ERICSSON ≋ | *GE*

Mobile **Communications**

EDACS™
C3 MAESTRO CONSOLE SYSTEM
EDITOR PROGRAM

User's Manual

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NOTE

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1.   INTRODUCTION

This user's manual describes the use of the C3 Maestro Editor program which is distributed with C3 Maestro application software package 344A3922Gxx. The Editor program provides a user interface to the C3 Maestro support files in the absence of the CEC/IMC Manager (MOM PC). It is a non-essential utility program because, except for a few configuration items, all of the same configuration and database tasks can be performed by the CEC/IMC Manager.

This manual was developed in accordance with Editor program Version 3.10 which is included with software package 344A3922G10. Earlier versions of the Editor program do not contain all of the features described in this manual. In contrast, future versions of the Editor program may contain additional features that are not described in this manual. See Section 12 in this manual for additional program version details.

Users of the Editor program should be familiar with EDACS™, particularly in regards to the Console Electronics Controller (CEC) or the Integrated Multisite and Console Controller (IMC) Digital Audio Switches and supporting equipment such as the CEC/IMC Manager. Users must understand that the CEC/IMC Manager should be the central point of databasing and configuration for all C3 Maestro consoles connected to the CEC/IMC. Changes made locally at a console by the Editor program can override those previously made by the CEC/IMC Manager. Correspondingly, changes made at the CEC/IMC Manager can also override changes previously made at a C3 Maestro console.

This document *shall not* attempt to explain in detail the implications or workings of system parameters that can be set with the Editor, but how they can be set, and in most cases, valid parameter values. For example, the user will be shown how to enable Confirmed Call, but not what Confirmed Call is, or what will happen if it is enabled.

TABLE 1 − CHARACTER STYLES AND SYMBOLS USED IN THIS MANUAL

EXAMPLE	DESCRIPTION
Display	Courier type is used to simulate information that appears on the computer screen..
CONFIG.DAT	**Bold** CAPITAL letters are used for the names of files used with Editor. This style is also used to indicate MS-DOS commands, **COPY,** for example.
User Input	Words in *italics* are data that the user must supply by typing from the keyboard. Italics may also be used occasionally in the text for emphasis.
<Enter>	Words inside angle brackets (< >) identify certain keys on the keyboard that the user must press to perform a specific function. Examples include <Enter> and <F1>.
Page Up	This example symbol represents a key on the standard PC keyboard that the user must press to make a selection. This example shows the <Page Up> key.

2.   QUICK REFERENCE

This section is primarily intended to aid users who are already familiar with the Editor program. Users who are new to the Editor should proceed to Section 3 to learn Editor operating details.

Table 2 lists, in the "**ACTION OR CHANGE**" column, the more common configurable items that are unique to the Editor program. It highlights the more common items that cannot be changed at the CEC/IMC Manager. It is a non-inclusive list for all unique configurable items. The table also shows the menu(s) to select to advance to the field or window to make the changes.

TABLE 2 – CONFIGURABLE ITEMS UNIQUE TO THE EDITOR PROGRAM (Non-Inclusive List)

ACTION OR CHANGE	MAIN MENU SELECTION	NEXT MENU SELECTION	FORM ITEM OR ACTION TO TAKE
Purge entity database	Edit **E**ntity Database	E**r**ase DB	n/a
Change sidetone levels	Edit **S**etups/Profiles	Edit **U**ser Profile Data	Opr Sidetone (or) Sup Sidetone
Change page names	Edit **S**etups/Profiles	Edit **P**age Database	Edit any page name field
Purge old patches and simulselects	Edit **S**etups/Profiles	Clear Patch/ Simulselects	n/a
Set serial port for 19.2k baud connection (normally used for hardwired connection to CIM)	Edit **C**onfiguration	Edit **C**onfig Database	19.2K Baud = Y
Set serial port for 9600 baud connection (normally used for modem connection to CIM)	Edit **C**onfiguration	Edit **C**onfig Database	19.2K Baud = N
Change foreign language	Edit **C**onfiguration	Edit **C**onfig Database	Language
Assign new foreground and background colors to a screen field or area	Edit **C**onfiguration	Edit Screen C**o**lors	Select field and change foreground and background colors.
Change RGB components (hue) of an existing screen color	Edit **C**onfiguration	Edit **D**AC Values	Select color and move "sliders".
Change the password	Change **P**assword	(none)	Enter current and new passwords in prompt windows.

NOTE

All data should be saved to disk after the changes are made.

3. SCREEN AND KEYBOARD BASICS

This section will familiarize the user with screen display techniques and the use of keys in the Editor program.

3.1 KEYBOARD

The Editor program uses the standard PC keyboard exclusively. Both "white" and "gray" navigation keys can be used for cursor-positioning functions. The custom Maestro keyboard is never used during the operation of the Editor.

3.2 WINDOWS

A window is a rectangular area on the screen that appears temporarily for the purpose of viewing information or entering data. When the user acknowledges the information or completes a data entry task, the window is erased and the

