use the ↑ ↓ arrow keys to select Fire Service Options, then press ENTER. Press ESC to exit.

Door Options - Displays the settings for some of the Door Operation parameters (see Door Operation Menu Options in the Controller Installation Manual). Use the ↑ ↓ arrow keys to select Door Options, then press ENTER. Press ESC to exit.

Timers - Displays the settings for some of the Timer parameters (see Timer Menu Options in the Controller Installation Manual). Use the ↑ ↓ arrow keys to select Timers, then press ENTER. Press ESC to exit.

Gongs & Lanterns - Displays the settings for some of the Gongs and Lanterns parameters (see Gongs/Lanterns Menu Options in the Controller Installation Manual). Use the ↑ ↓ arrow keys to select Gongs & Lanterns, then press Enter. Press ESC to exit.

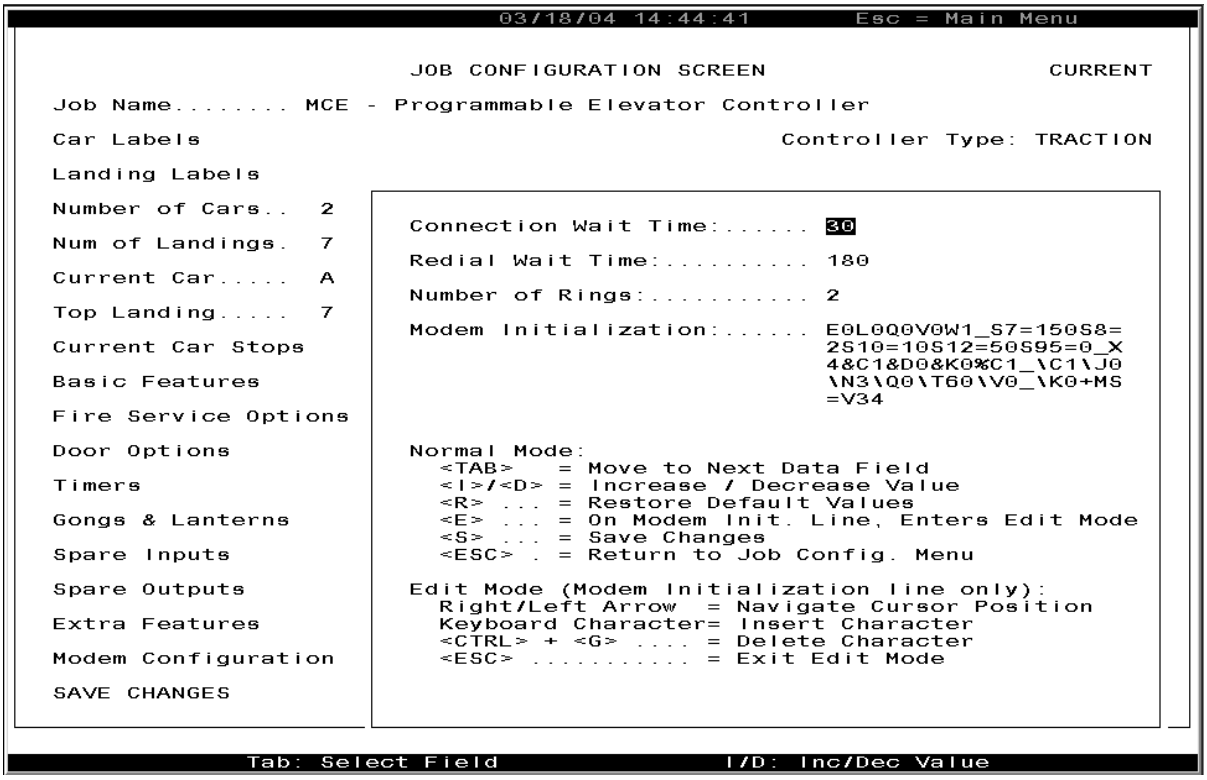
Spare Inputs - Displays the settings for some of the Spare Input parameters (see Spare Input Menu Options in the Controller Installation Manual). Use the ↑ ↓ arrow keys to select Spare Inputs, then press ENTER. Press ESC to exit.

Spare Outputs - Displays the settings for some of the Spare Output parameters (see Spare Outputs Menu Options in the Controller Installation Manual). Use the ↑ ↓ arrow keys to select Spare Outputs, then press ENTER. Press ESC to exit.

Extra Features - Displays the settings for some of the Extra Features parameters (see Extra Features Menu Options in the Controller Installation Manual). Use the ↑ ↓ arrow keys to select Extra Features, then press ENTER. Press ESC to exit.

Modem Configuration - Displays the modem configuration parameters and allows you to make changes (see Figure 3.5). Use the ↑ ↓ arrow keys to select Modem Configuration, then press ENTER.

FIGURE 3.5 Job Configuration Screen - Modem Configuration



- Connection Wait Time - the number of seconds that the modem remains connected when sending emergency events. A timer starts when the modem begins dialing out to send data to CMS. If the Connection Wait Time elapses before CMS acknowledges that it has received the data, the modem disconnects.

- Redial Wait time - number of seconds the controller waits before making additional attempts to connect to CMS for sending emergency events.

- Number of Rings - number of rings required before the modem will answer a connection. Usually set to “1.”

- Modem Initialization string - data that is sent to the modem to initialize it. Only modify the initialization string if directed to do so by MCE Technical Support.

To change the modem Connection Wait Time, Redial Wait Time and Number of Rings parameters:

1. Use the TAB key to select the desired parameter, then press ENTER.
2. Press I to increment and D to decrement the parameter value.

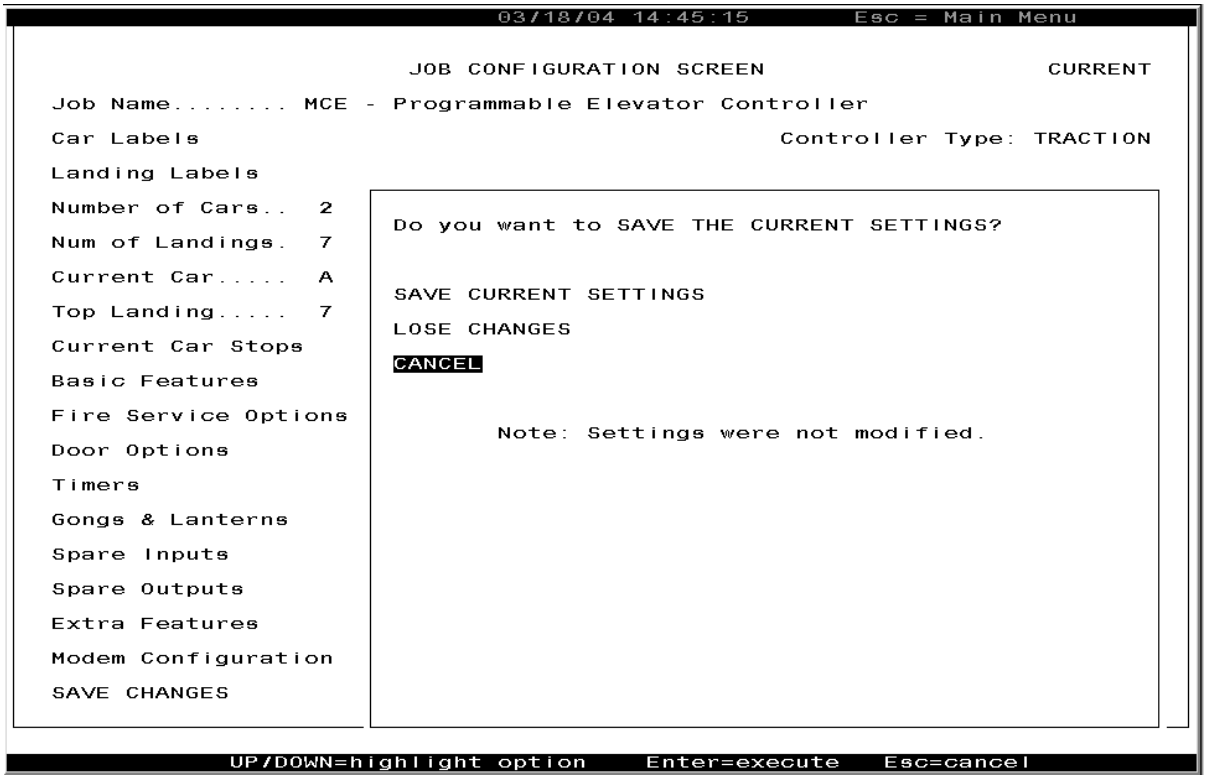
To make changes to the modem initialization string:

1. Use the ↑ ↓ arrow keys to select Modem Initialization, then press E.
2. Use the ← → arrow keys to move the cursor.
3. Press a character key to insert that character.
4. Press CTRL G to delete characters at the cursor position.
5. Press ESC to exit the edit mode. The cursor moves to the beginning of the data field.

NOTE: To restore the default values it is best to follow the instructions found in Appendix B, Section B.2 *Setting the Modem Defaults on the MC-PA Board*.

SAVE CHANGES - The SAVE CHANGES option allows you to save or not save changes that have been made to Job Configuration parameters. If changes have been made, and you attempt to leave the Job Configuration Screen by pressing ESC, the SAVE CHANGES screen is displayed (see Figure 3.6). You can also enter this screen by Using the ↑ ↓ arrow keys to select SAVE CHANGES, then pressing ENTER.

FIGURE 3.6 Job Configuration Screen - SAVE CHANGES

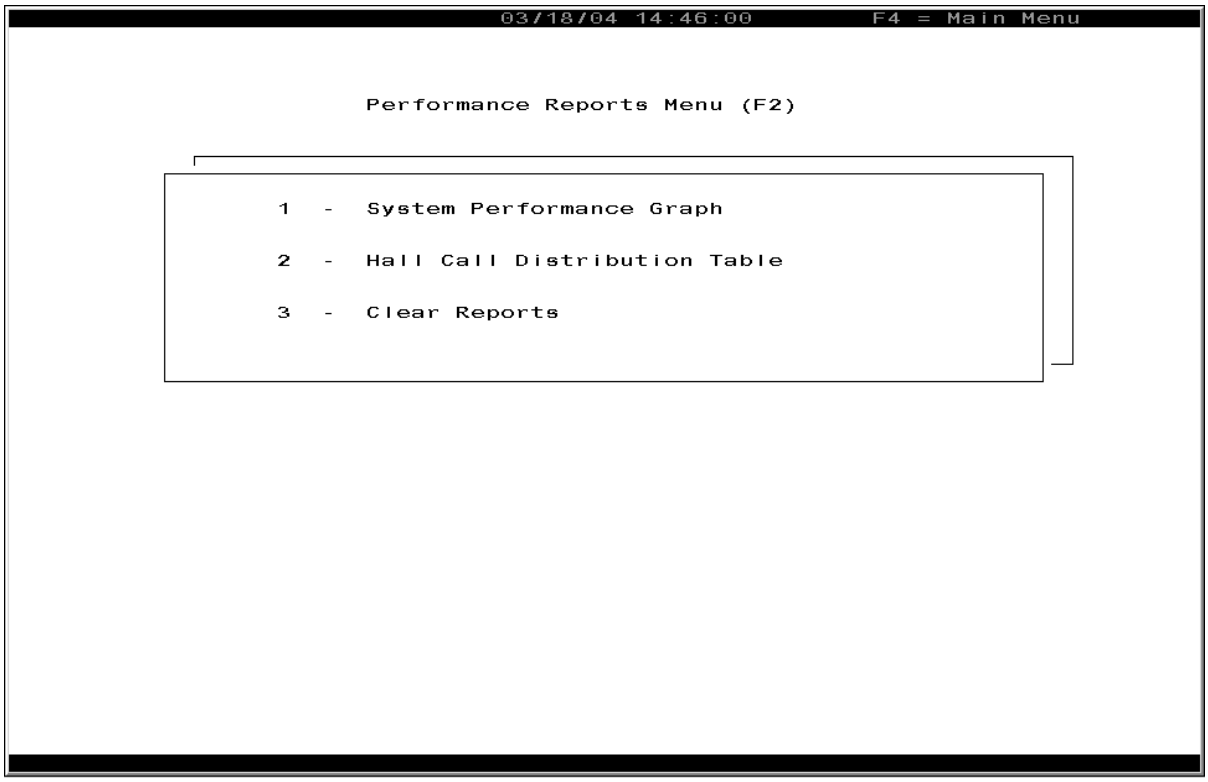


Use the ↑ ↓ arrow keys to select the desired choice, SAVE CURRENT SETTINGS, LOSE CHANGES or CHANCEL, then press ENTER. Press ESC to exit.

3.1.3 PERFORMANCE REPORTS MENU (F2)

The Performance Reports Menu (F2) provides access to both graphic and tabular performance reports.

FIGURE 3.7 Performance Reports Menu (F2)



1 - System Performance Graph - a graphic representation of hourly average hall call waiting time.

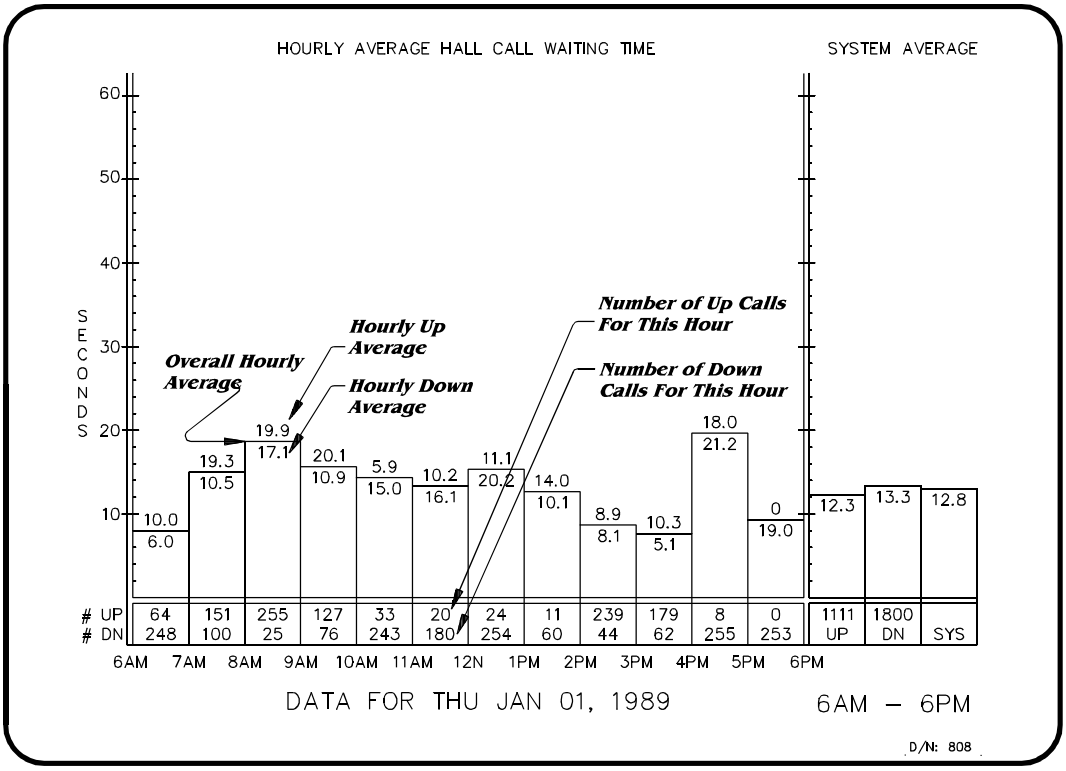
2 - Hall Call Distribution Table - a tabular representation of hourly average hall call waiting time.

3 - Clear Reports - Erases all data stored for both the System Performance Graph and Hall Call Distribution Table.

SYSTEM PERFORMANCE GRAPH

The Elevator System Performance data is based on Hall Call Waiting times and is saved on an hourly basis for seven days, 24 hours a day. Press the F2 key to access the *Performance Reports Menu* screen then press 1 for *System Performance Graph*. Each hour the number of up and down hall calls are averaged and saved in the controller's non-volatile RAM. These averages are the total individual hall call waiting times for the hour divided by the total number of hall calls registered for the hour. The system averages, displayed at the right side of the graph, are the total hourly up and down hall call averages (calculated as stated above) for the 12 hours currently being displayed, divided by the appropriate number of hours. All values are rounded off to the nearest tenth of a second.

FIGURE 3.8 System Performance Graph



At the beginning of each day, that day's data buffer is erased to make ready for the new incoming hourly averages and totals. Since data is saved hourly, the entire seven day data buffer will not be valid until seven days have elapsed from the initial startup of the system.

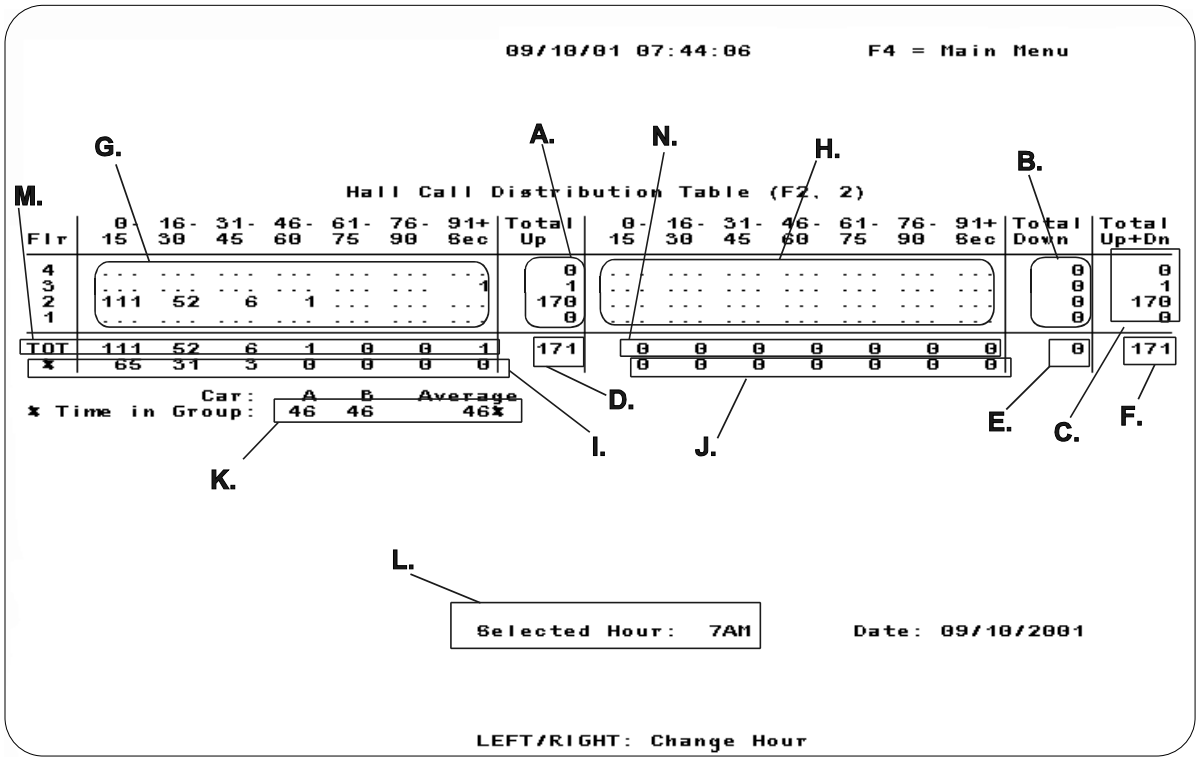
When the System Performance Graph page is first entered, it automatically displays the data for the hours of 6:00 AM to 6:00 PM of the present day in hourly increments.

- Press the → (right arrow key), to increment the starting hour displayed up to 12 PM.
- Press the ← (left arrow key) to decrement the starting hour displayed to 12 AM.
- Press the ↓ (down arrow key) to examine the previous day's information.
- Press the ↑ (up arrow key) to view stored data for the following day of the week.
  Note: If you press the ↑ key when displaying the present day's data, the information displayed is from six days ago or the "oldest" system performance data. The same holds true when you are looking at the "oldest" information. If you press the down arrow key, the data which will be displayed will be the most current. Page Up and Page Down keys select 6 AM to 6PM, and 6PM to 6 AM.

HALL CALL DISTRIBUTION TABLE

Hourly Hall Call Performance data is stored for a 24-hour period in hourly intervals. Press the F2 key to access the *Performance Reports Menu* screen then press 2 for *Hall Call Distribution*. Press ← to decrement the hour or → to increment the hour. Press TAB to view additional landings when the number of landings exceeds 16.

FIGURE 3.9 Hall Call Distribution Table (F2-2)



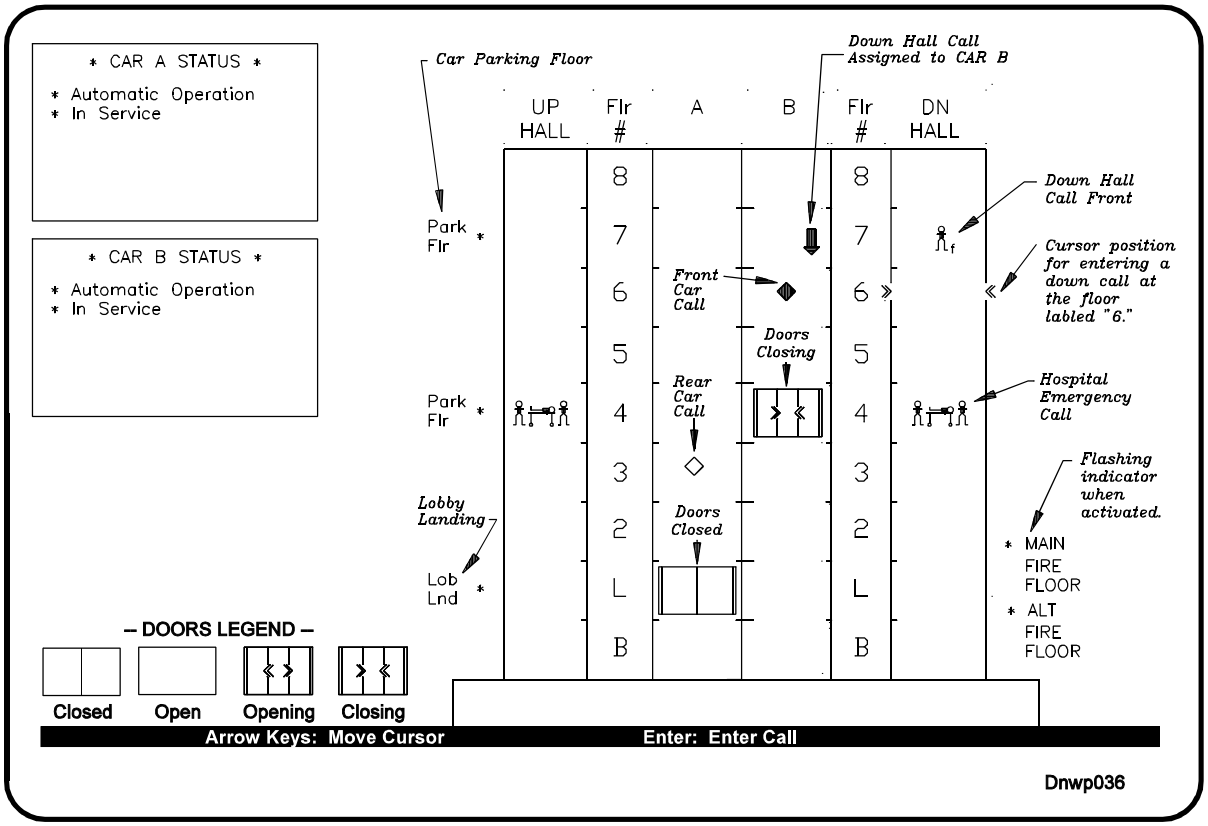
The Following Data is available for viewing from this screen in intervals of one hour. The letters (A. etc.) correspond to those in the figure above.

A. Total number of Up Hall Calls for each floor.
B. Total number of Down Hall Calls for each floor.
C. Total number of Hall Calls for each floor.
D. Total number of Up Hall Calls.
E. Total number of Down Hall Calls.
F. Total number of Hall Calls.
G. Number of Up Hall Calls responded to within 15, 30, 45, 60, 75, 90 and 90+ seconds for each floor and the total for time interval.
H. Number of Down Hall Calls responded to within 15, 30, 45, 60, 75, 90 and 90+ seconds for each floor.
I. Percentage of Up Hall Calls responded to within 15, 30, 45, 60, 75, 90 and 90+ seconds.
J. Percentage of Down Hall Calls responded to within 15, 30, 45, 60, 75, 90 and 90+ seconds.
K. Percentage of Car A/B time in service, and Average for both cars.
L. Selected hour and date displayed - in the example figure above, the hour preceding 7AM (6:00 to 6:59AM) is where the data displayed was derived from.
M. Total # of Up Hall Calls within 15, 30, 45, 60, 75, 90, and 90+ seconds.
N. Total # of Down Hall Calls within 15, 30, 45, 60, 75, 90 and 90+ seconds.

