

Entraguard VFD Series
Telephone Entry System
Installation and Programming Manual
Revision E

MARLEE ELECTRONICS CORPORATION
ENTRY CONTROL SYSTEMS

MARLEE ELECTRONICS CORPORATION

Entraguard VFD Series

Telephone Entry System

FOR USE WITH THE FOLLOWING MODELS

**VFD SERIES VERSION 2.50
P.C. SOFTWARE VERSION 9.0**

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1.0 Introduction

1.1 About Your Marlee System

The Entraguard VFD unit is a full featured door entry system that is intended to provide secure access control to buildings.

The basic configuration controls a door strike based on dial up tenant release code or keypad access codes entered at the Entraguard unit. The basic configuration provides the following features:

- The capacity to retain up to 2000 Tenant listings with associated phone numbers and access codes.
- The ability for the visitor to locate the tenant name via a scrolling electronic display and have the tenant automatically dialed.
- The ability for a visitor to have the tenant automatically dialed by entering a 2, 3, or 4 digit keypad dial code.
- The ability for a tenant to gain door access by entering a 4 digit keypad access code at the unit.
- The ability to display pre-programmed instructions or messages on the unit's electronic display.
- The ability to operate with a dedicated telephone line or shared line.
- Hands free speaker phone operation.

The Entraguard VFD unit also provides the following additional features:

- The capability to add a postal lock provision.
- The capability to add up to 2 card readers for direct door access.
- The ability to add a printer for recording door access activity.
- The ability to control elevator access within the building.
- An optional relay control for video cameras, motion detectors, auxiliary lighting, etc.
- TDD capability
- The ability to store door access activity information for later remote access.

The Entraguard VFD provides two modes for programming Tenant lists and the unit's operating parameters. They are:

- Local programming directly at the unit using the keypad and electronic display.
- Remote programming by a PC computer system via the telephone.

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The Entraguard VFD unit is comprised of the following components:

- Micro-processor based electronic PCB with integral Modem that controls the unit's operation.
- 4 line vacuum fluorescent display
- 16 button keypad
- Speaker
- Microphone
- Front panel illumination
- Postal lock mounting
- Environmentally resistant case with key lock

1.2 Getting Started

This is a comprehensive installation and programming manual for the Entraguard VFD system. The manual is divided into the following main sections:

Section 2.0 - Installation

This section provides detailed installation and wiring instructions for all VFD Models in standard applications. In addition, installation and wiring information is provided for the various options available with the Entraguard unit. For specialized applications, refer to the specified Appendix or contact your Marlee Distributor.

Section 3.0 - System Setup, Checkout and Diagnostics

This section provides a detailed description of how to use the diagnostic program to test for proper operation of the Entraguard VFD unit after initial installation or for later servicing. The diagnostic test program is available as an EPROM for insertion into the unit's electronic PC board.

Section 4.0 - Local Programming

This section provides step-by-step instructions for entry of Tenant Listings and System Parameters at the unit via the keypad and electronic display. Although the term *programming* is used throughout this manual, setting up your Entraguard VFD data base requires no programming experience or training.

Tenant List editing allows the user to add, delete or modify tenant names and access codes stored in non-volatile memory. Parameter file editing allows the installer to modify system parameters such as talk time, release codes, strike relay parameters, etc.

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Section 5.0 - Remote Programming

This section provides step-by-step instructions for using Marlee's PC Computer based Entraguard Programming System (EPS). The user installs the Windows based, EPS program on a typical PC Computer system. The EPS system allows the user to edit Tenant Listings and System Parameters off line and then send the modifications to the Entraguard unit via the telephone line.

The user may also retrieve the latest data base information from the non-volatile memory located in the unit. Although the term *programming* is also used in this section, operating the Windows based EPS software requires no programming experience or training.

Section 6.0 - System Operations

This section provides information on the basic operation of the Entraguard unit. This includes power-up procedures, as well as typical use of the Entraguard unit by both tenants and visitors.

1.3 Product Information

The information in this manual is current at this writing. However, as with any technology, efforts to improve and upgrade software and hardware continue. Updates will be furnished as required to support already installed Entraguard VFD units.

Questions or comments about installing or programming the Entraguard VFD unit should be directed to your authorized MARLEE ELECTRONICS Distributor.

For additional information contact Keri Systems at:

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2.0 Installation

2.1 Warning and Cautions

The following **Warnings and Cautions** should be observed prior to installing or servicing the Entraguard VFD unit:

1) Make sure the power supply to the unit is turned **OFF** when connecting or disconnecting any wiring and installing or removing electronic components.

Note: HIGH SHOCK HAZARD exists when power is **ON**.

2) Minimize potential static damage to the Entraguard electronic components by taking the following steps:

- Minimize handling of components labeled as static-sensitive.
- Transport and store components labeled as static-sensitive in their original containers or attached to conductive foam.
- Discharge body static by wearing a wrist strap while handling static sensitive components.
- Handle components by the body, not by the components leads. Handle boards by their edges.
- Use special anti-static tools when possible.

3) When replacing integrated circuits on a board, refer to the specific cautions and suggestions provided in Appendix X of this manual.

4) When servicing the Entraguard unit do not allow dirt, dust, or liquids to contaminate the internal components and circuit board while the Front Panel is open.

5) The Entraguard unit contains non-volatile memory that preserves the programmed Tenant List and Parameter File during power supply disruptions. Interruption of power to the unit will cause the Entraguard unit to reset, perform self test operations and alphabetically sort the Tenant List before returning to normal operation. The reset operation can take up to 2 minutes depending on the number of tenants.

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2.2 General Installation Requirements

The Entraguard VFD unit is typically located at a door entrance of the building. The following guidelines should be followed when choosing a location for the unit:

- Locate the Entraguard unit as near as possible to the controlled door.
- Although the unit is resistant to environmental factors, it should be protected from direct rain and snow. Environmental considerations should also be taken into account for the visitor using it.
- Although the electronic display and keypad can be read without additional lighting display, place in an area with ample light for the visitor.
- In desert areas, protection from direct sunlight is desirable. In cold climates try to prevent freezing.

The following general guidelines should be followed for mounting the unit:

- The unit should be mounted on a rigid wall. If necessary, provide added framing or a backing plate when mounting to paneled or dry walled areas.
- Typical mounting hardware is #10 x 1-1/2" wood screws in studs or 3/16" bolts or drive studs into masonry. The more secure the mounting, the better the unit will be able to withstand abuse or tampering by vandals.

2.3 System Mounting

The required tools and hardware for mounting the Entraguard VFD are listed in Appendix X.

2.3.1 Surface Mounting

(To be supplied)

2.3.2 Recessed Mounting

(To be supplied)

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2.4 Power Requirements

The Entraguard VFD and the door strike are powered by Class II stepdown transformers as follows:

- The Class II stepdown transformers must be connected to an unswitched (always **ON**) 120V AC circuit.
- The Entraguard unit requires a stepdown transformer that supplies 12 VAC power. The Entraguard unit should be the only load on the 12 VAC power source to avoid inadvertent power fluctuations that other equipment may cause.
- Locate the transformer as close to the unit as possible. Take care to locate and mount the stepdown transformer where it will not be accidentally unplugged.
- Similarly locate the door strike stepdown transformer close to the door strike it powers. Again take care to mount the transformer in a secure location.

Appendix X provides information on typical stepdown transformers that can be used.

2.5 Standard Installation Wiring

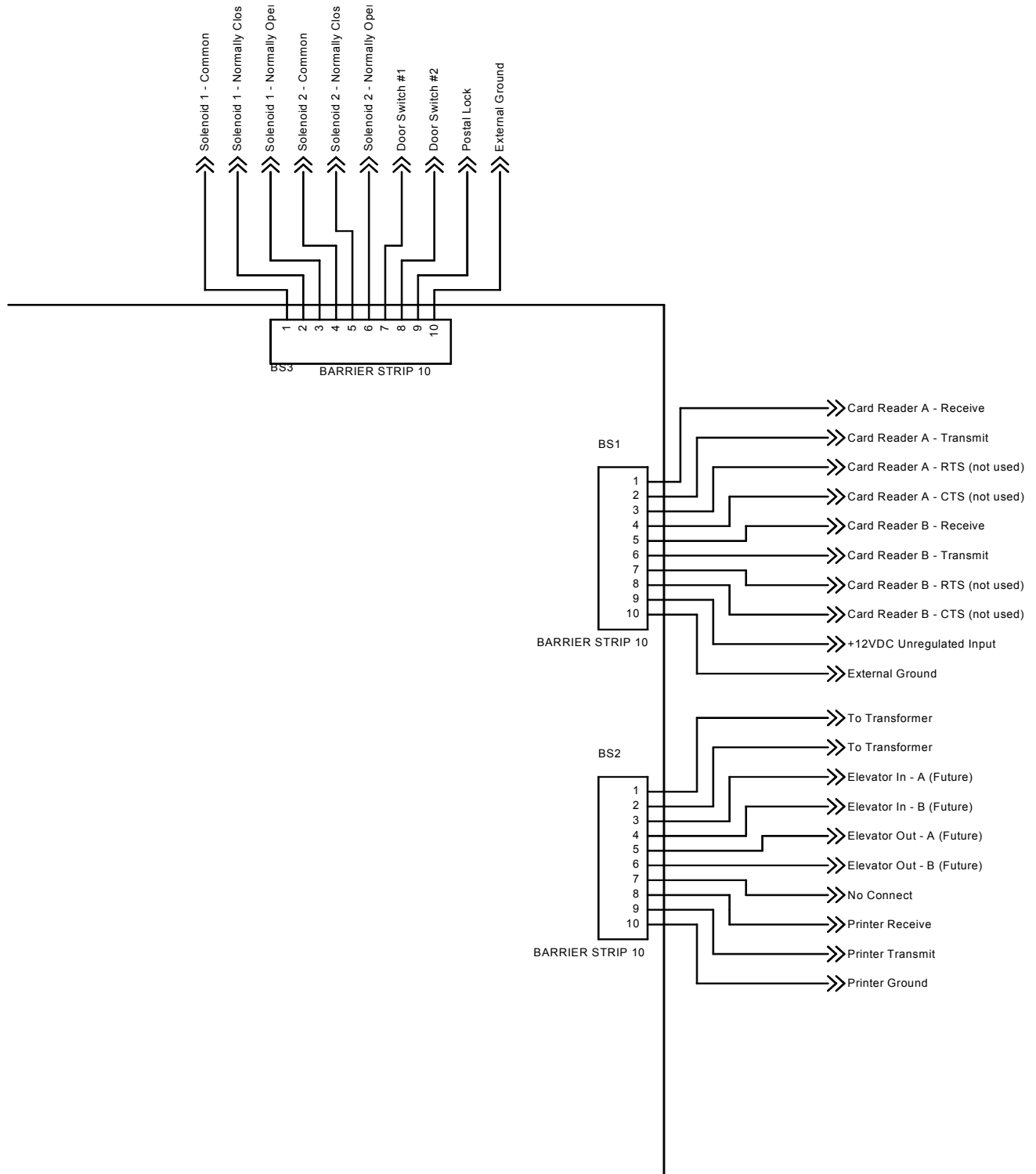
The standard Entraguard VFD installation requires a minimum of wiring during installation. The installation wiring includes:

- 12 VAC power wiring to the Entraguard unit
- Door strike wiring to the Entraguard unit
- Door switch wiring
- Telephone line wiring

The following Figure 2.5-1 defines signal names associated with each terminal of the Barrier Strips BS1, BS2 and BS3 located on the Entraguard unit's PC board. This figure is used for all installation wiring sections that follow.

The following sections detail the standard Entraguard unit wiring requirements:

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2.5.1 Power Wiring

The power wiring to the Entraguard VFD unit should be completed as follows:

- 1) Connect earth ground wire (14 gauge wire, 30 feet or less) from a cold water pipe or ground rod to the Entraguard enclosure.
- 2) Route two wires from the stepdown transformer to the VFD unit through one of the two cutouts located on the enclosure. Select the proper wire size per the wire gauge listed in Table 2.5.1-1.
- 3) Connect the two wires from the stepdown transformer to barrier strip **BS2** terminals **1** and **2**. It is recommended that all wiring be in metal conduits such as 3/4" EMT.

WARNING: Connecting the power to the wrong barrier strip terminals or connecting the unit directly to a standard 120 VAC wall outlet will cause severe damage to the unit. A 12 VAC stepdown transformer must be used.

WIRE LENGTH(FEET)	WIRE GAUGE (MIN.)
0-80'	18
81-300'	16
301-500'	14
501-800'	12

Table 2.5.1-1

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2.5.2 Strike Installation and Wiring

The Entraguard unit is designed to control a LOW voltage Class II circuit. The door jamb should be fitted with an electric strike and a Class II transformer of the same voltage to operate it.

The Entraguard unit's default parameter setting for the relays that control the strike solenoid are set up to control *Power to Unlock* with the normally open relay contacts. If reverse acting strikes are to be used (i.e. strike solenoid controlled by the normally closed relay contacts) the settings must be changed in the Relay Polarity selection (Refer to Section 4.4.5).

The following door strikes meet the 15-ohm or greater coil resistance specified for use with any Entraguard system:

Adams Rite Series 7500	24VDC Intermittent Use 12VDC Continuous Use 24VDC Continuous Use
Folger Adams	All 310 series 24VAC or DC All 310 series 12VDC All 700 series 12 or 24VDC
Trine	Only 24VAC or DC
Rofu	1505-U54-05 12VAC or DC

Signs such as *Pull to Open* should be applied to the outside of the doors. In locking one pair of double doors, be certain that the remaining movable half is wide enough to meet local fire codes.

The main access door strike should be wired to the Solenoid 1 signal terminals located on terminal strip **BS3**. These wires should also be routed through one of the two cutouts in the enclosure. It is recommended that all wiring be in metal conduits such as 3/4" EMT. Wire as follows:

- 1) For normal strike action, wire the strike to the normally open relay contacts, terminals **1** and **3**.
- 2) For reverse strike action, wire the strike to the normally closed relay contacts, terminals **1** and **2**.

Note: Use the appropriate wire gauge per Table 2.5.1-1.

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2.5.3 Door Switch Wiring

The Entraguard unit provides door switch inputs that allow the unit to detect when the door has been opened. For the main access door connect the Door Switch to door switch signals located on terminal strip **BS3** as follows.

- 1) The ground side (if identified) of the door switch monitor should be connected to barrier strip **BS3**, terminal **10**.
- 2) The other side of the door switch monitor should be connected to barrier strip **BS3**, terminal **7**.

2.5.4 Telephone Wiring

These units are supplied with an FCC approved device which allows direct connection to the telephone line. Make arrangements with the telephone company 2 to 3 weeks in advance of the planned time of installation. The installation of an RJ-11C jack should be as close to the Entraguard VFD unit as possible.

Note: When ordering the phone line, request that it be installed with *GAS DISCHARGE TUBE* lightning protection.

FCC Regulations require that all direct connections to telephone lines must be made through standard plugs and jacks as dictated by the FCC. No connections can be made to party lines or coin telephone lines. Prior to connecting your unit to the lines, you must:

- 1) Call the local phone company and inform them that an FCC registered device is to be installed. Provide them the 14 digit FCC Registration Number and the Ringer Equivalence Number.
- 2) Inform your phone company that the required connector is USOC RJ-11C.

The Entraguard unit should be connected to the telephone line as follows:

- 1) Obtain a telephone line that has an RJ-11C jack at both ends.
- 2) Insert one jack into the RJ-11 connector provided by the telephone company.
- 3) Route the telephone line through one of the two cutout in the enclosure and connect it to either of the RJ11 connectors located in the lower right corner of units PC board. Figure 2.5.4-1 illustrates the connectors' location.

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2.6 Option Installation Wiring

The Entraguard VFD provides a number of optional features including:

- Postal locks
- Card readers
- Activity log printers
- Elevator controls
- Optional relay control

The following sections describe the installation wiring for the optional features:

2.6.1 Postal Lock Installation and Wiring

At sites where the mailboxes are inside the lobby, the installer or building owner should call the local Post Office and request installation of an *Arrow Postal Lock*. This is the same lock the Post Office supplies for gang mailboxes. The Entraguard VFD unit is designed to readily accept an *Arrow Postal Lock*.

When the lock is installed, make sure the *pawl* of the lock is in the extended position and depressing the plunger of the slide switch. When the Letter Carrier inserts and turns the key, the pawl will be withdrawn, taking pressure off the switch. This unlocks the door's electric strike.

The Entraguard unit provides a postal lock switch input that allow the unit to detect when the lock has been turned. The postal lock switch signals are located on terminal strip **BS3** as follows.

- 1) The ground side (if identified) of the postal lock switch should be connected to barrier strip **BS3**, terminal **10**.
- 2) The other side of the postal lock switch should be connected to barrier strip **BS3**, terminal **9**.

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2.6.2 Card Readers

The Entraguard unit has the ability to monitor two separate card readers. Refer to Appendix X for information on card readers that are compatible with the Entraguard VFD unit.

The card reader signals are located on barrier strip **BS1** as follows:

- 1) The ground signal from the **Card Reader 1** is connected to barrier strip **BS1**, terminal **10**.
- 2) The receive signal (RX) from the **Card Reader 1** is connected barrier strip **BS1**, terminal **1**.
- 1) The ground signal from the **Card Reader 2** is connected to barrier strip **BS1**, terminal **10**.
- 2) The receive signal (RX) from the **Card Reader 2** is connected barrier strip **BS1**, terminal **5**.

2.6.3 Dot Matrix Printer

The Entraguard unit has the ability to output activity information to a serial dot matrix printer. Refer to Appendix X for information on printers that are compatible with the Entraguard VFD unit.

The printer signals are located on barrier strip **BS2** as follows:

- 1) The ground signal from the printer is connected to barrier strip **BS2**, terminal **10**.
- 2) The transmit signal (TX) to the printer is connected barrier strip **BS2**, terminal **9**.

2.6.4 TDD Jack

The Entraguard unit has the ability to provide TDD access for individuals with disabilities. Refer to Appendix X for information on TDD access requirements.

Call Marlee for information on the installation of the TDD option.

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2.6.5 Optional Relay Control and Switch Input

The Entraguard VFD unit provides an additional relay to control optional equipment. This includes:

- video cameras
- motion detectors
- auxiliary lighting
- additional doors and gates

This additional relay is designed to control a LOW voltage Class II circuit.

The additional relay contact signals are located on barrier strip **BS3** as follows:

- Terminal **4** - Common contact
- Terminal **5** - Normally closed contact
- Terminal **6** - Normally open contact

The additional switch monitor input signals are located on barrier strip **BS3** as follows:

- Terminal **10** - Ground
- Terminal **8** - Switch input

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2.6.6 Elevator Control Panel Option

The Entraguard VFD unit provides an interface for use with the Series PM 54 Remote Control Panel (RCP). Communications between the VFD unit and the RCP is via a RS-485 serial data link.

The following table list the wiring interconnection between the units:

Signal Name	RCP Unit	VFD Unit
	Terminal Block - J2	Terminal Block- BS2
	Pin #	Pin #
TX+	3	3
TX-	4	4
RX+	5	5
RX-	6	6

The wiring between the units should use two (2), 22 GA. twisted pairs with the following signal combination:

- TX+ & TX-
- RX+ & RX-

Note: For further information on the RCP see the Series PM54 Remote Control Panel (RCP) Installation and Programming Manual

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2.7 DIP Switches

A component containing 8 switches (a DIP Switch) is located on the P.C. board. Each switch can be set to either **ON** or **OFF**.

DIP Switches are used several times throughout this manual to control the operation of the Entraguard unit. Each DIP Switch is referred to by a label, and each individual switch on the DIP Switch is identified by a position number. The following figure, Figure 2.7, illustrates the location of each DIP Switch, its label, and its switches, with position numbers.

[Figure 2.7 — TBS]

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3.0 System Setup, Checkout and Diagnostics

3.1 Introduction

The Entraguard PM55 unit comes with a diagnostic program option that allows the unit's hardware and software functions to be tested for proper operation. The following table summarizes the diagnostic software functions available:

Table 3.1.1 Diagnostic Software Functions

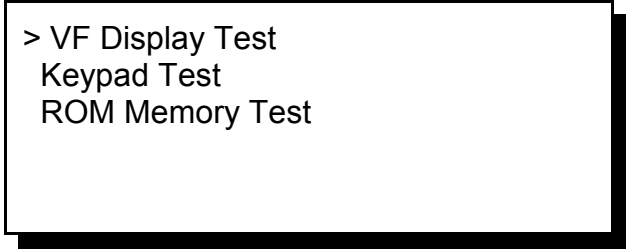
Diagnostic Tests	Test Description
3.3 VF Display Test	Checks for proper vacuum fluorescent display operation
3.4 Keypad Test	Checks that all the keys are functioning properly
3.5 ROM Memory Test	Check Diagnostic Software EPROM validity
3.6 EEPROM Memory Test	Check available tenant capacity and EEPROM operation
3.7 EEPROM Tenant List Initialization	Clears the current Tenant List
3.8 EEPROM Parameter Initialization	Resets the system parameters to the default setting
3.9 Door Strike Relay Test	Tests the door strike relays for proper operation
3.10 Door Switch Input Tests	Tests the door switch inputs for proper operation
3.11 Station ID Setup	Checks the Station ID setting
3.12 Dialing / Audio Tests	Tests dialing, DTMF tone, Click and Mute functions
3.13 Modem Answer Tests	Tests modem answer capability
3.14 Date / Time Check	Checks or set time and date
3.15 Postal Lock Test	Checks postal lock for proper operation
3.16 Card Reader Tests	Checks card readers for proper operation
3.17 Printer Tests	Checks for proper printer operation
3.18 TDD Test	Checks TDD for proper operation
3.19 Elevator Control Panel Test	Not implemented

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3.2 Starting the Diagnostic Program

The Entraguard unit's diagnostic program is initiated as follows:

- a) Install the **Diagnostic EPROM** (supplied by Marlee Electronics Corporation) in IC socket location **U40** as shown in Figure 3.2a.
- b) Move switch position 8 of DIP switch **DSW1** to the on position as shown in Figure 3.2b.
- c) Press Reset Switch **SW1** to start running the diagnostic program as shown in Figure 3.2b.
- d) The following **Test Scroll List** display will appear:



```
> VF Display Test
Keypad Test
ROM Memory Test
```

- e) To select a diagnostic test from the **Test Scroll List** display, scroll through the list using the up and down keys until the desired test is next to the > cursor.
- f) Then press the “**E**” key to start running the selected test.

The operating procedure for each diagnostic test is described in the following sections.

Note: Contact your local installer for service if a failed test condition exists.

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3.3 VF Display Test

The Entraguard unit's vacuum fluorescent display can be tested for proper operation including missing and/or shorted segments. The test operates as follows:

a) After the **VF Display Test** has been selected, the following message is displayed indicating the *Display Blank Test* is about to be performed:



Start Display Tests
All Blank

Note: No display segments (characters or dots) should be present during this test.

b) The following message will be displayed next indicating the *All Dots On Test* is about to be performed:



All Dots On

Note: All display dots should be present during this test.

c) The following message will be displayed next indicating the *Character Test* is about to be performed:



Character Displays
Press C to Cancel

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Note: All the characters of the alphabet will appear and move across the display. There should be no missing or incorrect characters displayed during this test.

d) Press the "C" key to end the *Character Test* or the test will eventually time out. The **Select Next Test** message will appear when the test is complete.

3.4 Keypad Test

The Entraguard unit's keypad can be tested for proper operation including open or stuck keys. The test operates as follows:

a) After the **Keypad Test** has been selected the following message is displayed:



**Begin Keypad Test
Press Any Key
Press C to End Test**

b) Press any key and the following confirmation message should appear:



Key Pressed: 0

Note: The key pressed should always appear in the confirmation message during this test.

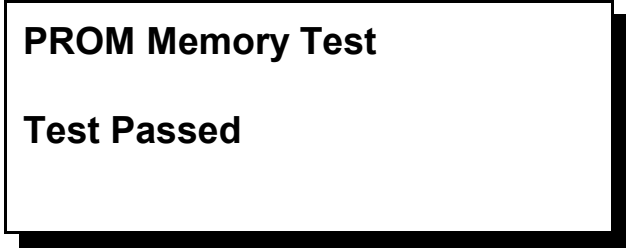
c) Press the "C" key to end the *Keypad Test*. The **Select Next Test** message will appear when the test has ended.