previous screen contents "under" the window are restored. The Editor uses the "drop-shadow" technique to make the windows appear to float above the screen.
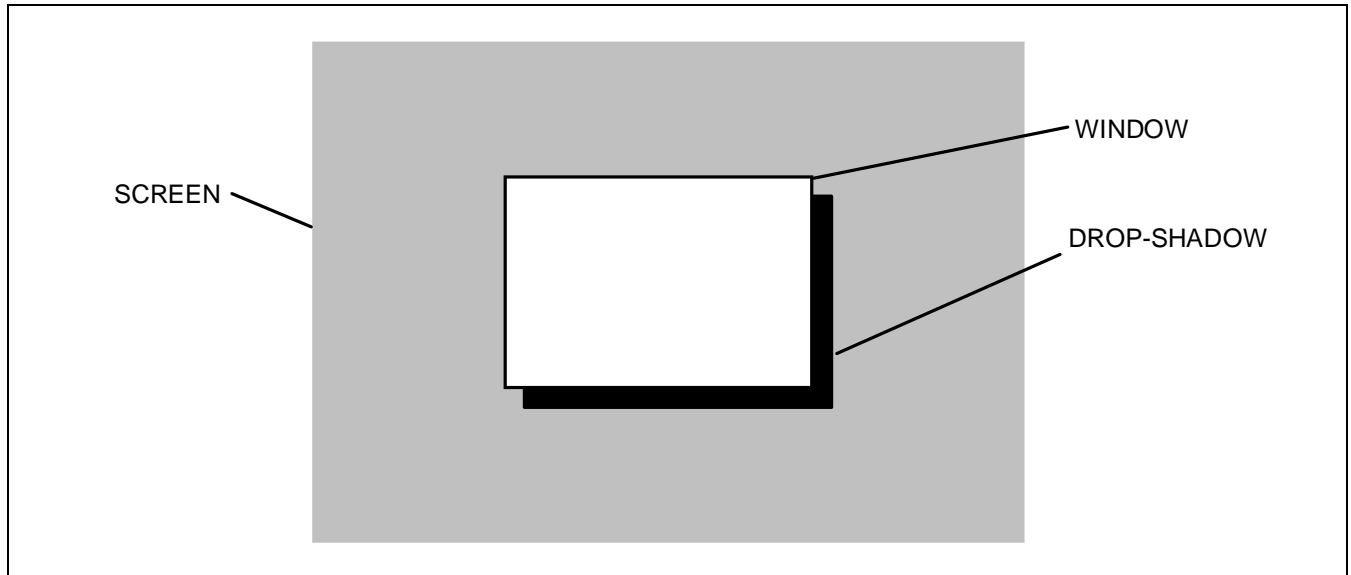
Figure 1 – Window

3.3   MENUS

A window in which various functions and commands are organized is a "menu". Figure 2 shows a typical menu. A highlighted bar is used to mark one of the menu items. This bar moves up and down the list of items by using the navigation keys. Most items have a single highlighted letter used for instant or "hot-key" selection.

A menu item may select a function or another menu. A menu item can be selected by two methods:

- Use the up and down arrow keys or <Page Up> and <Page Down> to move the highlighted bar over the desired item and press <Enter>.

- Press the letter key that matches the highlighted letter in each item title. This key is known as a "hot-key". The <Enter> key does not need to be pressed after pressing a hot-key.
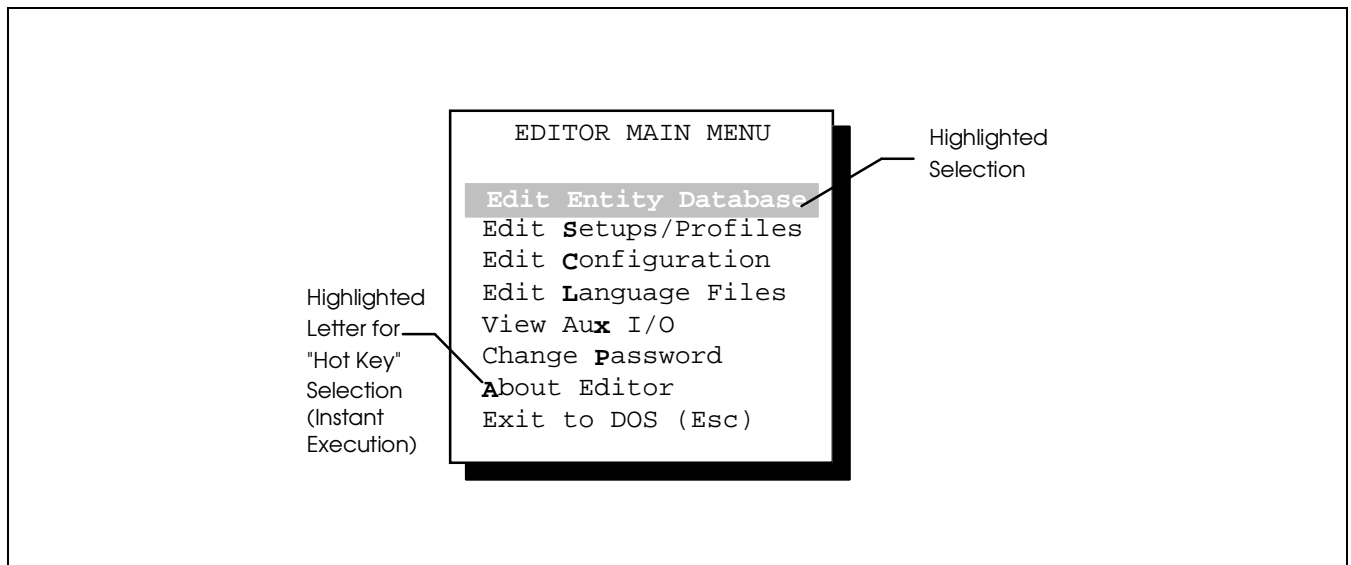
Figure 2 – Typical Menu

The following keys are used to navigate around a menu:
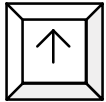
↑	Moves the highlighted bar to the previous item.
↓	Moves the highlighted bar to the next item.
Page Up	Moves the highlighted bar to the first item.
Page Down	Moves the highlighted bar to the last item.
Enter	Selects the item under the highlighted bar.
Esc	Returns to the previous menu, or exits to MS-DOS from the Main Menu.
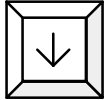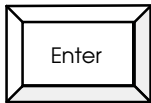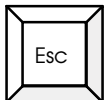
3.4   FORMS