3.1.4 GRAPHIC DISPLAY OF ELEVATOR STATUS (F3)

The graphic elevator display is a comprehensive picture of car location, door status, direction of travel, registered car calls, registered hall calls, hall call assignments, personalized floor labels, and essential car status information. The parking floors are identified on the left side of the building while the fire floors are indicated on the right side of the building (when the fire inputs are activated). MG status and direction of travel appear at the top of the hoistway.

FIGURE 3.10 Graphic Display of the Elevator Status (F3 Screen)



With most CRT terminals and emulators, car calls are represented by ♦ (diamonds) in the hoistway, hall calls are represented by stick men on the outer edges of the building. The legend at the bottom of the screen to identifies the graphic representations. The display will vary slightly depending on the number of cars, number of landings and which type of monitor (color or monochrome) and controller.

Hall and car calls can be entered using the → ← ↑ ↓ and ENTER keys. Use the ← → arrows to move the cursor between the UP HALL, (Car) A, (Car) B and DN HALL columns. Use the ↓ ↑ arrows move the cursor between landings.

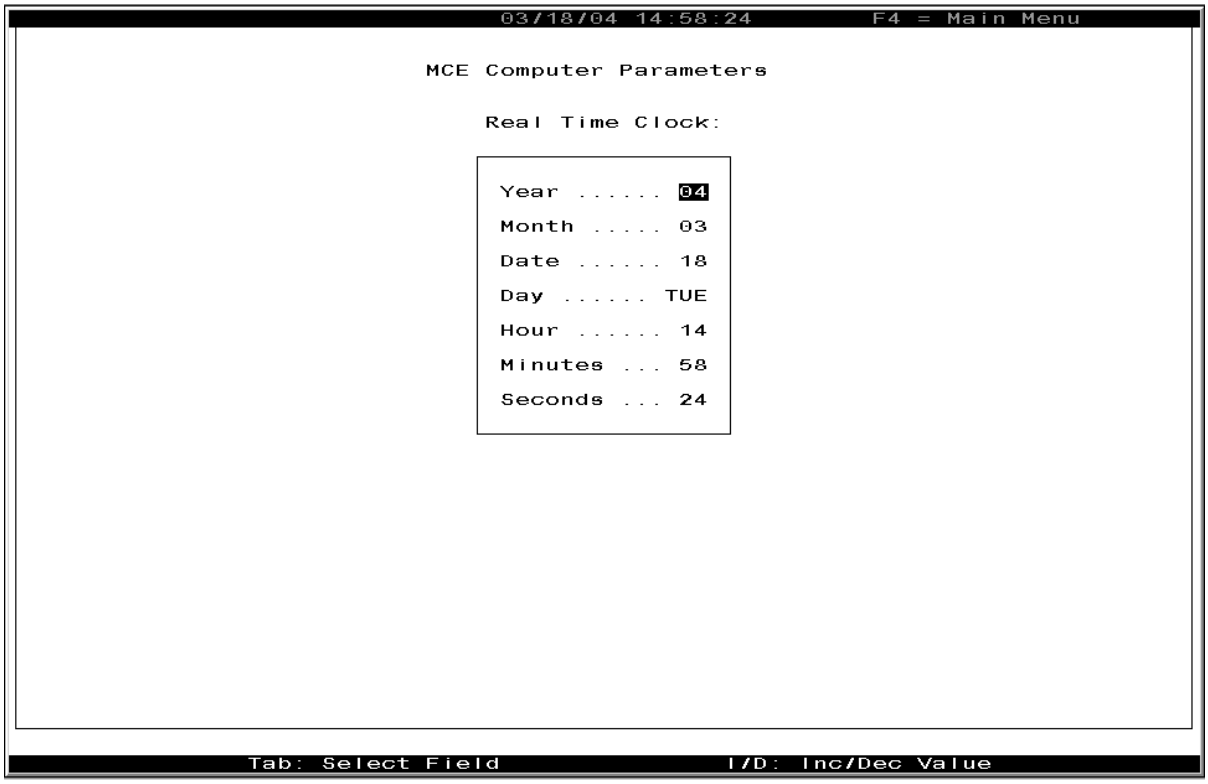
- To register a Car Call: Place the cursor in column A or B at the desired landing and press ENTER.
- To register a Hall Call: Place the cursor in the UP HALL or DN HALL column at the desired landing and press ENTER.

The car status boxes display important car status information. Some of these include Inspection, Fire Service Main and Alternate, Time Out of Service and Top Floor Demand. This page is listed as "Display of Car Status" on the main function key menu.

3.1.5 COMPUTER PARAMETERS (F6)

The Real Time Clock parameters can be viewed and set from the Computer Parameters page. To change these parameters, use the TAB key to select the desired field and the I or D key to increment or decrement the value.

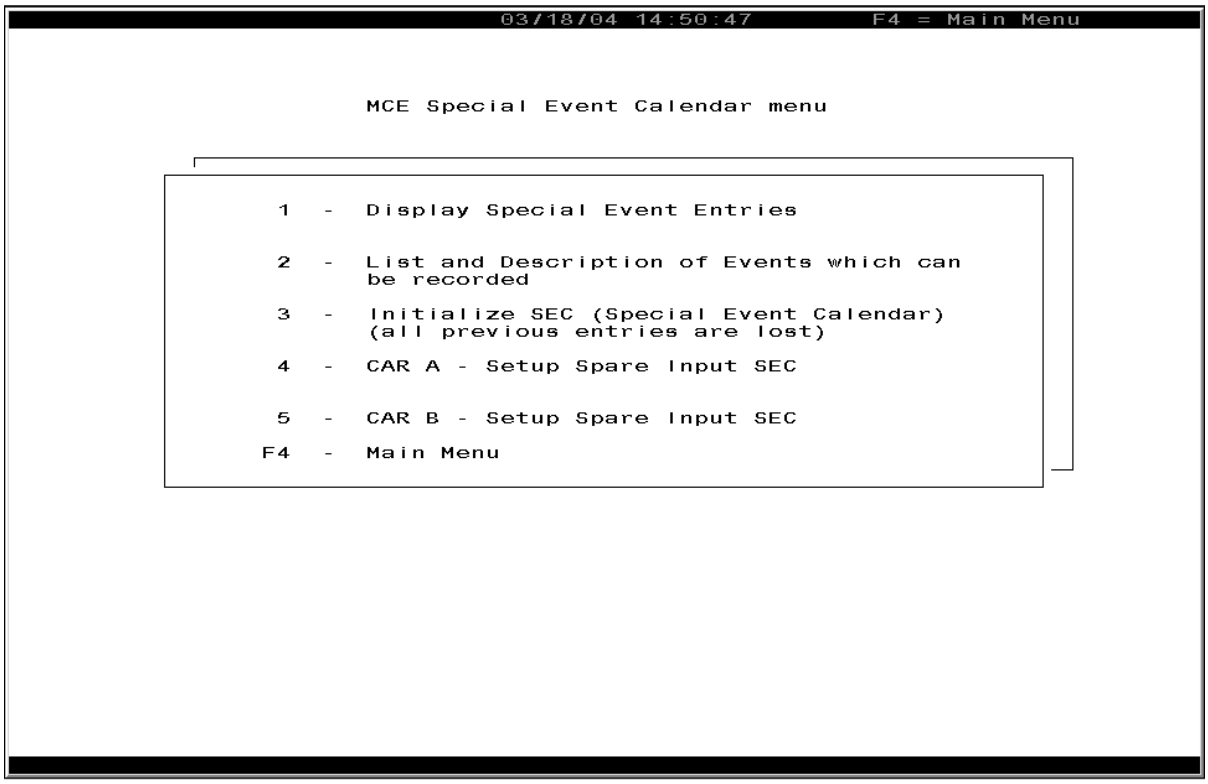
FIGURE 3.11 Computer Parameters (F6) Screen



3.1.6 SPECIAL EVENT CALENDAR MENU (F7)

The Special Event Calendar can document approximately 300 important fault conditions or *events* and display them in chronological order. Data displayed includes the type of event, the date and time of the occurrence, the date and time the event was corrected, probable causes of the event, and where to begin to correct it.

FIGURE 3.12 Special Event Calendar Menu (F7) Screen



The Special Event Calendar Menu provides four options (five in a duplex configuration).

1 - *Display Special Event Entries* - displays the last 16 events and the arrow keys scroll through the full table of events. Figure 3.13 depicts a typical list of Special Event Calendar Entries. These events vary depending on the given equipment and options. Consult the Controller Installation Manual for a list of events appropriate for the specific controller.

2 - *List and Description of Events which can be recorded* - displays the faults and events which are monitored, the information recorded, and a brief explanation and the probable cause of the fault/event (see Figure 3.14). Pressing the *space bar* or *down arrow* displays the next page of listings.

3 - *Initialize SEC (Special Event Calendar)* - clears all the documented events and resets the data pointers. **Note: cleared events are not recoverable**.

4 - *Car A - Setup Spare Input SEC* - (Figure 3.15) lets the user define which spare inputs are to be reported to the Events Log. For each spare input, the user can either turn off the event or record an event when (1) the input goes from low to high or (2) the input goes from high to low. The help box on the right side of the screen defines the settings. The help bar on the bottom of the screen displays the cursor movement keys used to change the Spare Input Special Events Calendar settings.

FIGURE 3.13 Display Special Event Entries (F7-1)

FDX Main 10/25/96 10:25:30 F12 - Exit

Date	Time	Event	Status	Car	Landing	Miscl
10-23	02:15	Time Out of Service	Activated	A	2	---
10-23	02:20	Door Close Protection	Activated	B	4	---
10-23	02:21	Time Out of Service	Deactivated	A	2	---
10-23	02:25	Door Close Protection	Deactivated	B	4	---
10-24	13:59	Motor Limit Timer	Activated	C	5	---
10-24	14:05	Motor Limit Timer	Deactivated	C	5	---
10-24	15:43	Excessive Commun. Error		B		
10-25	08:27	Hospital Service	Activated	A	L	2
10-25	08:28	Hospital Service	Deactivated	A	2	---
10-24	08:30	Independent Service	Activated	A	2	---
10-24	08:31	Independent Service	Deactivated	A	L	---

ESC - Exit Alt S - Event Description Alt H - Help

dnID057

FIGURE 3.14 List and Description of Events Which Can Be Recorded (F7-2)

03/18/04 15:02:18 Esc = Previous Menu

MCE Special Event Calendar Events

Fire Service Alternate — Information saved: date, time, Car #, PI

Main Fire Service input (FRS) activated (low) and Alternate Fire Service input (FRA) activated (high).

Fire Service Phase 2 — Information saved: date, time, Car #, PI

Phase 2 Fire Service input (FCS) activated (high).

Top Floor Demand — Information saved: date, time, Car #, PI

Car PI indicates bottom terminal landing but car is not there. Check bottom terminal landing slowdown switches and DSD input.

Bottom Floor Demand — Information saved: date, time, Car #, PI

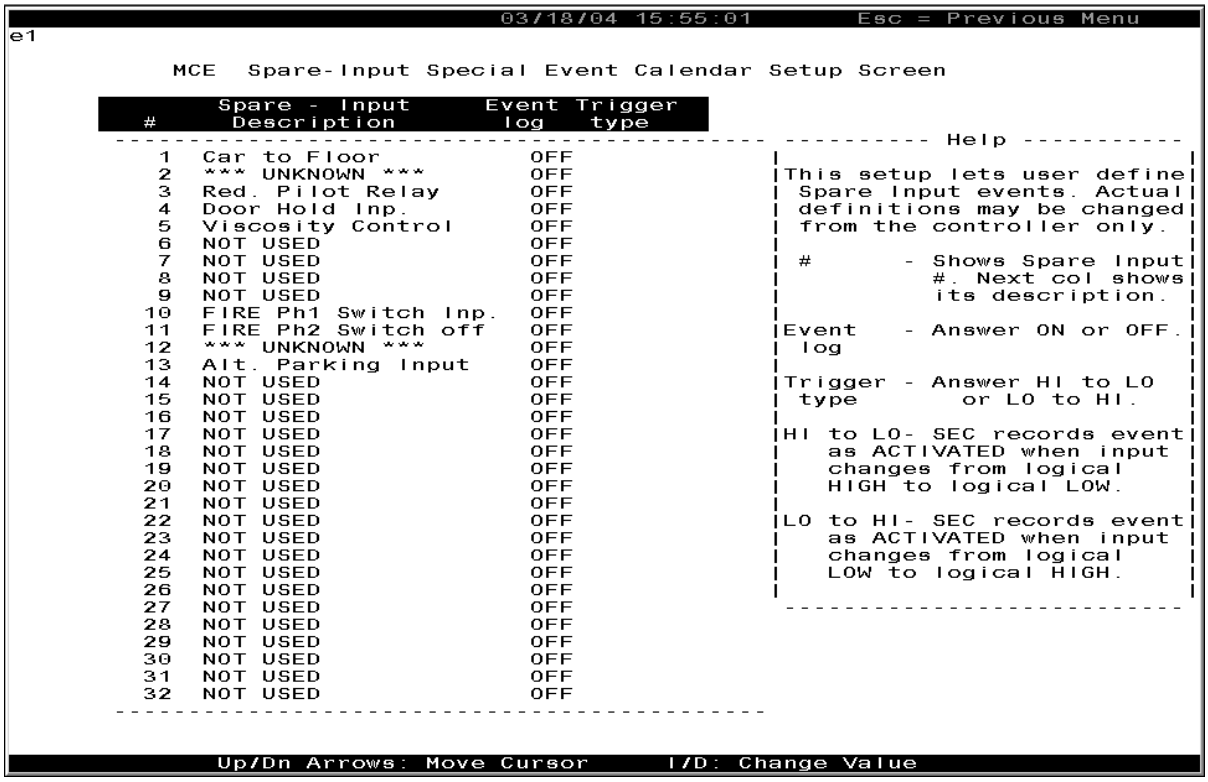
Generated when car comes off of Inspection or when car PI indicates top terminal landing but car is not there. Check top terminal landing slowdown switches and USD input.

Time Out of Service — Information saved: date, time, Car #, PI

Elevator abnormally delayed in reaching destination in response to a call demand. Doors cannot close and lock or motor stalled.

Dn Arrow: View More Monitored Events

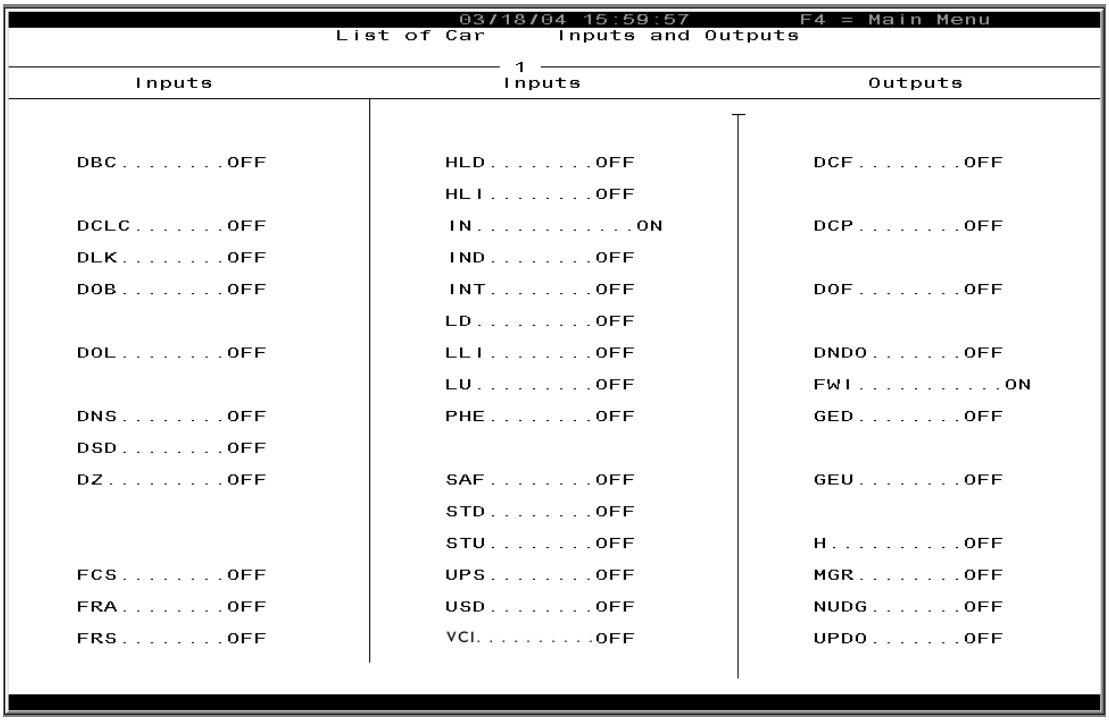
FIGURE 3.15 Special Event Calendar - Car "x" - Setup Spare Input SEC (F7 - 4 or 5) Screen



3.1.7 CAR INPUTS AND OUTPUTS (F8, F9)

Many of the individual car's input and output signals may be viewed simultaneously to detect important sequential events. Figure 3.16 shows typical "Car Inputs and Outputs" for Car A (see Section 5.3.7 in the Controller Manual for a complete listing and description of I/O flags).

FIGURE 3.16 Car "x" Inputs and Outputs (F8 or F9) Screen



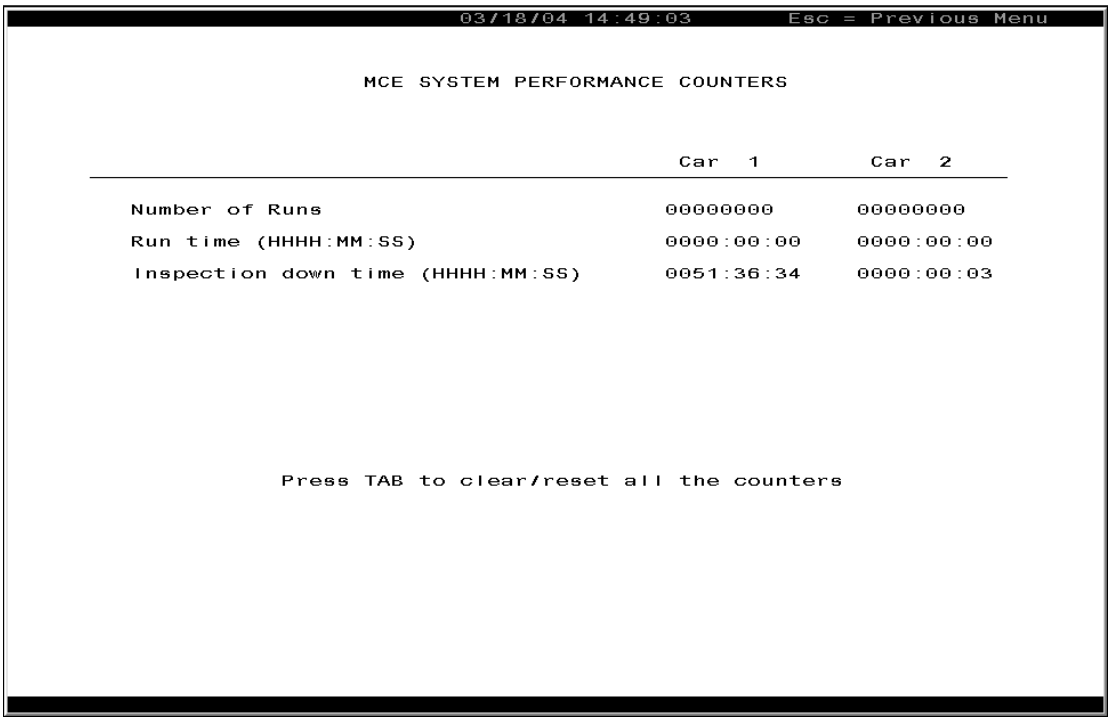
3.1.8 MODEM DISCONNECTION (HANG-UP) (F10)

The *Modem Disconnection (Hang-Up)* function is included on those jobs with modems and is designed to terminate the phone line connection. Once the connection is terminated, the screen displays the connection time, the disconnection time, and the total time connected.

3.1.9 SYSTEM PERFORMANCE COUNTERS (Shift F2)

This screen provides a number of runs counter, a run time counter and an Inspection down time counter.

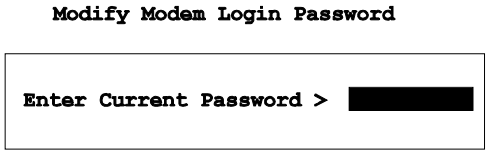
FIGURE 3.17 System Performance Counters (Shift F2) Screen



3.1.10 CHANGE MODEM LOGIN PASSWORD (Shift F4)

This option applies only to jobs that use modems to connect a CRT terminal or terminal emulator to the controller. To change the modem login password:

Press ***Shift F4*** for this screen



Press ENTER after last character.

When the current password is entered, the screen changes to:

Press ENTER after last character.

When the new password is entered, the screen changes to:

```
Modify Modem Login Password

Re-type New Password > ■■■■■■■■

Press ENTER after last character.
```

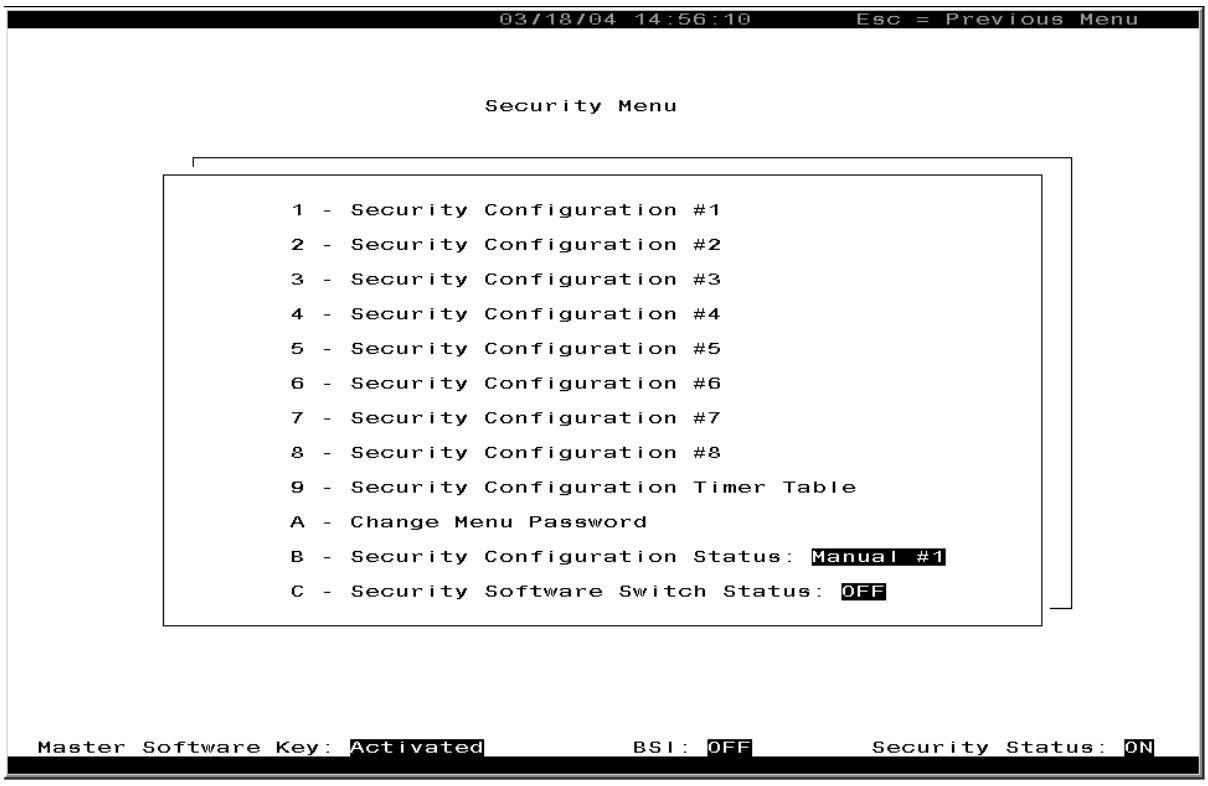
When the new password is confirmed, the screen changes to:

```
Modify Modem Login Password

Enter Current Password > ■■■■■■■■

The new password is now active.
  Press any key to continue
```

3.1.11 SECURITY MENU (Shift F5)

The Security Menu option (Shift F5) allows you to program the elevator security parameters. Please refer to the Elevator Security User's Guide, MCE part # 42-02-S024 for detailed information.