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3.5 ROM Memory Test

The Entraguard unit can verify that ROM program memory is valid and memory interface operating properly. The test operates as follows:

a) After the **Rom Memory Test** has been selected the following message is displayed indicating whether the test has passed or failed:



PROM Memory Test
Test Passed

b) The **Select Next Test** message will appear when the test has ended.

3.6 EEPROM Memory Test

The Entraguard unit can verify the tenant capacity of the EEPROM (non-volatile) program memory installed and the test to see if it is operating properly. The test operates as follows:

a) After the **EEPROM Tests** has been selected the following message is displayed indicating the tenant capacity and whether the test has passed or failed:



EEPROM Test
EEPROM Capacity = 0500
Test Passed

b) The **Select Next Test** message will appear when the test has ended.

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3.7 EEPROM Tenant List Initialization


The Entraguard unit can initialize the **Tenant List** in EEPROM (non-volatile) program memory if a totally new **Tenant List** is to be entered. The EEPROM is initialized as follows:

a) After the **EEPROM Tenant Init** has been selected the following message is displayed:



Tenant File Reset

b) The following warning message will then be displayed to prevent accidental EEPROM initialization:



**WARNING!! All Tenant
DATA WILL BE LOST
Press 1 to Continue
Press C to Abort**

c) The **Select Next Test** message will appear when reset is complete or the "C" key has been pressed.

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3.8 EEPROM Parameter Initialization


The Entraguard unit can initialize the **Parameter Settings** in EEPROM (non-volatile) program memory to the default operating parameters. The EEPROM is initialized as follows:

a) After the **EEPROM Para Init** has been selected the following message is displayed:



Parameter File Reset

b) The following warning message will then be displayed to prevent accidental EEPROM initialization:



**WARNING!! ALL PARA
DATA WILL BE LOST
Press 1 to Continue
Press C to Abort**

c) The **Select Next Test** message will appear when reset is complete or the "C" key has been pressed.

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3.9 Door Strike Relay Test

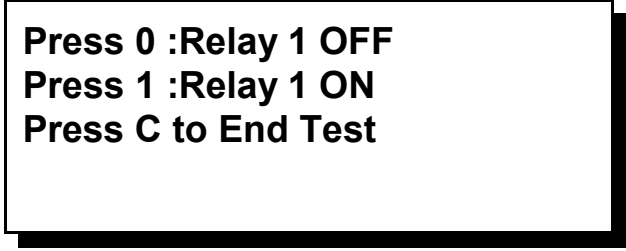
The two (2) door strike relays provided in the Entraguard unit can be checked for proper operation. The relays can be selectively energized or de-energized as follows:

a) After **Relay 1 Tests** has been selected the following message is displayed:



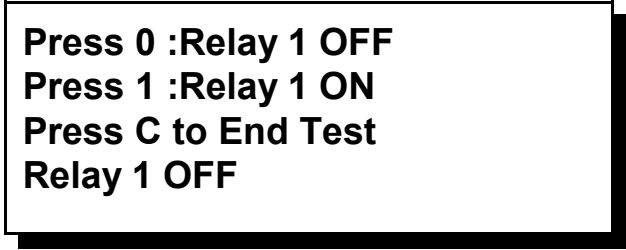
Relay 1 Test

b) The following message is then displayed:



**Press 0 :Relay 1 OFF
Press 1 :Relay 1 ON
Press C to End Test**

c) Pressing "0" will result in the following message:



**Press 0 :Relay 1 OFF
Press 1 :Relay 1 ON
Press C to End Test
Relay 1 OFF**

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d) Pressing "1" will result in the following message:

```
Press 0 :Relay 1 OFF
Press 1 :Relay 1 ON
Press C to End Test
Relay 1 ON
```

e) The test will end and the **Select Next Test** message will appear when the "C" key is pressed.

Note: Follow the above procedure for **Relay 2 Tests**.

3.10 Door Switch Input Tests

The Entraguard unit monitors two (2) door switch inputs that provide feedback when the access door is opened or closed. This diagnostic test checks the door switch inputs for proper operation. The state of the door switch inputs can be checked as follows:

a) After **Door Switch Tests** has been selected the following message is displayed:

```
Door Switch Input Ck
```

b) The following message is then displayed:

```
Press 1 : Read State
Press C to End Test
```

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c) Pressing "1" will result in the following message:

**Press 1 : Read State
Press C to End Test
Door Switch 1 Open
Door Switch 2 Open**

d) The test will end and the **Select Next Test** message will appear when the "C" key is pressed.

3.11 Station ID Setup

The EntraGuard unit's **Station ID** code is set by setting position 1 through 4 of DIP switch XX to the on position as shown in Figure 3.12a.

The following table identifies the Station ID for selected switch positions:

Station ID	Switch Position 1	Switch Position 2	Switch Position 3	Switch Position 4
ES00001A	OFF	OFF	OFF	OFF
ES00001B	ON	OFF	OFF	OFF
ES00001C	OFF	ON	OFF	OFF
ES00001D	ON	ON	OFF	OFF
ES00001E	OFF	OFF	ON	OFF
ES00001F	ON	OFF	ON	OFF
ES00001G	OFF	ON	ON	OFF
ES00001H	ON	ON	ON	OFF

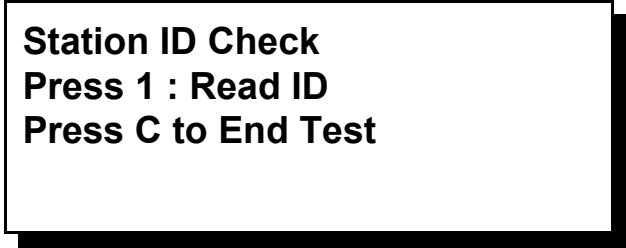
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a) After the **Station ID Test** has been selected the following message is displayed:



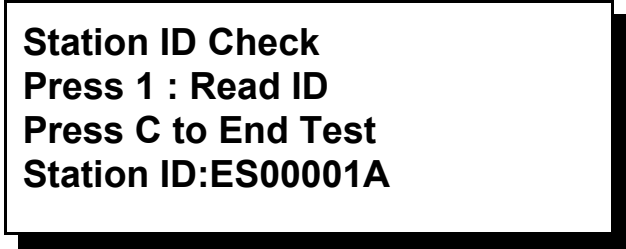
Station ID Ck

b) The following message is then displayed:



**Station ID Check
Press 1 : Read ID
Press C to End Test**

c) Pressing "1" will result in the following message:



**Station ID Check
Press 1 : Read ID
Press C to End Test
Station ID:ES00001A**

d) The test will end and the **Select Next Test** message will appear when the "C" key is pressed.

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3.12 Dialing / Audio Tests

The **Dialing/Audio Tests** check the following Entraguard unit hardware functions:

Telephone Line Presence

This test checks to see if a valid telephone line is plugged into the Entraguard unit.

Modem Test

This test checks for the proper operation of the Entraguard unit's Modem module.

Audio Tests

These tests check for proper operation of the **Speaker Mute** and **Microphone Mute** functions. The **Speaker Mute** function silences the speaker when **ON**. The **Microphone Mute** function stops voice transmission from the Entraguard unit when **ON**.

DTMF Tests

These tests check the ability of the Entraguard unit to encode (send) or decode (receive) DTMF tones. The Entraguard unit can encode DTMF tones to control automated message systems. The Entraguard unit can decode DTMF tones to determine valid release codes or hangup codes.

Click Test

This test checks the Entraguard ability to decode a pulse dialed "9" as a release code.

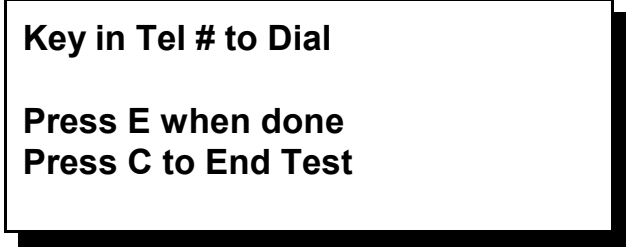
The following procedures describe the operation of these tests:

a) After the **Dialing/Audio Tests** has been selected the following message is displayed:

Dialing / Audio Tests

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b) The following message is then displayed:



Key in Tel # to Dial
Press E when done
Press C to End Test

c) If a telephone line is connected, the following message is displayed:



Tel Line Present

Note: The following message will be displayed if a valid telephone line is not present:



Tel Line Not Present

d) If the Modem is operating properly the following message will follow:



Tel Line Present
Modem Test Passed

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Note: The following message will be displayed if the Modem is not operating properly:



Modem Failure

e) Enter the telephone number as normally dialed without spaces. The following message is displayed:



Calling 5551212

f) The following message will be displayed next to indicate the telephone call is being placed:

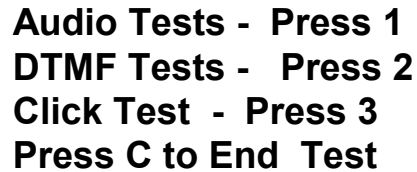


**Call in Progress
Press C to Cancel**

Note: Press the "C" key to cancel the call if a busy or invalid number is dialed.

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g) The following **Test Selection** message will be displayed after the call is placed:

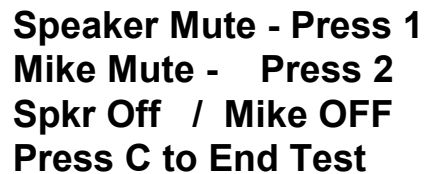


A screenshot of a menu displayed on a device. The menu is enclosed in a black rectangular border. The text inside the border is as follows:

- Audio Tests - Press 1**
- DTMF Tests - Press 2**
- Click Test - Press 3**
- Press C to End Test**

Audio Test Procedure:

a) Press "1" to start the **Audio Tests**. The following message will be displayed:



A screenshot of a menu displayed on a device. The menu is enclosed in a black rectangular border. The text inside the border is as follows:

- Speaker Mute - Press 1**
- Mike Mute - Press 2**
- Spkr Off / Mike OFF**
- Press C to End Test**

b) Press "1" to Mute (silence) the speaker. The **Spkr Off** message will change to **Spkr ON**. Pressing "1" again will turn the **Speaker Mute** off.

c) Press "2" to Mute (silence) the microphone. The **Mike Off** message will change to **Mike ON**. Pressing "2" again will turn the **Mike Mute** off.

d) Press "C" to end the **Audio Tests** and return to the **Test Selection** display.

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DTMF Send Test Procedure:

a) Press "**2**" to start the **DTMF Tests**. The following **DTMF Test Selection** message will be displayed:

**DTMF Send - Press 1
DTMF Receive - Press 2

Press C to End Test**

b) Press "**1**" to set up for encoding (sending) DTMF tones to the other party. The following message will be displayed:

**Test Press Key to Send

Press C to End**

c) Press any key from "**0**" to "**9**", "*****" or "**#**". The DTMF tone for that key will be sent and the following confirmation message displayed:

DTMF Key Sent: 7

d) Press "**C**" to end the **DTMF Send Tests** and return to the **DTMF Test Selection** display.

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DTMF Receive Test Procedure:

a) Press **"2"** to set up for decoding (receiving) DTMF tones from the other party. The following message will be displayed:



Waiting on DTMF Tone
Press C to End Test

c) The other party presses any key from **"0"** to **"9"**, **"*"** or **"#"**. The DTMF tone for that key will be decoded and the following confirmation message displayed:

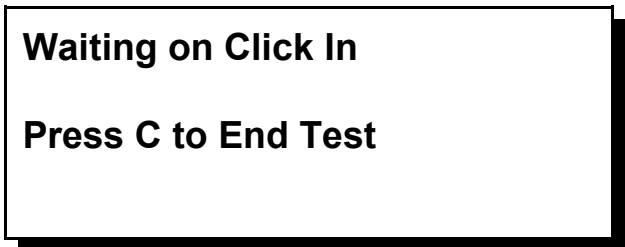


DTMF Key Rcvd: 7

d) Press **"C"** to end the **DTMF Receive Tests** and return to the **DTMF Test Selection** display.

Click Test procedure

a) Press **"3"** to set up for the **Click Test**. The following message will be displayed:



Waiting on Click In
Press C to End Test

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c) The other party presses the "9" key on a pulse dial phone. The Click count of that key will be decoded and the following confirmation message displayed:



Click Detected

d) Press "C" to end the **Click Test** and return to the **Test Selection** display.

Ending Dial / Audio Tests

e) Press "C" to end the **Dial / Audio Tests**. The **Select Next Test** message will then appear.

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3.13 Modem Answer Test

This test checks the ability of the Entraguard unit to answer an incoming call on the telephone line. This function is used with the Entraguard unit's remote programming function. The test is performed as follows:

a) After the **Modem Answer Test** has been selected the following message is displayed:



Modem Answer Test

b) If a telephone line is connected, the following message is displayed:



Tel Line Present
Modem Test Passed

Note: The following message will be displayed if a valid telephone line is not present:



Tel Line Not Present

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c) If the Modem is operating properly the following message will be displayed:



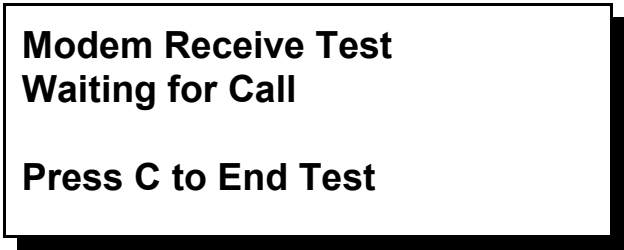
Modem Test Passed

Note: The following message will be displayed if the Modem is not operating properly:



Modem Failure

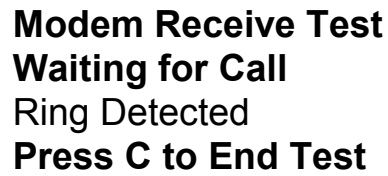
d) The following message will be displayed next:



**Modem Receive Test
Waiting for Call
Press C to End Test**

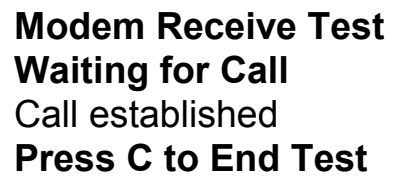
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e) Place a call to the Entraguard unit. The following messages will be displayed when the call is answered:



Modem Receive Test
Waiting for Call
Ring Detected
Press C to End Test

followed by:



Modem Receive Test
Waiting for Call
Call established
Press C to End Test

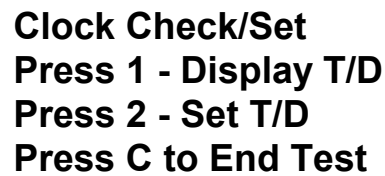
f) Press the "C" key to end the test. The **Select Next Test** message will then appear.

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3.14 Date / Time Check

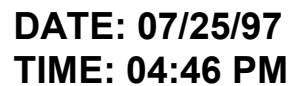
The Entraguard unit contains a real time clock that keeps the current date and time. This test allows the current date and time to be checked and reset if incorrect. The setting is programmed into it to enable many of the functions to work accurately. The check and reset function operates as follows:

a) After the **Date/Time Check** has been selected the following message is displayed:



Clock Check/Set
Press 1 - Display T/D
Press 2 - Set T/D
Press C to End Test

b) Pressing "1" will result in the display of the current date and time as follows:



DATE: 07/25/97
TIME: 04:46 PM

Note: The display then returns to the previous message .

c) Press "2" to set or change the time and date. The following date edit display will appear with the month highlighted:



Edit Date Below
DATE: 07/25/97

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d) Enter or change the date (month/day/year) by using the up and down arrow keys. Press the "E" key to move from the month to the day to the year, and to save the information. The following time edit display will appear, with the hour highlighted:

Edit Date Below
DATE: 07/25/97
Edit Time Below
TIME: 09:12 AM

e) Enter or change the time by using the up and down arrow keys. Press the "E" key to move from the hour to the minutes to the AM/PM designation, and to save the information.

Note: The display then returns to the previous message .

f) The test will end and the **Select Next Test** message will appear when the "C" key is pressed.

3.15 Postal Lock Test

The Entraguard unit contains the option to install a postal lock that allows a postal carrier with the proper key direct access. This test verifies the operation of the postal lock switch.

a) After **Postal Lock Test** has been selected the following message is displayed:

Postal Lock Test


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The following message is then displayed:



**Press 1 : Read State
Press C to End Test**

c) Pressing "1" will result in the following message:



**Press 1 : Read State
Press C to End Test
Postal Lock Open**

d) The test will end and the **Select Next Test** message will appear when the "C" key is pressed.

3.16 Card Reader Tests

The Entraguard unit can accommodate up to two (2) magnetic card readers to allow card access to the building. This test verifies the operation of the card readers.

a) After **Card Reader Tests** has been selected the following message is displayed:



Card Reader Tests

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The following message is then displayed:

Press 1 - Read CR#1
Press 2 - Read CR#2
Press C to End Test

c) After selecting the card reader to test, swipe a valid card. The card code should appear on the display as follows:

Card Code: 12345678

d) The test will end and the **Select Next Test** message will appear when the "C" key is pressed

3.17 Printer Tests

The Entraguard unit can provide a printed report of all activity that has occurred when an optional serial printer is provided. This test continuously outputs the following rotating character test line to the printer:

```
ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyx0123456789.,;'"?<>!@#$~  
~ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyx0123456789.,;'"?<>!@#$  
$~ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyx0123456789.,;'"?<>!@#  
#~ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyx0123456789.,;'"?<>!@
```

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a) After **Printer Tests** has been selected the following message is displayed:

Printer Test

b) The following message is then displayed:

Press 1 to Start

Press C to End Test

c) Pressing "**1**" will result in the following:

Press 1 to Start

Now Printing

Press C to End Test

d) The test will end and the **Select Next Test** message will appear when the "**C**" key is pressed.

3.18 TDD Test

The Entraguard unit provides an option for visitors with disabilities to use a TDD device to contact a tenant. An auxiliary telephone jack has been provided that is enabled when the proper access code has been entered into the keypad. The Entraguard unit will only accept this access code when the **TDD Option** is enabled. The following procedure allows the **TDD Option** to be tested:

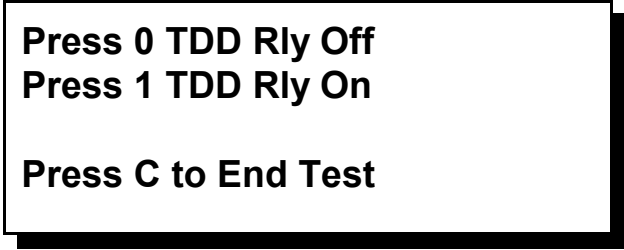
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a) After **TDD Test** has been selected the following message is displayed:



TDD Test

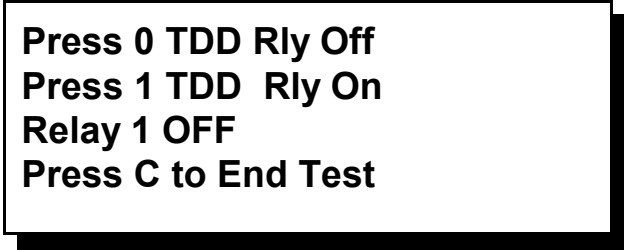
b) The following message is then displayed:



**Press 0 TDD Rly Off
Press 1 TDD Rly On

Press C to End Test**

c) Pressing "**0**" will result in the following display:



**Press 0 TDD Rly Off
Press 1 TDD Rly On
Relay 1 OFF
Press C to End Test**

d) Pressing "**1**" will result in the following display:

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**Press 0 TDD Rly Off
Press 1 TDD Rly On
Relay 1 ON
Press C to End Test**

e) The test will end and the **Select Next Test** message will appear when the "C" key is pressed.

3.19 Elevator Control Panel Test

The **Elevator Control** is an optional circuit to control floor access and the length of time the elevator door will remain open after a visitor is provided access.

The **Elevator Control Panel Test** is not implemented at this time.

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4.0 Local Programming

4.1 Introduction

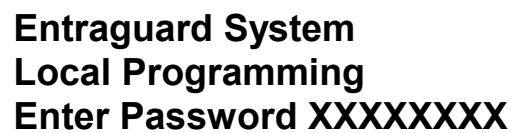
The Entraguard VFD Series can be programmed locally (directly at each unit) using the keypad and the display on the unit. This section provides detailed instructions for programming the unit locally.

Note: The unit may also be programmed remotely by a PC Computer System via the telephone line. Section 5.0 provides detailed instructions for programming the unit remotely.

4.2 Entering the Local Edit Mode

Press “#1234”. Ignore the screen indication of “Invalid Password”. This is a decoy for the individual who is attempting to randomly access the system without permission.

The unit will then display:



**Entraguard System
Local Programming
Enter Password XXXXXXXX**

Press up to the 8 digits that are a valid password and then press the “E” key . The unit will then display one of the following three (3) messages:



Factory Edit Mode

or

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Installer Edit Mode

or

User Edit Mode

The system is programmed to accept three (3) different passwords. They are the Factory Password, the Installer Password and the User (Customer) Password.

Factory Password - Marlee Electronics Corporation has programmed in, at the factory, a password which allows access to all functions within the Tenant List Editing and System Parameter Editing.

Installer Password - The Installer, at the time of installation, programs a password which allows access to Tenant List Editing and a limited set of functions in the System Parameter Editing.

User Password -The User, at the time of installation, programs a password which allows access to Tenant List Editing and a more limited set of functions in the System Parameter Editing.

Notes:

- 1) Section 4.4.1 describes how to enter or modify password numbers.
- 2) Table 4.4 in Section 4.4 provides a list the types of passwords and their corresponding **System Parameter Editing** functions.

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Entering up to an 8 digit number that matches one of the three (3) passwords programmed into the system allows access to the **Local Programming Mode**. The following menu providing the **Programming Selection List** will be displayed:

Tenant Edit - Press 1
Parameter Edit - Press 2
Set Clock - Press 3
End Edit - Press 4

4.3 Tenant List Editing

All three (3) types of passwords allow access to tenant list editing.

Tenant Editing Keypad Functions

- The up and down arrow keys are used to change the highlighted (flashing) character or number by scrolling through the character or number selection list. For example: If the highlighted character is "B", pressing the up arrow key will change the character to a "C", pressing the down arrow key will change the character to an "A".
- The "E" key moves the cursor to the next character or number position in the data item being changed. For example: If the **Tenant Name** being edited is "JOHN" and the character is "J", pressing the "E" key will cause the "O" to be highlighted.
- The "*" key is a tab function that moves the cursor to the next data item to be edited. For example: If the highlighted character is located in the **Tenant Name** field, pressing the "*" will cause the first character in the **Sort Code** field to become highlighted.
- The "C" key cancels editing of the current tenant entry and returns to the **Programming Selection List** display. **Note:** All changes made to the tenant entry will be ignored.

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Selecting Tenant Editing Function

From the **Programming Selection List**, Press **1** to modify existing tenant entries, add new tenant entries or delete existing tenant entries from the tenant data base.

Pressing "**1**" will display the current **Tenant Scroll List**.

To select a tenant entry to be modified, scroll to that name using the up and down arrow keys until the desired name is next to the arrow (>) as shown below:



```
Diane Brown  
>Joe Jones  
Mary Morgan  
John Smith
```

Press the "**E**" key to modify the entry as detailed in Section 4.3.2.

To add a new tenant entry, press the "**E**" key after the **Tenant Scroll List** is displayed and then refer to Section 4.3.1 for detailed instructions.

To select an existing tenant entry to be deleted, scroll to that name using the up and down arrow keys until the desired name is next to the arrow (>) and then press the "**E**" key to delete the tenant entry as detailed in Section 4.3.3.

4.3.1 Adding New Entries

The following procedures should be followed to add a new entry to the tenant list.

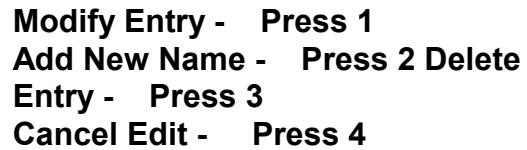
Command Selection

To select the "**Add New Entry**" mode perform the following steps:

- a) After entering the **Local Edit Mode** (per Section 4.2), press "**1**" to access the **Tenant Scroll List** display.
- b) Press the "**E**" key.