A window that requires or accepts user input is a "form". A form is made up of "fields" in which the user enters data. A field may require as little as a single character, for example, "Y" for yes, or several characters. The following keys are used to navigate around a form or field:
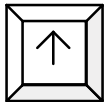
↑	Moves the cursor to the beginning of the previous field.
↓	Moves the cursor to the beginning of the next field.
Home	Moves the cursor to the beginning of the current field.
End	Moves the cursor to the end of the current field.
Tab	Moves the cursor to the beginning of the next field.
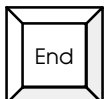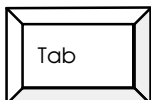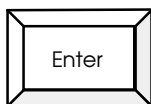
Enter	If pressed without entering data, the current field data remains unchanged and the cursor moves to the beginning of the next field.
Esc	Exits the form.
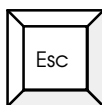
The following keys are used for form editing:
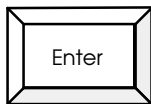
Enter	Completes user input on the current field and moves the cursor to the beginning of the next field.
Backspace	Deletes the character to the left of the cursor but does not affect the character under the cursor.
Del	Deletes the character under the cursor and shifts the text to the right of the cursor to the left. The cursor does not move.
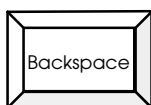
When the cursor is at the end of a field and the user attempts to enter more characters than the width of the field, a beep will sound and the cursor will not move any farther to the right.

A form can be completed in three ways:

- editing the last field on the form

- moving across all fields with arrow keys or by pressing <Enter> repeatedly

- pressing <Esc> anywhere on the form

When a form is completed, the following message is displayed (The data is not accepted at this point):

```
Press ENTER to accept, ESC to abort changes, any other key to Re-edit
```

At this point the data can be accepted (existing data is overwritten), exited without saving changes, or edited again. These keys are defined as follows:
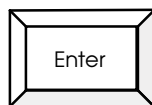
Enter	The data on the form is accepted and stored in memory. Previous data is overwritten.
Esc	The form is exited. All new data entered on the form is ignored and the previous data remains current.
(Any other)	The cursor moves to the first field for further editing. No new data has been accepted but the new data remains in temporary storage.
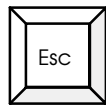
NOTE

The data in some fields will be automatically right-justified when <Enter> is pressed after entering numeric data that is less than the width of the field. This will also occur when numeric fields are passed over using the arrow keys. This right-justification is normal; the field data is unaffected.

3.5   PROMPTS

A prompt is a small one-line form which prompts the user to enter a number or a yes/no response. For yes/no prompts, a yes or no default answer is displayed at the cursor position. If <Enter> is pressed, the default answer is accepted as the answer. For example, if the default answer is "Y" (yes), and the user wishes to answer yes to the prompt question, only <Enter> must be pressed. A prompt with a "No" default answer is shown in Figure 3.

```
Confirm ERASE startup modules? N
```
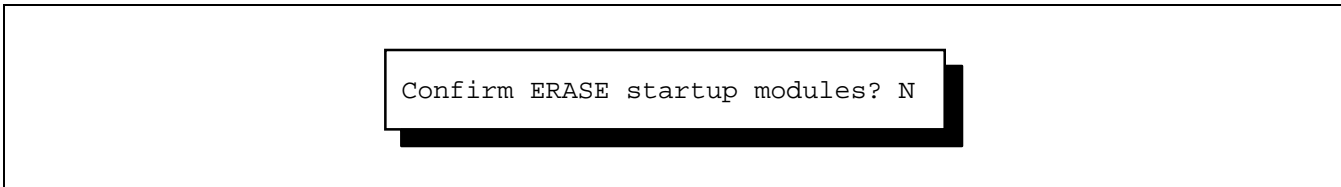
Figure 3 – Typical Prompt

4.   RUNNING EDITOR

This section will instruct the user in the basics of starting and ending the Editor program. It will also show how to get on-line help during the operation of the program.

4.1   STARTING

Start Editor from the MS-DOS prompt by typing *EDITOR* followed by <Enter>. The current directory must be C:\CONSOLE. The Editor's copyright screen will be displayed for five seconds or until any key is pressed. This copyright screen includes Ericsson GE copyright information and the program's version number. If password control is not enabled the Editor Main Menu is displayed after the copyright screen.

4.2   PASSWORD

Editor is protected from unauthorized use by means of a password. Password control can be enabled or disabled. If enabled, a small window will be displayed after the copyright screen. This window will prompt the user for a password. The password will not be echoed to the screen; however, the cursor will move to indicate user input. The password is not case-sensitive and the backspace key may be used for editing.

The password can be changed or disabled, but only if the current password is known. There is no password when Editor is installed on a new system. It is up to the user to set a password, if desired.

4.3   EXITING

To exit Editor from any menu or form, press <Esc> repeatedly until the screen is cleared and the MS-DOS prompt is visible again. If data is not saved before exiting with multiple <Esc> presses, the data in memory will be lost and the file data will remain unchanged.

4.4   HELP
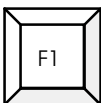
Help is available by pressing <F1>. Help is context sensitive. In other words, help is displayed for the selected field when <F1> is pressed. Help appears as a single line of text at the bottom of the screen. It temporarily overwrites any text on the bottom row. Help text is erased and the previous text re-appears upon the next key stroke (any key). The help text must be erased to continue.