FIGURE 3.18 Security Menu (Shift F5) Screen



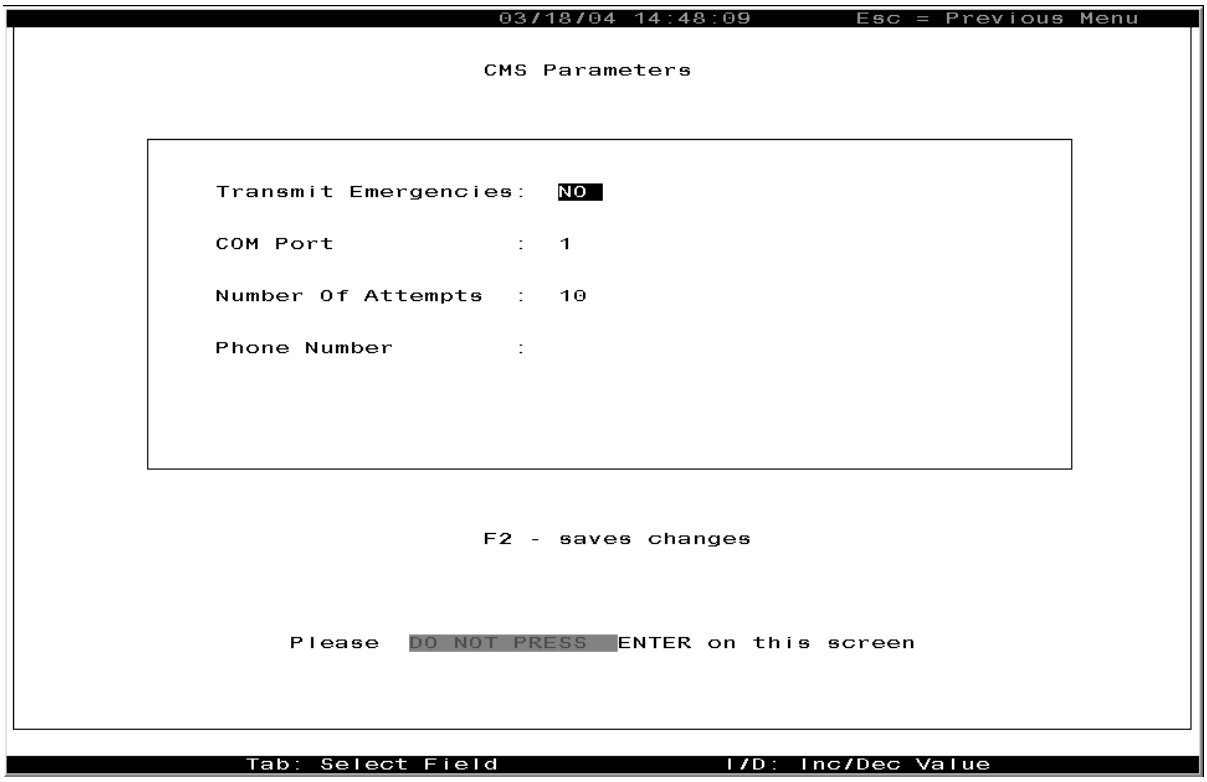
3.1.12 CMS PARAMETERS (Shift F6)

The CMS Parameters screen allows you to program the parameters used by the controller to call a computer running the CMS for Windows software to report a status or problem (see note).

NOTE: CMS needs to connect to the controller at least once in order to create relevant job information that will allow it to keep a record of EMS Events for the controller. It is generally considered best to set the CMS parameters from CMS rather than from the CRT.

For detailed information on the Central Monitoring System (CMS) please see the CMS *for* Windows Manual, MCE part # 42-02-S021.

FIGURE 3.19 CMS Parameters (Shift F6) Screen

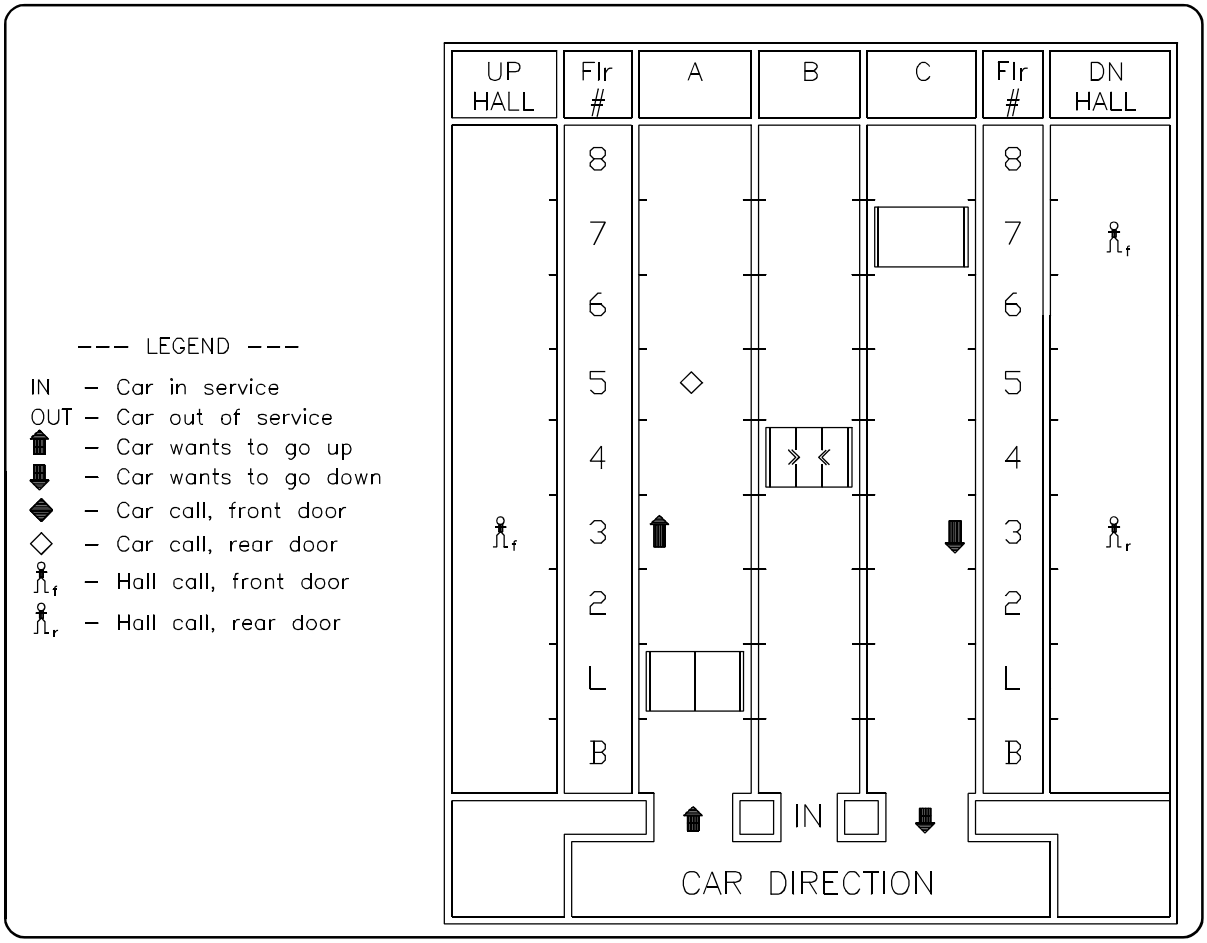


3.1.13 LOBBY TERMINAL DISPLAY

The Remote Lobby Terminal Display is designed to run independent of any operator assistance. The lobby terminal displays a dynamic, comprehensive picture of car locations, door status, direction of travel, registered car calls, registered hall calls, assigned hall calls (for group jobs only), MG status and personalized floor labels. This screen is displayed when the controller's COM port is set to CRT without keyboard (CRTM or CRTC) (see Section 1.7 *Communication Port Settings)*.

To operate the terminal once it has been connected as per installation instructions, simply turn it on. Every time the terminal is turned on it will automatically reinitialize and draw the graphic display. The graphic will redraw and update the information periodically. Figure 3.19 shows a typical monochrome lobby terminal display.

FIGURE 3.20 Lobby Terminal Display



SECTION 4
SWING PANEL CONTROLLER INSTRUCTIONS

4.0 GENERAL INFORMATION

This section describes the information and functions available for Swing Panel Controllers on CRT terminal and terminal emulator screens. Users with PCs running Central Monitoring System (CMS) software should consult the *CMS for Windows* manual. Group Supervisor and IMC Controller manuals contain screen information specific to those controllers and should be referenced instead of this generic overview.

4.1 SWING PANEL CONTROLLER SCREENS

4.1.1 INITIALIZING THE CRT TERMINAL

Normally the CRT terminal or terminal emulator will initialized automatically when power is turned ON. However, if the automatic initialization is not successful, press F5 on the keyboard. The CRT screen will go blank and may flash a couple of times before coming up with a readable display. Once the CRT terminal has been initialized, there are prompts to guide the user to the Main Menu.

If the CRT screen continues to flash for more than one minute after initialization has begun, or the display changes but is not readable, refer to Section 1.7, *Communication Port Settings* and Section 2 *CRT Terminal and Terminal Emulator Setup*.

Should any later problems arise due to power surges or line noise, reinitializing will usually clear the problem. Reinitializing the terminal is one of the functions accessible from the Main Menu by pressing F5, CRT Terminal Initialization. It is remotely possible that a voltage surge may require re-establishing the correct CRT parameter settings as described in Section 1.7, *Communication Port Settings* and Section 2 *CRT Terminal and Terminal Emulator Setup*

4.1.2 MAIN MENU (F4)

Once the CRT terminal is initialized, the Main Menu will display on the screen (see Figure 4.1). At this point all the display functions are available to the operator at the stroke of a single function key. Every Main Menu function can be accessed directly from any other Main Menu function. It is not necessary to return to the Main Menu prior to entering a different display screen. Once the operator becomes familiar with the function key definitions, accessing information with the terminal becomes a quick and easy process.

FIGURE 4.1 Main Menu (F4) screen

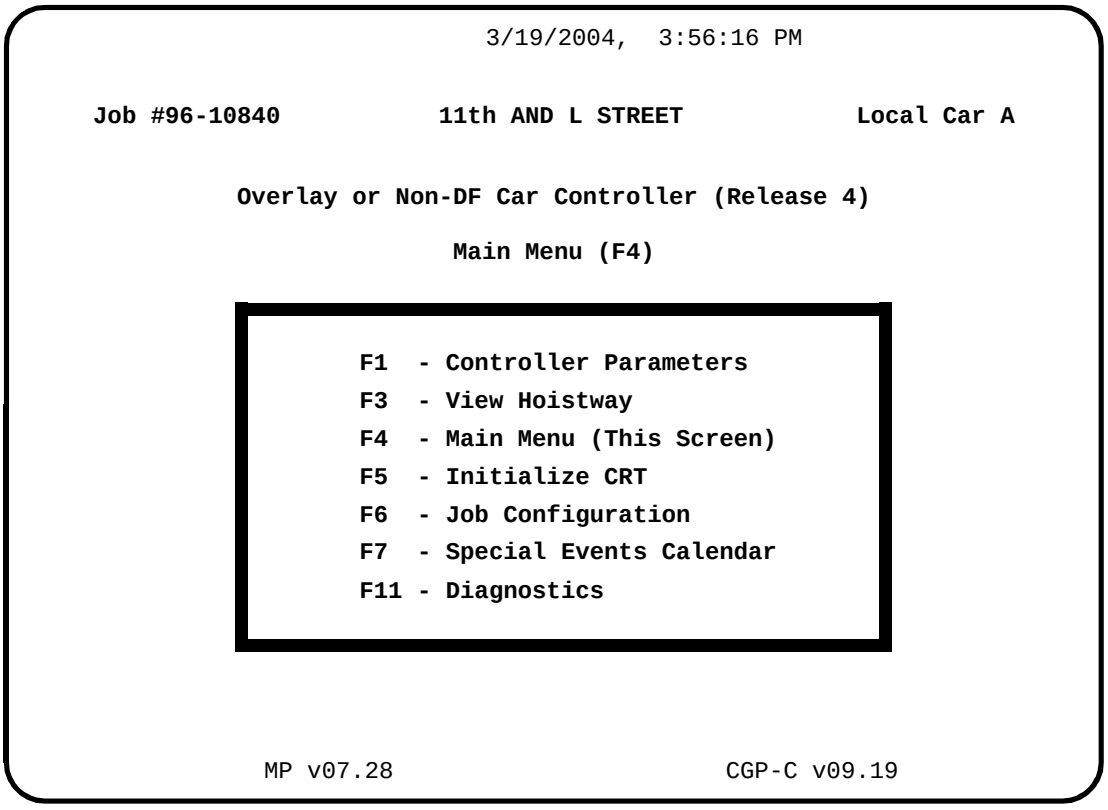
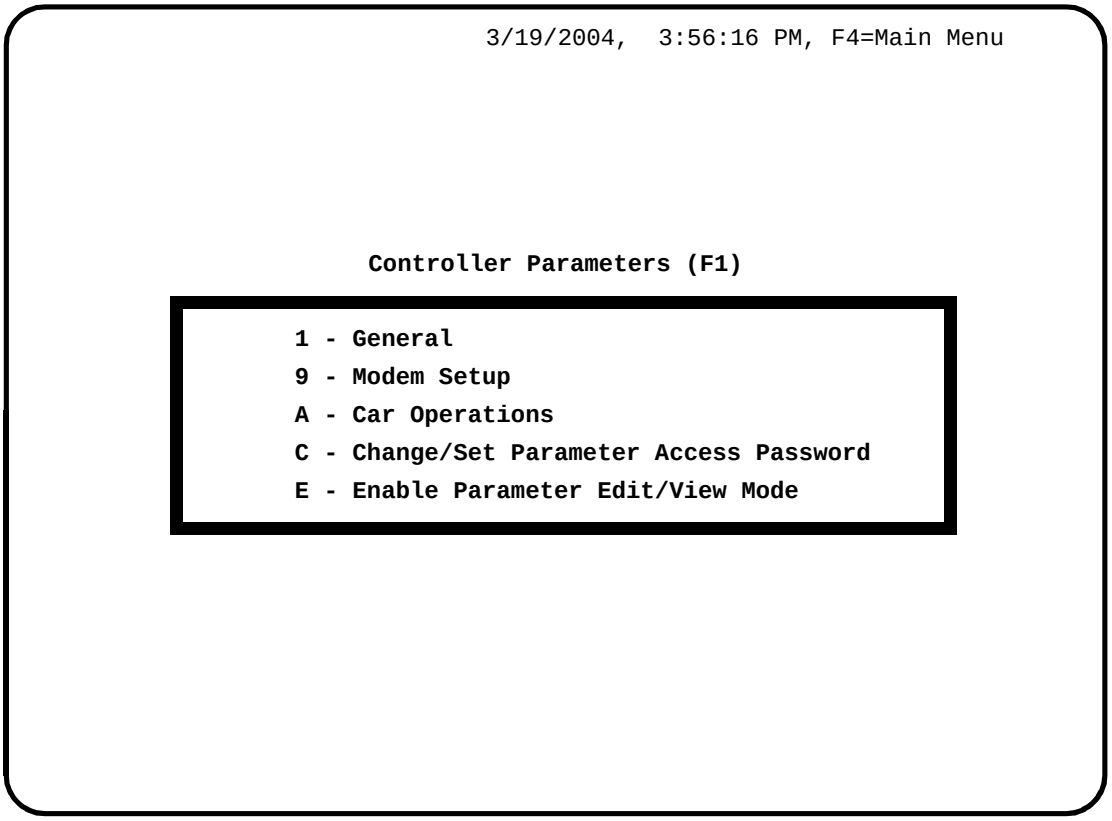


FIGURE 4.2 Controller Parameters Menu (F1) screen



4.2 CONTROLLER PARAMETERS (F1)

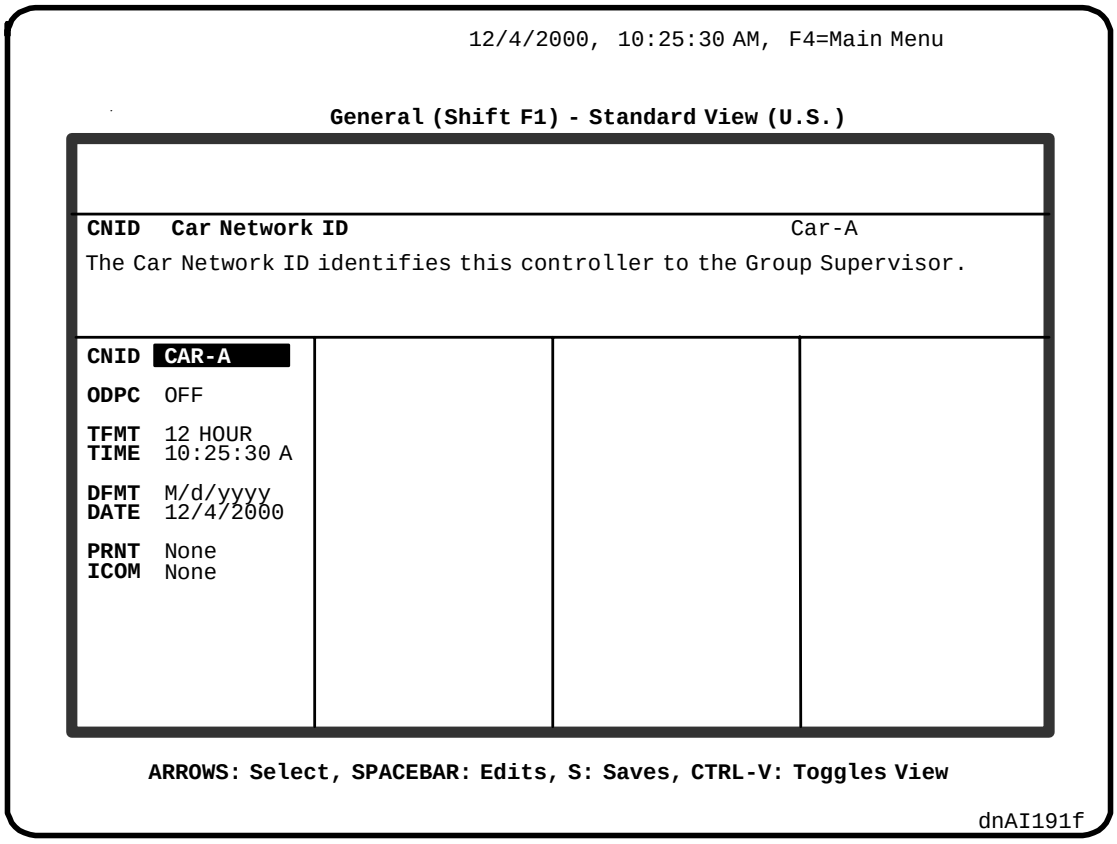
To access the Controller Parameters Menu press F1 while the Main menu is displayed (see Figure 4.2).

4.2.1 EDITING CONTROLLER PARAMETERS

The Controller Parameters can be accessed and adjustments can be made using selections on the Controller Parameters (F1) Menu. Adjustments to parameters on these screens can be made at any time, but will not go into effect until the car has stopped (no direction is active).

SELECTING PARAMETERS FOR EDITING - Display the screen listing the parameter you wish to edit. For example, to change **CNID** Car Network ID, the General (Shift F1) screen must be displayed (see Figure 4.3). Press F1 while the Main Menu is displayed and press 1 while the Controller Parameters Menu is displayed, or simply press SHIFT F1 while any screen is displayed.

FIGURE 4.3 General (Shift F1) Screen



In Figure 4.3 the highlighted value for **CNID** Car Network ID is selected for editing. Press the arrow keys to select other parameters for editing. In our example, CNID is selected (displayed in reverse video - see Figure 4.4). Notice that the full parameter name for CNID, **Car Network ID**, is displayed in the box above the columns and the current value is also displayed to the right in the same box. Below that is a description of this parameter.

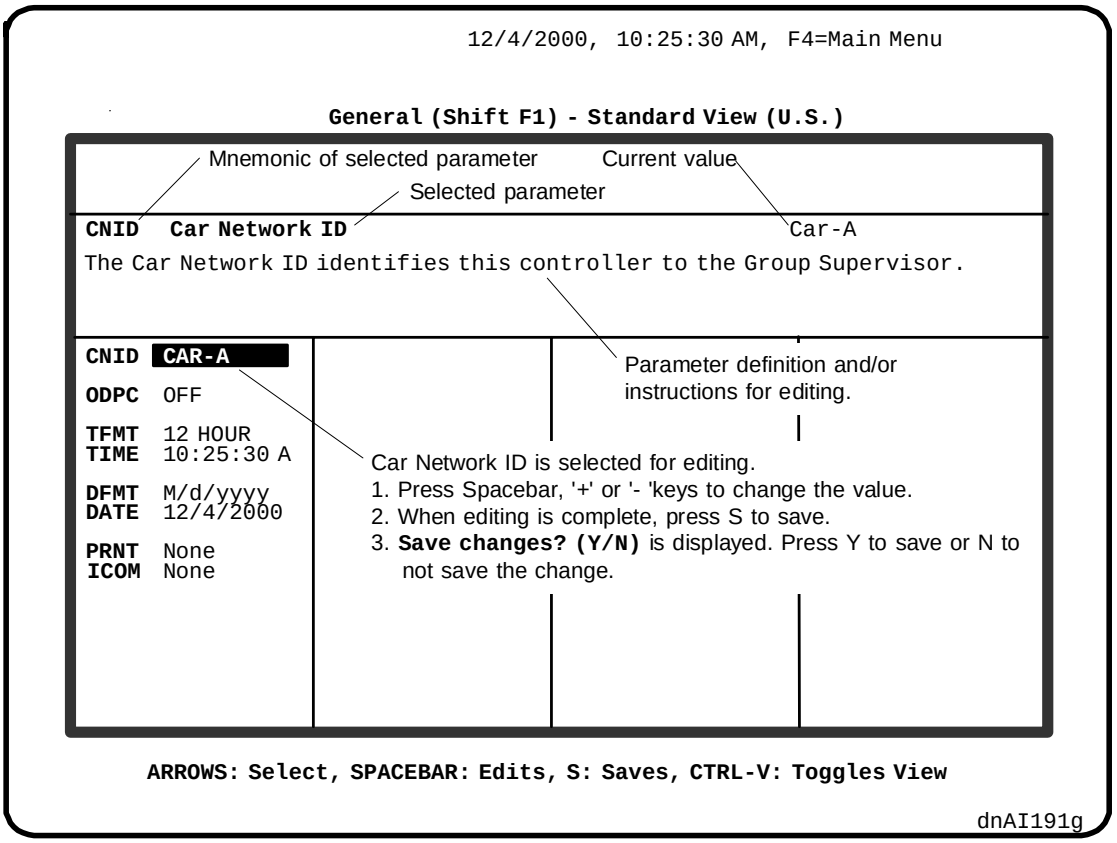
EDITING METHODS - The following methods are used to modify a parameter value once the desired value is highlighted.

1. If the instruction at the bottom of the screen is "**SPACEBAR Edits**" use the **Space Bar** or (**+** / **-**) keys to increase or decrease the value. If an arrow key is pressed to select another parameter, the previously edited parameter value is displayed in **bold** type. It will remain bold, to indicate that the value was changed, until the new value is *saved* as described below. The new value does not become effective until it is saved.

2. To edit numeric values, type the new value using the **number keys** on the top of the keyboard or on the number keypad with Num Lock ON. When the desired value is displayed, press **Enter**.

3. Press the **Enter** key to select the value for editing. At this point virtually all of the normal text editing keys are active. The **Arrow** keys allow selection of a single character to be changed. **Type** a new character to replace the selected character. The **Delete** key deletes the next character after the selected character. The **End** key moves the cursor to the far right and the **Home** key moves the cursor to the far left. The **Insert** key toggles between type-over and insert modes. When you have finished editing, press **Enter**. Press **Esc** to cancel the edit and return to the previous value.

FIGURE 4.4 Editing CNID on the General (Shift F1) Screen



SAVING THE CHANGES - Edited parameter values do not become effective until they are *saved*. Save the changes by pressing S. A confirmation message, **Save Changes? (Y/N),** is displayed. Press Y to save or N to not save. If you exit the parameter screen without saving, the message, **Save Changes? (Y/N)**, will be displayed. If N is pressed, a confirmation message, **Parameters were NOT saved**, is displayed. If Y is pressed, a

confirmation message, **Saving...**, and then, **Save Complete**, is displayed. If there is a problem the message ***** ERROR Saving Parameters ***** is displayed. If any new value is outside the acceptable range for that parameter, the computer will substitute the closest acceptable value, and that value will be saved and displayed.