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c) The following menu providing the **Tenant Edit Command List** will be displayed:



A screenshot of a menu with a black border. The text inside is as follows:

Modify Entry - Press 1
Add New Name - Press 2 Delete
Entry - Press 3
Cancel Edit - Press 4

d) Press "2" to "Add New Name".

e) The following **Tenant Edit Template** will be displayed with the first character position below the *Tenant Name* being highlighted:



A screenshot of a form with a black border. The text inside is as follows:

Tenant Name:
J
Sort Code:
Tele #:

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Tenant Name Entry

Enter a **Tenant Name** containing up to a maximum of 19 characters. The **Tenant Name** will appear exactly as entered. To enter the **Tenant Name** perform the following steps:

- a) Enter the first character of the name by using the up and down arrow keys to change the highlighted (flashing) character by scrolling through the character list.
- b) When the desired character is displayed in the highlighted position, press the "E" key to highlight the next character position. Again enter the character using the up and down arrow keys.
- c) Continue until the end of the display line is reached (maximum 19 characters) or press the "*" key if the tenant name entered is less than 19 characters to highlight the first character of the **Sort Code** field.

Note: To place a space in any character location, press the "E" key prior to pressing the up and down arrow keys.

Sort Code Entry

The **Sort Code** is used to organize alphabetically the display of tenants' names. Tenant entries with a **Sort Code** of "AA" will be displayed at the top of the **Tenant Scroll List** while "ZZ" will be displayed at the end of the **Tenant Scroll List**. The **Sort Code** must be comprised of two upper case letters. If there an improper or missing **Sort Code**, the tenant entry will be placed at the end of the **Tenant Scroll List** (after "ZZ"). To enter the **Sort Code** perform the following steps:

- a) Enter the first character of the **Sort Code** by using the up and down arrow keys. Then press the "E" key to highlight the next character position.
- b) Enter the next character using the up and down arrow keys and then press the "E" key to highlight the first number position of the **Telephone Number**.

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Telephone Number Entry

Note: See Section 4.4.11 to configure the system if connected to a PBX system.

Enter a telephone number up to 12 digits, as it would be dialed on a standard telephone set.

To enter the *Telephone Number*, perform the following steps:

- a) Enter the first number by using up and down arrow keys to change the highlighted (flashing) first number.
- b) When the desired number is displayed in the highlighted position, press the "E" key to highlight the next number position. Again enter the number using the up and down arrow keys.
- c) Continue until a maximum 12 digits are entered or press the "*" key if the telephone number entered is less than 12 digits to highlight the first number of the *Keypad Dial Number* field.

Note: Do not use spaces in the telephone number entered.

Keypad Dial Number Entry

The following **Tenant Edit Template** will be displayed with the first number position in the *Keypad Dial Number* being highlighted:

Keypad Dial #5
Keypad Access#
Card Code #
Elev Floor #

The *Keypad Dial Number* is intended to allow the visitor to enter a code on the keypad that will contact the tenant through the telephone system without scrolling through the **Tenant Scroll List** display. This number can be 2, 3 or 4 digits depending on the parameter setting described in Section 4.4.10. To enter the *Keypad Dial Number* perform the following steps:

- a) Enter the first number of the *Keypad Dial Number* by using the up and down arrow keys. Then press the "E" key to highlight the next character position.
- b) Repeat step a) until all of the *Keypad Dial Number* digits are entered.

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c) The first number of the *Keypad Access Number* field will then be highlighted.

Note: Each tenant entry must have a unique *Keypad Dial Number*. If a duplicate number is selected the following message will appear:

**Keypad Dial Code
Already In Use!!! Tenant
Record
Remains Unchanged!!!**

All information associated with this new tenant entry will be deleted and the following **Continue Edit Request** display will appear:

**Edit More - Press 1
End Edit - Press 2**

To Continue Tenant Editing

Pressing the "1" key will cause the **Tenant Scroll List** to be displayed for continued editing of the tenant list.

To End Tenant Editing

Pressing the "2" key will cause the **Programming Selection List** to appear again.

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Keypad Access Number

The **Keypad Access Number** allows access to the building via the Entraguard Unit by entering a four (4) digit number on the keypad. This four (4) digit number is typically used by the tenant to gain access to the building. To enter the **Keypad Access Number** perform the following steps:

- a) Enter the first number of the **Keypad Access Number** by using the up and down arrow keys. Then press the "E" key to highlight the next character position.
- b) Repeat step a) until all of the **Keypad Access Number** digits are entered.
- c) The first number of the **Card Code Number** field will then be highlighted.

Card Code Number Entry

The **Card Code Number** allows access to the building via an eight (8) digit number programmed on a magnetic card for use with a card reader located near the Entraguard unit. To enter the **Card Code Number** perform the following steps:

- a) Enter the first number of the **Card Code Number** by using the up and down arrow keys. Then press the "E" key to highlight the next character position.
- b) Repeat step a) until all of the **Card Code Number** digits are entered.
- c) The first number of the **Elevator Floor Number** field will then be highlighted.

Elevator Floor Number Entry

The **Elevator Floor Number** is intended to restrict a visitor's access to only the pre-selected floor. To enter the **Elevator Floor Number** perform the following steps:

- a) Enter the first number of the **Elevator Floor Number** by using the up and down arrow keys. Then press the "E" key to highlight the next character position.
- b) Repeat step a) to enter the second **Elevator Floor Number** digit (if required) or press the "*" key twice and the following **Continue Edit Request** display will appear:

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Edit More - Press 1
End Edit - Press 2

To Continue Tenant Editing

Pressing the "1" key will cause the **Tenant Scroll List** to be displayed for continued editing of the tenant list.

To End Tenant Editing

Pressing the "2" key will cause the **Programming Selection List** to appear again.

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4.3.2 Modifying Existing Tenant Entries

The following procedures should be followed to modify a new entry to the tenant list.

Command Selection

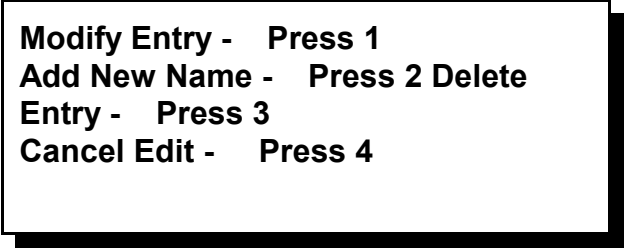
To select the **Modify Entry Mode**, perform the following steps:

- a) After entering the **Local Edit Mode** (per Section 4.2), press "**1**" to access the **Tenant Scroll List** display.
- b) Select a specific tenant entry to be modified by using the up and down arrow keys until the desired name is next to the arrow (>) as shown below:



```
Diane Brown
>Joe Jones
Mary Morgan
John Smith
```

- c) Press the "E" key.
- d) The following menu providing the **Tenant Edit Command List** will be displayed:



```
Modify Entry - Press 1
Add New Name - Press 2 Delete
Entry - Press 3
Cancel Edit - Press 4
```

- e) Press "**1**" to "**Modify Entry**".

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f) The following **Tenant Edit Template** with the existing tenant data will be displayed as shown:

Tenant Name: Joe Jones Sort Code: JO Tele #: 5556677

The first character position of the existing *Tenant Name* (Joe Jones) will be highlighted.

Note: See Section 4.3.1 for descriptions of the tenant entry items that follow:

Tenant Name Entry

Modify the *Tenant Name* as follows:

- a) Use the up and down arrow to modify characters.
- b) Use the "E" key to highlight the next character in the *Tenant Name*.
- c) Use the "*" key to highlight the first character of the *Sort Code* field.

Sort Code Entry

Modify the *Sort Code* as follows:

- a) Use the up and down arrow to modify characters.
- b) Use the "E" key to highlight the next character in the *Sort Code*.
- c) Use the "*" key to highlight the first number of the *Telephone Number* field.

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Telephone Number Entry

Modify the *Telephone Number* as follows:

- a) Use the up and down arrow to modify the numbers.
- b) Use the "E" key to highlight the next number in the *Telephone Number*.
- c) Use the "*" key to highlight the first character of the *Keypad Dial Number* field.

Keypad Dial Number Entry

The following **Tenant Edit Template** will be displayed with the first number position in the *Keypad Dial Number* being highlighted:

Keypad Dial #
Keypad Access #
Card Code #
Elev Floor #

Modify the *Keypad Dial Number* as follows:

- a) Use the up and down arrow to modify the numbers.
- b) Use the "E" key to highlight the next number in the *Keypad Dial Number*.
- c) Use the "*" key to highlight the first number of the *Keypad Access Number* field.

Keypad Access Number Entry

Modify the *Keypad Access Number* as follows:

- a) Use the up and down arrow to modify the numbers.
- b) Use the "E" key to highlight the next number in the *Keypad Access Number*.
- c) Use the "*" key to highlight the first number of the *Card Code Number* field.

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Note: If DIP Switch 5 is set to **OFF**, all Keypad Access Numbers will activate Relay 1. If DIP Switch 6 is set to **ON**, Keypad Access Numbers 0000 through 4999 will activate Relay 1, and Keypad Access Numbers 5000 through 9999 will activate Relay 2.

For more information about DIP Switches, please see Section 2.7.
For more information about Relays, please see Section 4.4.5.

Card Code Number Entry

Modify the *Card Code Number* as follows:

- a) Use the up and down arrow to modify the numbers.
- b) Use the "E" key to highlight the next number in the *Card Code Number*.
- c) Use the "*" key to highlight the first number of the *Elevator Floor Number* field.

Elevator Floor Number Entry

Modify the *Elevator Floor Number* as follows:

- a) Use the up and down arrow to modify the numbers.
- b) Use the "E" key to highlight the next number in the *Elevator Floor Number*.
- c) Press the "*" key and the following **Continue Edit Request** display will appear:.

Edit More - Press 1
End Edit - Press 2

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To Continue Tenant Editing

Pressing the "1" key will cause the **Tenant Scroll List** to be displayed for continued editing of the tenant list.

To End Tenant Editing

Pressing the "2" key will cause the **Programming Selection List** to appear again.

4.3.3 Deleting Existing Tenant Entries

The following procedures should be followed to delete an entry from the tenant list:

Command Selection

To select the **Modify Entry Mode** perform the following steps:

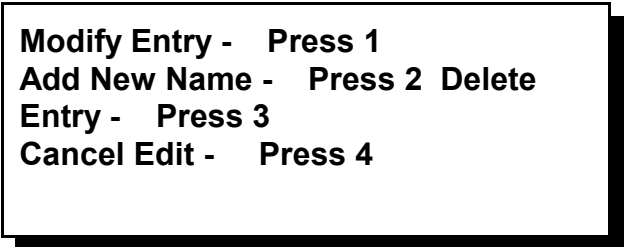
- a) After entering the **Local Edit Mode** (per Section 4.2), press **1** to access the **Tenant Scroll List** display.
- b) Select a specific tenant entry to be deleted by using the up and down arrow keys until the desired name is next to the arrow (>) as shown below:



```
Diane Brown
>Joe Jones
Mary Morgan
John Smith
```

- c) Press the "E" key.

- d) The following menu providing the **Tenant Edit Command List** will be displayed:

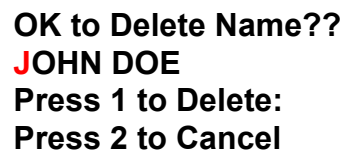


```
Modify Entry - Press 1
Add New Name - Press 2 Delete
Entry - Press 3
Cancel Edit - Press 4
```

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e) Press "3" to **"Delete Entry"**.

f) The following **Delete Confirmation** display will appear:



OK to Delete Name??
JOHN DOE
Press 1 to Delete:
Press 2 to Cancel

g) Press "1" if the entry is to be deleted.

h) Press "2" to cancel if the entry is not to be deleted.

i) The following **Continue Edit Request** display will appear:



Edit More - Press 1
End Edit - Press 2

To Continue Tenant Editing

Pressing the "1" key will cause the **Tenant Scroll List** to be displayed for continued editing of the tenant list.

To End Tenant Editing

Pressing the "2" key will cause the **Programming Selection List** to appear again.

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4.3.4 Canceling Tenant Edit

If after the **Tenant Edit Command List** menu is displayed, no further tenant editing is desired, press the "4" key to end the **Tenant Edit Mode** and return to the **Programming Selection List** display.

4.4 System Parameter Editing

Enter the **Local Edit Mode** as described in Section 4.2.

From the **Programming Selection List**, Press **2** to enter or modify the Entraguard System Parameter Settings. The **Parameter Scroll List** will then be displayed.

All parameters can be modified by the Marlee Electronics Corporation. The Installer and User, via their respective passwords, can modify specific parameter functions.

The following Table 4.4 provides a list of the system parameters that can be set and identifies the password level required to access the system parameter.

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Table 4.4 System Parameter Password Access

Parameter	Description	Password Access
4.4.1 Factory Password	Allows access to all System Parameter Editing functions	Factory
4.4.1 Installer Password	Allows access to all System Parameter Editing functions <u>except</u> Maximum System Capacity.	Factory, Installer
4.4.1 User Password	Allows access to Tenant List editing only	Factory, Installer, User
4.4.2 Marquee Messages	Provides information to visitors on the Entraguard unit's display.	Factory, Installer, User
4.4.3 Maximum System Capacity	Sets the number of tenant entries that the Entraguard unit is capable of holding (maximum 2000).	Factory
4.4.4 Talk Time Setting	Determines the maximum time allotted for the visitor's telephone conversation with the tenant.	Factory, Installer
4.4.4 Hang Up Code Setting	Identifies the digit that the tenant presses on his touch tone phone to end the telephone call with the visitor without allowing that visitor access to the building.	Factory, Installer
4.4.5 Relay Parameter Setting	2 Relays used to control Door Strike Time, Relay Polarity, Release Code, Relay Timer.	Factory, Installer
4.4.6 Elevator Controls	An optional circuit to control the length of time the elevator door will remain open after a visitor has been allowed access.	Factory, Installer
4.4.7 Card Reader Control Setting	Allows access to the building with up to two (2) magnetic card readers.	Factory, Installer
4.4.8 Printer Output Control Setting	Provides a printed report of all activity that has occurred when an optional serial printer is provided.	Factory, Installer
4.4.9 TDD Option	An option for visitors with disabilities to use a TDD device to contact a tenant.	Factory, Installer
4.4.10 Dial Code Digit Size Setting	Coinciding with the number of tenants served by the Entraguard unit, this setting limits the size of the Keypad Dial Number(see Sec.4.3.1)	Factory, Installer
4.4.11 PBX Parameter Setting	Enables the use of Entraguard unit on a PBX system extension.	Factory, Installer
4.4.12 Data Logging Control Setting	Stores records of all Entraguard activity, allowing later remote access.	Factory

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Selecting System Parameter Editing Functions

To select a system parameter for editing from the **Parameter Scroll List** display, scroll the displayed parameter list using the up and down arrow keys until the desired parameter is next to the arrow (>) as shown below:



>Factory Password
Installer Password
User Password

Then press the “E” key to call up the edit function for that parameter.

Note: If the system parameters selected cannot be edited by the password level entered at the start of the **Local Programming Mode** the following message will be displayed:



Improper Password
Access Denied

After the edit function for a selected system parameter is complete, the following **Continue Edit Request** display will appear:



Edit More - Press 1
End Edit - Press 2

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To Continue System Parameter Editing

Pressing the "1" key will cause the **Parameter Scroll List** to be displayed to select another system parameter for editing.

To End System Parameter Editing

Pressing the "2" key will cause the **Programming Selection List** to appear again.

System Parameter Editing Keypad Functions

- The up and down arrow keys are used to change the highlighted (flashing) parameter.
- The "E" key moves the cursor to the next character or number position in the data item being changed.
- The "*" key is a tab function that moves the cursor to the next data item to be edited.
- The "C" key cancels editing of the current system parameter and returns to the **Continue Edit Request** display. **Note:** All changes made to the system parameter will be ignored.

The sections that follow detail the edit function for each of the system parameters.

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4.4.1 Password Programming

The system is programmed to accept three (3) different passwords. They are the Factory Password, the Installer Password and the User (Customer) Password. Each password can contain up to eight (8) digits.

Factory Password - Marlee Electronics Corporation has programmed at the factory, a password which allows access to all functions within the Tenant List Editing and System Parameter Editing. The Factory Password can only be changed by Marlee Electronics Corporation.

Installer Password - The Installer, at the time of installation, programs a password which allows access to Tenant List Editing and a limited set of functions in the System Parameter Editing. The Installer Password can only be changed by Marlee Electronics Corporation and the Installer.

User Password - The User, at the time of installation, programs a password which allows access to Tenant List Editing and a more limited set of functions in the System Parameter Editing. The User Password can be changed by Marlee Electronics Corporation, the Installer and the User.

To change the any of the three (3) passwords use the following procedure:

- a) Scroll to the desired password on the **Parameter Scroll List** and press the "E" key.
- b) The following **Password Edit** display will appear with the first digit of the **Password** field being highlighted:

**Factory(or Installer or User)
Password
Is Now: 06198611**

Note: If no change is desired to the **Password**, press the "*" key to show the **Continue Edit Request** display.

- c) Use the up and down arrow keys to modify the numbers.
- d) Use the "E" key to highlight the next number in the **Password** field.
- e) The "*" key can be used to the **Continue Edit Request** display if the password entered is less than eight (8) digits.

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4.4.2 Marquee Message Programming

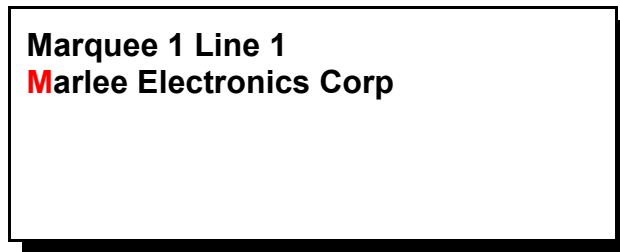
The **Marquee Messages** can be used to provide information to visitors on the display of the local Entraguard unit.

A maximum of three (3) **Marquee Messages** can be programmed along with the length of time the message is displayed. Each **Marquee Message** can contain up to four (4) lines of 20 characters. If more than one **Marquee Message** is programmed, each will continuously cycle on the display according to the length of time programmed. The **Marquee Messages** stop as soon as any keypad activity is detected and restart after entry functions have been completed.

Note: At least the first **Marquee Message** must be programmed.

To change the any of the three (3) **Marquee Messages** use the following procedure:

- a) Scroll to the desired **Marquee Message** on the **Parameter Scroll List** and press the "E" key.
- b) The following **Marquee Message Edit** display will appear with the first character of the first line of the **Marquee Message** field being highlighted:

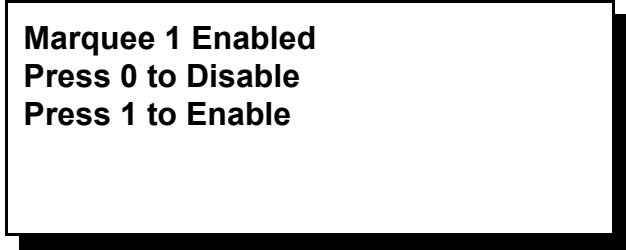


Note: If no change is desired to the **Marquee Message**, press the "*" key to show the **Time Selection** display.

- c) Use the up and down arrow keys to modify the characters.
- d) Use the "E" key to highlight the next character in the first line of the **Marquee Message** field.
- e) The "*" key can be used to highlight the second line of the **Marquee Message** field if the first line of the **Marquee Message** entered is less than 20 characters.
- f) The above steps d) and e) can be repeated for the third and fourth line of the **Marquee Message** field.

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g) After completing the fourth **Marquee Message** field, the following **Enable Selection** display will appear:



Marquee 1 Enabled
Press 0 to Disable
Press 1 to Enable

Note: If no change is desired to the **Marquee Message Enable Selection**, press the "*" key to show the **Time Selection** display.

h) Press the "0" key if the **Marquee Message** is not to be displayed. Press the "1" key if the **Marquee Message** is to be displayed.

i) The following **Time Selection** display will appear next with the first digit of **Marquee On Time** being highlighted:



Marquee On: 120 sec

Note: If no change is desired to the **Marquee On Time**, press the "*" key to show the **Continue Edit Request** display.

j) Use the up and down arrow keys to modify the **Marquee On Time**. The **Marquee On Time** can be set from 10 to 120 seconds in 5 second increments.

k) Press the "E" key after the desired **Marquee On Time** is displayed. The **Continue Edit Request** display will then appear.

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4.4.3 Maximum System Capacity Setting

The **Max System Capacity** parameter sets the maximum number of tenant entries that the Entraguard unit is capable of holding. The Entraguard unit can hold up to 2000 tenants depending on the non-volatile memory provided.

Note: The **Max System Capacity** can only be set by Marlee Electronics Corporation based on the non-volatile memory installed in the Entraguard unit.

To change the **Max System Capacity** use the following procedure:

- a) Scroll to the **Max System Capacity** on the **Parameter Scroll List** and press the "E" key.
- b) The following **Max System Capacity Edit** display will appear with the first digit of the **Max System Capacity** field being highlighted:



Max Capacity: 1550

Note: If no change is desired to the **Max System Capacity**, press the "*" key to show the **Continue Edit Request** display.

- c) Use the up and down arrow keys to modify the **Max System Capacity**. The **Max System Capacity** can be set to a maximum of 2000 tenants in 50 tenant increments.
- d) Press the "E" key after the desired **Max System Capacity** is displayed. The **Continue Edit Request** display will then appear.

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4.4.4 Talk Time / HangUp

The **Talk Time** setting determines the maximum time allotted for the visitor's telephone conversation with the tenant.

The **HangUp #** is the digit that the tenant can press on his touch tone phone to end the telephone call with the visitor without allowing access to the building by the visitor.

To change the **Talk Time / HangUp #** use the following procedure:

a) Scroll to the **Talk Time / HangUp #** on the **Parameter Scroll List** and press the "E" key.

b) The following **Talk Time Edit** display will appear with the first digit of the **Talk Time** field being highlighted:



Talk Time: 110 sec

Note: If no change to the **Talk Time** is desired, press the "*" key to show the **HangUp # Edit** display.

c) Use the up and down arrow keys to modify the **Talk Time**. The **Talk Time** parameter can be set to a maximum of 120 seconds in 5 second increments.

d) Press the "E" key after the desired **Talk Time** is displayed. The following **HangUp # Edit** display will then appear with the **HangUp** digit being highlighted:



Talk Time: 110 sec
Hang Up On: 6

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Note: If no change is desired to the **HangUp** digit, press the "*" key to show the **Continue Edit Request** display.

e) Use the up and down arrow keys to modify the **HangUp** digit. The **HangUp** digit can range from 0 to 9.

f) Press the "E" key after the desired **HangUp** digit is displayed. The **Continue Edit Request** display will then appear.

4.4.5 Relay Parameter Setting

There are two (2) relays built into the Entraguard unit that can be used to control door strike solenoids or other devices. The relays' parameters that can be controlled include:

Door Strike Time - This parameter determines the length of time that the Entraguard unit relay will be energized after a valid release code, access code or card code has been detected by the Entraguard unit.

Relay Polarity - This parameter determines whether the Entraguard unit relay contacts are normally open or normally closed prior to a valid release command being detected.

Release Code - This parameter determines the touch tone telephone digit that the tenant must press in order to open the door for a visitor. **Note:** The release code is always "9" for tenants with pulse dial telephones.

Relay Timer Enable - The Entraguard unit allows the relays to be automatically energized at the same time every day (7 days a week) based on pre-programmed start and stop times. This parameter enables or disables this relay timer function.

Relay Timer On/Off Times - These clock time parameters determine the start and ending times for automatically energizing the Entraguard relays if the relay timer function is enabled.

Relay 1 is considered the primary relay and Relay 2 is considered the auxiliary relay. Each relay's parameters are individually programmed and operate identically with one exception. Relay 1 ends (hangs up) the tenant / visitor phone call when a valid release code is entered by the tenant. Relay 2 does not end (hang up) the tenant / visitor phone call when a valid release code is entered by the tenant.