5.   MAIN MENU

The Main Menu is the starting point from which all Editor operations begin. This menu appears after the copyright screen and password window (if enabled) are displayed. After an editing session has been completed, the user will always return to the Main Menu before exiting to MS-DOS. The Main Menu is shown in Figure 4.

```
        EDITOR MAIN MENU

    Edit Entity Database
    Edit Setups/Profiles
    Edit Configuration
    Edit Language Files
    View Aux I/O
    Change Password
    About Editor
    Exit to DOS (Esc)
```
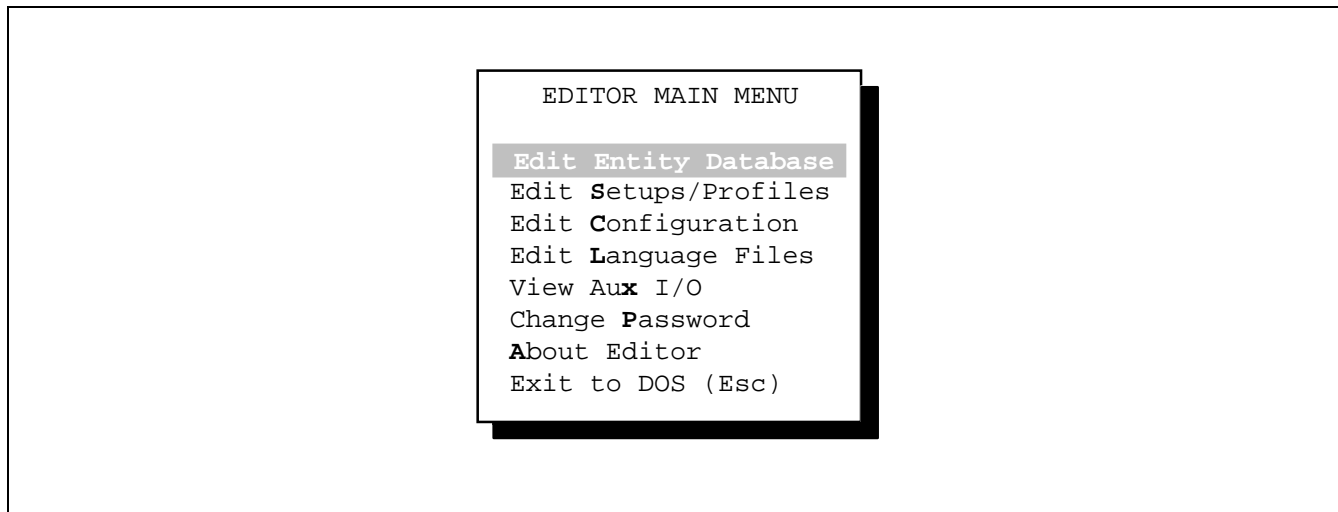
Figure 4 – Editor Main Menu

Table 3 briefly describes the actions that follow a menu selection and how the menu selection is used. Most of the menu items have an entire section devoted to their use. Hot-key letters are shown in bold type.

TABLE 3 – MAIN MENU SELECTIONS

MENU ITEM	ACTION	USE
Edit **E**ntity Database	Accesses the entity database edit screen	Editing of entity database file **ENTITY.DAT**. This includes the entity name, privilege, and home site. (Section 6)
Edit **S**etups/Profiles	Displays the Edit Setups/Profiles Menu	Editing of user profiles, setup titles, and page names. Clearing startup modules, patches and simulselects. (Section 7)
Edit **C**onfiguration	Displays the Edit Configuration Menu	Editing console configuration, including hardware parameters, site names, and screen colors in **CONFIG.DAT**. (Section 8)
Edit **L**anguage Files	Displays the Edit Language File Menu	Editing English or foreign language text strings displayed by the console application. (Sec. 9)
View Au**x** I/O	Displays the Auxiliary I/O screen	View the contents of **AUXIO.DAT**. (Sec.10)
Change **P**assword	Prompts user for current and new passwords	Change the current password to a new password. (Section 11)
About Editor	Displays a window describing the Editor program	General information.
Exit to DOS	Terminates program, returns user to MS-DOS prompt	Returns to MS-DOS prompt.

When one of the "Edit" or "View" selections is made, a file related to that selection will be opened. If the file is missing or cannot be opened for some reason, the window shown in Figure 5 will be displayed. "XXXXXXXX" can be "ENTITY", "CONFIG", "PHONE", "AUXIO" or a language name. If the file is missing, it can be copied from the Maestro installation disk or from another console.

```
XXXXXXXX.DAT open error.   Press any key to continue.
```
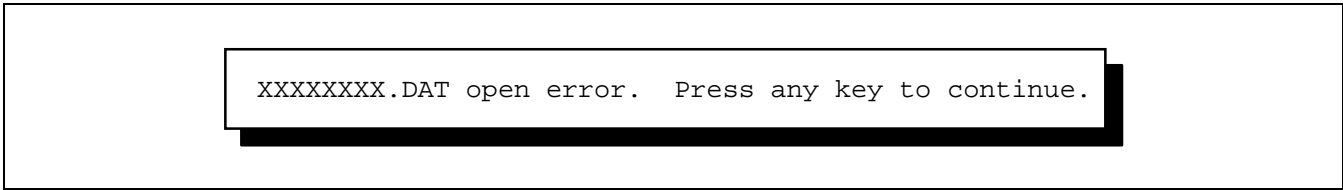
Figure 5 – File Open Error Message

6.   EDIT ENTITY DATABASE

6.1   EDITOR SCREEN

The entity database editing screen is composed of four main sections, the top and bottom Information Lines, the Function Menu, and the main editing area. The screen layout is shown in Figure 6.