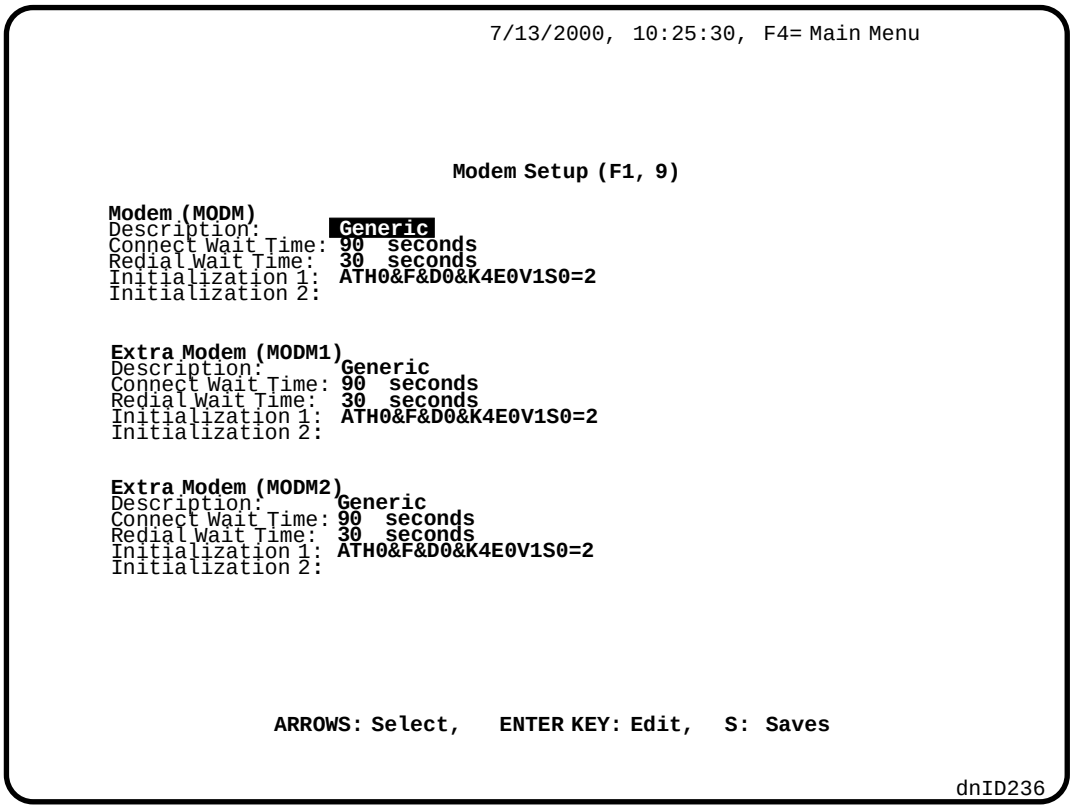
SAVING ALL PARAMETERS - If parameters have been changed, pressing S will save *only* those parameters that were changed. If no parameters have been changed, pressing S will save *all* parameters on the screen. Some parameters are saved in more than one location. Saving all parameters is a feature that is used initially to ensure that the parameters are correct in all locations.

NOTE: In Group Systems the **TIME** and **DATE** parameters on the car controllers are synchronized with the Group Supervisor. These parameters must be set using the Group Supervisor's CRT terminal or Computer Swing Panel (refer to the M3 Group Supervisor manual, part #42-02-G004, for instructions).

4.2.2 MODEM SETUP (F1, 9)

The Modem Setup (F1, 9) screen is used to set the modem communication parameters. From the Controller Parameters (F1) screen press 9.

FIGURE 4.5 Modem Setup (F1, 9) screen



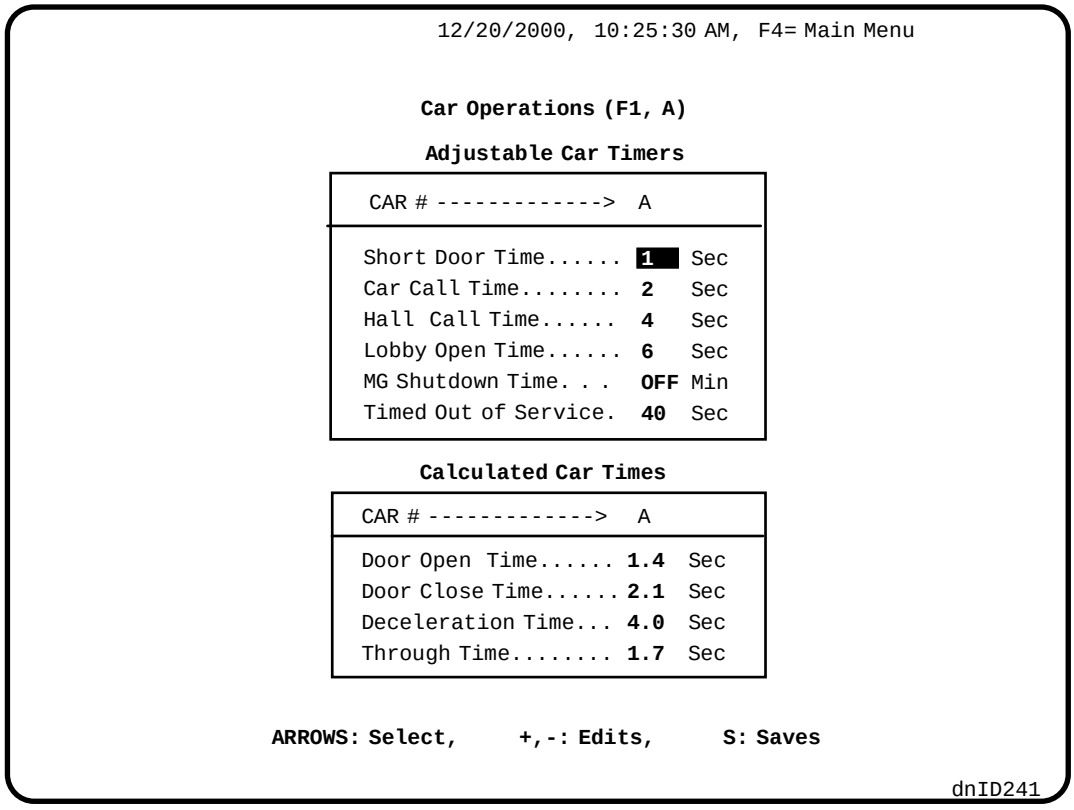
It may be necessary to change the default modem parameters. Consult the modem user's manual.

4.2.3 CAR OPERATIONS (F1, A)

The Car Operations (F1, A) screen (Figure 4.6) allows you to set the Adjustable Car Timers and view the Calculated Car Times. From the Controller Parameters menu (F1) screen, press A.

Use the ↑ ↓ arrow keys to select the desired parameter for editing and press '**+**' to increase or '**-**' to decrease the value. Save the changes by pressing S. A confirmation message, **Save Changes? (Y/N),** is displayed. Press Y to save or N to not save.

FIGURE 4.6 Car Operations (F1, A) screen



4.2.4 CHANGE / SET PARAMETER ACCESS PASSWORD (F1, C)

A password system has been included that prevents unauthorized persons from changing controller parameters. Once activated, a valid password must be entered in order to make changes to parameters. However, the parameter screens may still be viewed.

SETTING THE PARAMETER ACCESS PASSWORD - From the Controller Parameters (F1) screen, select Change/Set Parameter Access Password C. The screen will change to:

```
   Change Parameter Access Password (F1, C)
Enter Current Password: (none)
   Enter New Password: ■
  Confirm New Password:
```

The password may be up to ten letters, numbers or characters. Type the new password and press Enter. Asterisks (*) will be displayed in place of the new password. Confirm the new

password by typing it again and press Enter. If the password has been accepted the following message will be displayed:

Password Successfully Changed.

If the passwords do not match, the following message is displayed:

New Password and Confirm Password mismatch

Repeat the process of entering and confirming the new password.

4.2.5 ENABLE PARAMETER EDIT / VIEW MODE (F1, E)

Once a password is accepted the controller parameters can be placed into VIEW ONLY MODE or EDIT mode using Enable Parameter Edit/View Mode (F1, E). To place the parameters into VIEW ONLY MODE, press E. The screen will change to:

Parameter Access Password: ■

Parameters are Unlocked. Enter Password to Lock.

Type the password and press Enter. The message:

Password accepted. Parameters will be in VIEW ONLY Mode.

is displayed momentarily. Once accepted, controller parameters are locked and may not be changed.

To place the parameters into EDIT MODE, press E. The screen will change to:

Parameter Access Password: ■

Parameters are Locked. Enter Password to Unlock.

Type the password and press Enter. The message:

Password accepted. Parameters will be in EDIT Mode.

is displayed momentarily. Once accepted, controller parameters are unlocked and may be changed.

LOST OR FORGOTTEN PASSWORD - If you lose or forget the password, type a question mark (?) and press Enter. The following will appear on the screen:

MCE Security Reference #: **xx**

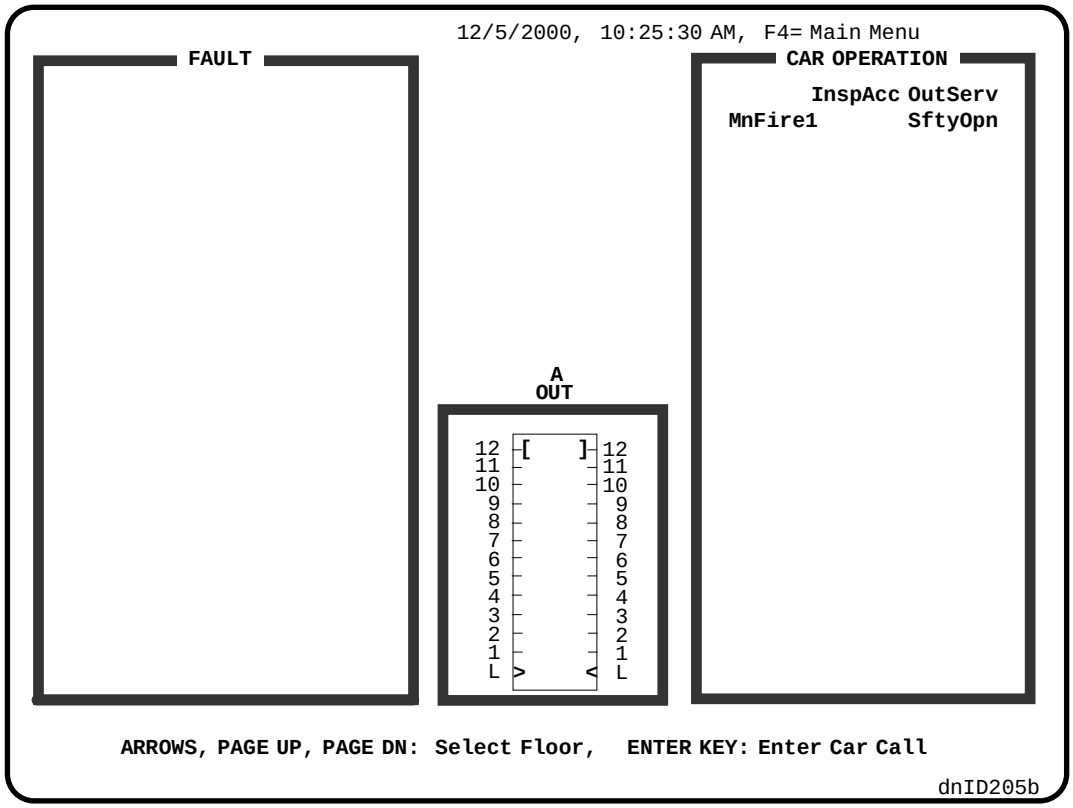
xx is a number between 0 and 15, randomly generated.

Call MCE Technical Support and tell them the reference number. They will give you a temporary password. Type in the temporary password and press Enter. If you make a mistake while typing the temporary password, try again. Then choose a new password, enter it and confirm it as described above.

4.3 VIEW HOISTWAY SCREEN (F3)

The View Hoistway (F3) screen provides a graphic representation of the hoistway and text messages indicating car operating status and faults.

FIGURE 4.7 View Hoistway (F3) screen



Entering Calls - Calls can be entered using the CRT terminal and the View Hoistway screen. Select the desired floor using the arrow keys to position the cursor, then press Enter.

Status Messages - Car operation status messages are displayed in the CAR OPERATION window. Table 4.1 provides a list of the status messages. The *Status and Error Messages* table in the Controller Installation Manual provides a description and troubleshooting tips.

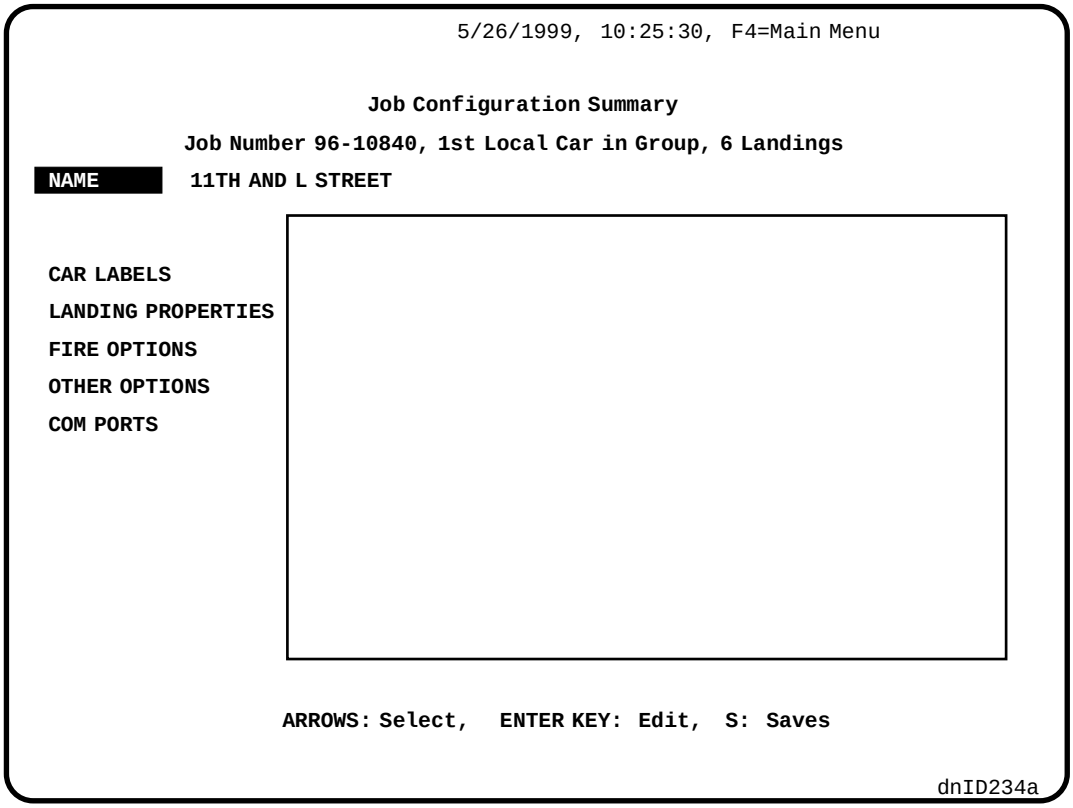
TABLE 4.1 View Hoistway (F3) Screen - CAR OPERATION

The flags appear only when the car condition exists.			
AlmNoDZ	Alarm - No Door Zone	**IndSrv**	Independent Service
AlmNoMv	Alarm - No Car Movement	**InServ**	In Service
AltFir1	Fire Service Alternate	**InspAcc**	Inspection
AntiNui	Anti-Nuisance Operation	**MLT**	MLT - Timer Expired
AttnSrv	Attendant Service Operation	**MnFire1**	Fire Service Main
AutoOps	Automatic Operation	**Nudging**	Nudging
BflrDem	Bottom Floor Demand	**OutServ**	Out of Service
Byp-HLW	Hall Call Bypass Operation	**SftyOpn**	Car Safety Device Open
EmrgPwr	Emergency Power	**SwngOpr**	Swing Car Operation
Eqactv	Earthquake	**TflrDem**	Top Floor Demand
FirePh2	Fire Service Phase 2	**TOS**	Timed Out of Service
HospEmr	Hospital Service		

4.4 JOB CONFIGURATION (F6)

The Job Configuration Summary (F6) screen provides information about the controller's configuration. In addition, it provides a means of programming the job name, car labels and landing labels.

FIGURE 4.8 Job Configuration (F6) screen



4.4.1 NAME

To modify the Job Name:

1. Use the Up Arrow or Down Arrow keys to move the cursor to the NAME field, then press ENTER.
2. Use the alphanumeric keys to enter the desired Job Name, then press ENTER.

4.4.2 CAR LABELS

To modify the Car Labels (see Figure 4.9):

1. Use the arrow keys to move the cursor to the CAR LABELS field, then press Enter.
2. Use the alphanumeric keys to enter a new label (up to three characters), then press ENTER.

FIGURE 4.9 Job Configuration (F6) - Car Labels screen

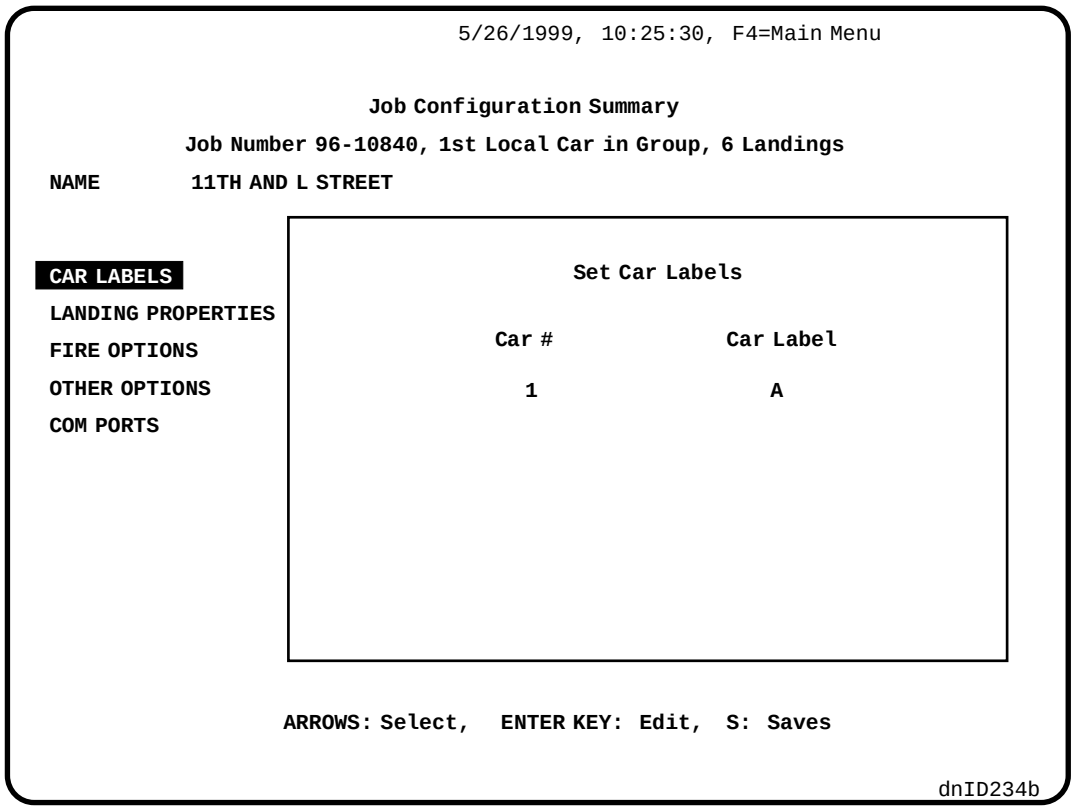
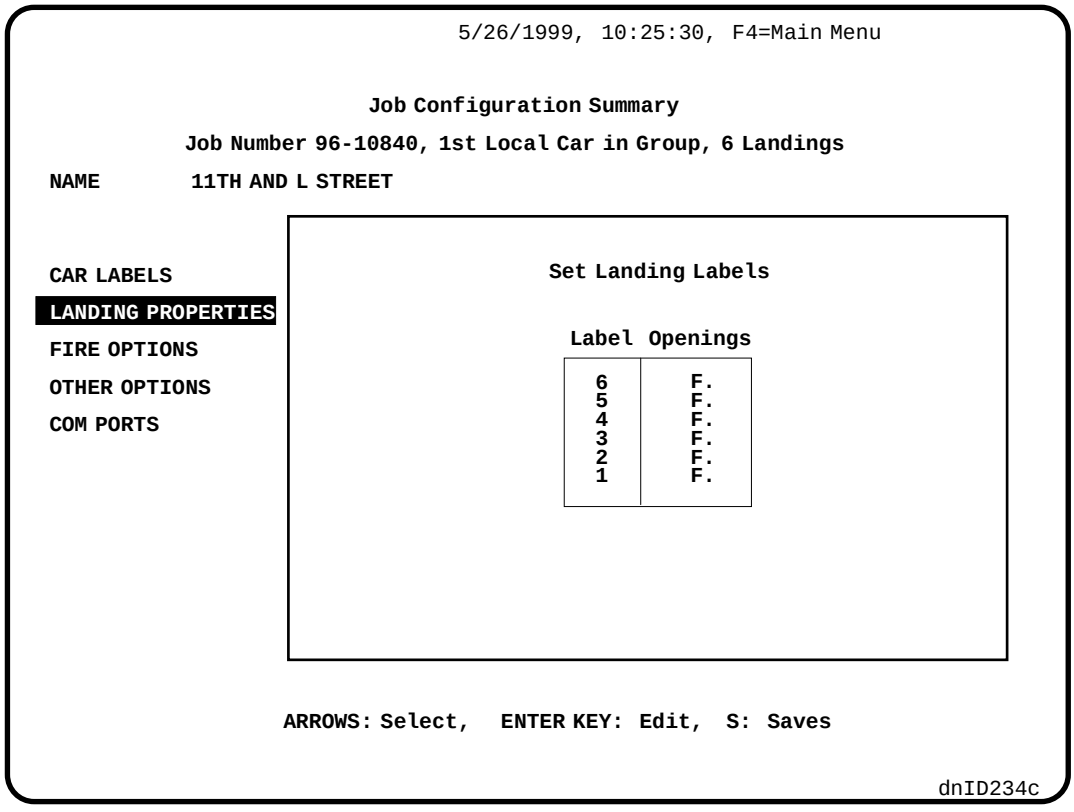


FIGURE 4.10 Job Configuration (F6) - Landing Properties screen

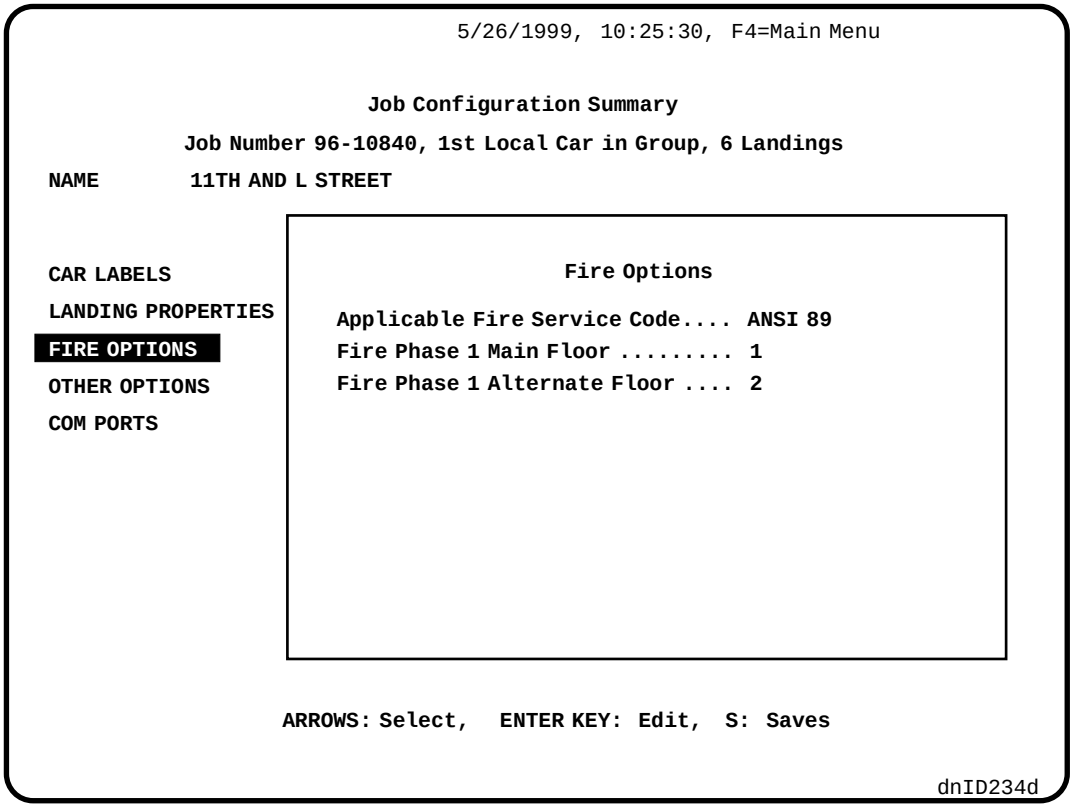


4.4.3 LANDING PROPERTIES

To modify the Landing Labels (see Figure 4.10):

1. Use the ↑ ↓ arrow keys to move the cursor to the LANDING PROPERTIES field, then press ENTER.
2. Use the ↑ ↓ arrow keys to select the desired landing, then press ENTER.
3. Use the alphanumeric keys to enter a new landing label (up to two characters), then press ENTER.
4. Press ESC to exit the Landing Properties edit screen.