To change either Relay 1 or Relay 2 parameters use the following procedure:

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a) Scroll to the **Relay 1** or **Relay 2 Parameter** selection on the **Parameter Scroll List** and press the "E" key.

b) The following **Strike Time Edit** display will appear with the first digit of the **Strike Time** field being highlighted:

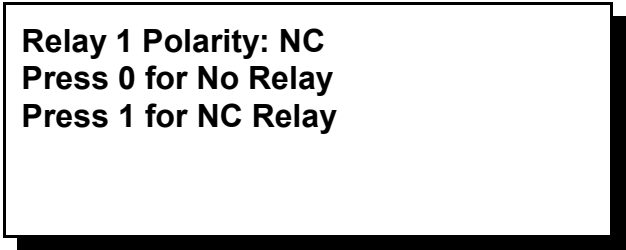


Rly 1 Time: **1**20 sec

Note: If no change is desired to the **Strike Time**, press the "*" key to show the **Relay Polarity Edit** display.

c) Use the up and down arrow keys to modify the **Strike Time**. The **Strike Time** parameter can be set to a maximum of 120 seconds in 5 second increments.

d) Press the "E" key after the desired **Strike Time** is displayed. The following **Relay Polarity** display will then appear:



Relay 1 Polarity: NC
Press 0 for No Relay
Press 1 for NC Relay

Note: If no change is desired to the **Relay Polarity**, press the "*" key to show the **Release Code Edit** display.

e) Press the "0" key to set **Normally Open (NO)** relay operation. Press the "1" key to set **Normally Closed (NC)** relay operation. The polarity setting will be confirmed and the following **Release Code Edit** display will then appear:

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Relay 1 Release On: 8

Note: If no change is desired to the **Release Code** digit, press the "*" key to show the **Enable Selection** display.

f) Use the up and down arrow keys to modify the **Release Code** digit. The **Release Code** digit can range from 0 to 9.

g) Press the "E" key after the desired **Release Code** digit is displayed. The following **Enable Selection** display will then appear:



**Rly 1 Timer Enabled
Press 0 to Disable
Press 1 to Enable**

Note: If no change is desired to the **Enable Selection**, press the "*" key to show the **Relay Timer Setting** display.

h) Press the "0" key if the **Relay Timer** is not to be enabled. Press the "1" key if the **Relay Timer** is to be enabled. The enable setting will be confirmed and the following **Relay Timer Setting** display will then appear with the **On Time Hours** highlighted:

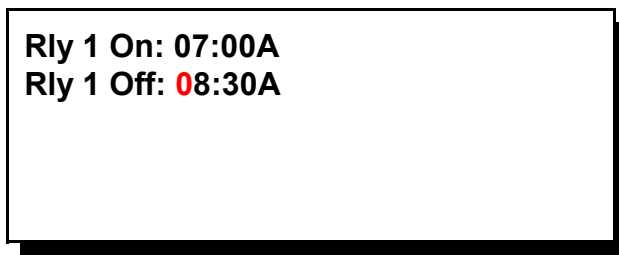


Rly 1 On: 07:00A

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Note: If no change is desired to the **Relay Timer Setting** , repeatedly press the "*" key until the **Continue Edit Request** display appears.

- i) Use the up and down arrow keys to modify the **On Time Hours** setting.
- j) Press the "E" key after the desired **On Time Hour** setting is displayed. The **On Time Minutes** will then appear highlighted.
- k) Use the up and down arrow keys to modify the **On Time Minutes** setting.
- l) Press the "E" key after the desired **On Time Minutes** setting is displayed.
- m) The **Relay Timer Setting Display** will then appear with the **Off Time Hours** highlighted:



Rly 1 On: 07:00A
Rly 1 Off: 08:30A

- n) Use the up and down arrow keys to modify the **Off Time Minutes** setting.
- o) Press the "E" key after the desired **Off Time Minutes** setting is displayed.
- p) Repeat the above steps for the **On Time AM/PM, Off Time Hours, Off Time Minutes, and Off Time AM/PM** parameters to be set to the desired values. The **Continue Edit Request** display will then appear.

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4.4.6 Elevator Controls

The Entraguard unit can provide, for buildings with elevators, an optional circuit to control the length of time the elevator door will remain open after a visitor is provided access.

To change the **Elevator Control** parameters use the following procedure:

- a) Scroll to the **Elevator Control** parameter on the **Parameter Scroll List** and press the "E" key.
- b) The following **Enable Selection** display will appear:



Elevator Control Enabled
Press 0 to Disable
Press 1 to Enable

Note: If no change is desired to the **Elevator Control Enable Selection**, press the "*" key to show the **Door Open Time** setting display.

- c) Press the "0" key if the **Elevator Control** is not to be enabled. Press the "1" key if the **Elevator Control** is to be enabled. The setting will then be confirmed on the display.
- d) The following **Door Open Time Edit** display will next appear with the first digit of **Door Open Time** being highlighted:



Door Open: 120 sec

Note: If no change is desired to the **Door Open Time**, press the "*" key to show the **Continue Edit Request** display.

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e) Use the up and down arrow keys to modify the **Door Open Time**. The **Door Open Time** can be set from 10 to 120 seconds in 5 second increments.

f) Press the "E" key after the desired **Door Open Time** is displayed. The **Continue Edit Request** display will then appear.

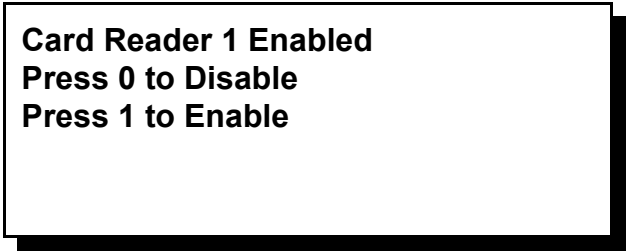
4.4.7 Card Reader Control Setting

The Entraguard unit can accommodate up to two (2) magnetic card readers to allow card access to the building.

To enable the **Card Reader** inputs use the following procedure:

a) Scroll to the **Card Reader Control** parameter on the **Parameter Scroll List** and press the "E" key.

b) The following **Enable Selection** display for **Card Reader 1** will appear:



Card Reader 1 Enabled
Press 0 to Disable
Press 1 to Enable

Note: If no change is desired to the **Card Reader 1 Enable Selection**, press the "*" key to show the **Enable Selection** display for **Card Reader 2**.

c) Press the "0" key if **Card Reader 1** is not to be enabled. Press the "1" key if **Card Reader 1** is to be enabled. The setting will then be confirmed on the display.

Repeat the above steps for enabling or disabling **Card Reader 2**.

d) After the setting for **Card Reader 2** is confirmed on the display or the "*" key has been pressed, the **Continue Edit Request** display will appear.

Note: If DIP Switch 6 is set to **OFF**, **Card Reader 1** will activate **Relay 1**, and **Card Reader 2** will activate **Relay 2**. If DIP Switch 6 is set to **ON**, **Card Reader 1** will activate both **Relay 1** and **Relay 2**.

Card Reader 2 will also activate both relays.

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For more information about DIP Switches, please see Section 2.7.
For more information about Relays, please see Section 4.4.5.

4.4.8 Printer Output Control Setting

The Entraguard unit can provide a printed report of all activity that has occurred when an optional serial printer is provided.

To enable the **Printer Output Control** setting use the following procedure:

- a) Scroll to the **Printer Output Control** parameter on the **Parameter Scroll List** and press the "E" key.
- b) The following **Enable Selection** display for **Printer Output Control** will appear:



Print Out Enabled
Press 0 to Disable
Press 1 to Enable

Note: If no change is desired to the **Printer Output Control Enable Selection**, press the "*" key to show the **Continue Edit Request** display.

- c) Press the "0" key if the **Printer Output Control** is not to be enabled. Press the "1" key if the **Printer Output Control** is to be enabled. The setting will then be confirmed on the display.
- d) After the setting for **Printer Output Control** is confirmed on the display or the "*" key has been pressed, the **Continue Edit Request** display will appear.

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4.4.9 TDD Option

The Entraguard unit provides an option for visitors with disabilities to use a TDD device to contact a tenant. An auxiliary telephone jack has been provided that is enabled when the proper access code has been entered into the keypad. The Entraguard unit will only accept this access code when the **TDD Option** is enabled.

To enable the **TDD Option** use the following procedure:

- a) Scroll to the **TDD Option** parameter on the **Parameter Scroll List** and press the "E" key.
- b) The following **Enable Selection** display for **TDD Option** will appear:

TDD Jack Enabled
Press 0 to Disable
Press 1 to Enable

Note: If no change is desired to the **TDD Option Enable Selection**, press the "*" key to show the **Continue Edit Request** display.

- c) Press the "0" key if the **TDD Option** is not to be enabled. Press the "1" key if the **TDD Option** is to be enabled. The setting will then be confirmed on the display.
- d) After the setting for **TDD Option** is confirmed on the display or the "*" key has been pressed, the **Continue Edit Request** display will appear.

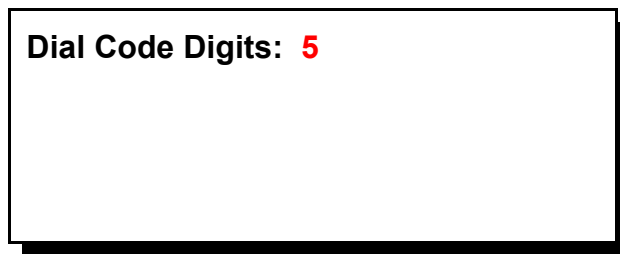
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4.4.10 Dial Code Digit Size Setting

The number of the **Dial Code Digit Size** can be programmed to coincide with the number of tenants served by the Entraguard unit. For buildings with less than 99 tenant entries the **Dial Code Digit** can be set to two (2) digits. For buildings with 100 - 999 tenant entries the **Dial Code Digit** can be set to three (3) digits. For buildings with more than 1000 tenant entries the **Dial Code Digit** can be set to four (4) digits.

To change the **Dial Code Digit Size** use the following procedure:

- a) Scroll to the **Dial Code Digit** parameter selection on the **Parameter Scroll List** and press the "E" key.
- b) The following **Dial Code Digit Edit** display will appear with the only digit of the **Dial Code Digit** field being highlighted:



Note: If no change is desired to the **Dial Code Digit Selection**, press the "*" key to show the **Continue Edit Request** display.

- c) Use the up and down arrow keys to modify the **Dial Code Digit**. The **Dial Code Digit** can be set to **2, 3, or 4** digits.
- d) Press the "E" key after the desired **Dial Code Digit** is displayed. The **Continue Edit Request** display will then appear.

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4.4.11 PBX Parameter Setting

The Entraguard unit can be used with a PBX system that requires a single digit to be dialed to gain access to an outside line that can be used to call a tenant. A settable delay time is also provided to pause before the tenant number is dialed to allow time for the PBX to switch over to an outside line.

To change the **PBX** parameters use the following procedure:

- a) Scroll to the **PBX Parameter** listing on the **Parameter Scroll List** and press the "E" key.
- b) The following **Enable Selection** display will appear:



PBX Option Disabled
Press 0 to Disable
Press 1 to Enable

Note: If no change is desired to the **PBX Option Enable Selection**, press the "*" key to show the **PBX Dial Digit** setting display.

- c) Press the "0" key if the **PBX Option** is not to be enabled. Press the "1" key if the **PBX Option** is to be enabled. The setting will then be confirmed on the display and the following **PBX Dial Digit** setting display will appear:



PBX Dial Digit: 7

Note: If no change is desired to the **PBX Dial Digit**, press the "*" key to show the **PBX Dial Delay Time** setting display.

- d) Use the up and down arrow keys to modify the **PBX Dial Digit**. The **PBX Dial Digit** can range from 0 to 9.

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e) Press the "E" key after the desired **PBX Dial Digit** is displayed. The following **PBX Dial Delay Time** display will then appear:



Dial Delay: 10 sec

Note: If no change is desired to the **PBX Dial Delay**, press the "*" key to show the **Continue Edit Request** display.

f) Use the up and down arrow keys to modify the **PBX Dial Delay Time**. The **PBX Dial Delay Time** can be set from 2 to 10 seconds.

g) Press the "E" key after the desired **PBX Dial Delay Time** is displayed. The **Continue Edit Request** display will then appear.

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4.4.12 Data Logging Control Setting

In addition to printing out records of all transactions, the Entraguard unit can store these records in memory, to be accessed remotely. The Entraguard unit can be set to store up to 400 or up to 800 transaction records.

Note: The **Data Log Control** can only be set by Marlee Electronics Corporation, based on non-volatile memory installed in the Entraguard unit.

To change the **Data Log Control** use the following procedure:

a) Scroll to the **Data Log Control** on the **Parameter Scroll List** and press the “E” key.

b) The following **Enable Selection** display for **Data Log Control** will appear:



Log Data Disabled
Press 0 to Disable
Press 1 to Enable

Note: If no change is desired to the **Data Log Control Enable Selection**, press the “*” key to show the **Transaction Amount Selection** display.

c) Press the “0” key if the **Data Log Control** is not to be enabled. Press the “1” key if the **Data Log Control** is to be enabled. The setting will then be confirmed on the display.

d) After the setting for **Data Logging Control** is confirmed on the display or the “*” key has been pressed, the following **Transaction Amount Selection** display will appear.



400 Transactions
Press 0 for 400
Press 1 for 800

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Note: If no change is desired to the **Transaction Amount**, press the "*" key to show the **Continue Edit Request** display.

e) Press the "0" key to select 400 Transactions. Press the "1" key to select 800 Transactions. The setting will then be confirmed on the display.

f) If the Entraguard unit contains a limited amount of non-volatile memory, the **Transaction Amount** will automatically be set to 400. The following display will then appear:



400 Transactions Max

f) After the **Transaction Amount Selection** is confirmed on the display or the "*" key has been pressed, the **Continue Edit Request** display will appear.

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4.5 Date and Time Setting

The Entraguard unit must have a correct current date and time setting programmed to enable many of the functions to work accurately.

To program the correct date and time, perform the following steps:

a) After entering the **Local Edit Mode** (per Section 4.2), press **3** to access **Set Clock**. The following display will appear, with the first digit of the month highlighted:



Edit Date Below
DATE: 07/24/97

Note: If no change is desired to the **Date Display**, press the "*" key to highlight the **Time Display**.

b) Enter the month (01=January, 02=February,...12=December) by using the up and down arrow keys. Then press the "E" key to highlight the day.

c) Enter the date of the month by using the up and down arrow keys. Then press the "E" key to highlight the year.

d) Enter the last two (2) digits of the year (1997=97) and press the "*" key. The following display will appear, with the hour highlighted:



Edit Date Below
DATE: 07/24/97
Edit Time Below
TIME: 09:12 AM
TIME: 09:12 AM


Note: If no change is desired to the **Time Display**, press the "*" key to return to the **Program Selection List**.

e) Enter the hour, minute and AM/PM by using the up and down arrow keys. Then press the "E" key to return to the **Programming Selection List**.

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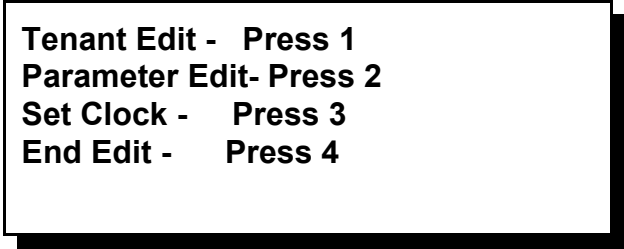
4.6 Ending Local Edit Mode

When all information has been entered, press the "*" key to return to the **Continue Edit Request** display:



Edit More - Press 1
End Edit - Press 2

Pressing the "2" key will cause the **Programming Selection List** will be displayed:



Tenant Edit - Press 1
Parameter Edit- Press 2
Set Clock - Press 3
End Edit - Press 4

Press "4" to end Local Edit Mode and return to the **Marquee Message** display.

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5.0 Remote Programming

5.1 Introduction

The Entraguard VFD can be programmed from a personal computer (remote programming) using the software provided by Marlee Electronics Corporation. This section provides detailed instructions for programming from a personal computer.

Note: The unit may also be programmed locally (directly at the unit). Section 4.0 provides detailed instructions for programming the unit locally.

5.2 PC Software Installation

The Entraguard Programming System Software requires an IBM compatible PC Computer running Windows 3.X or Windows 95.

To install the Entraguard Programming System Software on a PC system running Windows 3.X, use the disk labeled *Installation Disk* and following the following procedure.

- 1) Insert floppy disk into your 3 1/2" drive.
- 2) Select Run from the Program Manager File menu.
- 3) Type the floppy disk drive letter followed by :\setup (e.g., a:\setup) and Press Enter
- 4) The Entraguard installer displays a screen and prompts you to select a directory to install the EPS software. **Note:** The drive letter may be changed , but the directory name must be *EPS*.
- 5) Press Enter to complete the Entraguard Programming System installation.

To install the Entraguard Programming System Software on a PC system running Windows 95, use the disk labeled *Installation Disk* and following the following procedure.

- 1) Insert floppy disk into your 3 1/2" drive.
- 2) Select Run from the Start menu.
- 3) Type the floppy disk drive letter followed by :\setup (e.g., a:\setup) and Press OK
- 4) The Entraguard installer displays a screen and prompts you to select a directory to install the software.

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Note: The drive letter may be changed , but the directory name must be *EPS*.

5) Press Enter to complete the Entraguard Programming System installation.

Note: Windows 3.X and Windows 95 are trademarks of Microsoft Corporation

5.3 Starting the Entraguard Programming System

Perform the following procedure to start the Entraguard Programming System (EPS):

a) Turn on your computer system and start Windows.



Figure 5.3

b) Double click on the EPS Program Group.c) Double click on the EPS Program Icon.d) The **Main Command Window** will appear:

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This allows the following main commands to be accessed:

Setup Command - Allows the user to identify to which PC Computer Com Port the PC Computer's Modem has been assigned and on which Disk Drive the Tenant Lists and Parameter Files are stored.

Select System Command - Allows the user to select the Entraguard System whose Tenant Lists and Parameter Files are to be modified, retrieved or sent. This command window also allows existing system parameters to be modified, new systems to be added or existing systems to be deleted.

Open File Command - Opens the selected Entraguard Systems' Tenant Lists and Parameter Files for modification.

Retrieve File Command - Retrieves the selected Entraguard Systems' Tenant Lists and Parameter Files from a local Entraguard unit via the telephone line. This allows the most recent Tenant List and Parameter File to be modified and saved on the PC Computer System.

Send Files Command - Sends the selected Entraguard Systems' Tenant Lists and Parameter Files stored in the PC Computer System to the local Entraguard unit via the telephone line.

End Command - Ends the current programming session and returns to the main Windows screen.

Help Command - On line help is not currently available.

Note: The **Open File, Retrieve File and Send File** commands are inactive until a system is selected for programming.

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5.4 Set Up Command

To modify the EPS Program Setup, first double click on **Set Up**. The **Set Com Port** and **Set File Path** commands will appear (Figure 5.4) in the *Main Command* window as follows:



Figure 5.4

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5.4.1 Modem COM Port Setting

This parameter identifies to the EPS software the **COM Port** that the Modem has been assigned in the user's PC Computer System.

To modify the **Modem Com Port** that the EPS software expects, perform the following:

a) Double Click on the **Set Com Port** command. The following window (Figure 5.4.1) will appear:

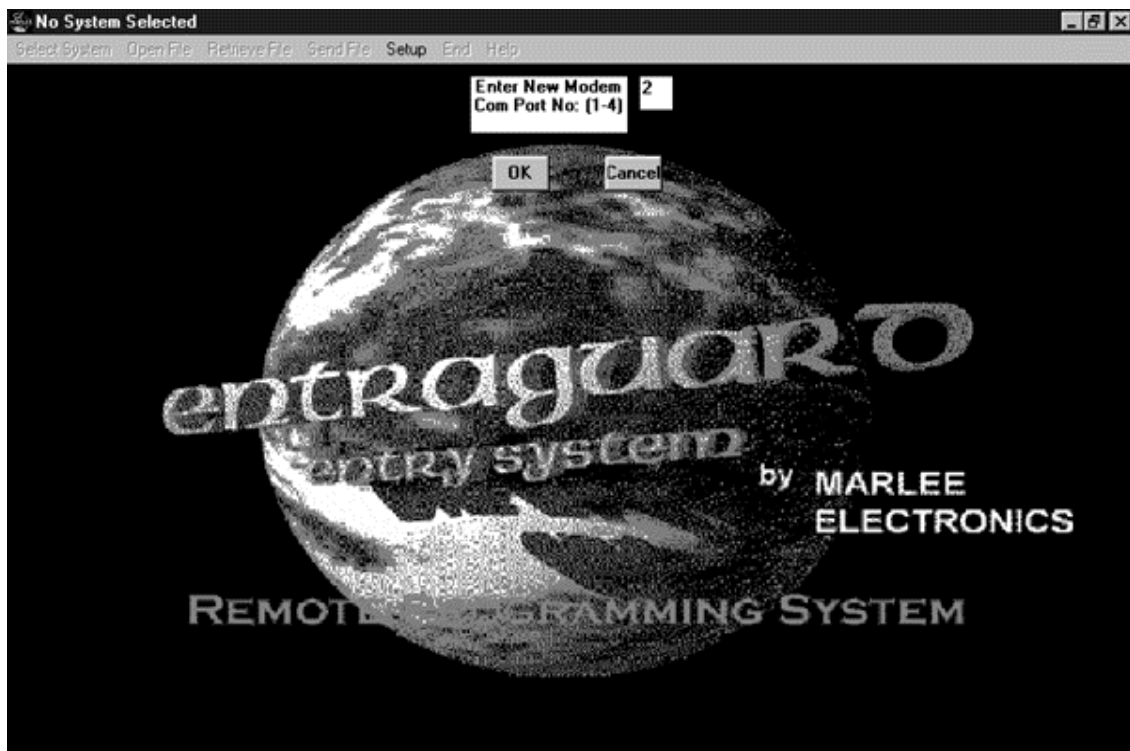


Figure 5.4.1

b) Enter the Modem Com Port currently being used (1-4) and click on **OK**.

Notes:

- 1) The Modem Com Port default value is set to 2.
- 2) Once the Modem Com Port has been set by the user the EPS software will retain that setting.

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5.4.2 Disk Drive Setting

This identifies the PC Computer System's Disk Drive to be used by the EPS software for storage of the Tenant Lists and Parameter Files.

To modify the Disk Drive to be used by the EPS software, perform the following:

a) Double Click on the **Set File Path** command. The following window (Figure 5.4.2) will appear:



Figure 5.4.2

b) Enter the Disk Drive letter and click on **OK**.

Notes:

- 1) The Disk Drive default is set to C.
- 2) Once the Disk Drive letter has been set by the user, the EPS software will retain that setting.

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5.5 Select System Command

This command window allows the user to select from the list of Entraguard systems available for programming functions. This command window also allows existing system parameters to be modified, new systems to be added or existing systems to be deleted.

Once an Entraguard System is selected that system's Tenant List and Parameter Files will be available for use with the **Open File, Retrieve File and Send File** commands.

The following *Select Entraguard System* window (Figure 5.5) will appear by double clicking on the **Select System Command**:

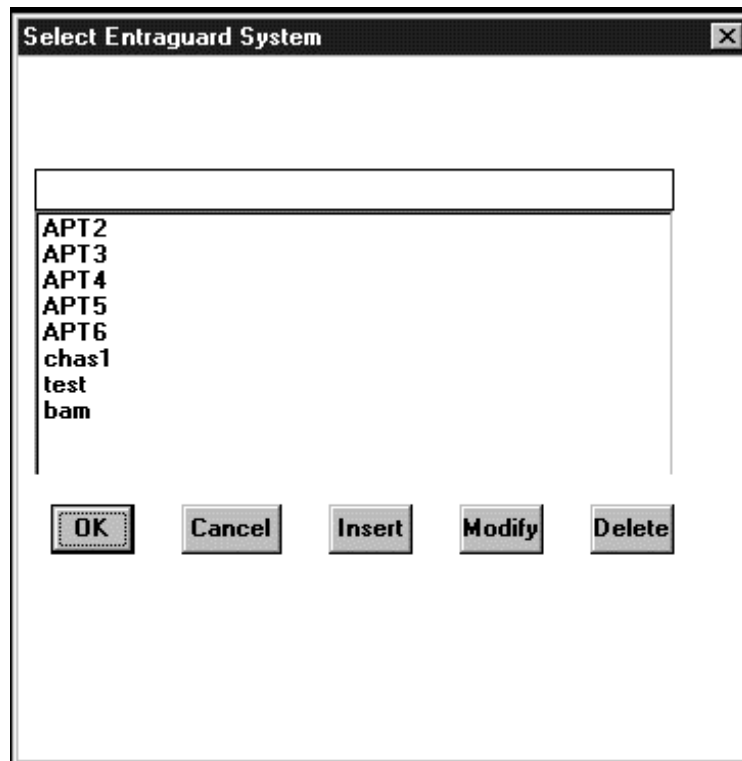


Figure 5.5

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5.5.1 System Selection

To select an existing system stored in the EPS software data base perform the following:

a) Select an existing Entraguard System by clicking on that system name in the list box. The system name selected will appear in the top box (Figure 5.5.1a) as shown:

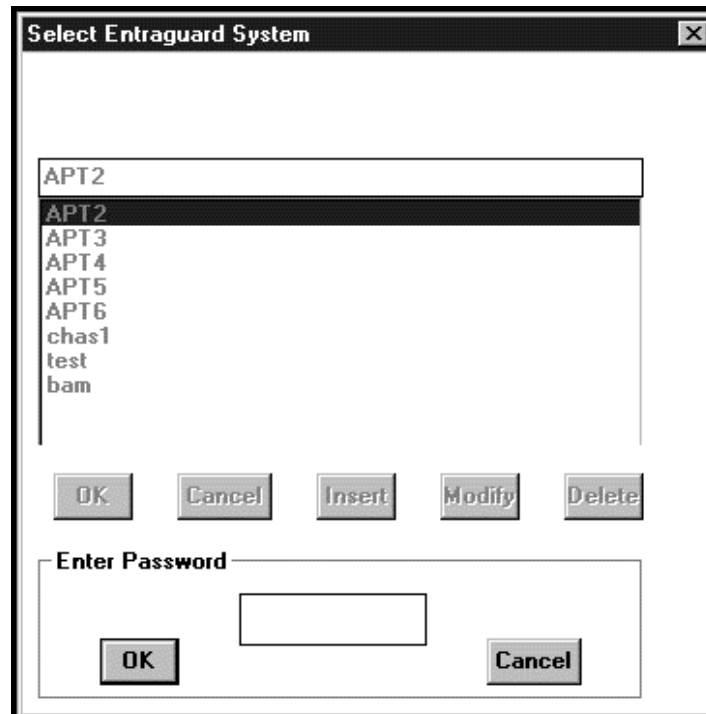


Figure 5.5.1a

b) Enter an eight digit password, and then click **OK**.