6.1.1   Information Lines

The top and bottom lines of the screen display current file and edit memory parameters. The top line shows the name of the file being edited, the file size, and the date and time the file was last saved. The filename will always be **ENTITY.DAT**. The file size will vary depending on the number of entities in the file. A reminder about the help key is located at the right end of the line. The bottom line shows the current number of each type of entity.
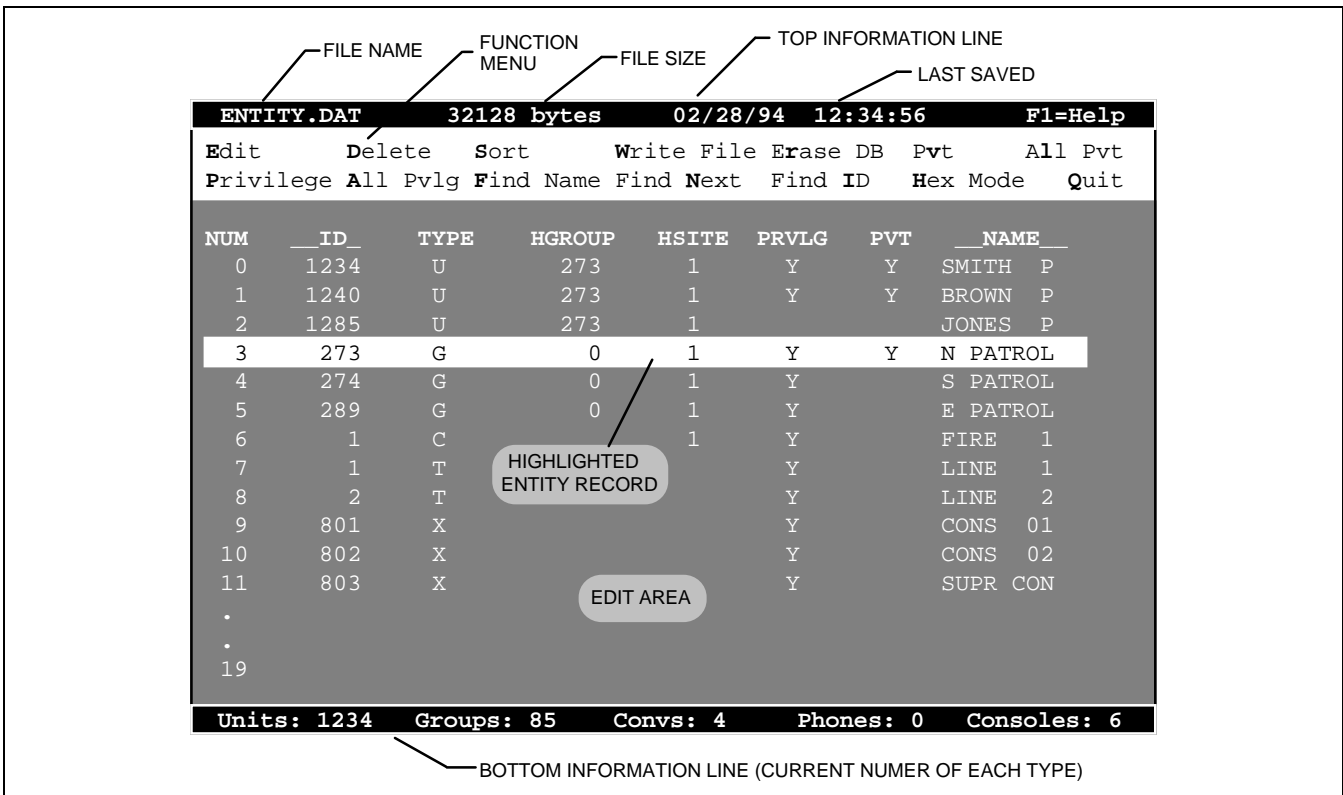
Figure 6 – Entity Editor Screen

6.1.2   Function Menu

The Function Menu is located on the second and third lines of the screen. It contains the fourteen (14) editing functions that can be executed. A function can be selected by two methods:

- Use the left and right arrow keys to move the highlighted bar over the desired function and press <Enter>.

- Use the hot-key selection method by pressing the letter key that matches the highlighted letter in each function title.

The following table shows a brief description of each function. The hot-key letter is shown is bold type.
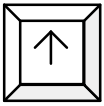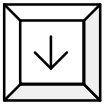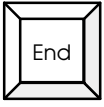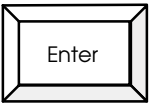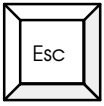
TABLE 4 – FUNCTION MENU SELECTIONS

| MENU ITEM	USE
Edit	Edits the highlighted entity record. A small window containing an information form is displayed when the function is selected. A secondary form window is displayed for conventional-only information. If the record is blank the data from the form is added as a new entity. (See Section 6.3)
Delete	Deletes the highlighted entity record from memory. Deleting is immediate – there is no prompt for confirmation. Accidentally deleted records are not permanently deleted until the file is saved to disk.
Sort	Sorts the entity records according to the sorting method selected when this function is selected. The sorting can be done by ID number, Name (alias), or Home Group. Records are sorted by type (unit, group, conv., phone, console) first, and then by the selected method. (See Section 6.4)
Write File	Writes (saves) the file image in memory to a disk file named **ENTITY.DAT**. The previous entity data is written to a file named **ENTITY.OLD**. If the file has not been sorted, a warning message will be displayed. It is not necessary to sort the file before writing it to disk.
E**r**ase DB	Erases all records in the file image. A confirmation window is displayed before the data is erased.
P**v**t	Toggles the private status for the highlighted entity. "Y" indicates private status is set and a blank indicates private is off.
A**l**l Pvt	Toggles the private status for all units and groups.
Privilege	Toggles the privilege for the highlighted entity. "Y" indicates that the privilege is set; blank indicates the privilege is off.
All Pvlg	Toggles the privilege for all entities.
Find Name	Finds the first record whose name (alias) matches the search string. The search string is entered in a small window when this function is selected. Up to 8 characters can be entered. The search is not case sensitive.
Find **N**ext	Finds the next match(s) of the search string. This function can be repeated to find all entities whose name matches the search string.
Find **I**D	Finds the first record that matches the search number.
Hex Mode	Toggles the display of IDs between decimal and hexadecimal. The display mode is hexadecimal when a check appears next to the word "Hex".
Quit	Returns the user to the Main Menu.