FIGURE 4.11 Job Configuration (F6) - Fire Options screen



4.4.4 FIRE OPTIONS - Displays the settings for the Fire Service options (Figure 4.11). Use the ↑ ↓ arrow keys to select FIRE OPTIONS, then press ENTER. Press ESC to exit.

4.4.5 OTHER OPTIONS - Displays the settings for other options, e.g. nudging, earthquake, etc. (Figure 4.12). Use the ↑ ↓ arrow keys to select OTHER OPTIONS, then press ENTER. Press ESC to exit.

4.4.6 COM PORTS - Displays the settings for the COM port parameters (Figure 4.13) (see Section 1.7 *Communication Port Settings*). Use the ↑ ↓ arrow keys to select COM PORTS, then press ENTER. Press ESC to exit.

FIGURE 4.12 Job Configuration (F6) - Other Options screen

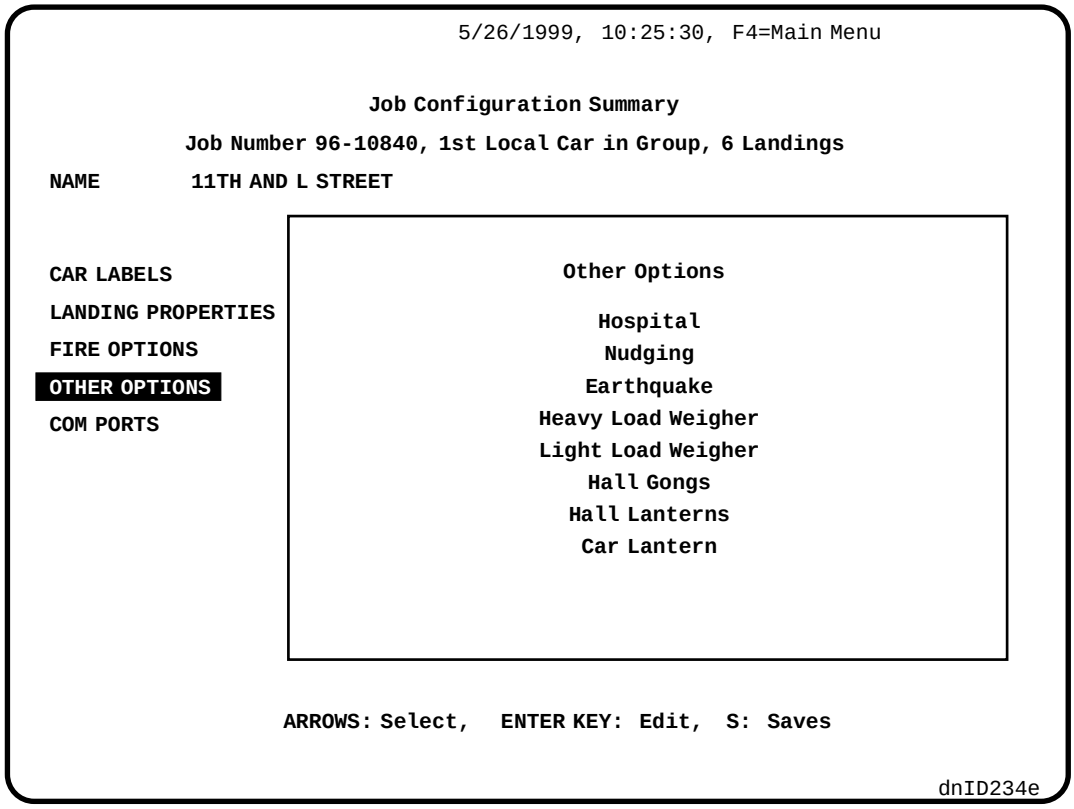
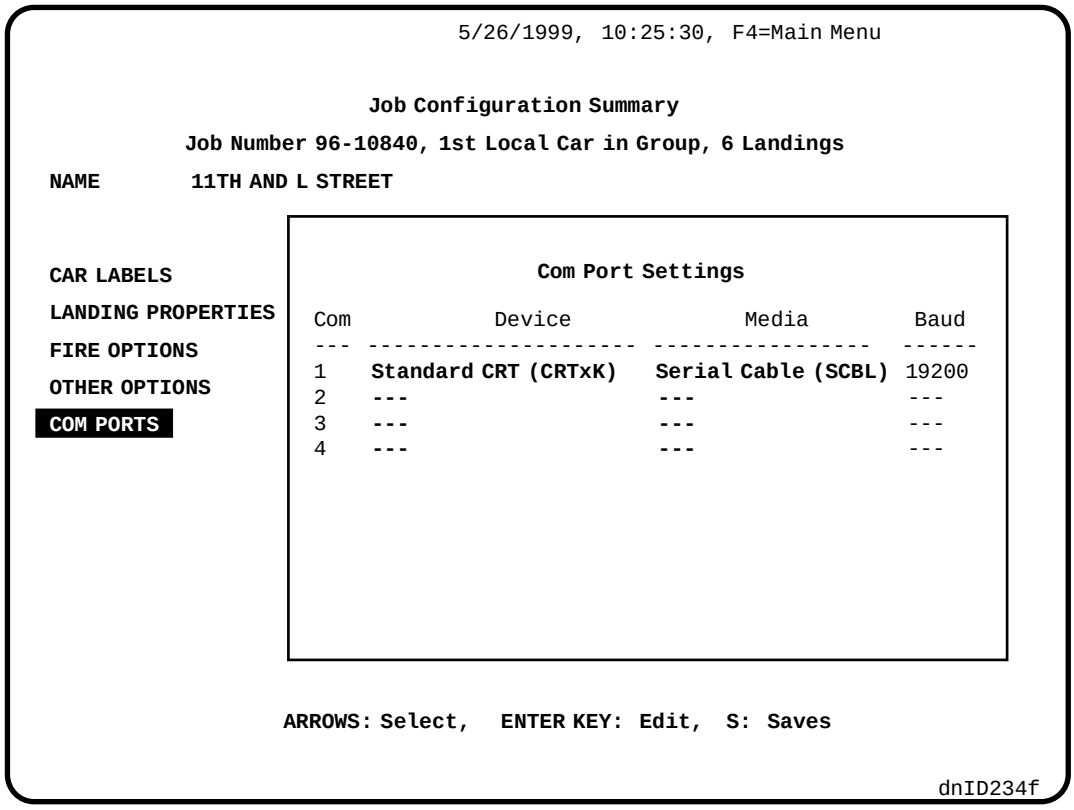


FIGURE 4.13 Job Configuration (F6) - Com Ports screen

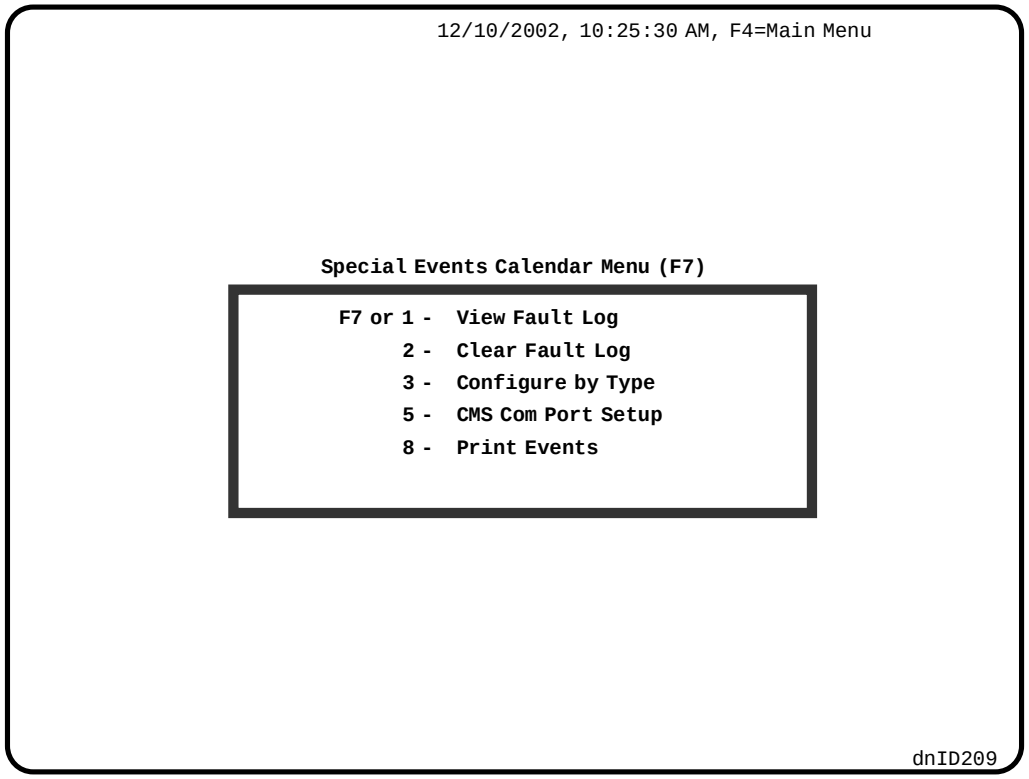


4.5 SPECIAL EVENTS CALENDAR (F7)

The Special Events Calendar documents the 250 most recent fault conditions or events and displays them in chronological order. The data displayed includes the type of event or fault, the date and time the fault/event occurred, the date and time the fault/event was corrected, as well as other information about the status of the elevator when the fault or event occurred.

The Special Events Calendar Fault Log is accessed from the Special Events Calendar Menu (Figure 4.14). Press the F7 while the Main Menu is displayed.

FIGURE 4.14 Special Events Calendar Menu (F7) screen



4.5.1 VIEW FAULT LOG

From the Special Events Calendar Menu (F7) screen press 1 or F7 to display the events logged to the Special Events Calendar (Figure 4.15). This screen makes it possible to examine the documented faults and events. The latest 14 faults and events are displayed in the bottom half of the screen, including the date and time the event occurred.

When this screen is first displayed, the most recent event is displayed at the bottom of the screen. Use the ↑ ↓ arrow keys to scroll one event at a time, the **Page Up** / **Page Down** keys to scroll a page at a time, or the ***Home / End*** key to scroll to event 1 or 250. As each event is selected (reverse video), the description of the event and any other logged data is displayed in the top half of the screen. Additional troubleshooting information for each event can be displayed by pressing CTRL T (see Figure 4.16). The *Status and Error Messages Table* in the Controller Installation Manual lists the faults or events which are recorded, including a description and recommended troubleshooting actions.

FIGURE 4.15 Special Events Calendar (F7 - 1) screen

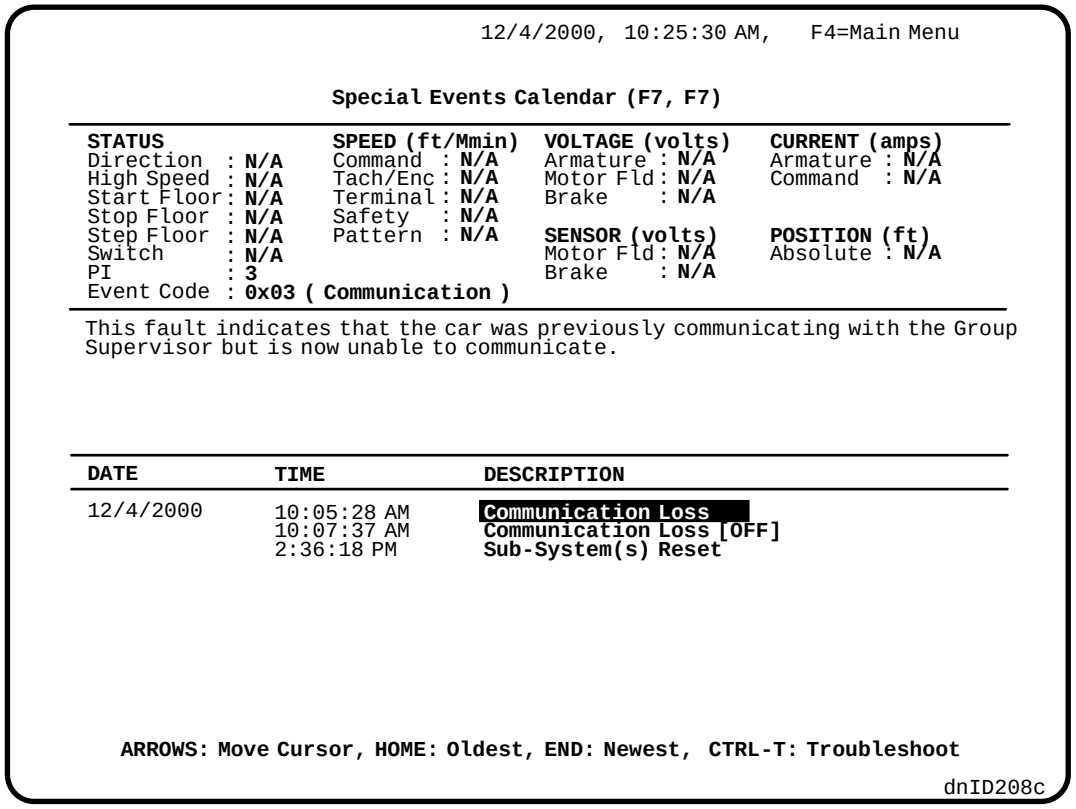
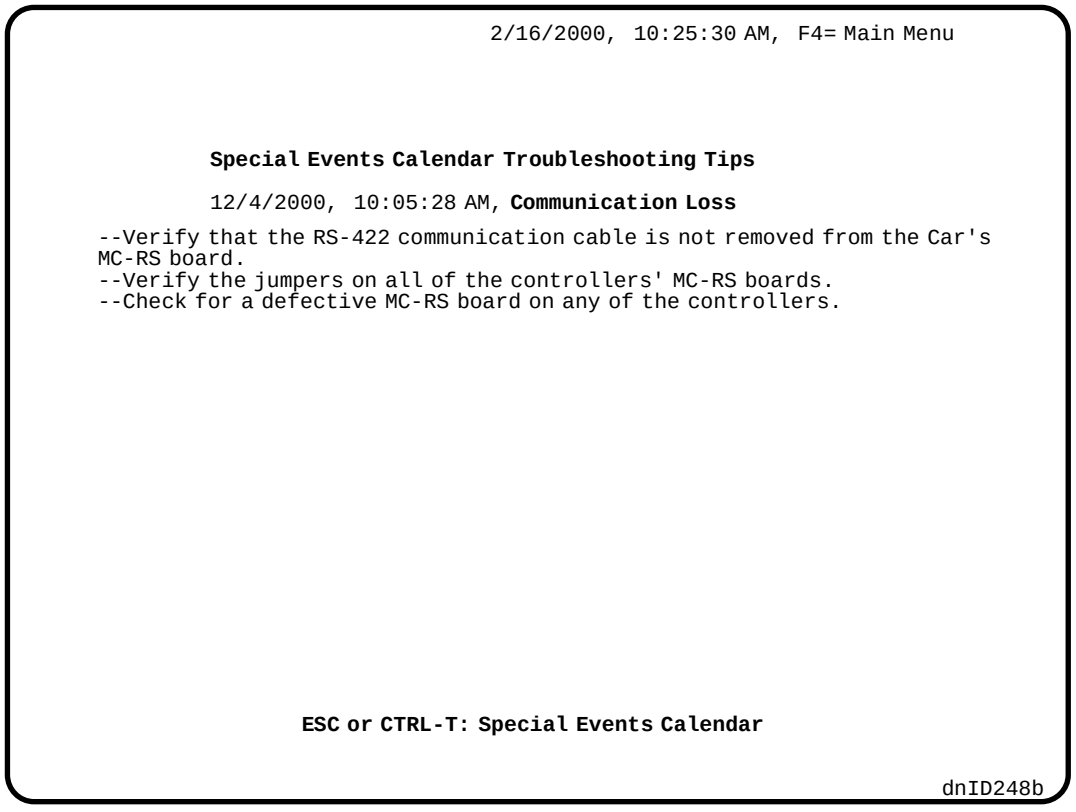


FIGURE 4.16 Special Events Calendar Troubleshooting (F7 - 1 - Crtl +T) screen



4.5.2 CLEAR FAULT LOG

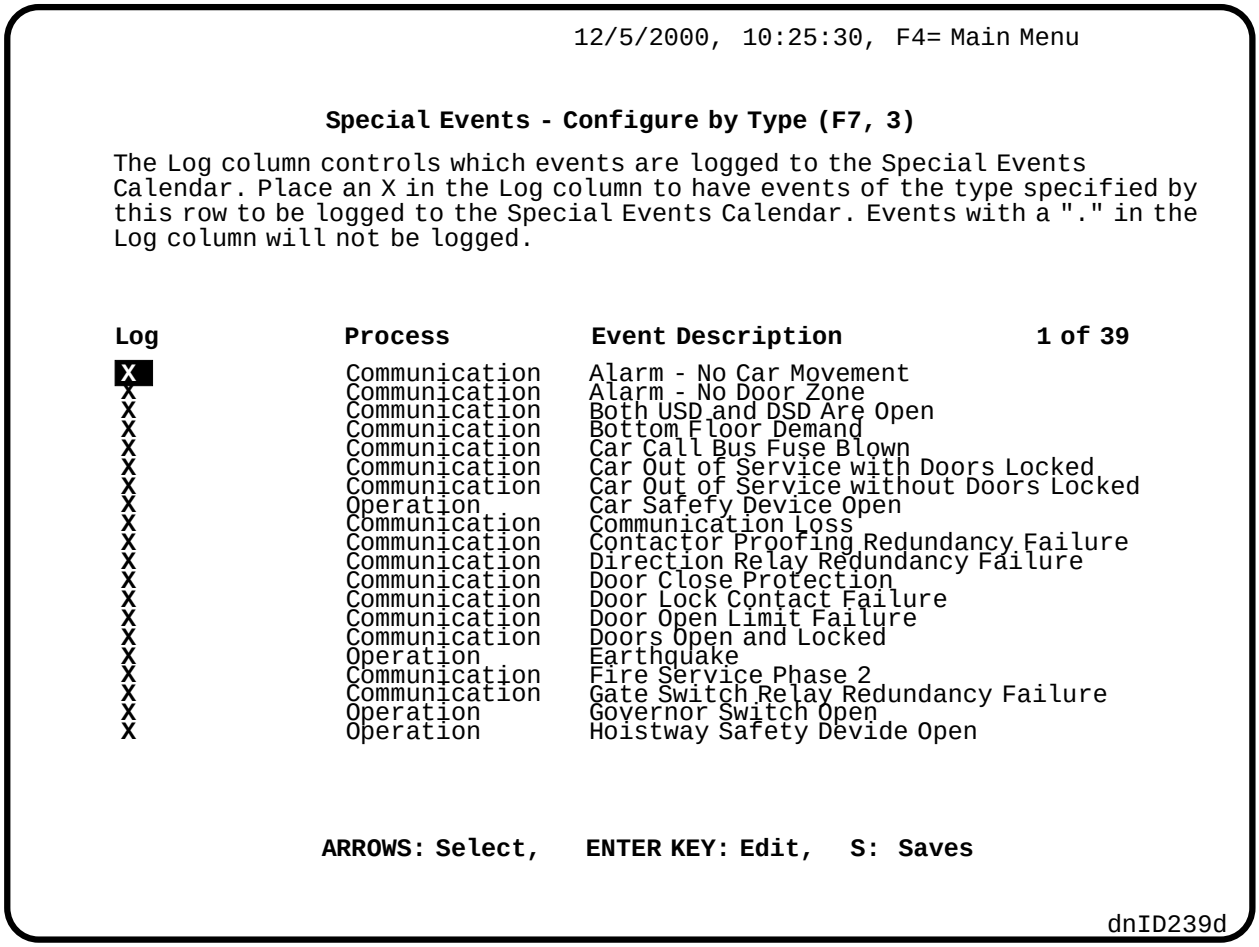
While in the Special Event Calendar Menu (F7) screen is displayed, if the 2 key is pressed, the message **`Delete All Events? (Y/N)`** is displayed. Press Y to clear the Special Events Calendar of all events.

4.5.3 SPECIAL EVENTS - CONFIGURE BY TYPE

In order to aid in troubleshooting, the list of events which are logged to the Special Events Calendar can be configured based on the event type.

While in the Special Event Calendar Menu (F7) screen is displayed, press the 3 key to access the Special Events - Configure by Type (F7, 3) screen (see Figure 4.17). The ***Log*** column controls which events are logged to the Special Events Calendar Fault Log. Place an 'X' in this column if you want the event type listed in the selected row to be logged to the Special Events Calendar.

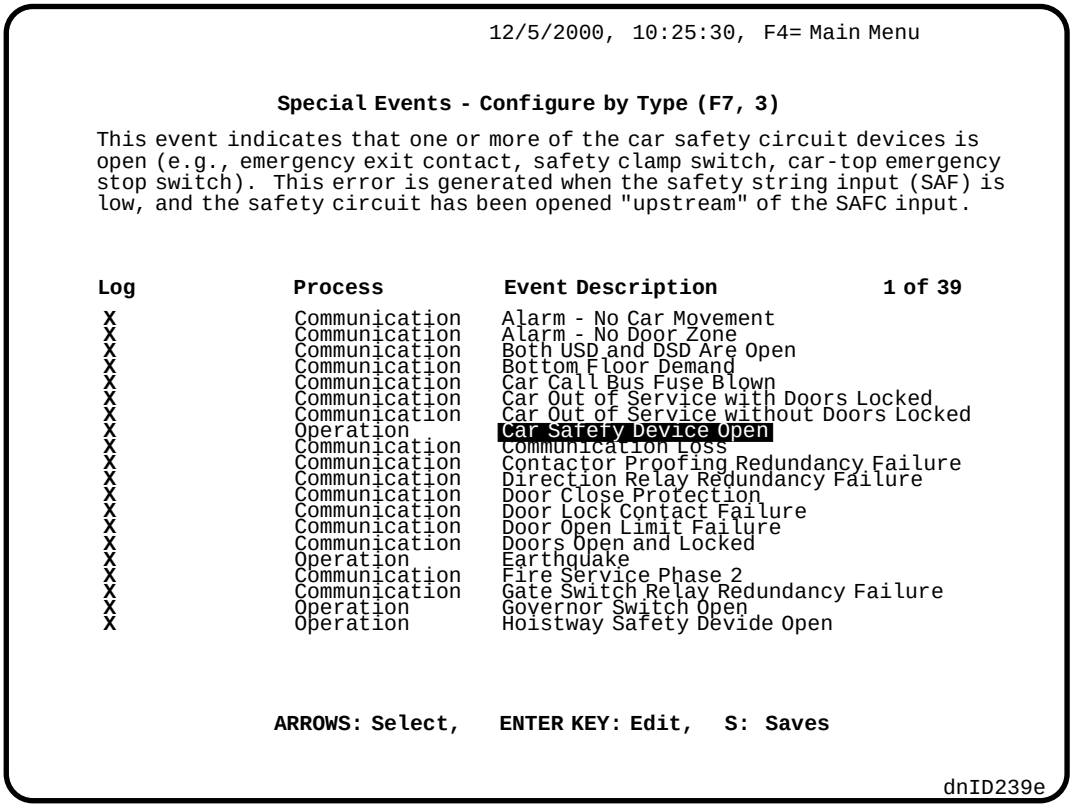
FIGURE 4.17 Special Events - Configure by Type (F7, 3) screen



4.5.4 SPECIAL EVENT DESCRIPTIONS

When the Event Description is highlighted, a description of the event type is displayed above the column headings (see Figure 4.18). The *Status and Error Messages Table* in the Controller Installation Manual provides a complete listing of events. The event messages that are logged to the Special Event Calendar are shown with SEC in the *Location* column.