Note: This password is the same password as that which is used to access the Local Unit. See Section 4.4.1 for a description of the password.

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c) If the selected system does not contain a log file, the following message (Figure 5.5.1b) will be displayed:

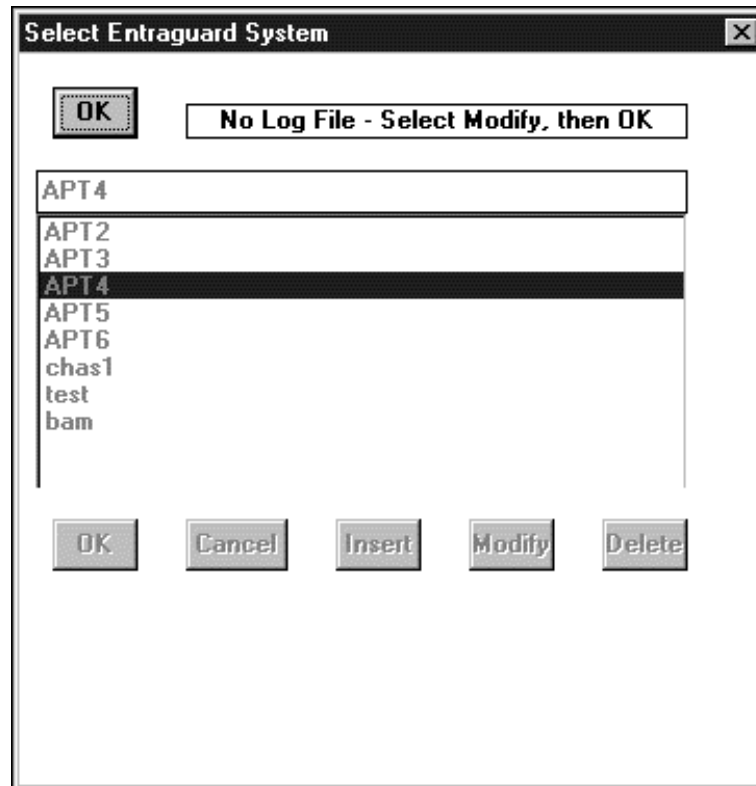


Figure 5.5.1b

Note: If this message does *not* appear, the selected system already contains a log file. Please skip directly to instruction g.

d) Click **OK** (in the top left corner) to acknowledge the message.

e) Click **Modify**. The *Edit Entraguard System* window will appear.

f) Click **OK**. Changes do not have to be made to the system setup.

Note: This procedure will only need to be done once for each system.

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g) The following window (Figure 5.5.1c) will then appear:

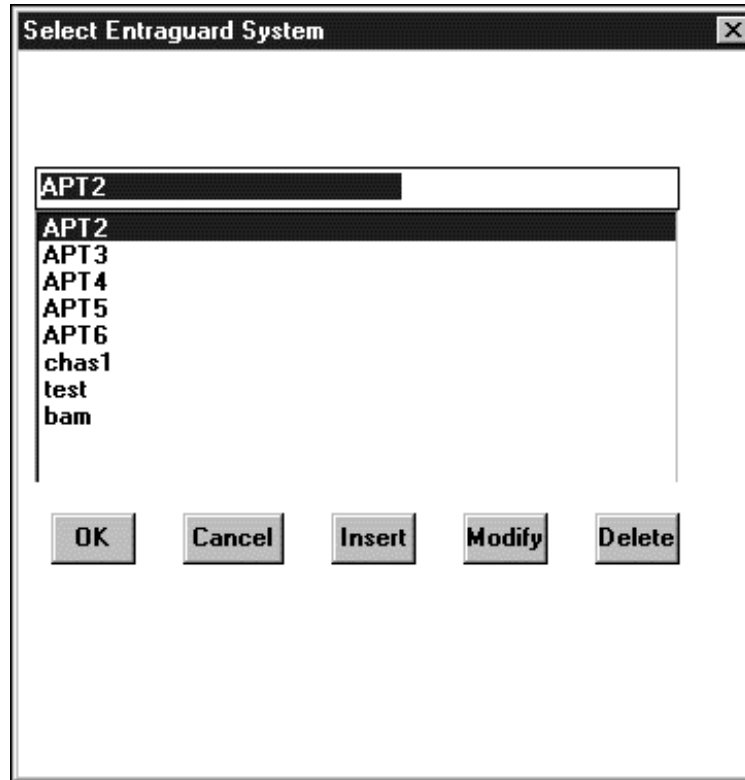


Figure 5.5.1c

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Note: If a system has not been selected, the following message (Figure 5.5.1d) will appear:

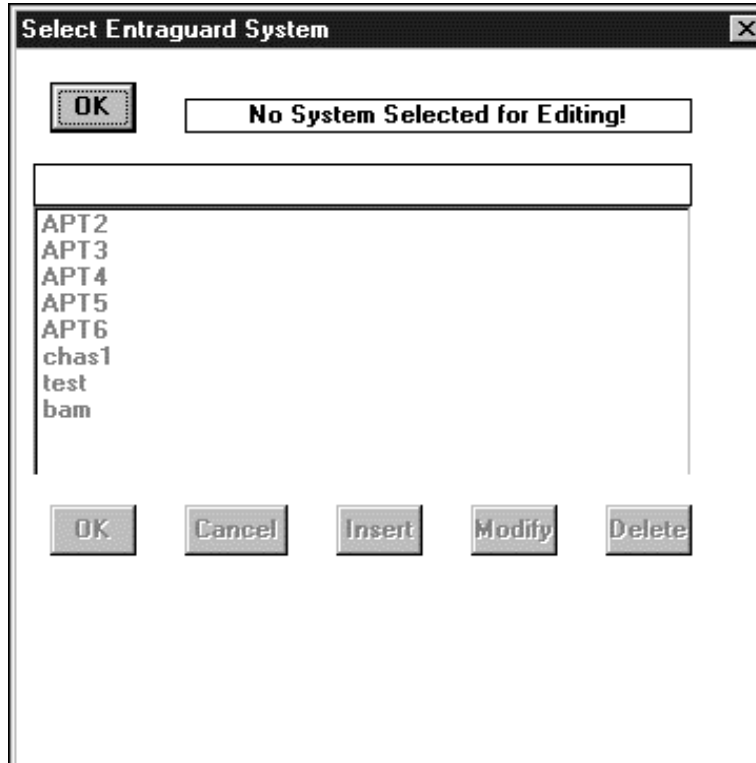


Figure 5.5.1d

Click **OK**, select a system, and continue.

5.5.2 Adding New Systems

The following procedures should be followed to add a new Entraguard System to the EPS software data base:

a) From the *Select Entraguard System Window*, click on **Insert(Add)** command from the menu. The following *Edit Entraguard System File* window (Figure 5.5.2) will appear.

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Edit Entraguard System File

System Name:

Address:

Telephone No.:

Notes:

Master/Slave Configuration

Master System No. of Slaves:

Sub-Master System Assigned No:

Figure 5.5.2

b) Complete the information requested, including the System Name, Address and Telephone Number.

Note: The telephone number must be entered without spaces or dashes. (i.e. 5551111 or 12165551111)

Note: For systems connected to a PBX that does not initially supply dial tone place an “X” in front of the telephone number to be dialed. It is also recommended that commas be placed after the PBX digit to ensure dial tone is available when the outside number is dialed . (i.e. X9,,5551212)

c) The Master / Slave Configuration information is required if more than one Entraguard unit is connected to a single telephone line. Enter the configuration information per the following notes:

Notes:

- 1) Select only the Master System box if there is only one Entraguard unit connected to the telephone line.
- 2) If multiple units are connected to the same telephone line and they are to be programmed with the same Tenant List and Parameter Files, select the Master System box and enter the number of units in addition to the master unit.

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- 3) If multiple units are connected to the same telephone line and they all are not programmed with the same Tenant List and Parameter Files, select the Sub-Master System box and enter the ID number assigned to the units. (See Section 3.11 for setting the unit ID number.)
- d) Click the **OK** box when all the system data has been entered.

Note: Click on the **Cancel** box at any time to discard any changes made and return to the *Select Entraguard System* window.

5.5.3 Modifying Existing System Information

The following procedure should be followed to modify existing Entraguard System data stored in the EPS software data base:

- a) Once a system has been selected in the *Select Entraguard System* window, click on the **Modify** command from the menu. The *Edit Entraguard System File* window will appear displaying the currently stored system data .
- b) Modify the system information as desired.
- c) Click the **OK** box when all the system data modifications have been entered.

Note:

- 1) Click on the **Cancel** box at any time to discard any changes made and return to the *Select Entraguard System* window.
- 2) A system must be selected to modify exiting Entraguard System data stored in the EPS software data base. If a system has not been selected, a message to that effect will appear. Click **OK**, select a system, and continue.

5.5.4 Deleting Existing Systems

The following procedure should be followed to delete an existing Entraguard System from the EPS software data base:

- a) Once a system has been selected in the *Select Entraguard System* window, click on the **Delete** command from the menu.

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b) A delete confirmation message will appear in the *Select Entraguard System* window (Figure 5.5.4) as shown:

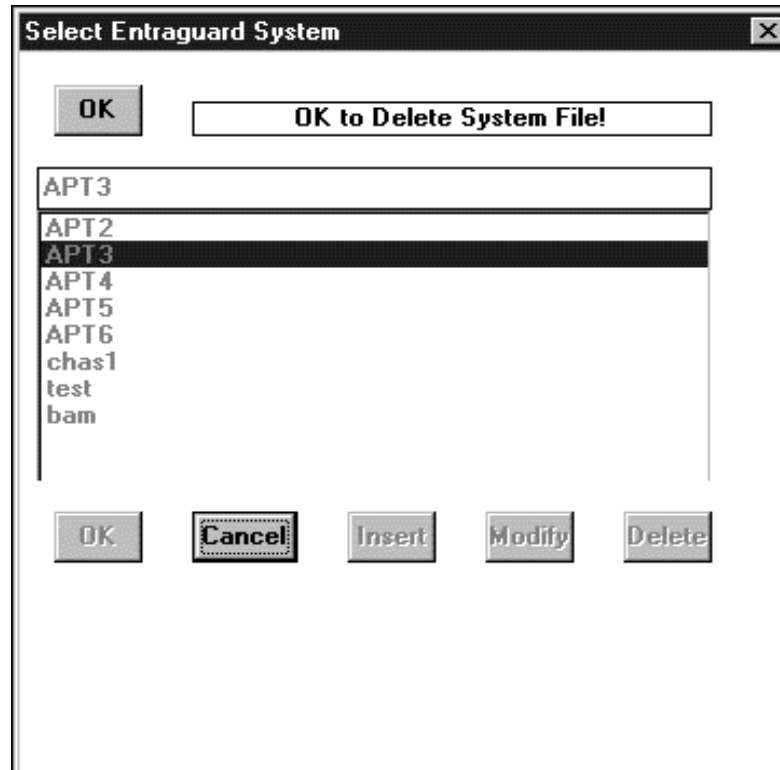


Figure 5.5.4

c) Click **OK** at the top of the window, if you wish to proceed with deleting the Entraguard System from the EPS software data base.

Note: If you do not wish to proceed with the deletion, click the **Cancel** box.

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5.6 Open File Command

After selecting an Entraguard System as described in Section 5.5.1, the EPS software will return to the *Main Command* window.

Click on the **Open File** command to modify the Tenant List and Parameter Files stored in the EPS data base. The following window (Figure 5.6) will appear in the *Main Command* window:



Figure 5.6

The following sections detail the procedures for modifying the Tenant List and Parameter File stored in the EPS data base, as well as viewing the most recently retrieved Log Data:

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5.6.1 Tenant List Editing

To modify the Tenant List file click on the **Tenant(Name) List** command from the pull down menu. The following *Tenant Name List* window (Figure 5.6.1) will appear providing a summary of the information stored in the EPS software data base. This includes tenant names, telephone numbers, keypad dial numbers, keypad access numbers, and card reader access numbers.

The user can modify add, modify or delete tenant entries or opt to have the EPS software create a print file of the current Tenant List. The following sections describe how to use these features:

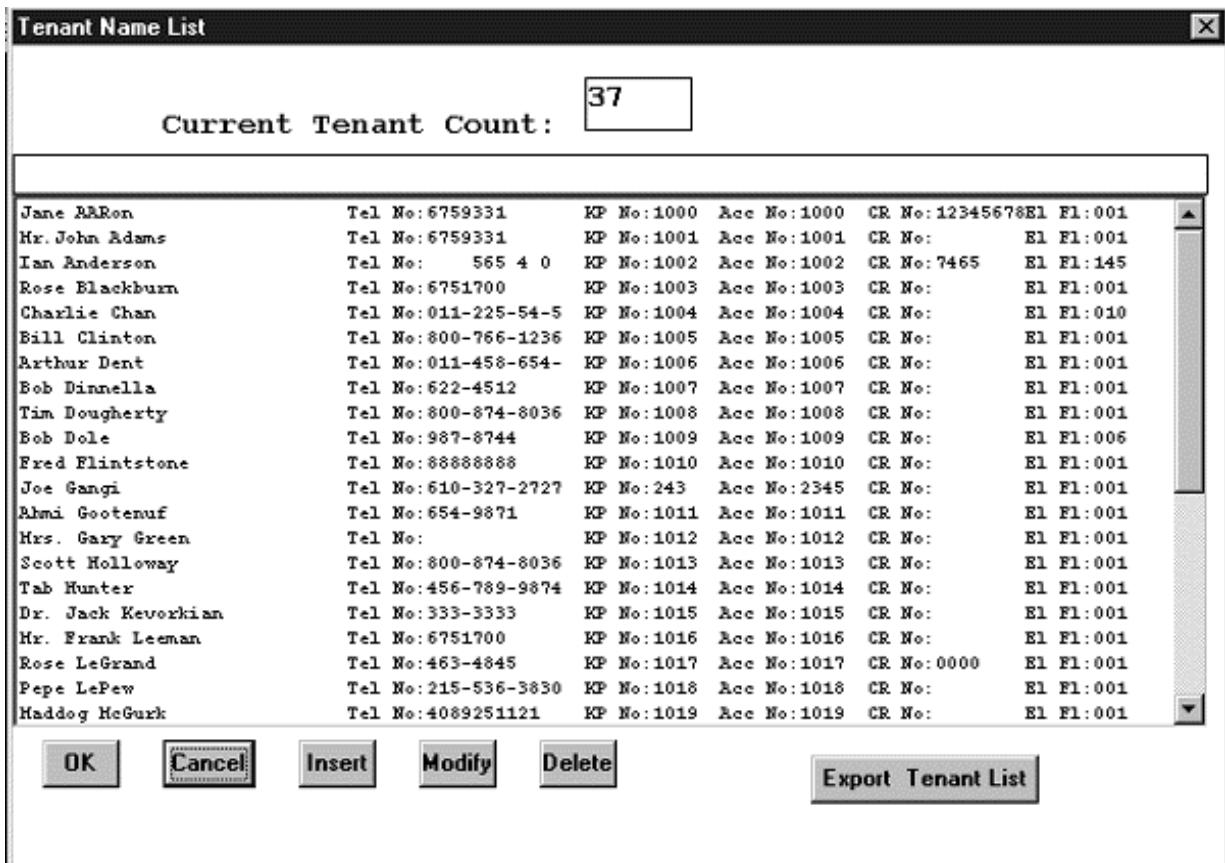


Figure 5.6.1

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5.6.1.1 Tenant Name Selection

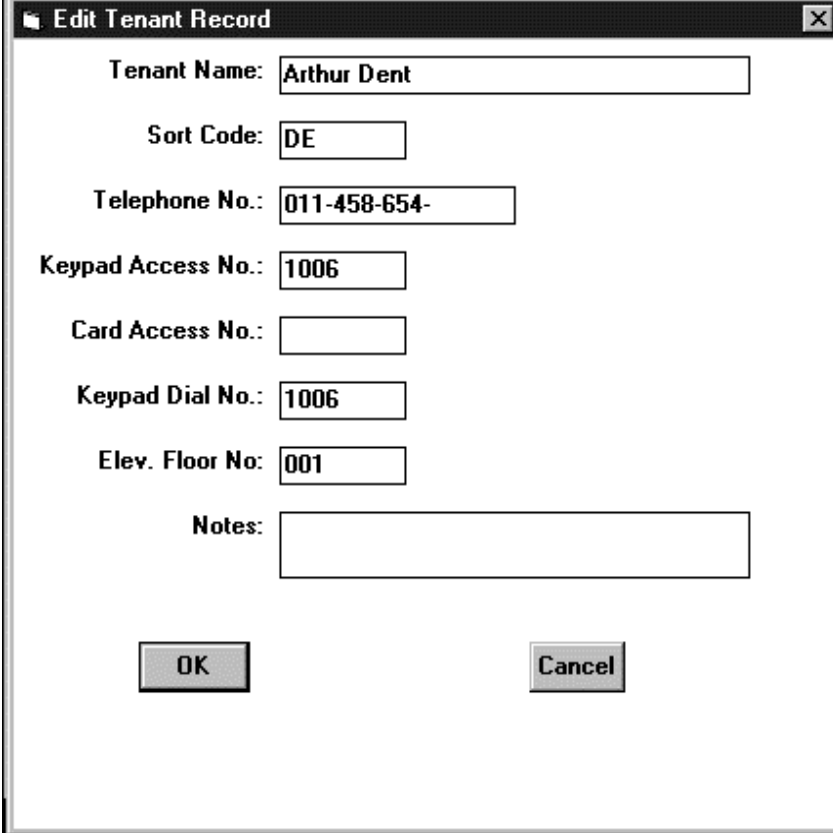
To select an existing Tenant name stored in the EPS software data base for editing, click on that tenant name in the list box. The tenant name selected will appear in the top box. This tenant entry can now be modified or deleted.

Note: To add a new tenant entry, a tenant name does not need to be selected.

5.6.1.2 Adding New Tenants Names

The following procedures should be followed to add a new Tenant names to the EPS software data base:

a) From the *Tenant Name List* window, click on **Insert(Add)** command from the menu. The following *Edit Tenant Record* window (Figure 5.6.1.2) will appear:



The screenshot shows a dialog box titled "Edit Tenant Record" with a close button in the top right corner. The dialog contains the following fields and values:

- Tenant Name: Arthur Dent
- Sort Code: DE
- Telephone No.: 011-458-654-
- Keypad Access No.: 1006
- Card Access No.: (empty)
- Keypad Dial No.: 1006
- Elev. Floor No.: 001
- Notes: (empty text area)

At the bottom of the dialog are two buttons: "OK" and "Cancel".

Figure 5.6.1.2

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b) Enter the information requested, including the Tenant Name, Sort Code, Telephone Number, Keypad Access Number, Card Access Number, Keypad Dial Number, Elevator Floor Number, and any additional notes.

Note: See Section 4.3.1 for a description of the tenant list data items.

c) Click the **OK** box when all the tenant data has been entered. The new tenant name is now saved in the EPS data base. The EPS software will resort the tenant list as indicated by the flashing *Tenant Name List* window.

Note: Click on the **Cancel** box at any time to discard any changes made and return to the *Tenant Name List* window.

5.6.1.3 Modifying Existing Tenant Entries

The following procedure should be followed to modify existing Entraguard System data stored in the EPS software data base:

a) Once a system has been selected in the *Tenant Name List* window, click on the **Modify** command from the menu. The *Edit Tenant Record* window will appear displaying the currently stored tenant data .

b) Modify the system information as desired.

Note: See Section 4.3.1 for a description of the tenant list data items.

c) Click the **OK** button when all the tenant data modifications have been entered.

Note: Click on the **Cancel** button at any time to discard any changes made and return to the *Tenant Name List* window.

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5.6.1.4 Deleting Existing Tenant Entries

The following procedure should be used to delete an existing tenant entry from the EPS software database:

a) Once a system has been selected in the *Tenant Name List* window, click on the **Delete** command from the menu.

Note: Once **Delete** has been selected, the information is erased from the EPS software data base and must be re-entered if it is needed.

5.6.1.5 Export Tenant List Command

The **Export Tenant List** command writes an ASCII file to the select disk drive. This file can then be accessed and printed from any common word processing program, such as Word Perfect, Word or Notepad.

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5.6.2 System Configuration Modification

To change an Entraguard System's Configuration, the user modifies the Parameter File information stored in the EPS software data base. All parameters can be modified by the Marlee Electronics Corporation. The Installer and the User, via their respective passwords, can modify specific parameter functions. Table 4.4 provides a list of the system parameters that can be set and identifies the password level required to access the system parameters. This is accomplished by clicking on the **Configuration** command from the pull down menu under the **Open File** command on the *Main Command* window.

The following *System Parameter Listing* window (Figure 5.6.2) will appear providing a list of the parameters that are available for modification:

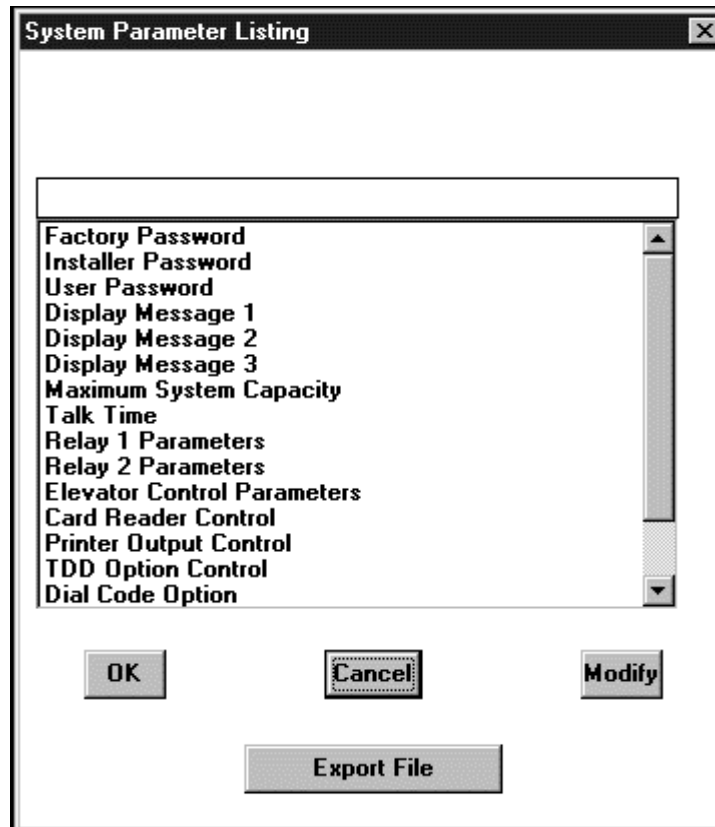


Figure 6.2

The following sections describe how to modify the various parameters.