6.2   KEYS

Table 5 identifies the keys and key actions used to navigate around the entity editor or entity record form:

TABLE 5 – ENTITY EDITOR AND ENTITY RECORD SELECTIONS

KEY	MAIN EDIT ACTION	FORM ACTION
↑	Moves the highlight bar to the previous record.	Moves the cursor to the beginning of the previous field.
↓	Moves the highlight bar to the next record.	Moves the cursor to the beginning of the next field.
Home	Moves the highlight bar to the first record.	Moves the cursor to the beginning of the current field.
End	Moves the highlight bar to the last record.	Moves the cursor to the end of the current field.
Page Up	Moves the highlight bar to the first record on the current page or to the first record on the previous page if already at the top of the current page.	Does nothing.
Page Down	Moves the highlight bar to the last record on the current page or to the last record on the next page if already at the bottom of the current page.	Does Nothing.
Enter	Executes the current highlighted function on the Function Menu.	Completes the entry on the current field.
Esc	Exits the main edit.	Exits the form.

6.3   EDITING A RECORD

When "Edit" has been selected from the Function Menu, the left-hand record edit form shown in Figure 7 is displayed. If the selected record exists, the current data is displayed in the form; otherwise, the data displayed is undefined. The user should enter the required data to complete the form. If the type is "C" (conventional), the right-hand form will be displayed after the left-hand form is complete.

Table 6 shows the validation checks made on the entered data. Since the data is not rigidly checked, the user should use care when entering the data.

After the form is complete, the data will be displayed in the main edit area and the highlighted bar will move down to the next record.

```
ID        : 273
TYPE      : G
HOME GROUP: 0
HOME SITE : 1
PRIVILEGE : Y
PRIVATE   : N
NAME      : N PATROL
```

```
CHANNEL: 32
MAX RX : 1
MAX TX : 1
```

Figure 7 – Entity Record Forms

TABLE 6 – ENTITY RECORD FORMS VALIDATION CHECKS

PARAMETER	RANGE CHECK
ID	1 - 16382
Type	None
Home Group *	0 - 2047
Home Site	0 - 32
Privilege	"Y" or "N"
Private	"Y" or "N"
Name	Max. 8 characters
Channel	1 - 99
Max RX/TX	1 - 8

* Zero is a valid home group for a group, conventional, or phone.

6.4 SORTING RECORDS

The Sorting Method Menu is displayed when "Sort" is selected from the Function menu. See Figure 8.

```
SORTING METHOD

ID Number
Name
Home Group
```

Figure 8 – Sorting Method Menu

TABLE 7 – SORTING METHOD MENU SELECTIONS

SORTING METHOD	RESULTS
ID Number	Records are sorted by type and then numerically by ID number.
Name	Records are sorted by type and then alphabetically by name.
Home Group	Records are sorted by type, numerically by home group, and then numerically by ID.

During the sorting process, blank records are eliminated and the file size of the potential new file is recalculated. Consoles are sorted separately from units even though they reside in the same ID space. The alphabetic sorting is done by ASCII value; therefore, a name beginning with a number will come before any name beginning with a letter and names with leading spaces will come before any name beginning with a number or letter.

When "Write File" is selected from the Function Menu directly after record editing, the user will see the warning message shown in Figure 9. It is not necessary to sort the database before saving. However, if the database is sorted previous to saving, blank records are eliminated and the entity records are easier to view.

```
WARNING: Database is not sorted!
```
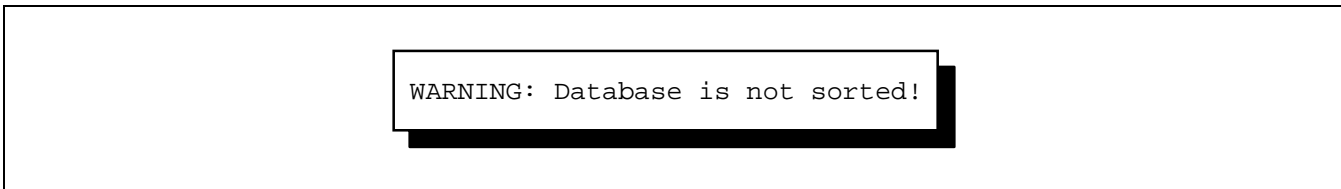
Figure 9 – Database Not Sorted Warning Message

7.   EDIT SETUPS/PROFILES

When "Edit Setups/Profiles" is selected from the Main Menu, the Edit Setups/Profiles Menu is displayed. See Figure 10.

```
    EDIT SETUPS/PROFILES

About This Menu
Select Setup Number
Clear Startup Modules
Clear Patch/Simulselects
Copy Setup
Edit Page Database
Edit User Profile Data
Save Changes to Disk
Restore Initial Database
Quit Changes and Return
Return to Main Menu (Esc)
```
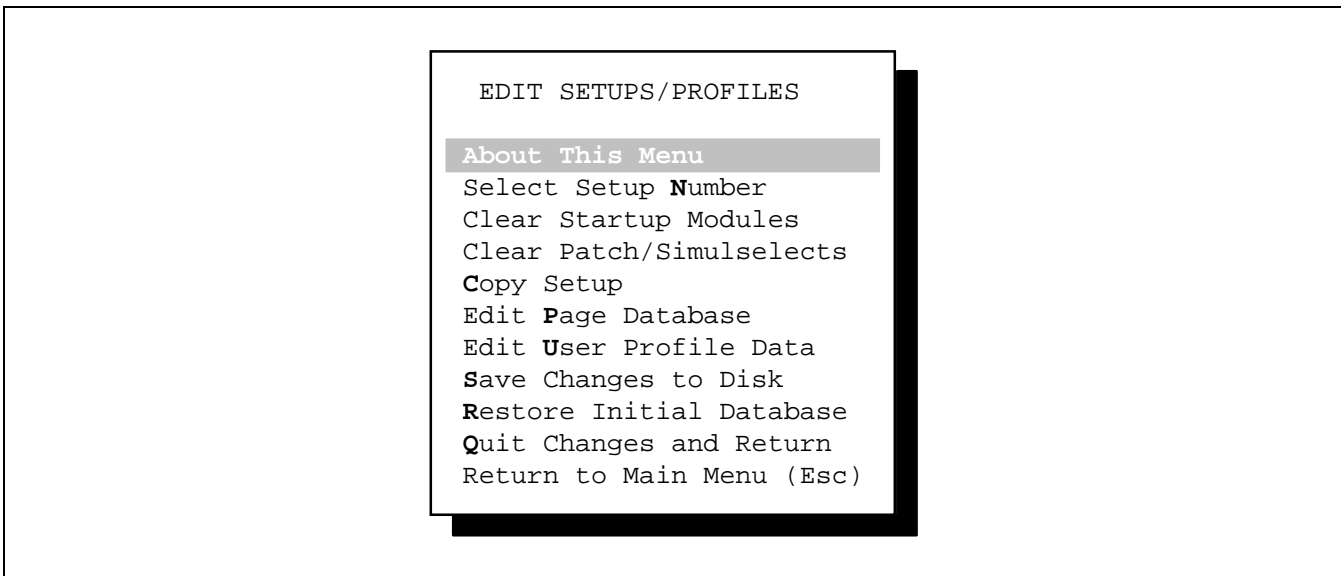
Figure 10 – Edit Setups/Profiles Menu