FIGURE 4.18 Special Events - Configure by Type - Event Description (F7, 3) screen



4.5.5 REPORTING SPECIAL EVENTS TO A CENTRAL MONITORING SYSTEM (CMS)

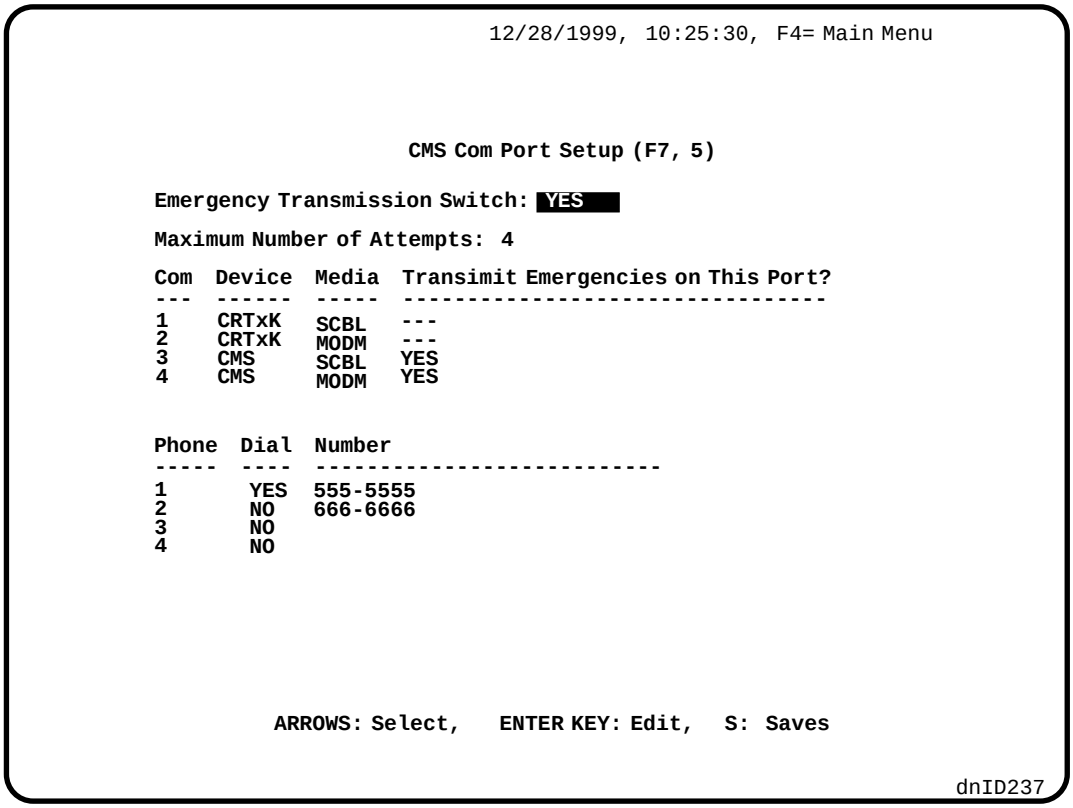
IMC-SCR controllers can be programmed to call a computer at a remote location when specific events, logged to the Special Events Calendar, occur. The specific events which will cause the controller to report the event are programmed from the Configure by Type (F7,3) screen.

If the controller is equipped with CMS, place an 'X' in the ***CMS*** column if you want the controller to call a remote PC running CMS, Central Monitoring System for Windows software to report this type of event. In order to place an 'X' in the CMS column, there must also be an 'X' in the Log column for that type of event.

CMS COM PORT SETUP

The CMS Com Port Setup (F7, 5) screen is used to set the com ports to be used to transmit emergency information to a remote PC running CMS. From the Special Events Calendar Menu (F7) screen press 5 to display the CMS Com Port Setup screen (see Figure 4.19).

FIGURE 4.19 CMS Com Port Setup (F7, 5) Screen



Emergency Transmission Switch - Set to ON to transmit emergency messages to a remote PC running CMS software.

Maximum Number of Attempts - Set to the number of times the system should attempt to send each emergency message via modem to a remote PC running CMS software. If all attempts fail, the system will stop sending after this number of tries until a new CMS connection is established or another Emergency Event occurs.

Com, Device, Media - These are the current communication port settings. These settings are programmed using the Computer Swing Panel. Refer to Section 1.7.1 *Verifying / Programming the COM Port Settings on Swing Panel Controllers* for instructions on viewing and changing the controller Communication Port settings. The *Device* must be set to *PC* for transmitting emergency messages to a PC running CMS software. When Device is set to PC on the Swing Panel, the CMS Com Port Setup (F7, 5) screen will show CMS in the Device column.

NOTE: If *Media* = MODM, additional setup may be required using the Modem Setup (F1, 9) screen. The default settings will work for most standard modems.

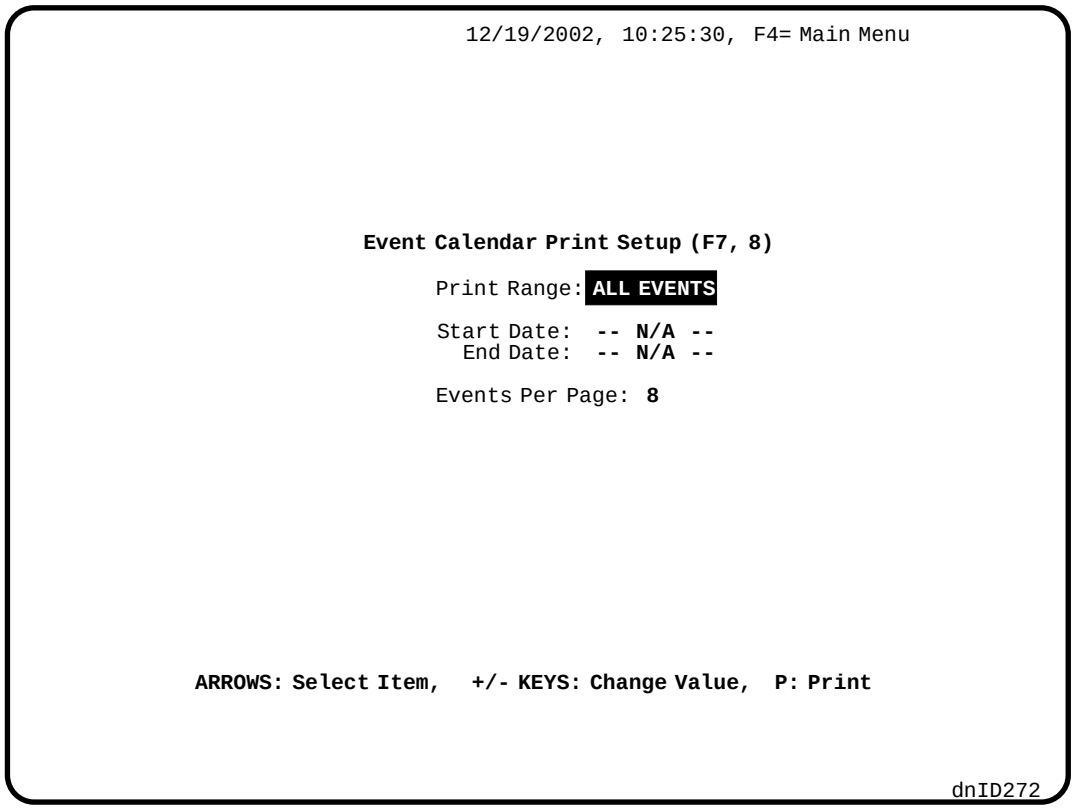
Transmit Emergencies on this Port? - Set to YES to transmit emergency messages on this port.

Phone, Dial, Number - Set *Dial* to YES and enter the phone number(s) to be dialed to send emergency messages via a modem. The phone number(s) will only be dialed if at least one com port is programmed for *Device* = PC (F7, 5 screen shows CMS in the Device column) and *Media* = MODM and *Transmit Emergencies on This Port* = YES.

4.5.6 PRINTING THE EVENTS LOG

Special Events Calendar entries can be printed using the event Calendar Print Setup (F7, 8) screen. You can print all of the available events or choose a range of dates using the Start Date and End Date entry fields.

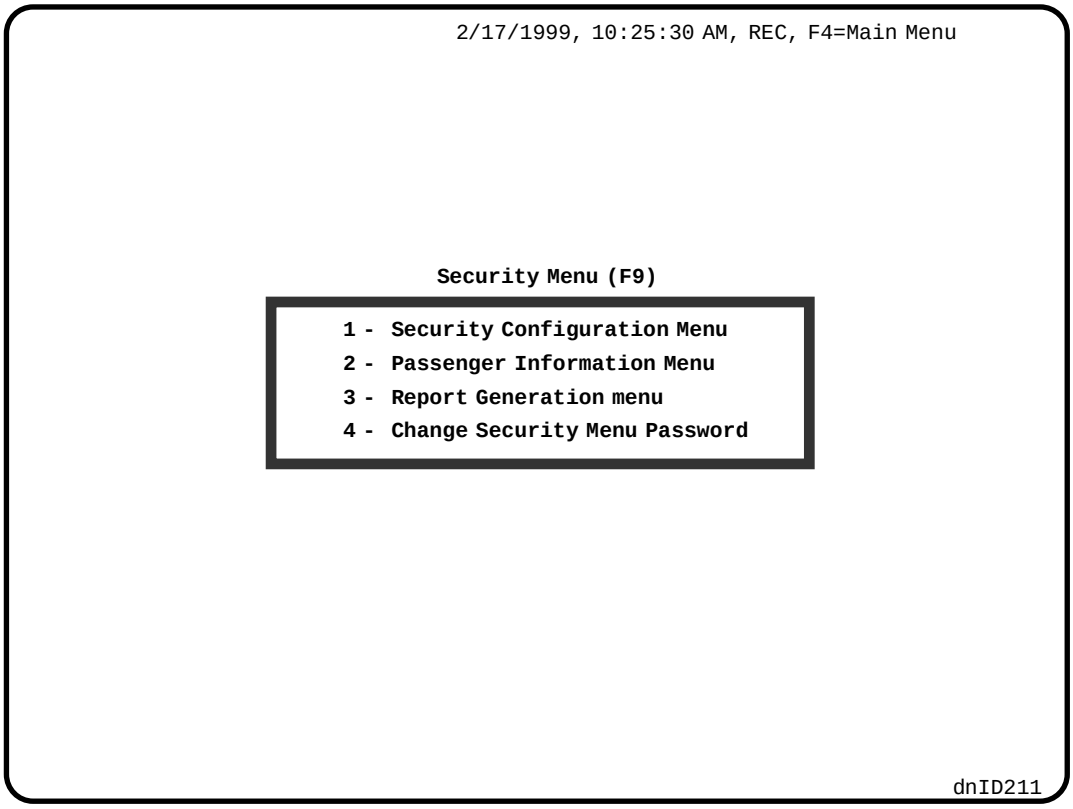
FIGURE 4.20 Events Log - Print Events (F7, 8) screen



4.6 SECURITY MENU (F9)

The Security Menu option (F9) allows you to program the elevator security parameters. Please refer to the Elevator Security User's Guide, MCE part #42-02-S024 for detailed information.

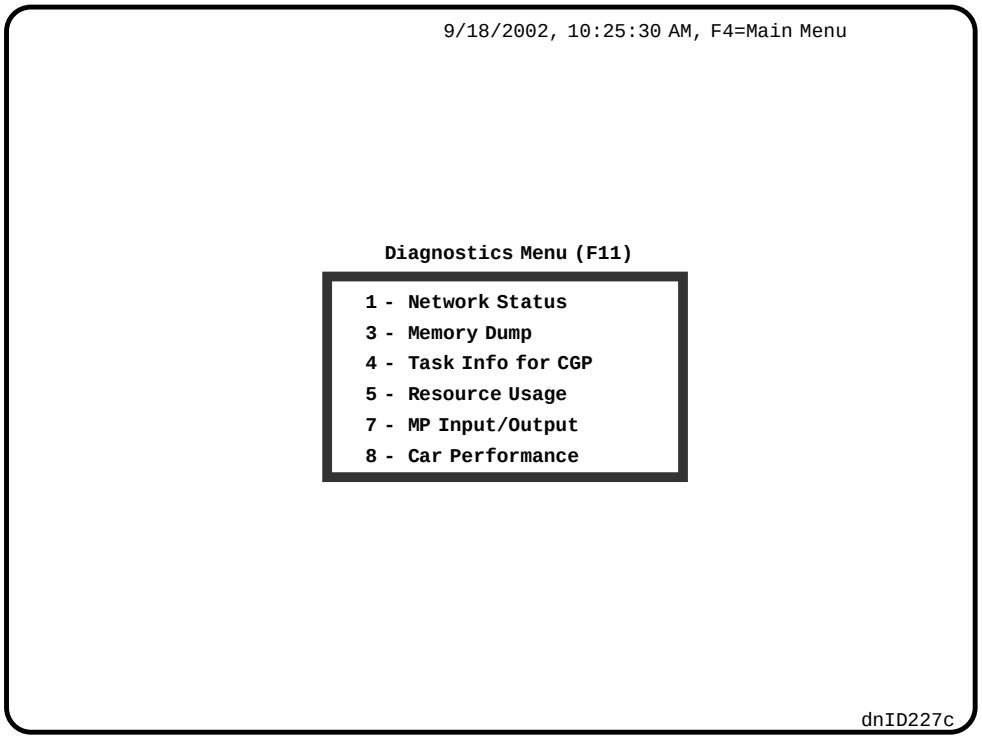
FIGURE 4.21 Security Menu (F9) screen



4.7 DIAGNOSTICS MENU (F11)

System diagnostics are available using the CRT terminal with Release 4 Communication board software. The diagnostics accessed via the Diagnostics Menu (F11) screen (Figure 4.21)

FIGURE 4.22 Diagnostics Menu (F11) screen



4.7.1 NETWORK STATUS - (see Figure 4.23) The status of communication between the car controller and the Group Supervisor can be verified using the Network Status (F11, 1) screen. A Success Rate of less than 100% indicates possible improper termination of the High-Speed Serial Communication Link. Proper termination is achieved by installing or removing shunts on jumpers JP1 and JP2 on the MC-RS Communication Interface boards at the ends of the communication chain while observing the Success Rate percentage for each local Car. The goal is to achieve 100% Success Rate for each car, or the highest percentage possible. This diagnostic screen is also available on the M3 Group Supervisor (see Section 3.9.2 *Using the Network Status Diagnostics Screen* in the M3 Group Supervisor manual, part #42-02-G004)

4.7.2 MEMORY DUMP - (screen not shown) This diagnostic screen shows the status of memory locations within the controller's computers. MCE Technical Support personnel may request information from this screen while troubleshooting a problem.

4.7.3 TASK INFO FOR CGP - (screen not shown) This diagnostic screen shows the status of various tasks performed by the MC-CGP-4(8) Communication Processor Board. MCE Technical Support personnel may request information from this screen while troubleshooting a problem.

4.7.4 RESOURCE USAGE - (screen not shown) This diagnostic screen shows resource usage in the MC-CGP-4(8) Communication Processor Board. MCE Technical Support personnel may request information from this screen while troubleshooting a problem.

4.7.5 MP INPUT / OUTPUT - (see Figure 4.23) This diagnostic screen shows the status of many of the MP Input and Output flags (not available on Hydraulic Controllers).

FIGURE 4.23 Network Status (F11, 1) screen

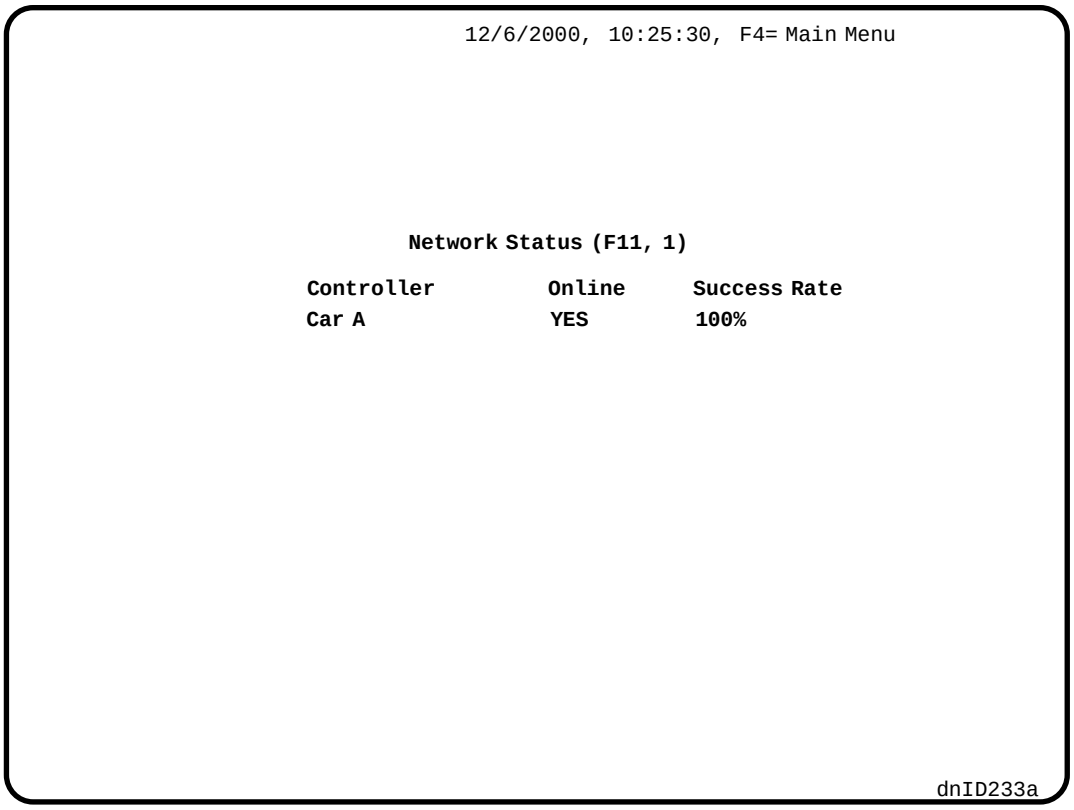


FIGURE 4.24 MP Input/Output (F11, 7) screen

7/19/2000, 10:25:30 AM, F4=Main Menu

MP Diagnostic Input/Output Flags

20	DOLM	PHE	DZ	DOL	DBC	SE	GEU	GED
21		DC	UC	CC			DHO	DOI
22	DCF	DCP	DOF	LOT		HTC	CCT	SDT
23			HSEL	CSB	DCC	NUDG		DSHT
24	INT	FRA	FCS	FRS	DNS	UPS	STD	STU
25			HLW	HLI			**FWI**	
26	LFP	UFP						
27			EQI	IND	IN		DEL	YSIM
28	LLW	DLK		DZORDZ			PK	LLI
29	DNDO	LD		DDP	UPDO	LU		UDP
2A	DMD	DCB	UCB	CCB	DMU	DCA	UCA	CCA
2B	TOS	MLT	PSTX	MGR	H	REL	DSH	RUN
2C		STC	SAF	**HCR**	**HCDX**	**CCD**	ISV	ISRT
2D					**FRM**			FRC
2E	SD	SDA	DSD	BFD	SU	SUA	USD	TFD
2F	HLD		EQA	ATSF		ECRN	CD	EPR

dnID265

4.7.6 CAR PERFORMANCE - The Car Performance Graph (F11, 8) screen and the Car Performance Report (F11, 8, H) screen provide car performance data including:

- Door Close Time (DCT)
- Door Close & Car Start Time (DT)
- Run Time (RT)
- Door Open Time (DOT)
- Performance Time (PT)
- Cycle Time (CT)
- Average Short Door Dwell Time (SDT)
- Average Car Call Dwell Time (CCT)
- Average Hall Call Dwell Time (HCT)

FIGURE 4.25 Car Performance Graph (F11, 8) screen

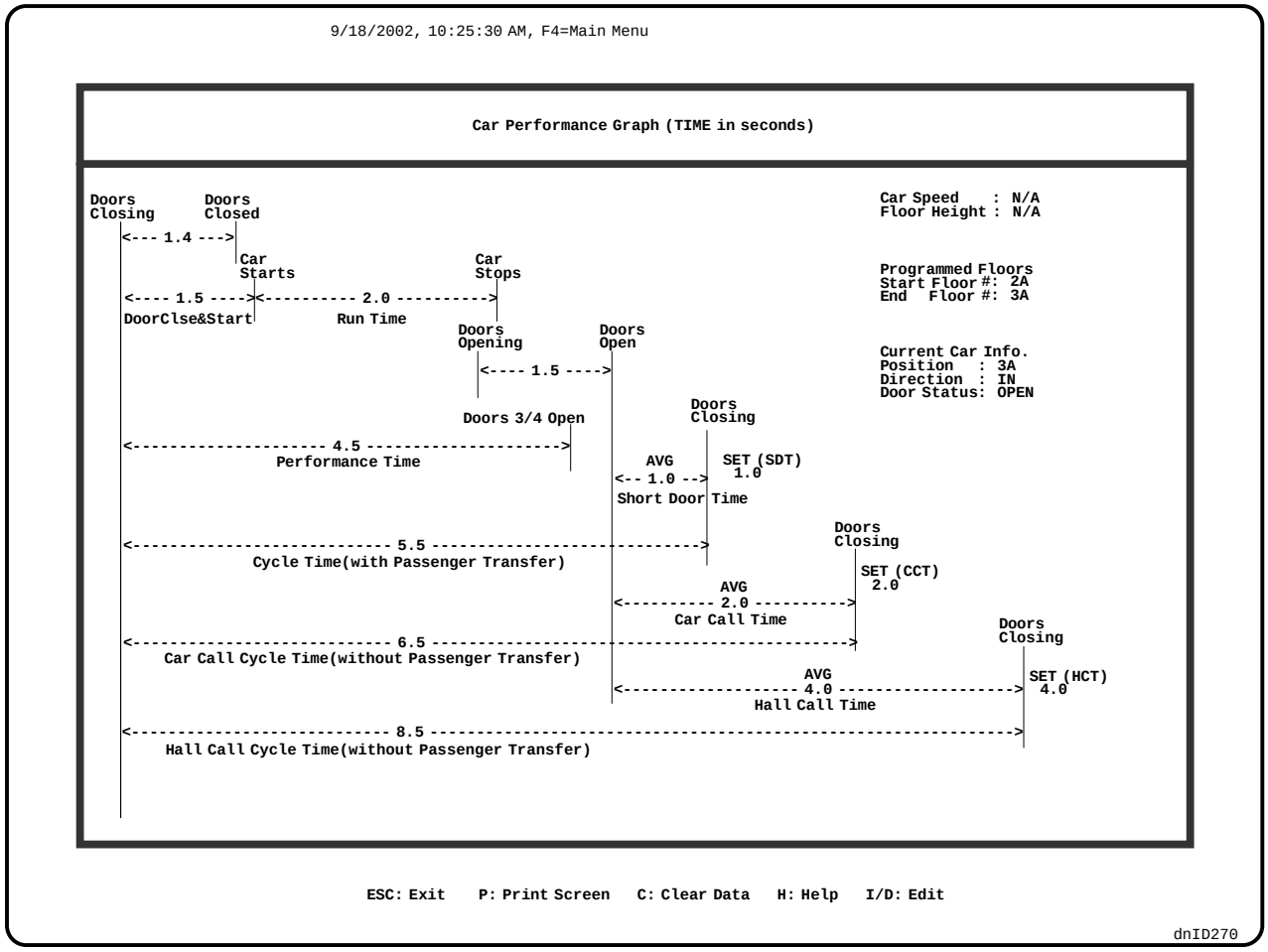
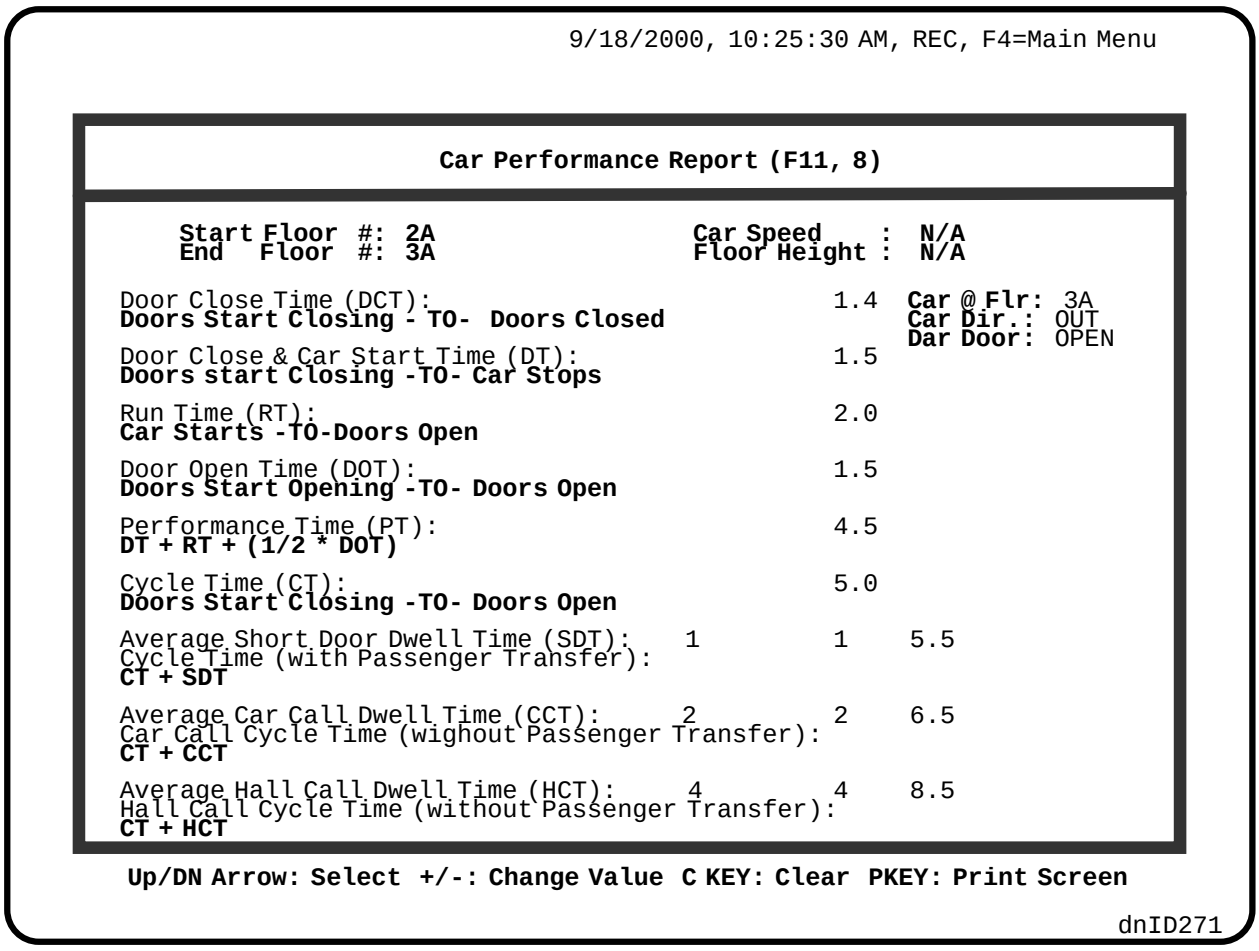


FIGURE 4.26 Car Performance Report (F11, 8, H) screen



SECTION 5
TROUBLESHOOTING

5.0 GENERAL INFORMATION

This section provides information to guide the user through installation problems relating to the CRT terminal, terminal emulator and other peripheral devices. Once the CRT terminal is online, use the terminal's diagnostic screens in conjunction with the controller manual and Enhanced Onboard Diagnostics to troubleshoot the elevator system.