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5.6.2.1 Parameter Selection

To select a parameter to modify, click on that parameter name in the list box. The parameter selected will appear in the top box (Figure 5.6.2.1) as shown:

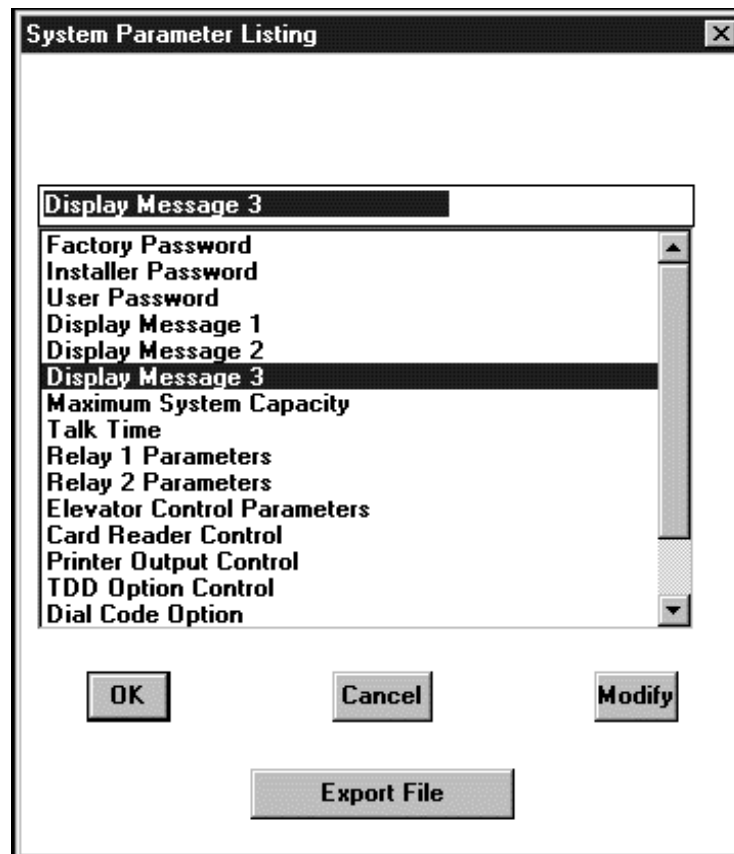


Figure 5.6.2.1

Click on the **Modify** button to access the edit window for the parameter selected.

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5.6.2.2 Password Programming

The Entraguard system has three levels of passwords. They are the Factory Password, the Installer Password, and the User (Customer) Password. To change a password follow the following procedure:

Note: The passwords should be the same passwords as those used to access the Local Unit. See Section 4.4.1 for a description of the passwords.

a) After selecting one of the passwords per section 5.6.2.1, the following *Change Password* window (Figure 5.6.2.2) will appear with the first digit of the Password being highlighted:



Figure 5.6.2.2

b) Enter the new password.

c) Click the **OK** button to save the change.

Note: If no change is desired to the **Password**, click the **Cancel** button to return to the *System Parameter Listing* window.

5.6.2.3 Marquee Message Programming

The **Marquee Messages** can be used to provide information to visitors on the display of the local Entraguard Unit.

A maximum of three (3) **Marquee Messages** can be programmed along with the length of time the message is displayed. See Section 4.4.2 for a description of the **Marquee Messages**.

To change any of the three (3) **Display (Marquee) Messages**, use the following procedure:

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a) After selecting one of the **Marquee Messages** per section 5.6.2.1, the following *Change Display Message* window (Figure 5.6.2.3) will appear:

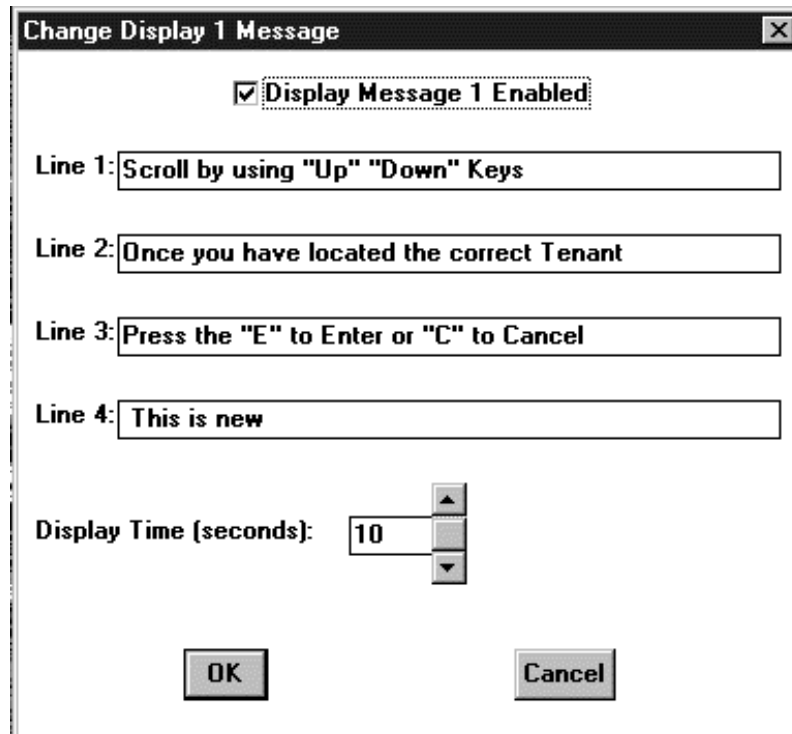


Figure 5.6.2.3

b) Enter new message text or modify the existing text.

c) Use the up and down arrow keys buttons to modify the **Display Time** parameter.

d) Click the **OK** button to save the changes .

Note: If no change is desired to the **Message Marquee**, click the **Cancel** button to return to the *System Parameter Listing* window.

5.6.2.4 Maximum System Capacity Setting

The **Maximum System Capacity** parameter sets the maximum number of tenant entries that the Entraguard unit is capable of holding. The Entraguard unit can hold up to 2000 tenants depending on the non-volatile memory provided.

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Note: The **Max System Capacity** can only be set by Marlee Electronics Corporation based on the non-volatile memory installed in the Entraguard unit.

To change the **Max System Capacity** use the following procedure:

a) After selecting one of the **Max System Capacity** per section 5.6.2.1, the following *Change Maximum System Capacity* window (Figure 5.6.2.4) will appear:

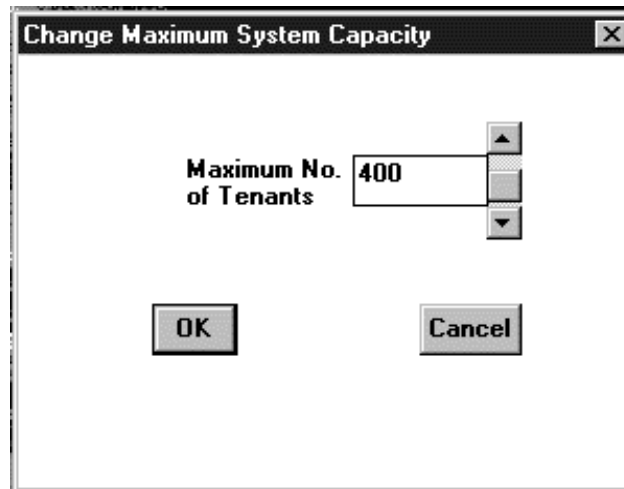


Figure 5.6.2.4

b) Use the up and down arrow keys to modify the **Max System Capacity**.

c) Click the **OK** button to save the change.

Note: If no change is desired to the **Max System Capacity**, click the **Cancel** button to return to the *System Parameter Listing* window.

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5.6.2.5 Talk Time Setting

The **Talk Time** setting determines the maximum time allotted for the visitor's telephone conversation with the tenant.

To change the **Talk Time Setting**, use the following procedure:

a) After selecting the **Talk Time Setting** per section 5.6.2.1, the following *Change Talk Time* window (Figure 5.6.2.5) will appear:

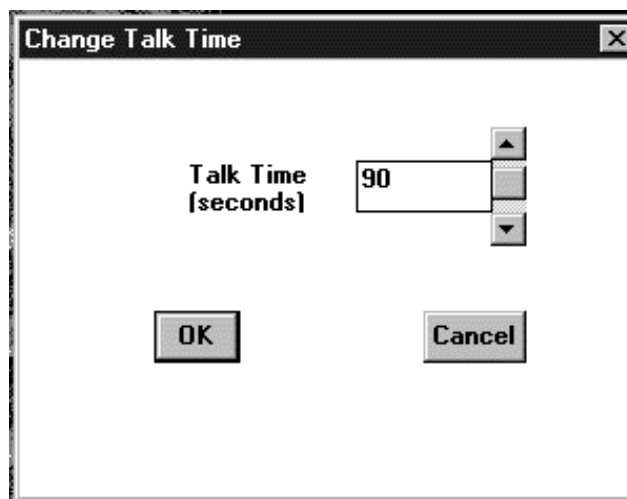


Figure 5.6.2.5

b) Use the up and down arrow keys to modify the **Talk Time Setting**.

c) Click the **OK** button to save the change .

Note: If no change is desired to the **Talk Time Setting**, click the **Cancel** button to return to the *System Parameter Listing* window.

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5.6.2.6 Relay Parameter Setting

There are two (2) relays built into the Entraguard unit that can be used to control door strike solenoids or other devices. See Section 4.4.5 for a description of the relay parameters that can be controlled.

To change either **Relay 1** or **Relay 2** parameters use the following procedure:

The screenshot shows a dialog box titled "Change Relay 1 Parameters". It contains the following fields and controls:

- Strike Time (seconds):** A numeric input field with the value "10" and up/down arrow buttons.
- Relay Polarity:** Radio buttons for "Normally Open" (selected) and "Normally Closed".
- Relay Trigger:** A numeric input field with the value "9" and up/down arrow buttons.
- Hold Relay Timer:** A section containing a checkbox labeled "Timer Enabled" (unchecked), a time input field set to "07:30AM" with up/down arrows, and another time input field set to "07:45PM" with up/down arrows. Below these are the labels "Turn Relay On" and "Turn Relay Off".
- Buttons:** "OK" and "Cancel" buttons at the bottom.

Figure 5.6.2.6

- After selecting either **Relay 1** or **Relay 2** per section 5.6.2.1, the following *Change Relay Parameter* window (Figure 5.6.2.6) will appear:
- Use the up and down arrow keys to modify the **Strike Time**.
- Select the desired the **Relay Polarity**.
- Use the up and down arrow keys to modify the **Relay Trigger (Release Code)**.
- Check the **Hold Relay Timer** box if it is to be enabled.

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f) Use the up and down arrow keys to modify times when the **Relay Timer** is to be turned on and off.

g) Click **OK** button to save the changes.

Note: If no change is desired to the **Relay 1 Parameters** or **Relay 2 Parameters**, click the **Cancel** button to return to the "System Parameter Listing" window.

5.6.2.7 Elevator Control Parameter

The Entraguard unit can provide, for buildings with elevators, an optional circuit to control the length of time the elevator door will remain open (Activation Time) after a visitor is provided access.

To change the **Elevator Control Parameters** use the following procedure:

a) After selecting one of the **Elevator Control Parameters** per section 5.6.2.1, the following *Elevator Control Parameters* window (Figure 5.6.2.7) will appear:

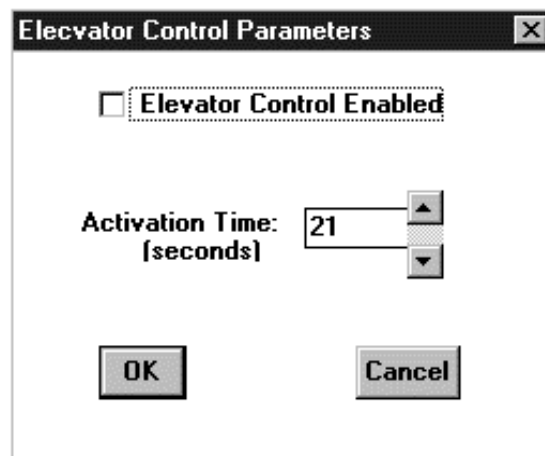


Figure 5.6.2.7

b) Check the **Elevator Control** box if it is to be enabled.

c) Use the up and down arrow keys to modify the **Activation Time**.

d) Click the **OK** button to save the change .

Note: If no change is desired to the **Elevator Control Parameters**, click the **Cancel** button to return to the *System Parameter Listing* window.

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5.6.2.8 Card Reader Control Setting

The Entraguard unit can accommodate up to two (2) magnetic card readers to allow card access to the building.

To enable the **Card Reader** inputs use the following procedure:

a) After selecting one of the **Card Reader Control Settings** per section 5.6.2.1, the following *Card Reader Control* window (Figure 5.6.2.8) will appear:

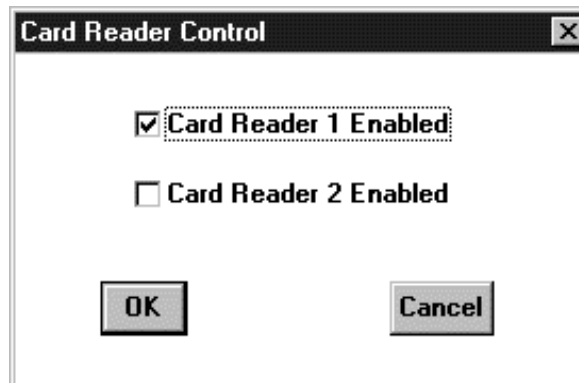


Figure 5.6.2.8

b) Check the appropriate box if **Card Reader 1** or **Card Reader 2** is to be enabled.

c) Click the **OK** button to save the change .

Notes:

- 1) If no change is desired to the **Card Reader Control Setting**, click the **Cancel** button to return to the *System Parameter Listing* window.
- 2) Please see Section 4.4.7 about proper DIP Switch settings for **Card Reader Control**.

5.6.2.9 Printer Output Control Setting

The Entraguard Unit can provide a printed report of all activity that has occurred when an optional serial printer is provided.

To enable the **Printer Output Control** setting use the following procedure:

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a) After selecting the **Printer Output Control** per section 5.6.2.1, the following *Printer Output Control* window (Figure 5.6.2.9) will appear:

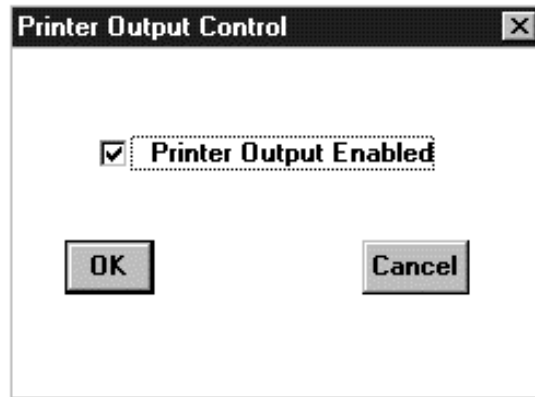


Figure 5.6.2.9

b) Check the **Printer** box if the Printer is to be enabled.

c) Click the **OK** button to save the change .

Note: If no change is desired to the **Printer Output Control**, click the **Cancel** button to return to the *System Parameter Listing* window.

5.6.2.10 TDD Option Control Setting

The Entraguard unit provides an option for visitors with disabilities to use a TDD device to contact a tenant. An auxiliary telephone jack has been provided that is enabled when the proper access code has been entered into the keypad. The Entraguard unit will only accept this access code when the **TDD Option** is enabled.

To enable the **TDD Option** use the following procedure:

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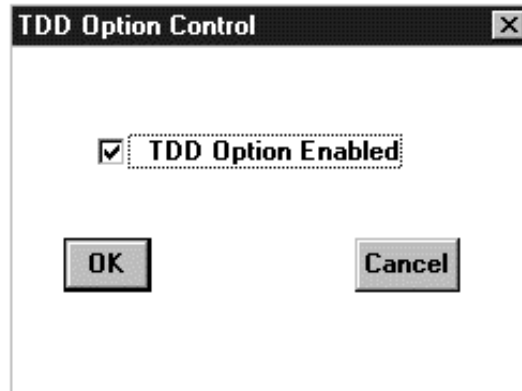


Figure 5.6.2.10

- a) After selecting the **TDD Option** per section 5.6.2.1, the following *TDD Option Control* window (Figure 6.5.2.10) will appear:
- b) Check the **TDD Option** box if the **TDD Option** is to be enabled.
- c) Click the **OK** button to save the change .

Note: If no change is desired to the **TDD Option**, click the **Cancel** button to return to the *System Parameter Listing* window.

5.6.2.11 Dial Code Option

The number of the **Dial Code Option** can be programmed to coincide with the number of tenants served by the Entraguard unit. For buildings with less than 99 tenant entries, the **Dial Code Option** can be set to 2 digits. For buildings with 100 - 999 tenant entries, the **Dial Code Option** can be set to 3 digits. For buildings with more than 1000 tenant entries, the **Dial Code Option** can be set to 4 digits.

To change the **Dial Code Option** use the following procedure:

- a) After selecting the **Dial Code Option** per section 5.6.2.1, the following *Dial Configuration* window (Figure 5.6.2.11) will appear:

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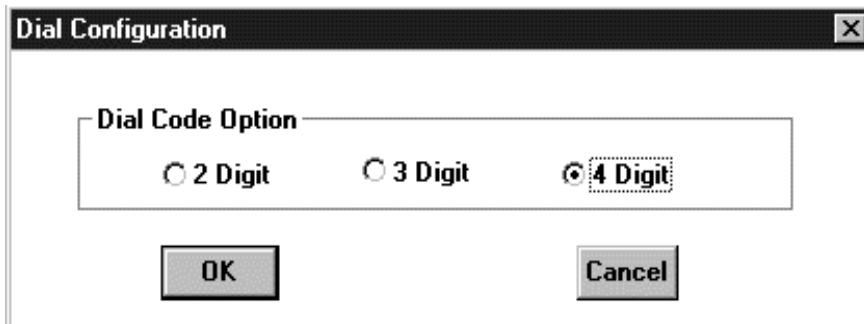


Figure 5.6.2.11

- b) Click in the desired **Dial Code Option** box .
- c) Click the **OK** button to save the change .

Note: If no change is desired to the **Dial Code Option**, click the **Cancel** button to return to the *System Parameter Listing* window.

5.6.2.12 PBX Parameter Setting

The Entraguard unit can be used with a PBX system that requires a single digit to be dialed to gain access to an outside line that can be used to call a tenant. A settable delay time is also provided to pause before the tenant number is dialed to allow time for the PBX to switch over to an outside line.

To change the **PBX** parameters use the following procedure:

- a) After selecting the **PBX Configuration** per section 5.6.2.1, the following *PBX Configuration* window (Figure 5.6.2.12) will appear:

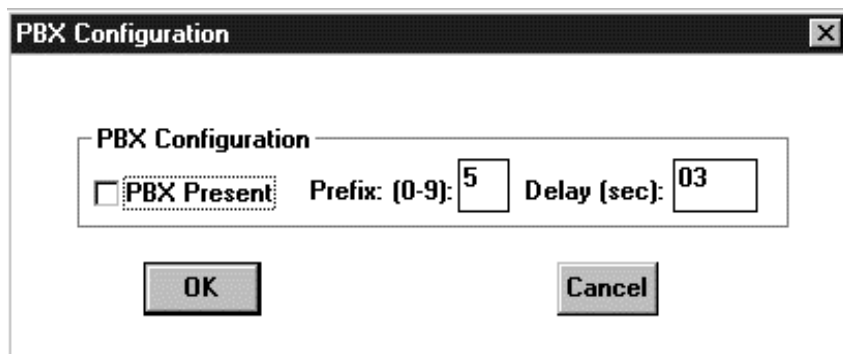


Figure 5.6.2.12

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- b) Check the **PBX Configuration** box if the PBX is to be enabled.
- c) Highlight the **Prefix** and replace it with the desired digit (0-9).
- d) Click the **OK** button to save the changes.

Note: If no change is desired to the **PBX Configuration**, click the **Cancel** button to return to the *System Parameter Listing* window.

5.6.2.13 HangUp Digit

The **HangUp Digit** is the digit that the tenant can press on his touch tone phone to end the telephone call with the visitor without allowing access to the building by the visitor.

To change the **HangUp Digit** use the following procedure:

- a) After selecting the **HangUp Digit** per section 5.6.2.1, the following *HangUp Digit* window (Figure 5.6.2.13) will appear:

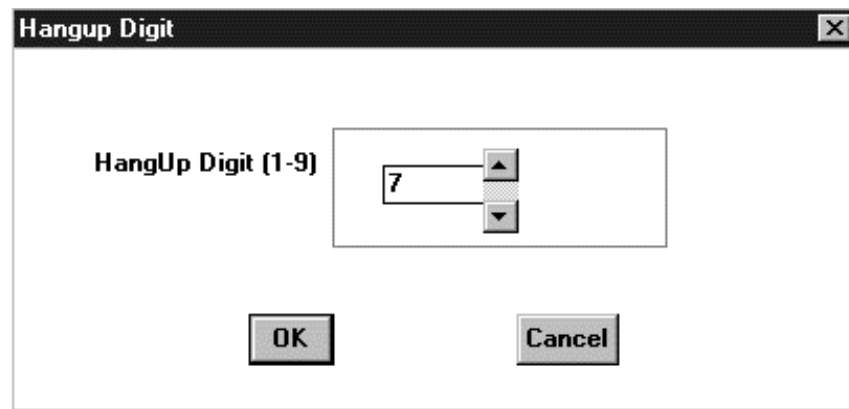


Figure 5.6.2.13

- b) Use the up and down arrow keys to modify the **HangUp Digit**.
- c) Click the **OK** button to save the changes.

Note: If no change is desired to the **HangUp Digit**, click the **Cancel** button to return to the *System Parameter Listing* window.

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5.6.2.14 Data Logging Control

The Entraguard unit can store records of all transactions that have occurred. These records can be accessed remotely.

To enable the **Data Logging Control** setting use the following procedure:

a) After selecting the **Data Logging Control** per section 5.6.2.1, the following *Data Logging Control* window (Figure 5.6.2.14) will appear:

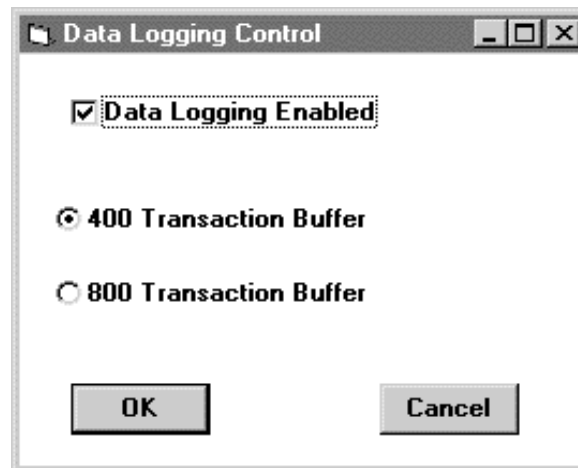


Figure 5.6.2.14

b) Check the **Data Logging Control Enabled** box if Data Logging is to be enabled.

c) Select the desired amount of transactions to be recorded (400 or 800).

d) Click the **OK** button to save the change.

Note: If no change is desired to the **Data Logging Control**, click the **Cancel** button to return to the *System Parameter Listing* window.

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5.6.2.15 Export File Command

The **Export File Command** writes an ASCII file to the select disk drive. This file can then be accessed and printed from any common word processing program, such as Word Perfect, Word, or Notepad.

5.6.3 Viewing Recent Log Data

This command allows the user to view the log data which was most recently accessed from the local Entraguard unit.

a) Click on the **Log File** command from the pull down menu under the **Open File** command on the *Main Command* window. The *Log Data List* window (Figure 5.6.3a) will then be displayed.