TABLE 8 – EDIT SETUPS/PROFILES MENU SELECTIONS

MENU ITEM	ACTION	USE
About This Menu	Displays a window containing brief information about the parameters that can be edited.	General information
Select Setup **N**umber	Prompts user for setup number. (Section 7.1)	Setting the current setup number for all setup editing.
Clear Startup Modules	Prompts user to confirm clearing. (Section 7.2)	Erasing all startup modules from the current setup.
Clear Patch/Simulselects	Prompts user to confirm clearing. (Section 7.3)	Erasing all patches and simulselects from the current setup.
Copy Setup	Prompts user for source and destination setups. (Section 7.4)	Copying the contents of one setup to another setup, or to all other setups.
Edit **P**age Database	Displays Page Data form for current setup. (Section 7.5)	Editing the test of the page names displayed in the page window.
Edit **U**ser Profile Data	Displays User Profile Data screen for current setup. (Section 7.6)	Editing of numeric and yes/no parameters in the user profile of the current setup.
Save Changes to Disk	Prompts user to save changes to disk.	Saving the setup changes to the **SETUPS.DAT** file.
Restore **I**nitial Database	Restores setup database to the save values before editing began.	Restoring the memory image of the database to its values previous to editing.
Quit Changes and Return – and – Return to Main Menu (Esc)	Returns user to Main Menu.	Select other main editing functions or return to MS-DOS.

7.1   SELECT SETUP NUMBER

When "Select Setup Number" is selected from the Edit Setups/Profiles Menu, the Setup Number Window is displayed. This number must be set to the number of the setup that is to be edited and saved. It must be set before editing begins. It remains the current setup number until it is changed or the Edit Setups/Profiles Menu is exited. The default number is 1.

```
Setup number:
```

Figure 11 – Select Setup Number Window

7.2   CLEAR STARTUP MODULES

When "Clear Startup Modules" is selected from the Edit Setups/Profiles Menu, the erase confirmation window is displayed. If confirmed as YES, all startup modules stored in the current setup will be erased. Startup modules are those that are programmed when the Maestro application starts up and establishes a link with the CEC/IMC. If <Enter> is pressed, the default answer of No is accepted and nothing is erased.
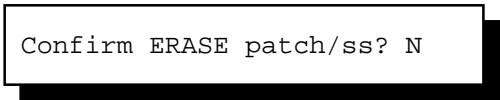
```
Confirm ERASE startup modules? N
```

Figure 12 − Clear Startup Modules Erase Confirmation Window

7.3   CLEAR PATCH/SIMULSELECTS

When "Clear Patch/Simulselects" is selected from the Edit Setups/Profiles Menu, the erase confirmation window is displayed. If confirmed as YES, all patches and simulselects stored in the current setup will be erased. These are the "memory" patches and simulselects seen with the Maestro <Patch View> or <Simul View> keys. If <Enter> is pressed, the default answer of NO is accepted, and nothing is erased.

```
Confirm ERASE patch/ss? N
```

Figure 13 − Clear Patch/Simulselects Erase Confirmation Window

7.4   COPY SETUP

When "Copy Setup" is selected from the Edit Setups/Profiles Menu, a window is displayed. The *source* setup is the one that will be copied to the *destination* setup; the destination setup will be overwritten with data from the source.

For single copies, the user should enter two different numbers, separated by a space, each in the range 1 - 10. For example, entering *2 8* will copy setup 2 to setup 8. If it is desired to copy the source to all setups, the destination should be *99*. For example, entering *1 99* will copy setup 1 to all setups (2 - 10).

Only source numeric data, *not* the source setup title, is copied to the destination(s). This preserves the titles of all destinations.

```
Source   Destination:
```

Figure 14 − Copy Setup Source/Destination Window

7.5   EDIT PAGE DATABASE

When "Edit Page Database" is selected from the Edit Setups/Profiles Menu, the Page Data form is displayed. See Figure 15. The page numbers (1 - 8) on the form are static − they cannot be changed. The user can modify the page names stored in the current setup by using the form navigation keys and text editing keys. Page names are limited to eight (8) alphanumeric characters.