5.1 CRT TERMINAL / TERMINAL EMULATOR

The easiest and quickest method of resolving most display problems with CRT terminals and terminal emulators is to default the setup parameters and perform the setup instructions (see Section 2).

TABLE 5.1 Troubleshooting CRT Terminal / Terminal Emulator

TROUBLE	POSSIBLE CAUSE
Screen is blank	• Check the contrast and brightness controls located on the lower right front corner of a monochrome CRT terminal or the right side of a color CRT terminal.
CRT terminal receives data but it is not legible.	• Verify that the CRT terminal baud rate is programmed correctly. Refer to Section 2.
CRT terminal is functioning but does not respond to some or all function keys.	• Check the function key definitions in the Terminal Setup Mode. Function key's F1 through F12 and Shift F1 through Shift F8 should be blank. Check the problem function key or keys to make sure they are blank. **NOTE:** Sometimes the function key may look blank but there may be some hidden control characters, to delete these press "Home" while the appropriate function key is highlighted. Refer to Section 2 CRT Terminal Setup.
CRT terminal is functioning but does not respond to the appropriate key strokes (i.e. "1," "2," "P," etc...).	• The keyboard may be locked. Check the upper left corner of the CRT terminal screen for the word LOCK. If it appears locked you can unlock it by pressing the "Sys Req" or "Select" key. The CRT terminal should now respond to those keys.
CRT terminal worked properly until moved from group to car controller.	• The MC-CGP group controller modifies the operation of escape and some function keys which interfere with the CRT terminal operation when connected to some car controllers. Default the CRT terminal as described on the quick setup card.
Strange characters (@,#,$) appear on the hoistway screen of the monochrome CRT terminal.	• After powering up the CRT terminal, always press F5 or Shift F5 (Group MC-CGP controller) from the main menu to initialize the terminal setup.

5.2 CONNECTED TO CONTROLLER VIA LINE DRIVERS

TABLE 5.2 Troubleshooting CRT Terminal with Line Drivers

TROUBLE	POSSIBLE SOLUTION
Line Driver: CRT terminal receives data; but, function keys have no effect.	• Check the receptacle line driver terminals labeled "TD+" and "TD-" in the machine room and ensure they are connected to terminals "RD+" and "RD-" of the plug line driver located on the back of the remote terminal. Make sure "TD+" is connected to "RD+" and "TD-" is connected to "RD-." • If connections are correct, then check the continuity of the communication cable. To do this, remove the twisted pair from their terminals at both locations, then tie them together at one end and check the continuity at the other. If continuity exists, then it may be a bad line driver.
CRT terminal does not receive data and the line driver LEDs are not flashing.	• Check the contrast and brightness controls which are located on the lower right front edge of the CRT terminal housing. If nothing shows up on the remote screen, turn the display off, wait 5 seconds, turn it back on and press a function key. If nothing happens, check the receptacle line driver terminals labeled "RD+" and "RD-" in the machine room making sure they are connected to terminals "TD+" and "TD-" respectively of the plug line driver located on the back of the remote terminal as outlined above.

5.3 MODEM

TABLE 5.3 Troubleshooting CRT Terminal with Modems

TROUBLE	POSSIBLE SOLUTION
The machine room modem is not answering an incoming call.	• Verify that you are calling the correct phone number. • Verify that the modem is turned on, and that the modem's auto answer light is on. • Verify that the dedicated phone line is plugged into the modem's line jack.
The machine room modem's auto answer light is off.	• Verify that the controller COM port is programmed for a modem device. Refer to Section 1.7 of this manual and Section 5 of your controller's installation manual. • Verify that the controller COM port is connected to the modem with the appropriate cable. • Verify that the communication interface board jumpers, or switches, are set correctly. Refer to Section 1.2 (MC-RS see Table 1.2, MC-PA see Table 1.3, MC-MRS, MC-ARS see Tables 1.4 and 1.5).
There is no activity on the remote modem.	• Verify that the modem has power. • Verify that the modem is connected to the CRT terminal.
Remote modem connects to machine room modem, but data is not received, and pressing CRT terminal keys has no effect.	• Make sure the machine room modem is installed correctly. See "Installation with Modems" Section 1.4. • Verify that the Controller's COM port is set to MODEM and CRTMK . See Section 1.7. • Verify the jumpers on the MC-RS, MC-PA, MC-MRS, or MC-ARS boards are set correctly (Section 1.2). • Verify the color or monochrome CRT terminal setup (see Section 2). • Verify modem-to-controller cable is correct (see Table 1.1). • The modem's dialing profile could be incorrect. Enter the following initialization string: "AT E0L0V1 &D0 &K4 S95=0 DT"
When dialing a number the modem responds with "NO DIALTONE".	• Verify that the dedicated phone line is plugged into the modem's line jack.

TABLE 5.3 Troubleshooting CRT Terminal with Modems (Continued)

When dialing a number from the CRT terminal using the Function Keys, Shift Function Keys or manually, the modem responds with an "ERROR."	• The data entered for the function key should be printed on the top line of the display CRT terminal. Verify that the data you see matches those given in the operation instructions given in Section 2.6. If it is correct, then the modem may not support MNP (Microcom Networking Protocol) commands. Look in the modem's manual to see if it supports MNP commands, if not enter the following instead: "AT E0L0V1 DT " • Refer to the ESTABLISHING MODEM COMMUNICATION operating instructions in Section 2.6.

5.4 CRT PRINTER

TABLE 5.4 Troubleshooting CRT Terminal with Printer

TROUBLE	POSSIBLE SOLUTION
CRT terminal displays "Printer buffer in use" and ">AUX" is flashing in the upper left corner but the printer is not responding.	• Verify that the CRT terminal to printer connection is correct. • Verify that the printer is not out of paper. • If you are using a monochrome CRT terminal, check the printer parameter in the CRT terminal setup mode; it should be set to "serial" if you are using a serial printer or "parallel" if you are using a parallel printer. Refer to Section 2.
The ON LINE lamp, on the printer, is *OFF*.	• If the ON LINE lamp is off or blinking, try pressing the ON LINE button. Also consult the Operation or Maintenance sections in the printer manual.
No printer activity when you press the <Print Screen> key.	• Verify that the printer is connected and turned ON. • Verify that the CRT terminal Print Screen key is programmed correctly. Refer to Section 2. Also, verify that the terminal parameters are set as shown in Section 2.
No printer activity when you press 'P' in the printer menu.	• Verify that the printer is connected and turned ON. • Verify that the CRT terminal is programmed correctly. Refer to Section 2.

5.5 DATA SWITCH BOX APPLICATIONS (LINE DRIVER)

TABLE 5.5 Troubleshooting CRT Terminal with Data Switch Applications

TROUBLE	POSSIBLE SOLUTION
One or both of the elevator systems are not displayed on the CRT terminal.	• With the hoods removed from the switch box connectors, test the continuity from the plug line driver terminals (located on the port labeled "Modem," "Main" or "PORT A" on the back of the CRT terminal) to the corresponding connector as indicated by the setting on the front of the switch box. Make sure that terminal "TD+" of the terminal plug line driver has continuity to pin 1 of each of the connectors (when the switch box is set for that input), that terminal "TD-" has continuity to pin 2, that terminal "RD+" has continuity to pin 3, and terminal "RD-" to pin 4. If continuity is good then the problem may reside in the machine room receptacle line driver terminals. If continuity fails then recheck the cabling from the machine room–to the switch box–to the terminal.
Corrupted data appears on the CRT terminal screen when switching from one elevator system to another.	• Switching the data switch box from one elevator system to another may cause noise and voltage spikes. It is advisable to switch from one elevator system to another only when the screen is done drawing, and to reinitialize the CRT terminal whenever this problem occurs. If reinitialization fails, turn OFF the CRT terminal, wait for a few seconds, and then turn it back ON. Be sure to reinitialize the CRT terminal by pressing the function F5 key or Shift F5 key (Group CGP).