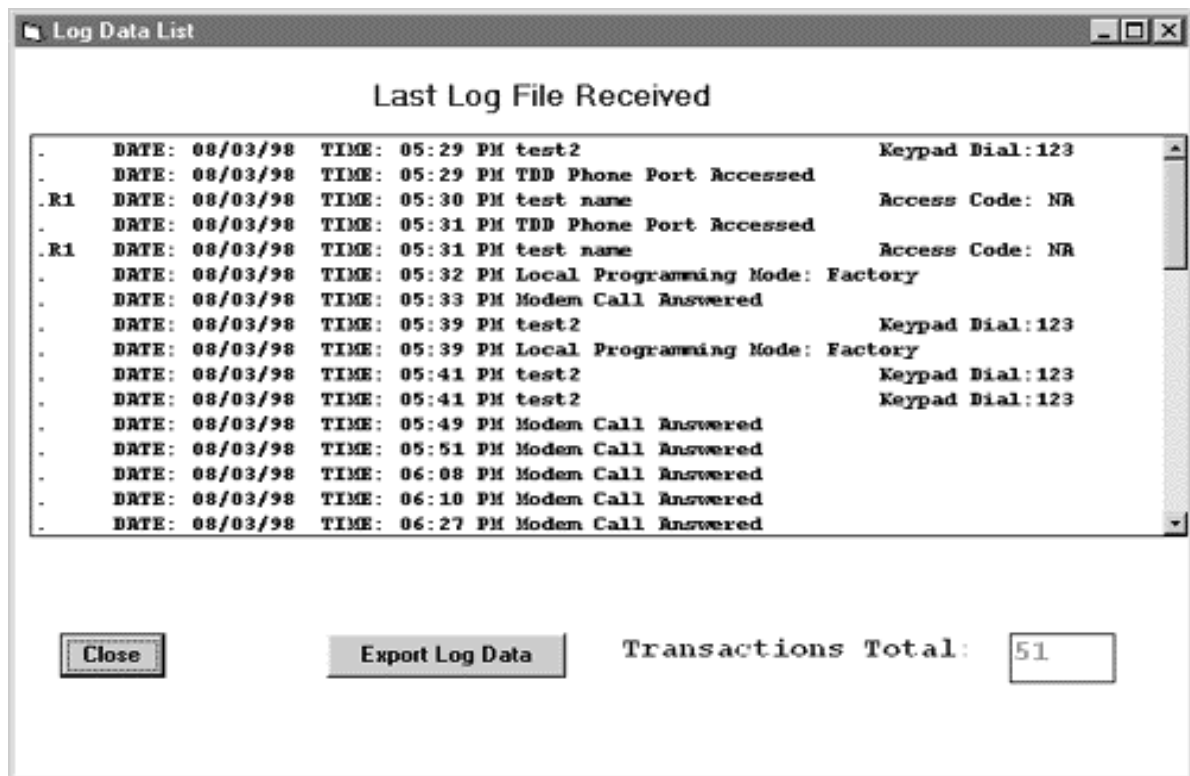


Figure 5.6.3a

b) The data can be scrolled using the scroll arrows.

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c) Click **Export** to export the Log Data. This command writes an ASCII file to the select disk drive. This file can then be accessed and printed from any common word processing program, such as Word Perfect, Word or Notepad. A confirmation message (Figure 5.6.3b) will be displayed:

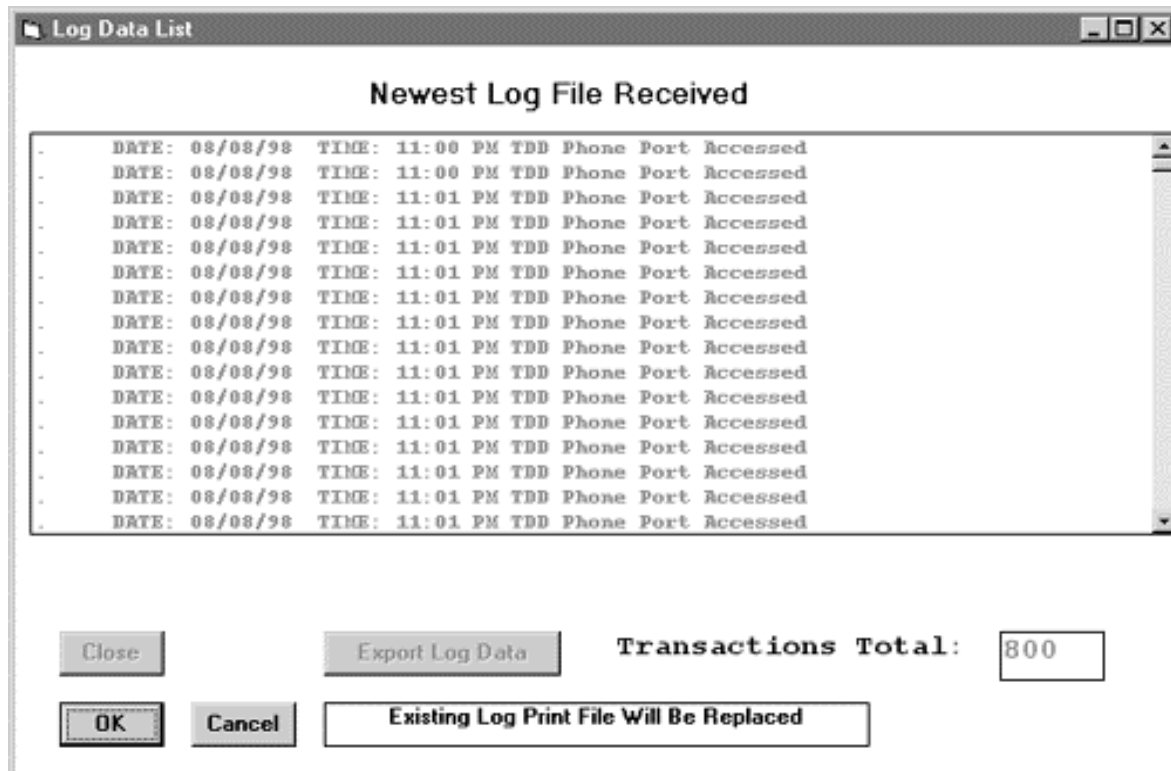


Figure 5.6.3b

Note: The existing ASCII files stored in the PC Computer system will be over written with the currently displayed Log Data. Click the **Cancel** button if the displayed information is not to be exported.

Note: It is recommended that, to keep copies of all Entraguard activity, the user renames each old Log before exporting the new one. (To do this: Open the old Log in the word processing program of your choice. From the menu, choose File, then Save As. Choose a new name for the file.)

d) To finish viewing Log Data, click **Close**.

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5.7 Retrieve File Command

The EPS software has the ability to retrieve the latest **Tenant List**, **Parameter File**, and **Data Log** from a local (on-site) Entraguard unit via the telephone line. This allows the user to modify most current information that may have been added by local programming at the Entraguard unit, and to view and save records.

After selecting an Entraguard System as described in Section 5.5.1, the EPS software will return to the *Main Command* window. Click on the **Retrieve File** command to retrieve the **Tenant List**, **Parameter File**, and **Data Log** stored at a local Entraguard unit. The following window (Figure 5.7) will appear in the *Main Command* window



Figure 5.7

The following sections detail the procedures for retrieving the **Tenant List**, **Parameter File**, and **Data Log** stored at a local Entraguard unit.

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5.7.1 Retrieving Tenant Lists

a) To retrieve the **Tenant List**, click on the **Tenant(Name) List** command from the pull down menu. The System will attempt to connect to the local Entraguard unit via the phone line. The following message will appear:

Connection to Remote System Being Established
Please Wait

Note: The **Retrieve File** operation can be canceled by clicking on the **Hang Up** button. The following message will then be displayed:

Call Cancelled By Operator

b) When the System has connected to the local Entraguard unit via the phone line, the following message will appear:

Remote System Connection Established

c) The system will confirm the connection with the local Entraguard unit, and flash the following message:

Remote System Identity Valid

As the entire **Tenant Name List** is received from the local Entraguard unit, the following message will appear:

Retrieving Remote Tenant Record File

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e) When the complete **Tenant Name List** has been received from the local Entraguard unit, the following message will appear:

Remote Tenant File Received

f) The **Tenant Name List** window will then be displayed (Figure 5.7.1a). The list retrieved will contain any information entered at the local unit. Modifications can be made to the Tenant List as described in Section 5.6.1.

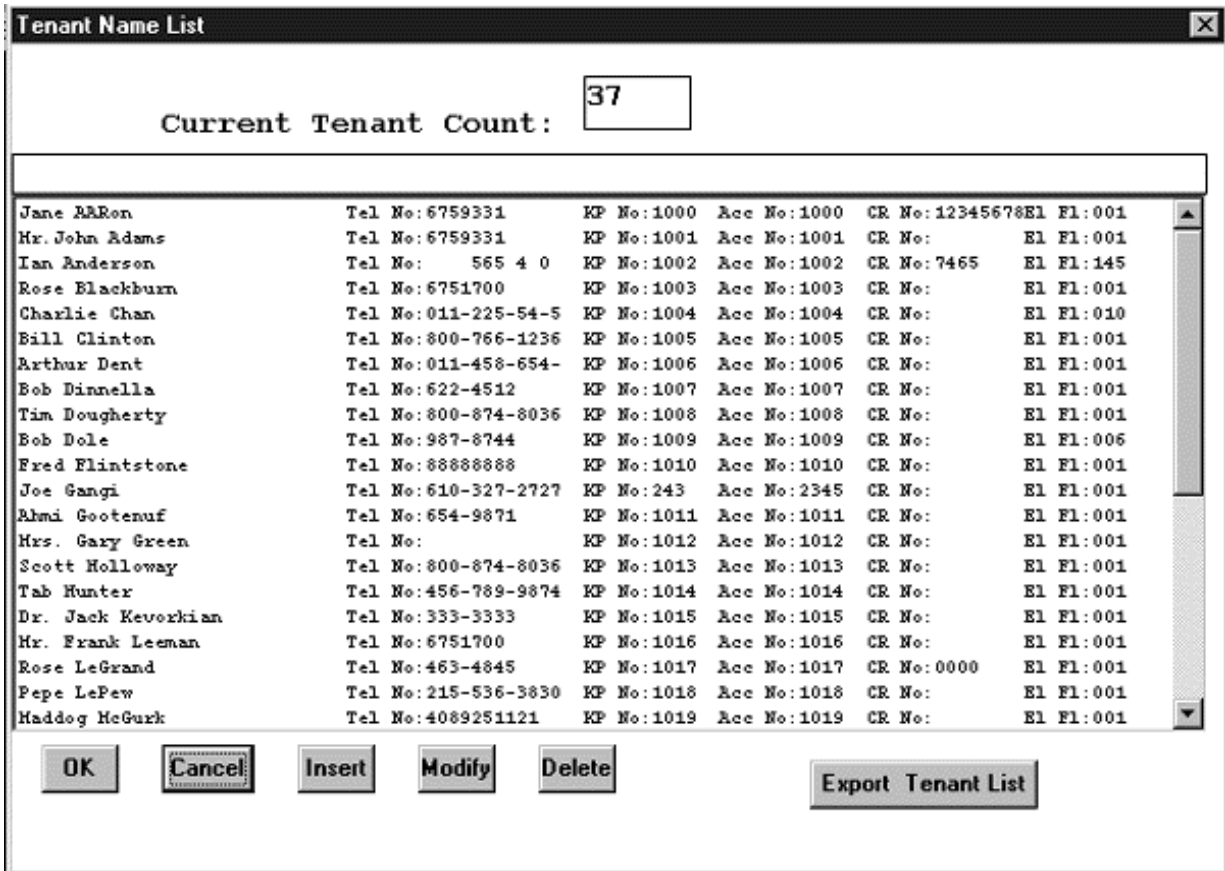


Figure 5.7.1a

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To save the retrieved file click the **OK** button. A confirmation message will be displayed (Figure 5.7.1b).

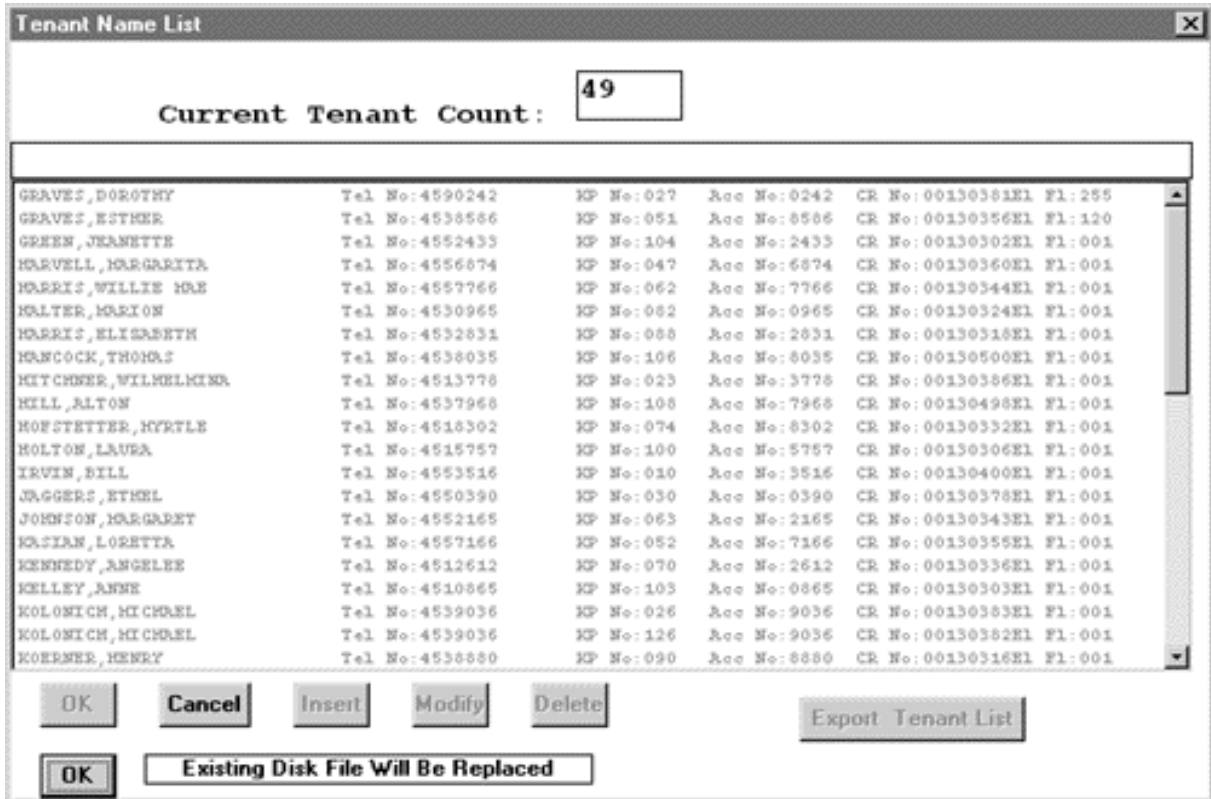


Figure 5.7.1b

Note: The existing files stored in the PC Computer system will be over written with the current Tenant List being displayed. Click the **Cancel** button if the displayed information is not to be saved.

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5.7.2 Retrieving Configuration Files

To retrieve the **Configuration File**, click on the **Configuration** command from the pull down menu of the *Main Command* window. The System will attempt to connect to the remote Entraguard unit via the phone line. The following message will appear:

Connection to Remote System Being Established
Please Wait

Note: The **Retrieve File** operation can be canceled by clicking on the **Hang Up** button. The following message will then be displayed:

Call Cancelled By Operator

b) When the System has connected to the local Entraguard unit via the phone line, the following message will appear:

Remote System Connection Established

c) The system will confirm the connection with the local Entraguard unit, and flash the following message:

Remote System Identity Valid

d) As the **Configuration File** is received from the local Entraguard unit, the following message will appear:

Retrieving Remote Configuration File

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e) When the **Configuration File** has been received from the local Entraguard unit, the following message will appear:

Remote Configuration File Received

f) The **System Parameter List** will then be displayed (Figure 5.7.2a). The file retrieved will contain any information entered at the local unit. Modifications can be made to the Parameter File as described in Section 5.6.2

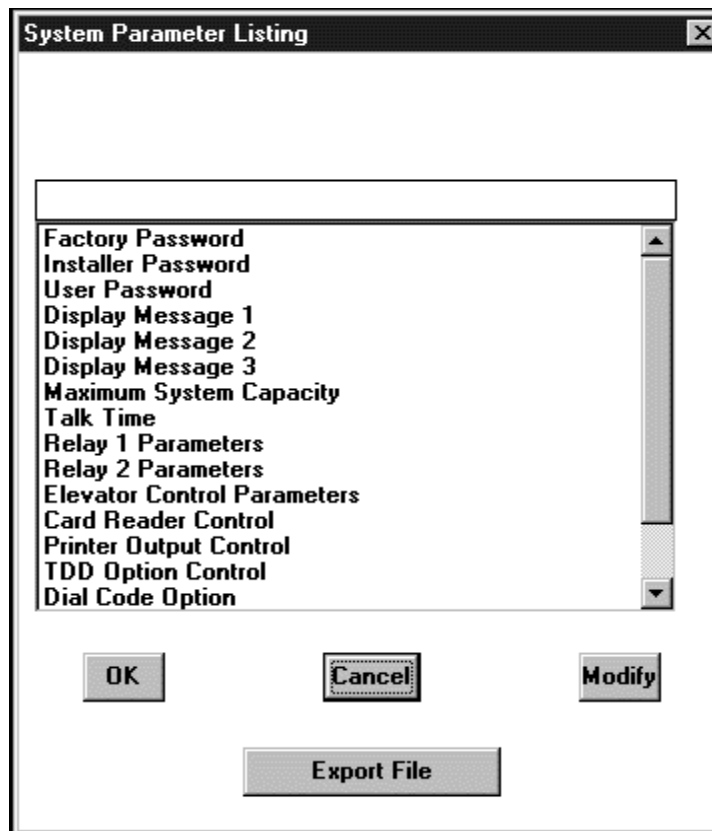


Figure 5.7.2a

To save the retrieved file click the **OK** button. A confirmation message will be displayed (Figure 5.7.2b).

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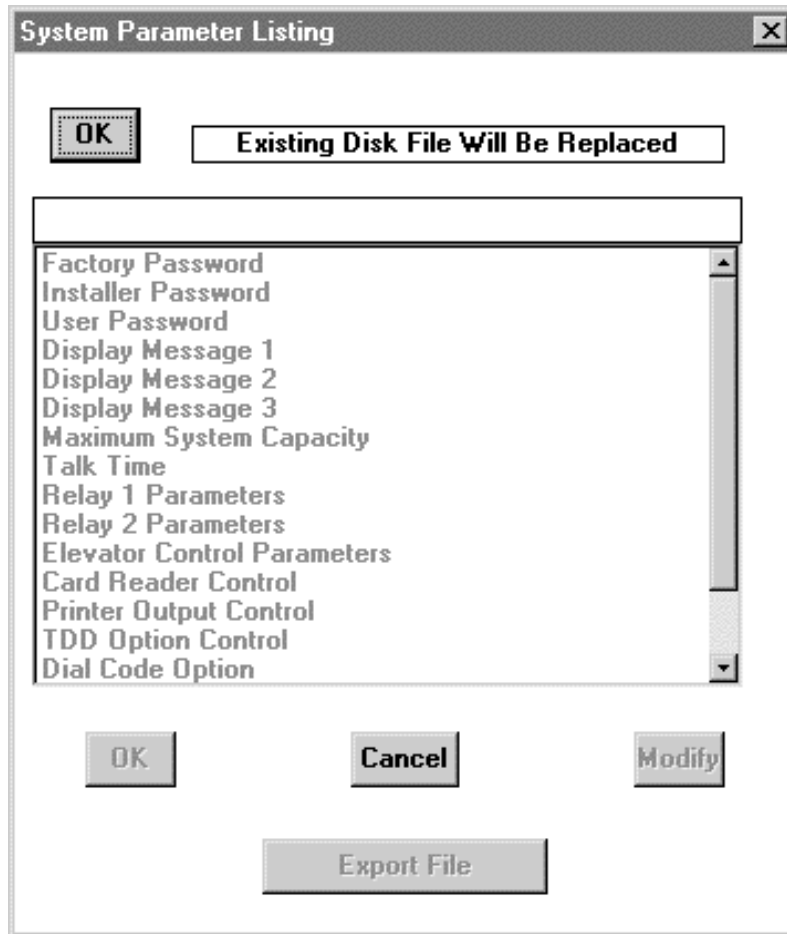


Figure 5.7.2b

Note: The existing files stored in the PC Computer system will be over written with the current Parameter File being displayed. Click the **Cancel** button if the displayed information is not to be saved.

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5.7.3 Retrieving Data Logs

The Entraguard unit offers two options for retrieving **Data Logs**: **Retrieve All Data** and **Retrieve Only New Data**. **Retrieve All Data** allows the user to retrieve all transaction records, up to the maximum allowed by the Data Logging Control. (See section 4.4.12 or section 5.6.2.14 for instructions on editing this parameter.) **Retrieve Only New Data** allows the user to view only transactions which have taken place since the last time the Data Log was retrieved.

To **Retrieve Logged Data**, click on the **Log Data** command from the pull down menu. Another pull down menu (Figure 5.7.3) will appear:

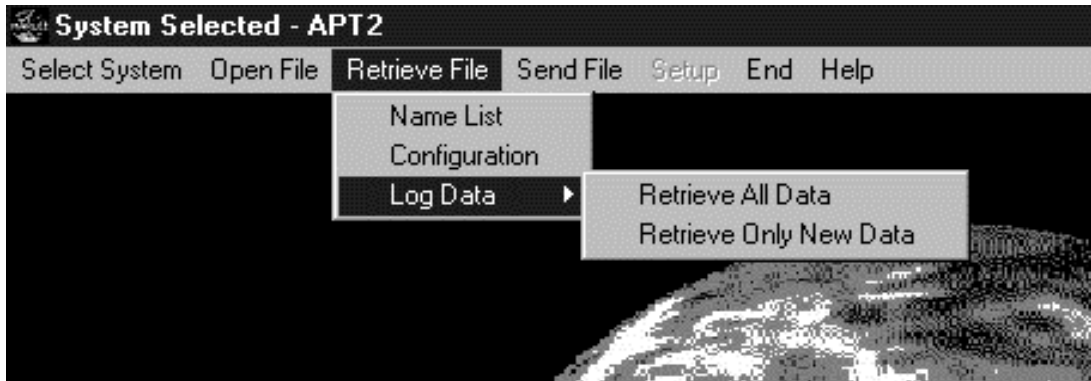


Figure 5.7.3

5.7.3.1 Retrieving All Data

a) Click on the **Retrieve All Data** command. The System will attempt to connect to the local Entraguard unit via the phone line. The following message will appear:

Connection To Remote System Being Established
Please Wait

Note: The **Retrieve File** operation can be canceled by clicking on the **Hang Up** button. The following message will then be displayed:

Call Cancelled By Operator

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b) When the System has connected to the local Entraguard unit via the phone line, the following message will appear:

Remote System Connection Established

c) The System will confirm the connection with the local Entraguard unit, and flash the following message:

Remote System Identity Valid

d) As **All Logged Data** is received from the local Entraguard unit, the following message will appear:

Retrieving Remote Log Data File

e) When **All Logged Data** has been received from the local Entraguard unit, the following message (Figure 5.7.3.1g) will appear:

Remote Log Data File Received (all)

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f) The **Log Data List** window will then be displayed (Figure 5.7.3.1). The list retrieved will contain all the transactions which fit in the buffer.

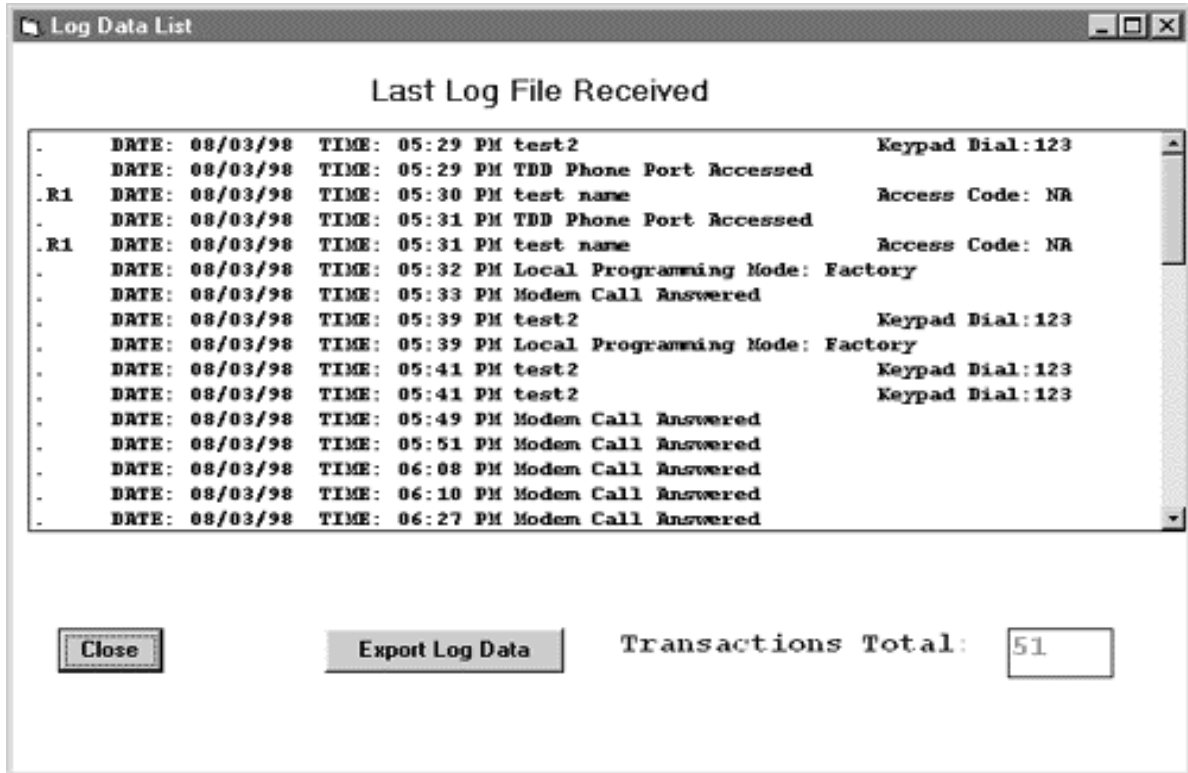


Figure 5.7.3.1

5.7.3.2 Retrieving Only New Logged Data

a) Click on the **Retrieve Only New Data** command. The System will attempt to connect to the local Entraguard unit via the phone line. The following message will appear:

Connection To Remote System Being Established
Please Wait

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Note: The **Retrieve File** operation can be canceled by clicking on the **Hang Up** button. The following message will then be displayed:

Call Cancelled By Operator

b) When the System has connected to the local Entraguard unit via the phone line, the following message will appear:

Remote System Connection Established

c) The System will confirm the connection with the local Entraguard unit, and flash the following message:

Remote System Identity Valid

d) As **Only New Logged Data** is received from the local Entraguard unit, the following message will appear:

Retrieving Remote Log Data File

e) When **Only New Logged Data** has been received from the local Entraguard unit, the following message will appear:

Remote Log Data File Received (new)

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f) The **Log Data List** window will then be displayed (Figure 5.7.3.2). The list retrieved will contain all transactions which have taken place since the Data Log was last accessed.

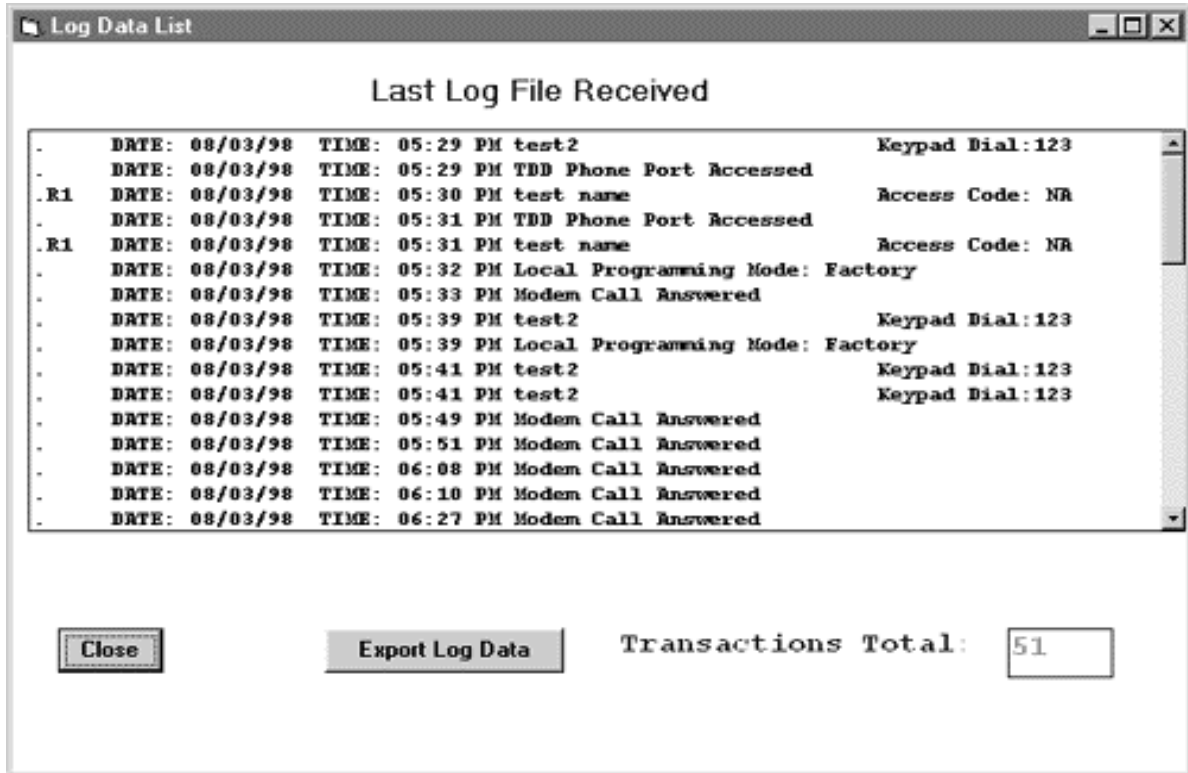


Figure 5.7.3.2

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5.8 Send File Command

The EPS software has the ability to send the latest **Tenant List** and **Parameter File** stored in the EPS data base to a local Entraguard unit via the telephone line.

After selecting an Entraguard System as described in Section 5.5.1, the EPS software will return to the *Main Command* window. Click on the **Send File** command to send the **Tenant List** and **Parameter File** stored in the EPS software data base to a local Entraguard unit. The following window (Figure 5.8) will appear:

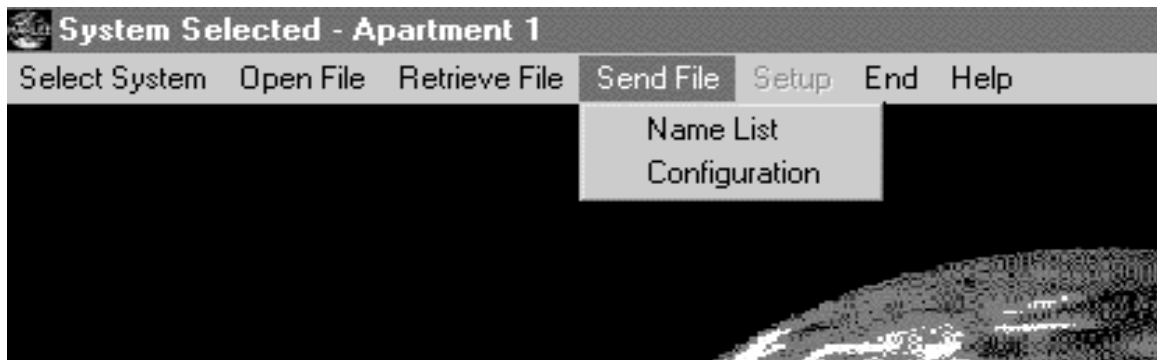


Figure 5.8

The following sections detail the procedures for sending the **Tenant List** and **Parameter File** stored in the EPS software data base to a local Entraguard unit.

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5.8.1 Sending Tenant Lists

a) To send the **Tenant List**, click on the **Tenant(Name) List** command from the pull down menu. The System will attempt to connect to the local Entraguard unit via the phone line. The following message will appear:

Connection To Remote System Being Established
Please Wait

Note: The **Send File** operation can be canceled by clicking on the **Hang Up** button. The following message will then be displayed:

Call Cancelled By Operator

b) When the System has connected to the local Entraguard unit via the phone line, the following message will appear:

Remote System Connection Established

c) The system will confirm the connection with the local Entraguard unit, and flash the following message:

Remote System Identity Valid

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d) As the **Tenant Name List** is sent to the local Entraguard unit, the following message will appear:

Sending Tenant Record File
To Remote System

e) When the complete **Tenant Name List** has been sent to the local Entraguard unit, the following message will appear:

Tenant File Load Successful

5.8.2 Sending Configuration Files

a) To send the **Configuration File**, click on the **Configuration** command from the pull down menu. The System will attempt to connect to the local Entraguard unit via the phone line. The following message will appear:

Connection to Remote System Being Established
Please Wait

Note: The **Send File** operation can be canceled by clicking on the **Hang Up** button. The following message will then be displayed:

Call Cancelled By Operator

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b) When the System has connected to the local Entraguard unit via the phone line, the following message will appear:

Remote System Connection Established

c) The system will confirm the connection with the local Entraguard unit, and flash the following message:

Remote System Identity Valid

d) As the **Configuration File** is sent to the local Entraguard unit, the following message will appear:

Sending Configuration File
To Remote System

e) When the complete **Configuration File** has been sent to the local Entraguard unit, the following message will appear:

Configuration File Send Complete

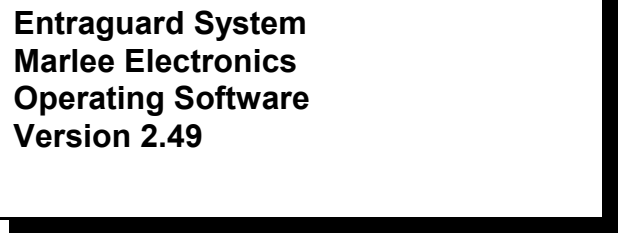
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6.0 System Operation

This section details typical operation of the Entraguard unit by tenants and guests.

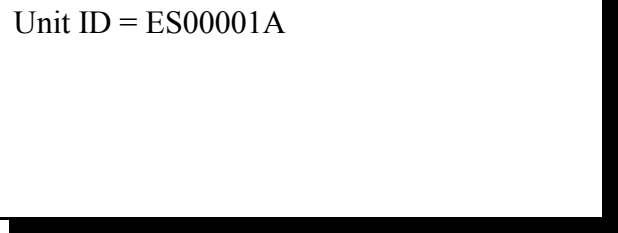
6.1 System Power-Up

Whenever the system is turned on, it will automatically run through a set of informational displays and tests for proper hardware and software function. If all hardware and software are connected and functioning correctly, the following sequence of messages will appear on the display:



**Entraguard System
Marlee Electronics
Operating Software
Version 2.49**

Note: Software Version will vary based on the firmware installed



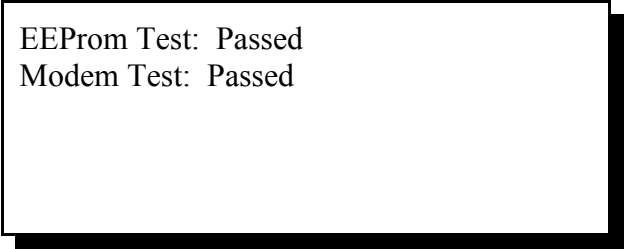
Unit ID = ES00001A

Note: See section 3.11 for setting the station ID number.



EEProm Test: Passed

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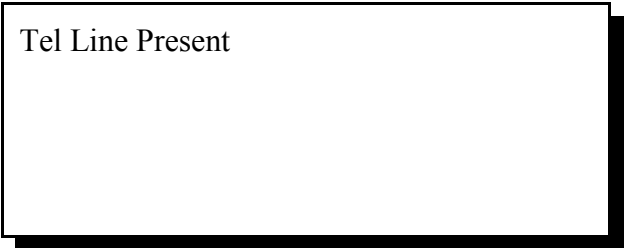
EEProm Test: Passed
Modem Test: Passed

Note: A Modem or EEPROM hardware failure will result in the following error message display:



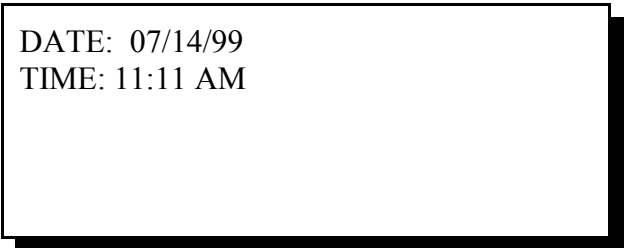
Error Code XX
Call for Service

Note: The above message will only be displayed if an error occurs. If there is no error, the display will continue with the following message:



Tel Line Present

Note: Setting DIP Switch 7 to **ON** will disable the Telephone Line Presence Test. (It is not recommended that the Telephone Line Presence Test be disabled if there are multiple systems on the line.)



DATE: 07/14/99
TIME: 11:11 AM

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Note: See Section 4.5 to set the date and time.



Sorting Tenant List

Note: The sort time varies as a function of the number of tenants entered.

The programmed Marquee will then be displayed, and the system is now ready for normal operation.

6.2 Typical System Operation

6.2.1 Marquee Operation

The Marquee messages entered in the configuration file will continually cycle as programmed while there is no entrance activity.

6.2.2 Scroll Entry

The scroll entry feature allows a visitor to look through an alphabetical list of available tenant names to find the desired tenant. To use the scroll feature, the visitor performs the following steps:

- a) The visitor presses the down arrow key to start at the top of the alphabetical list.
- b) The visitor presses the up arrow key to start at the bottom of the alphabetical list.
- c) The visitor scrolls using the up and down arrow keys until the desired name is next to the arrow (>) as shown below:



Diane Brown
>Joe Jones
Mary Morgan
John Smith

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d) The visitor then presses the “E” key to select the call the tenant. The following messages are then displayed:

Calling
TENANT NAME

Note: At this time, telephone ringing or busy signals will be heard on the unit’s speaker. If there are multiple systems using the same telephone line and one of the other systems is already in use, the following message will be displayed:

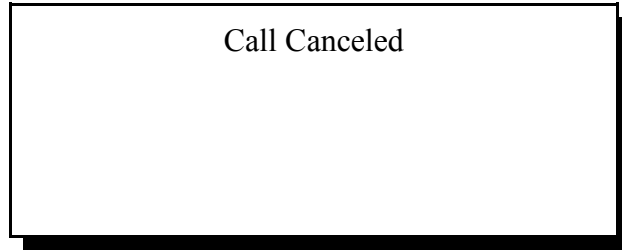
Line In Use
Please Try Again

If the line is not busy, the call will proceed, and the following message will be displayed:

Call in Progress
PRESS C Key
To Cancel Call -OR-
If Busy To Try Again

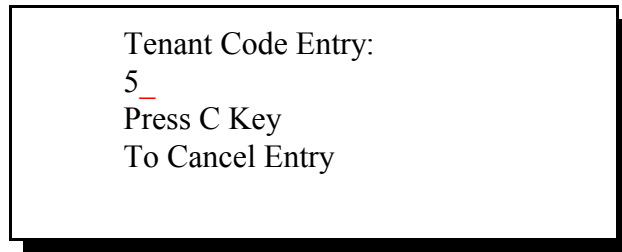
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The “C” key may be pressed at any time to cancel the call. The following screen will then be displayed:



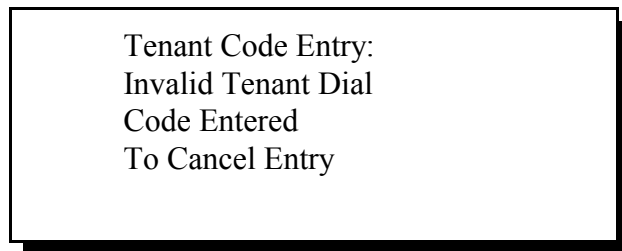
6.2.3 Keypad Dial Number Entry

The Keypad Dial Number allows visitors to enter a code on the keypad that initiates calling the tenant. After the first digit is entered, the following screen will be displayed:



When a correct two, three, or four digit number is entered, the series of displays shown in Section 6.2.2 will occur.

Note: If an invalid keypad dial number is entered, the following message will be displayed:

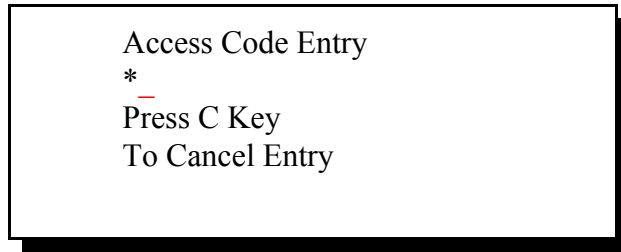


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6.2.4 Keypad Access Number Entry

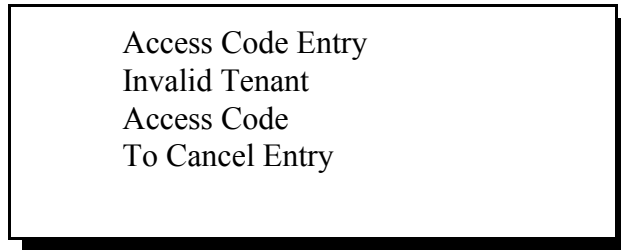
The Keypad Access Number allows tenants to gain direct access to the building by typing in a “* ” followed by a four digit number.

After the “* ” is entered, the following screen is displayed:



Access Code Entry
*
—
Press C Key
To Cancel Entry

Note: If an invalid keypad dial number is entered, the following message will be displayed:



Access Code Entry
Invalid Tenant
Access Code
To Cancel Entry

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APPENDICES

I. Card Reader Requirements

II. Error Codes

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Appendix I. Card Reader Requirements

A. Equipment Required

The following card reader equipment is recommended:

1) Proximity Reader - Weigand compatible

MS-3000: MicroStar Reader

Manufactured by:

Keri Systems
1530 Old Oakland Rd., Ste 100
San Jose, CA 95112
800-260-5265

2) Smart Module - Weigand proximity reader interface

SM-1000: Smart Module

Manufactured by:

Keri Systems
1530 Old Oakland Rd., Ste 100
San Jose, CA 95112
(800)260-5265

3) Weigand to RS-232 Converter

Part N0. 2910110

Manufactured by:

Sensor Engineering
2155 State Street
Hamden, CT 06517
(203) 777-7443

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Appendix I. Cont'd

4) Power Supply

Generic Wall Outlet Module

Input: 115VAC

Output: 12 VDC @ 500ma.

B. Installation

The following are installation instructions for Card Reader 1:

- 1) Mount MS-3000 Card Reader per the instructions provided with the unit.
- 2) Mount SM-1000 Smart Module within 500 feet of the card reader per the instructions provided with the unit.
- 3) Wire the Card Reader to Smart Module per the instructions provided with the Smart Module.
- 4) Mount the Weigand RS-232 Converter Card within 500 feet of the Smart Module and within 100 feet of the Entraguard unit.
- 5) Wire the Weigand RS-232 Converter Card as follows:

Entraguard unit to Converter Card

- Wire Pin 3 (TX) of the DB9 connector of the Converter Card to Barrier Strip, Pin 1 (receive) of the Entraguard unit. **Note:** Use Pin 5 for Card Reader 2.
- Wire Pin 5 (TX) of the DB9 connector of the Converter Card to Barrier Strip, Pin 10 (ground) of the Entraguard unit.

Note: Use 22 ga. stranded wire.

Converter card to Smart Module

- Wire Pin 4 (Data 0) of the terminal block of the Converter Card to Pin 14 (Data 0) of the terminal block of the Smart Module.
- Wire Pin 5 (Data 1) of the terminal block of the Converter Card to Pin 15 (Data 1) of the terminal block of the Smart Module.

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Appendix I. Cont'd

Note: Use 22 ga. stranded wire.

12 VDC Power Wiring

- Wire +12 VDC of the Power Module to Pin 1 of the terminal block of the Converter Card.
- Wire Ground of the Power Module to Pin 2 of the terminal block of the Converter Card.
- Wire +12 VDC of the Power Module to Pin 13 (12V-IN) of the terminal block of the Smart Module.
- Wire Ground of the Power Module to Pin 12 (GND) of the terminal block of the Smart Module.

Note: Use 18 ga. stranded wire

C. Checkout and Setup

Card Reader Checkout

Run diagnostic test per Section 3.16 to verify card reader operation.

The test will display all 13 characters encoded on the proximity card.

Card Reader Setup

Program the last 8 digits of the encoded proximity card characters into the tenant data base, per Section 4.3 (local programming) or Section 5.6.1 (remote programming).

Set the configuration file to enable the card reader operation per Section 4.4.7 (local programming) or Section 5.6.2.8 (remote programming).

Note: Repeat above for Card Reader 2 except use Barrier Strip, Pin 5 (RX) for Card Reader 2.

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Appendix II. Error Codes

If the Entraguard cannot complete a task, it will display an error code, which can be used to find and fix the problem. Error codes are displayed at the local unit, as well as in the Remote Programming software.

Table II.A outlines the error codes which are displayed at the **local** Entraguard **unit**. The **local** Entraguard **unit** will be referred to as the “local unit.” The **Remote Programming** software will be referred to as “EPS” or “PC.”

Table II.A. Local Entraguard Unit Error Codes

Error Code	Description	Possible Causes
01	Modem did not connect	Call received from a standard telephone
02	Invalid Remote ID	Call received by a computer not using EPS software
03	Invalid Password	Different passwords for local and remote systems
04	Local unit timed out waiting for a command from the EPS software	Transmission Error
05	Local unit timed out waiting for the PC to acknowledge the last parameter record sent	Transmission Error
06	Local unit did not receive an OK from the PC for the last parameter record sent	Transmission Error
07	Local unit timed out waiting for the PC to acknowledge EOF marker sent	Transmission Error
08	Local unit did not receive OK from the PC for the EOF marker sent	Transmission Error
09	Local unit timed out waiting for the PC to send a parameter record	Transmission Error
10	Local unit timed out waiting for the PC to acknowledge file size data sent	Transmission Error

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11	Local unit did not receive OK from the PC for file size data sent	Transmission Error
12	Local unit timed out waiting for the PC to acknowledge last tenant record sent	Transmission Error
13	Local unit did not receive OK from the PC for the last tenant record sent	Transmission Error
14	Local unit timed out waiting for the PC to acknowledge EOF marker sent	Transmission Error
15	Local unit did not receive an OK form the PC for the EOF marker sent	Transmission Error
16	Local unit timed out waiting for the PC to send file size data	Transmission Error
17	Local unit timed out waiting for the PC to send a tenant record	Transmission Error
18	Local unit timed out waiting fo the PC to send an EOF marker	Transmission Error
19	Local unit received an incorrect EOF marker	Transmission Error

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Appnedix II cont'd

Table II.B outlines the error codes which are displayed in the **Remote Programming Software**. The **local Entraguard unit** will be referred to as the “local unit.” The **Remote Programming Software** will be referred to as “EPS” or “PC.”

Table II.B. Remote Programming Software Error Codes

Error Code	Description	Possible Causes
1	Modem Initialization Error	Wrong COM port assignment Modem inoperative
2	Modem Dial - No Carrier	Wrong phone number dialed
3	Modem Dial - No Dial Tone	Telephone line not plugged in to modem
4	Modem Dial - Line Busy	
5	Modem Dial - No Response	
6	Modem Dial - Time Out	No answer on the number dialed
7		
8	No Response to PC system ID	
9	Local unit ID did not match	Local unit ID switches improperly set
10	No response to password, local unit status not received	Improper password sent to local unit
11		
12		
13		
14	No response by local unit to EstLink RN command	Transmission Error
15	No response by local unit to EstLink RD command	Transmission Error

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16	No response by local unit to EstLink XX command	Transmission Error
17	No response by local unit to GetParaRec SP command	Transmission Error
18	GetParaRec time out waiting for local unit to send parameter record	Transmission Error
19	GetParaRec EOF marker not received from the local unit	Transmission Error
20	No response by local unit to ConfigR XX command	Transmission Error
21	No response by local unit to SendParaFile RP command	Transmission Error
22	No response by local unit to last parameter record sent	Transmission Error
23	No response by local unit to ConfigSF XX command	Transmission Error
24	No response by local unit to GetTenRec ST command	Transmission Error
25	No file size data received from local unit	Transmission Error
26	GetTenRec time out waiting for local unit to send tenant record	Transmission Error
27	GetTenRec EOF marker not received from the local unit	Transmission Error
28	No response by local unit to NameLR XX command	Transmission Error
29	No response by local unit to SendTenFile RT command	Transmission Error
30	No file size data acknowledgement received by SendTenFile from local unit	Transmission Error
31	No tenant record acknowledgement received by SendTenFile from local unit	Transmission Error

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32	No EOF acknowledgement received by SendTenFile from local unit	Transmission Error
33	No response by local unit to NameLSF XX command	Transmission Error

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