APPENDIX

APPENDIX A CONNECTORS

FIGURE A.1 C-CRT / PA Cable Drawing

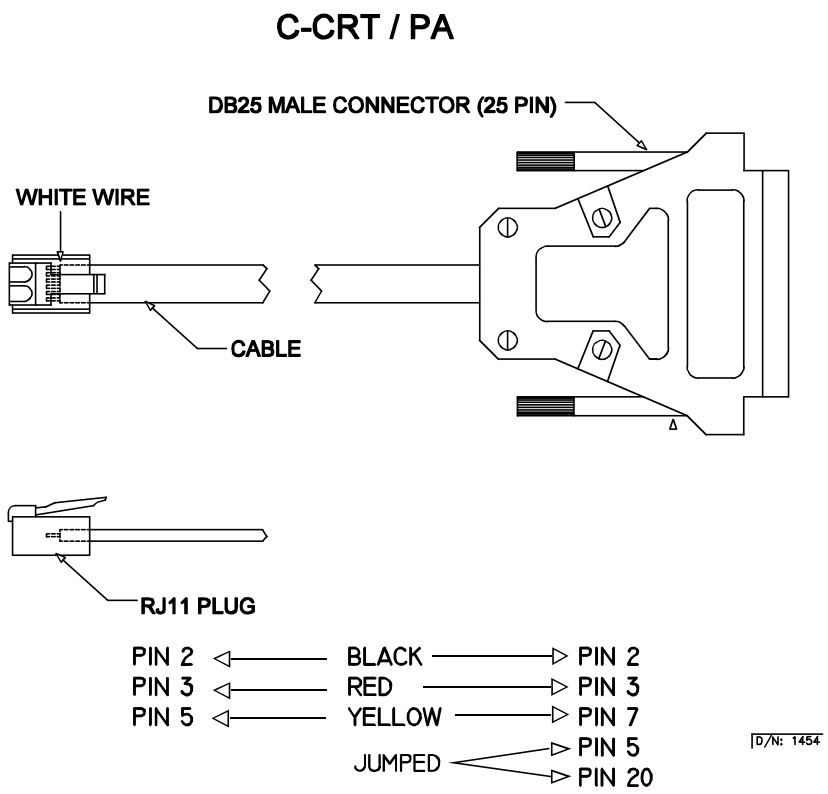


FIGURE A.2 C-CRT / MRS-n Cable Drawing

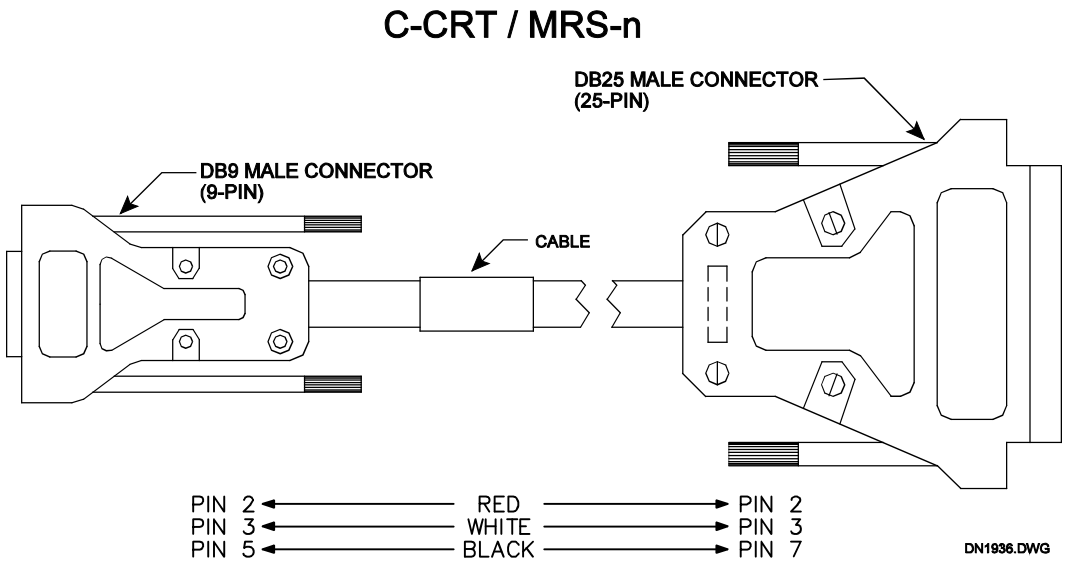


FIGURE A.3 C-LD / PA-n Cable Drawing

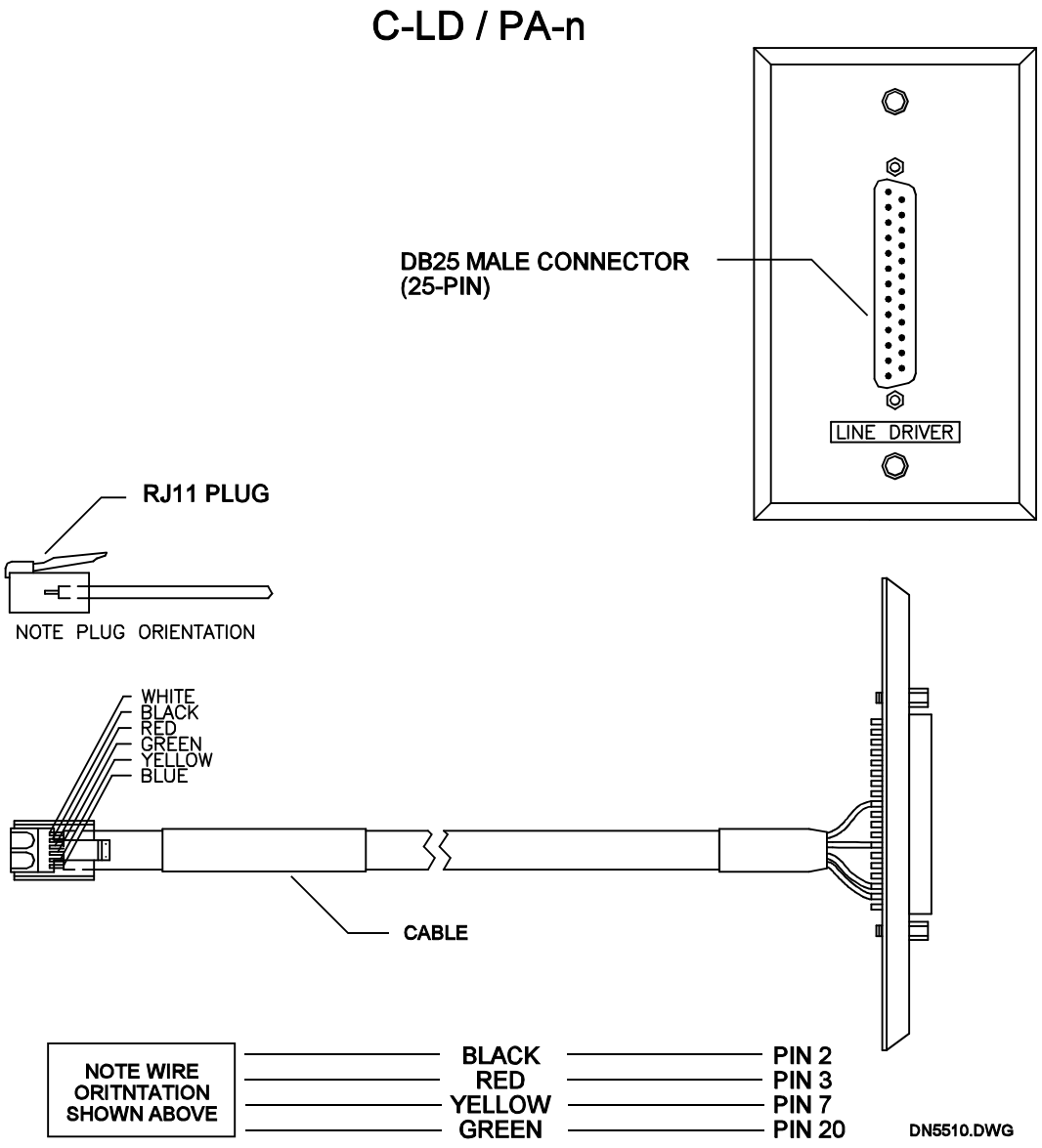


FIGURE A.4 C-LD / MRS-n Cable Drawing

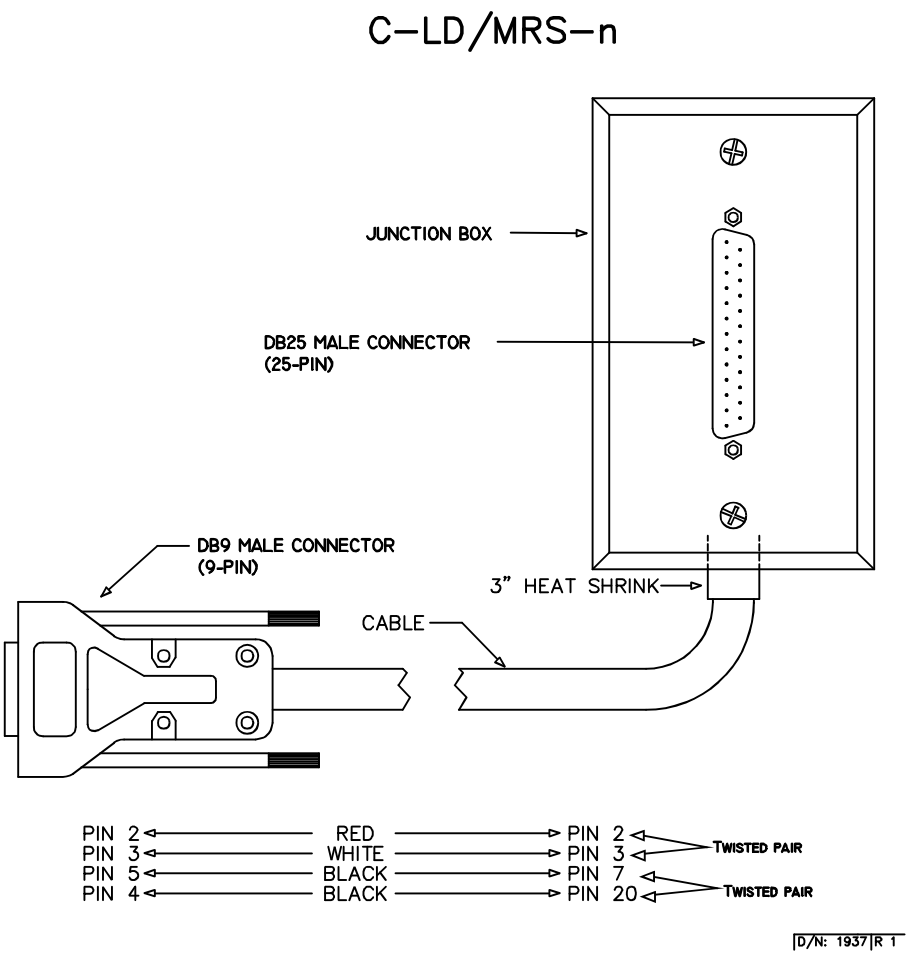


FIGURE A.5 C-MD / MRS-n Cable Drawing

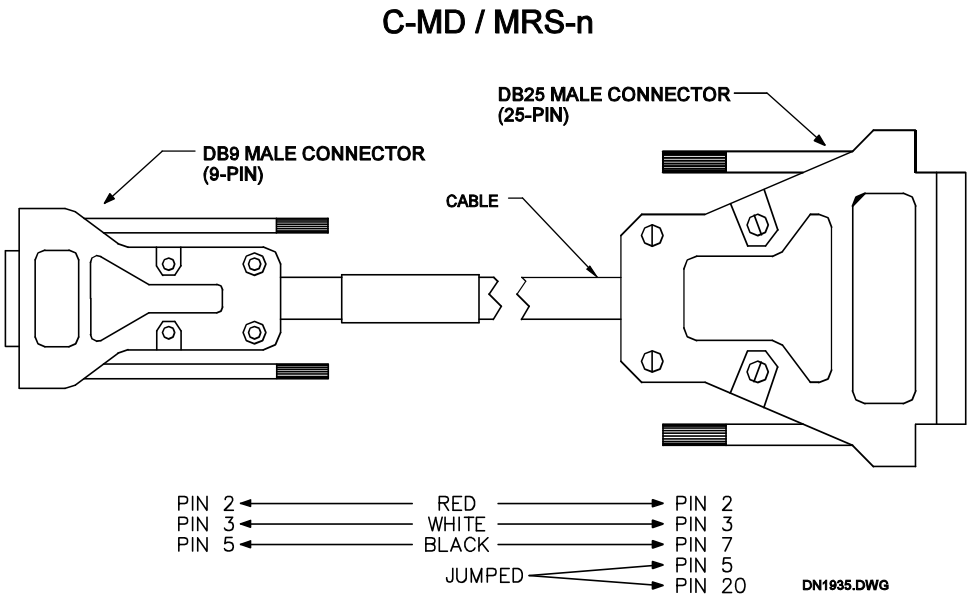


FIGURE A.6 C-CRT / ND-n Cable Drawing

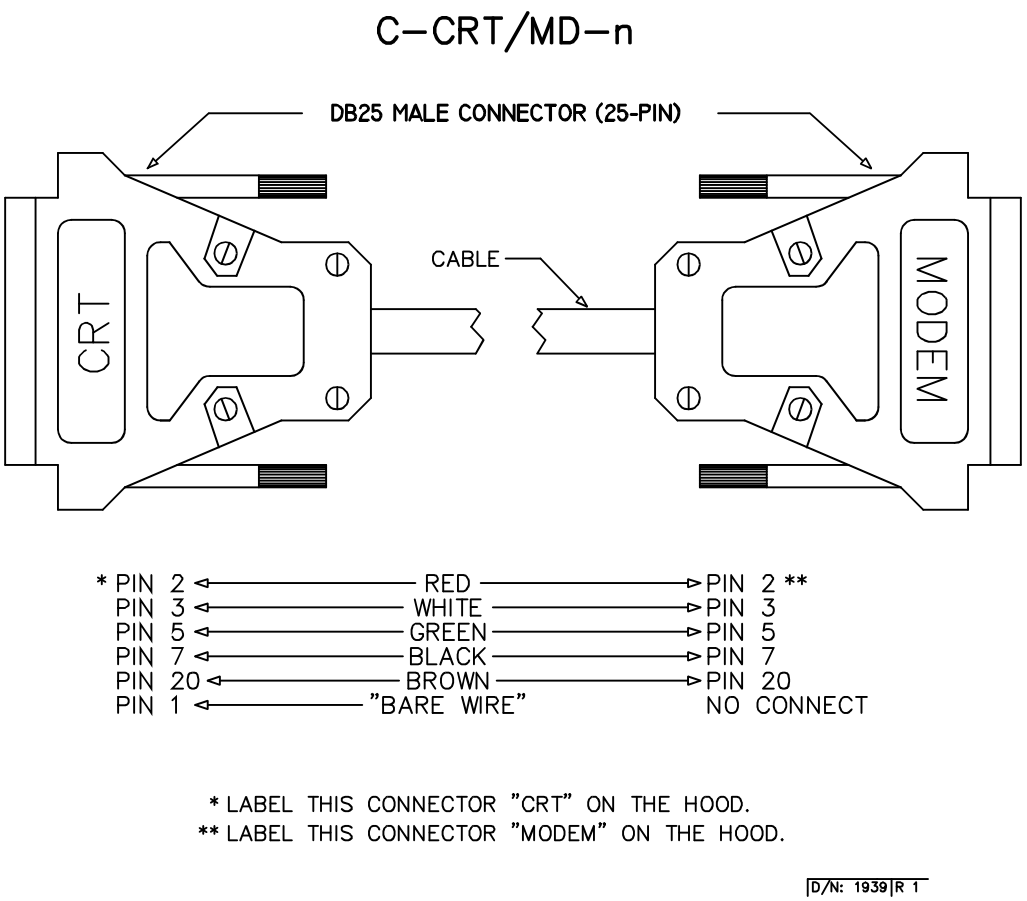


FIGURE A.7 C-MD / PCAT-n Cable Drawing

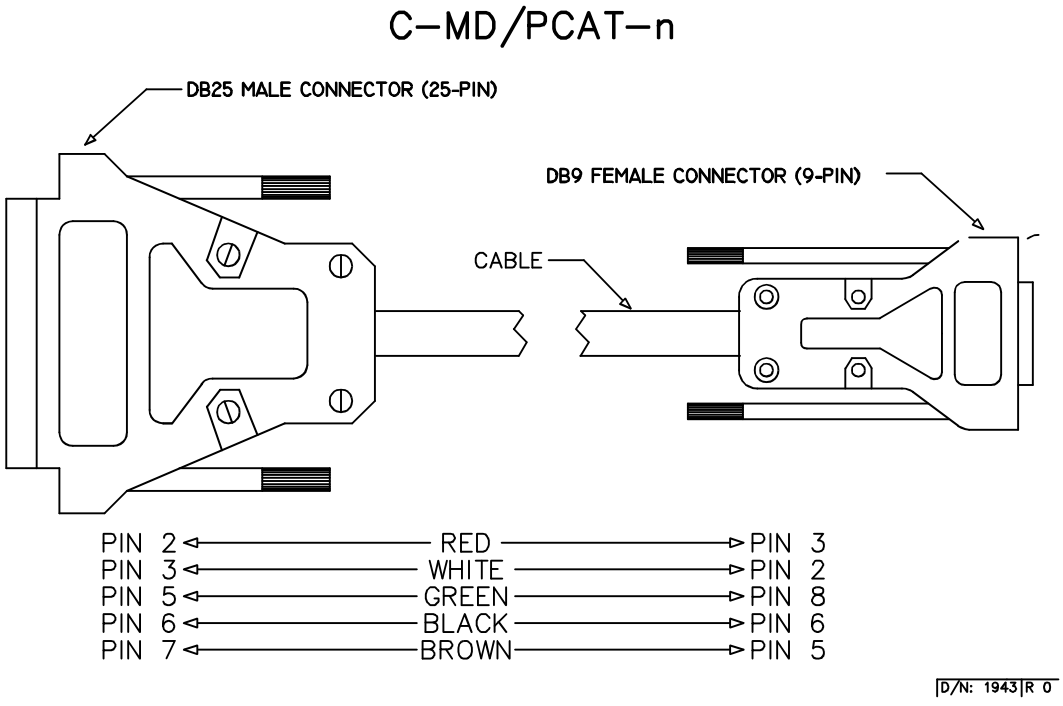


FIGURE A.8 C-CRT / PRC-n Cable Drawing

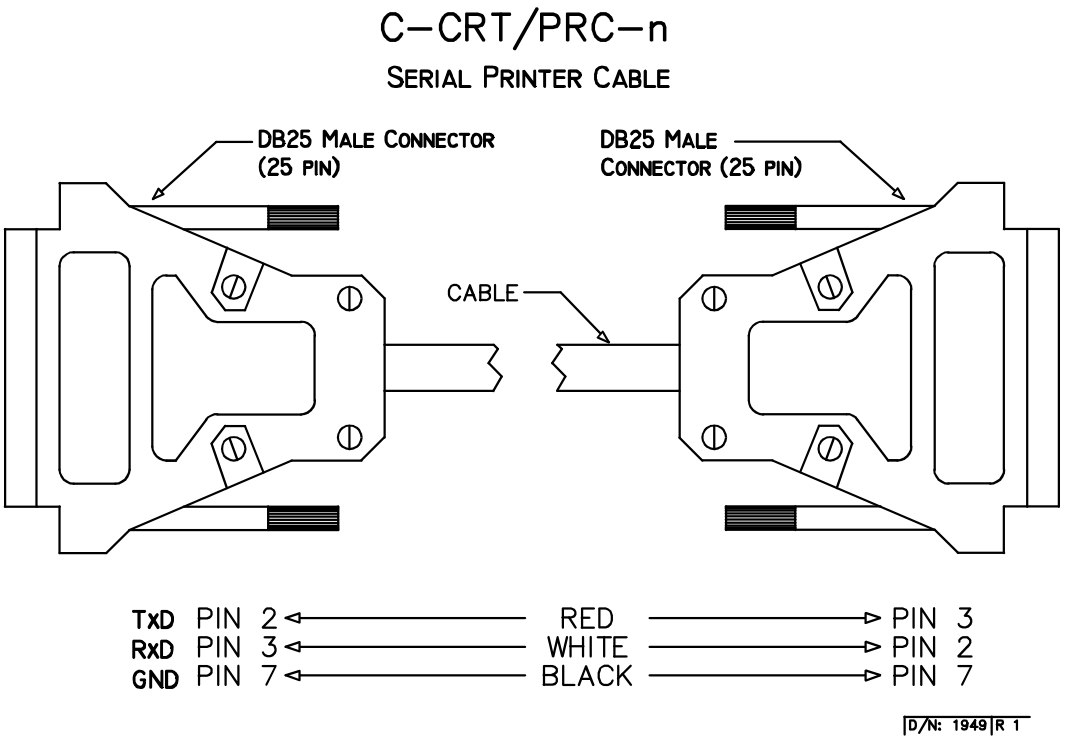


FIGURE A.9 C-RS-422-n Cable Drawing

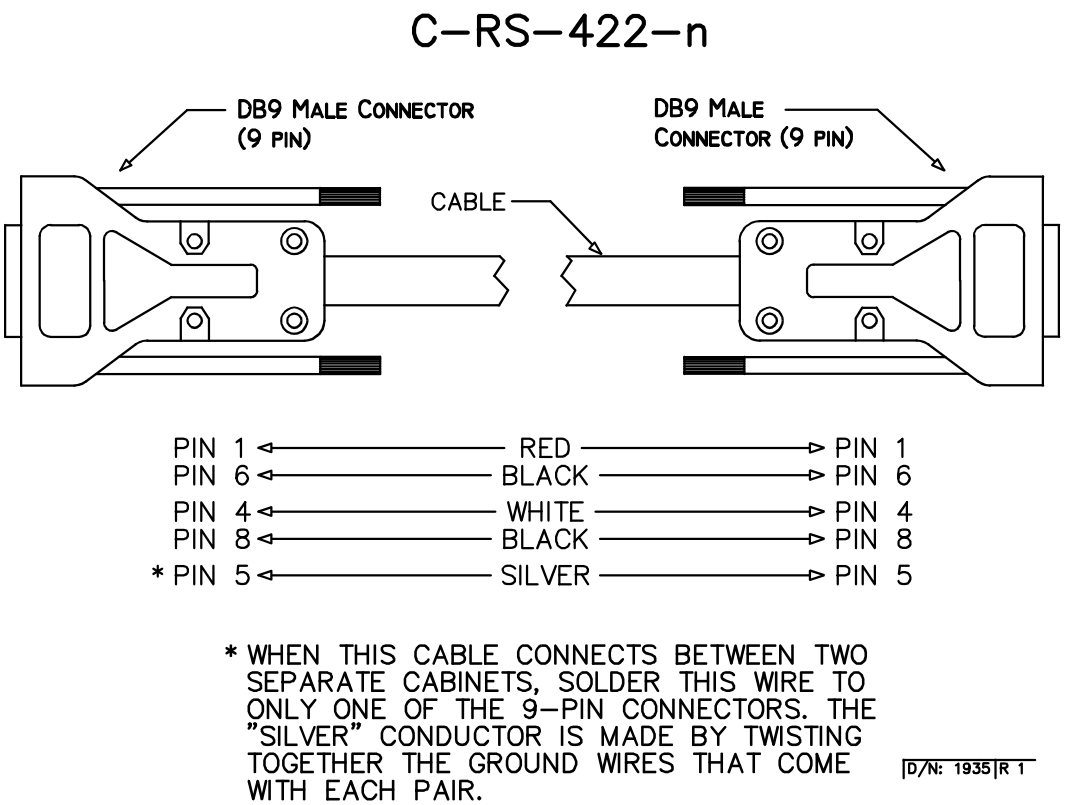
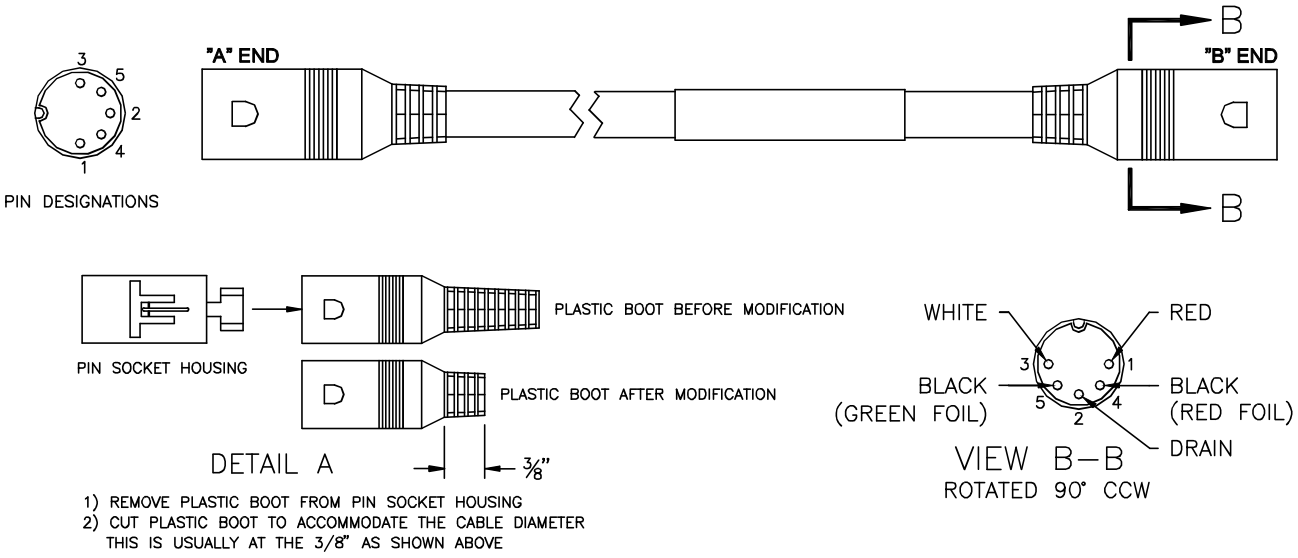


FIGURE A.10 C-PCA / PCA-n Cable Drawing

C-PCA / PCA-n



CABLE TO CONNECTOR ASSEMBLY TABLE		
"A" END PIN DESIGNATION	CABLE WIRE COLOR / DESIGNATION	"B" END PIN DESIGNATION
1	RED FROM RED FOIL PAIR	1
4	BLACK FROM RED FOIL PAIR	4
2	DRAIN WIRES FROM RED & GREEN FOIL PAIRS	2
5	BLACK FROM GREEN FOIL PAIR	5
3	WHITE FROM GREEN FOIL PAIR	3

DN5453.DWG

FIGURE A.11 C-LD-PCAT-n Cable Drawing

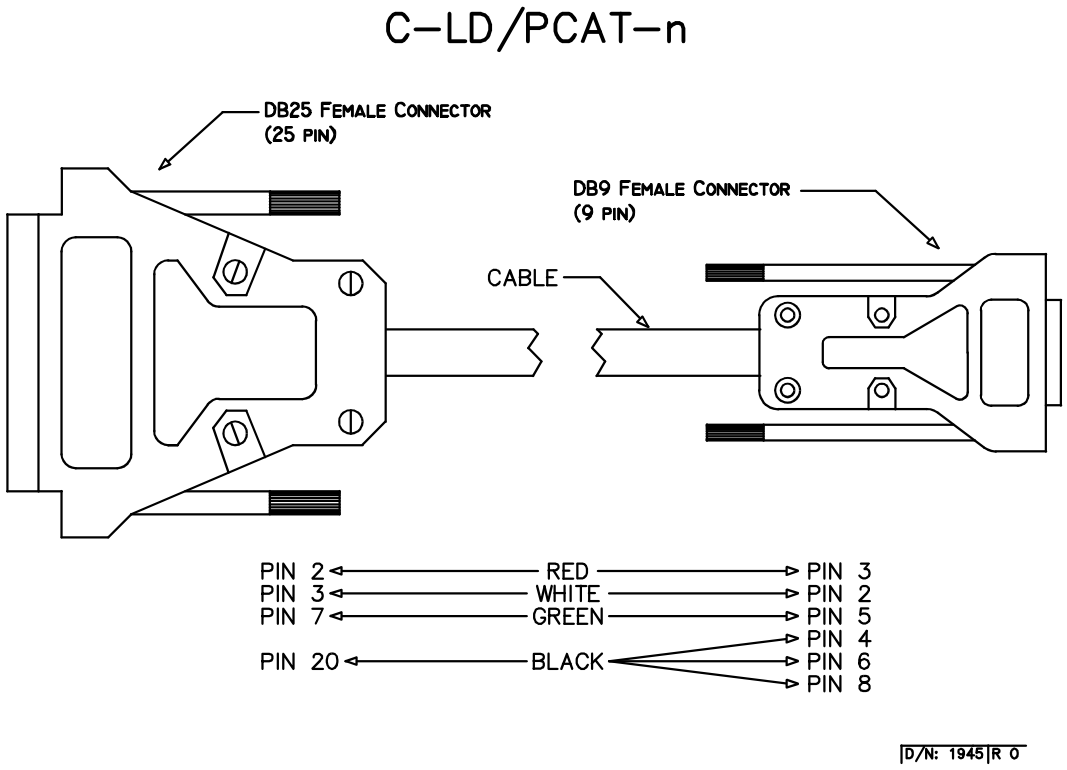
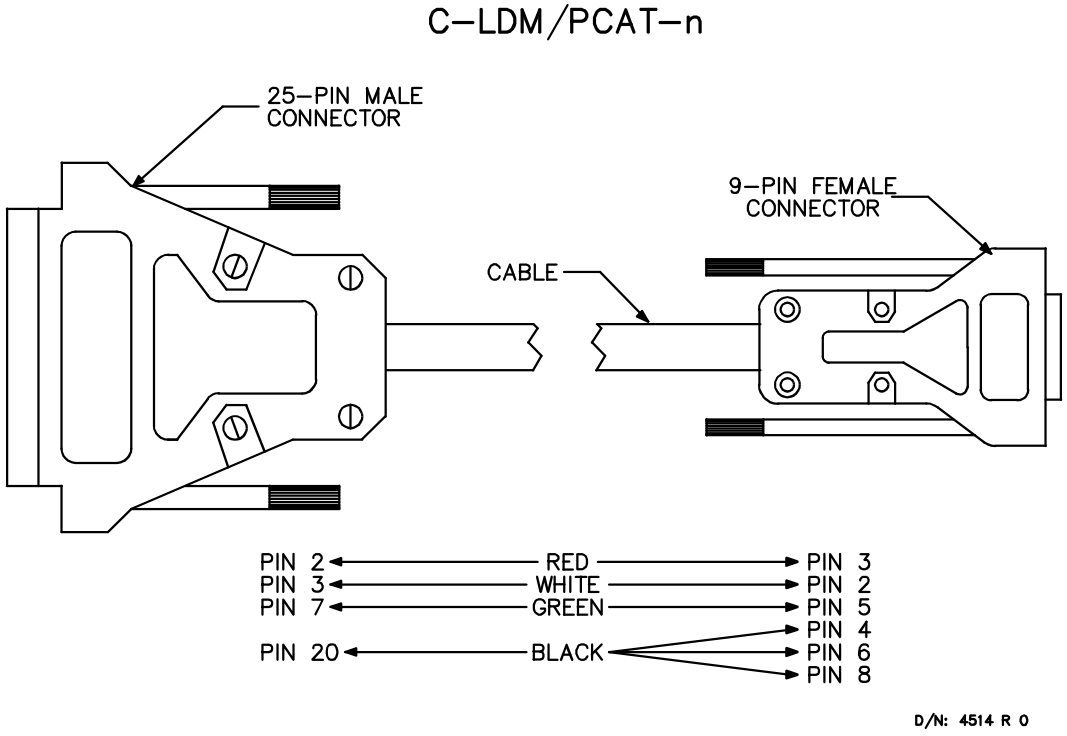


FIGURE A.12 C-LDM / PCAT-n Cable Drawing



APPENDIX B
CHANGING THE MC-PA BOARD EPROM

With directions from MCE Technical Support, a PC board, EPROMs or Microcontroller may need to be reinstalled in the field. Great care should be taken when changing any of these items. The EPROM stores the computer program, the microcontroller both stores and executes the program and all three are subject to damage by ESD (see CAUTION). These instructions should be followed step-by-step.

CAUTION: Components on the PC boards can be damaged by ESD. Install a grounding strap on your wrist and connect it to ground before handling the PC boards.

B.1 INSTRUCTIONS FOR CHANGING THE MC-PA BOARD EPROM

1. Turn OFF the main power and verify that no lights are operating on the MC-PA board.

2. The EPROM will be installed into the socket marked ROM (see Figure B.1 for the location of the ROM socket on the MC-PA board).

3. Use a small, thin bladed screwdriver. Place the tip of the screwdriver between the EPROM chip and the socket (NOT between the socket and the board). Gently pry the existing EPROM chip out of the socket. Work slowly, taking care not to bend the last leads to come out of the socket. If they become bent, carefully straighten them with a pair of needle-nose pliers.

4. Place the new EPROM chip lightly (do not plug it in yet) into the socket. Check to make sure that all of the pins are aligned with their corresponding holes in the socket. The notch on the chip should be toward the top of the board (see Figure B.1).

CAUTION: **It is important not to plug the chip in backwards. Make sure that the notch in the chip is facing the top of the board.**

5. Push the new chip firmly into the socket, making sure that none of the pins are bent during the insertion. Inspect the chip to verify that none of the pins are bent outward or under the chip.

NOTE: It is important to default (clear) the RAM after changing the EPROM. Any passwords, security configurations, job name and number and custom modem settings will be lost and must be re-entered.

Also, if you are using CMS (Central Monitoring System) software and Emergency reporting is being used, it is important to connect to this job and reconfigure the Controller's CMS Parameters.

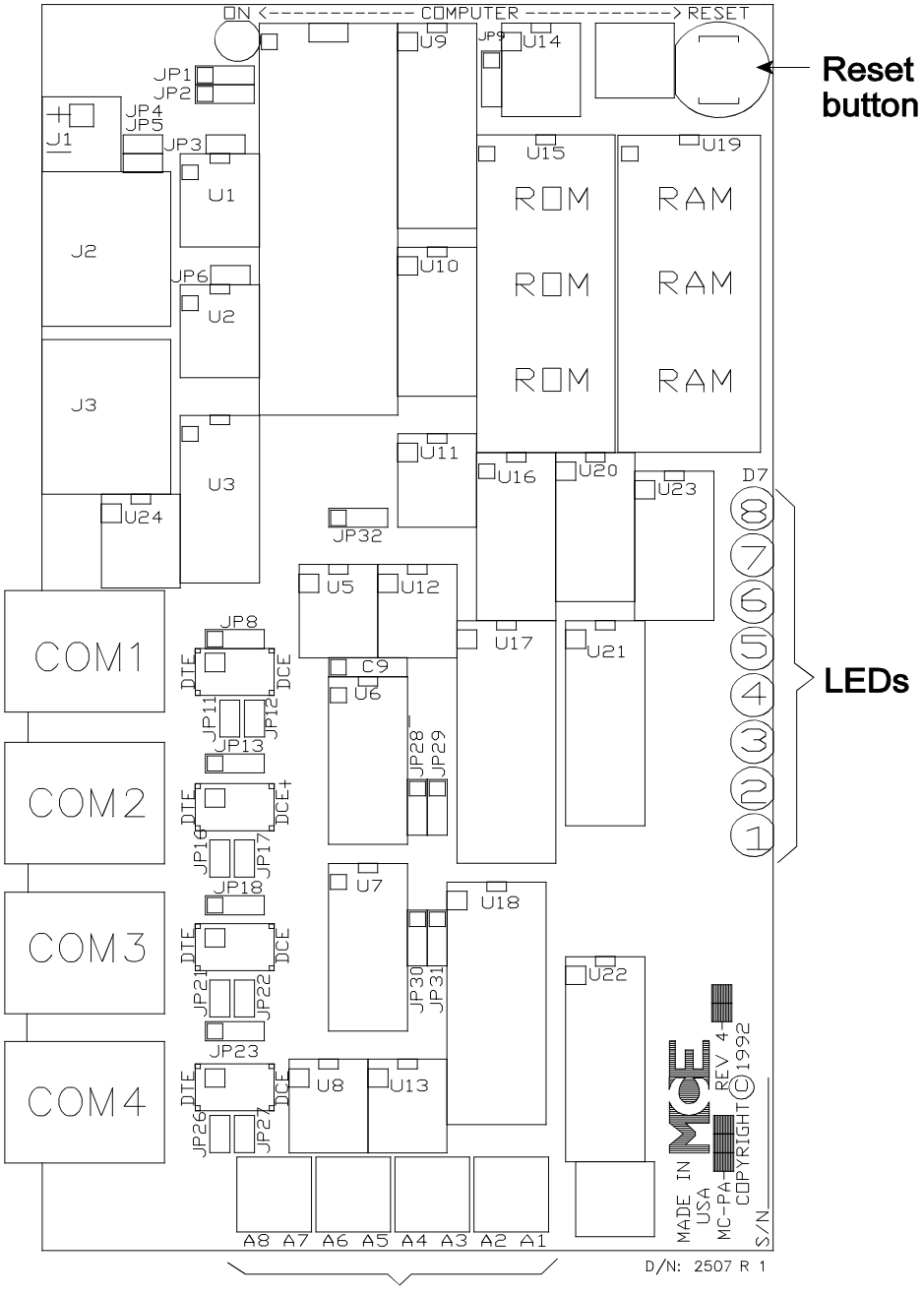
If security is being used, it will need to be reconfigured using either the CRT or SIS software.

6. Turn ON the system. The COMPUTER ON light should be ON steady (should not be blinking) and all the LEDs on the side of the board should be ON. If the COMPUTER ON light is blinking, the chip may not have been installed properly. Repeat steps 1 to 6.

7. To default (clear) the RAM, set dip switches A1, A3, A5 and A7 to the up (ON) position (see Figure B.1). Then depress the **Reset** button on the MC-PA board.

8. Wait at least 20 seconds for the ON light to turn back ON, then set all dip switches A1 thru A8 to the down (OFF) position. The LEDs on the side of the board should start scanning from bottom to top.

FIGURE B.1 MC-PA Peripherals Adapter Board



B.2 SETTING MODEM DEFAULTS ON THE MC-PA BOARD

If the Modem is not working, first verify that the COM port is programmed properly. Next verify that the DCE/DTE switch is set to DTE.

Procedure for most modems - To set the default modem string for all modems (except the Zoom Faxmodem model 3049c), perform the following procedure:

1. Set the MC-PA dip switches (see Figure B.1) as follows:
   - Set dip switches A5 thru A8 to the up (on) position.
   - Leave dip switches A1 thru A4 in the down (off) position.

2. Press the Reset button on the MC-PA. When the MC-PA's vertical LEDs turn ON, the modem string has been reset to its defaults.

3. Return the A5 thru A8 switches to the down position.

Procedure for Zoom Faxmodem model 3049c - MC-PA custom software ver. 3.62 C5 and MC-PA software ver 3.63 and above have the following option to set the modem string for compatibility with the Zoom Faxmodem model 3049c:

1. Set the MC-PA dip switches (see Figure B.1) as follows:
   - Set dip switches A1 and A5 thru A8 to the up (on) position.
   - Leave dip switches A2 thru A4 in the down (off) position.

2. Press the Reset button on the MC-PA. When the MC-PA's vertical LEDs turn ON, the modem string has been reset to its defaults.

3. Return the A1 thru A8 switches to the down position.

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