NOTE

Maestro application module numbering format of a letter (A-H) followed by a 2-digit number <u>cannot</u> be changed.

```
                 PAGE DATA

  NUM      __NAME__
   1        PAGE-A
   2        PAGE-B
   3        PHONES
   4        PAGE-D
   5        PAGE-E
   6        PAGE-F
   7        PAGE-G
   8        PAGE-H
```

Figure 15 – Page Data Form

7.6   EDIT USER PROFILE DATA

When "Edit User Profile Data" is selected from the Edit Setups/Profiles Menu, the User Profile Data form and top/bottom information line is displayed. See Figure 16. All of the user profile data parameters shown in Table 9 can be set at the CEC/IMC Manager except the setup Title parameter. Subsequent CEC/IMC Manager profile updates will override any Editor changes. Default values are shown in square brackets ([ ]).

```
 SETUPS.DAT          17920 bytes   02/28/94    16:50:22            F1=Help


                         USER PROFILE DATA


     TITLE : Operator Setup 1

     DEFAULT VOL  : 16    SUPERVISOR     : N      FORCE TONES    : N
     DEFAULT SPKR : 2     24 HOUR TIME   : Y
     EMERG VOL    : 16    UNSEL LABELS   : Y
     MUTE VOL     : 0     NUMERIC LABELS : N
     MUTE DELAY   : 30    NUMERIC VOLUME : N
     LABEL DELAY  : 0     AUTO ALARM OFF : Y
     BLANK DELAY  : 0     BEEP W/ERROR   : N
     MIN ALRM VOL : 16    RST BEFORE CLR : N
     MAX CNFM DEL : 0     DISP FAILSOFT  : Y
     TONE OFFSET  : 5     DEBUG MESSAGES : N
     OPR SIDETONE : 150   RT UNPRIV EMER : N
     SUP SIDETONE : 150   CONFIRMED CALL : N


  SETUP: 1     Modules: 6     Patches: 0      Simuls:0
```

Figure 16 – User Profile Data Screen

TABLE 9 – USER PROFILE DATA PARAMETERS

PARAMETER	DESCRIPTION AND VALID VALUES
Title	Setup Title. This is the current setup's title displayed on the Maestro "Change Setup" notecard. It can contain up to 31 printable ASCII characters. [Operator Setup x]
Default Vol	Default unselect volume. This is the volume at which all newly programmed entities are set to. Valid range is 0 - 32. [16]
Default Spkr	Default unselect speaker. This is the unselect speaker to which all newly added entities are set. Valid numbers are 2 for a single PA Board system, or 2 - 4 for a dual PA Board system. [2].
Emer Vol	Emergency volume. Valid range is 0 - 32. [16]
Mute Vol	Mute volume. This is the volume to which a module will be set when muted. Valid range is 0 - 32. [0]
Mute Delay	All-Mute Delay. This is the delay, in seconds, that all-mute will remain active until it is automatically canceled. Valid range is 0 - 60. [30]
Label Delay	Call and Caller label delay. This is the delay (or hang-time), in seconds, that these fields will remain active after a call has actually dropped. Valid range is 0 - 10. [0]
Blank Delay	Screen blanking delay. This is the delay, in minutes, that the screen will remain on, without key or call activity, before going blank. 0 disables the feature. Valid range is 0 - 30. [0]
Min Alrm Vol	Minimum alarm volume. See CEC/IMC documentation for details. Valid range is 0 - 32. [16]
Max Cnfm Del	Maximum confirmed call delay in seconds. Reserved for future use. [0]
Tone Offset	Confirmation and system tone offset in dBm. See CEC/IMC documentation for details. Valid range is 0 - 20, which translates to 0 to -20 dBm. [5]
Opr Sidetone	Operator headset sidetone level setting for digital pot on the Audio Matrix Board. Applies to AMB Rev. A or later. Valid range is 0 - 255. [150]
Sup Sidetone	Supervisor headset sidetone level setting for digital pot on the Audio Matrix Board. Applies to AMB Rev. A or later. Valid range is 0 - 255. [150]
Supervisor	Supervisor console and supervisor privileges [N] Y = Supervisor N = Normal operator
24 Hour Time	12/24 time display mode. [Y] Y = 24 hour (military) time N = 12 hour time
Unsel Labels	Caller aliases (labels) displayed on unselected calls. [Y] Y = All callers displayed N = Only selected callers
Numeric Labels	LID, GID, etc. numbers used instead of aliases in module displays. [N] Y = Display IDs N = Display aliases
Numeric Volume	Numeric module volume level (0 - 32) used instead of volume bar. [N] Y = Numeric value N = Volume bar
Auto Alarm Off	Audible alarms automatically reset by emergency clear. [Y] Y = Alarm reset when emergency is cleared. N = Alarm must be manually reset, even if emergency is clear.

(Continued)

TABLE 9 - USER PROFILE DATA PARAMETERS (Continued)

PARAMETER	DESCRIPTION AND VALID VALUES
Beep w/Error	Beeps (error tones) when keyboard errors occur or warning message banners are displayed. Y = Beep with keyboard error or banner N = No beeps
Rst Before Clr	Reset Emergency Before Clear. Alarm reset (acknowledge) is required before <EMER CLR> key will clear emergency. [N] Y = Alarm must be reset first N = <EMER CLR> works all the time.
Disp Failsoft	Failsoft/trunking status indicator is displayed. [Y] Y = Display indicator N = No display
Debug Messages	Development mode debug messages are displayed. [N] Y = Messages displayed N = No messages
Rt Unpriv Emer	Route unprivileged emergencies on to <u>supervisor</u> console. An unprivileged emergency is one that occurs on an unprivileged and unprogrammed group. Does not apply to non-supervisors. [N] Y = Emergencies on unprivileged and unprogrammed groups are declared on the console. N = Emergencies on unprogrammed groups are declared on the console.
Confirmed Call	Enables group confirmed call, i.e confirmed channel request from console. [N] Y = Group confirmed call requests N = Normal call requests
Force Tones	Beeps, error, confirmation, emergency, etc. tones are forced to the select speaker or headset even if the tone is related to an unselected entity. [N] Y = Tones to select speaker or headset N = Tones follow entity

8.   EDIT CONFIGURATION

When "Edit Configuration" is selected from the Main Menu, the Edit Configuration Menu shown in Figure 17, is displayed.

```
        EDIT CONFIGURATION


   About This Menu
   Edit Config Database
   Disable Keyboard Keys
   Edit Site Database
   Edit Screen Colors
   Edit DAC Values
   Read Special Config File
   Save Changes to Disk
   Restore Initial Database
   Quit Changes and Return
   Return to Main Menu (Esc)
```
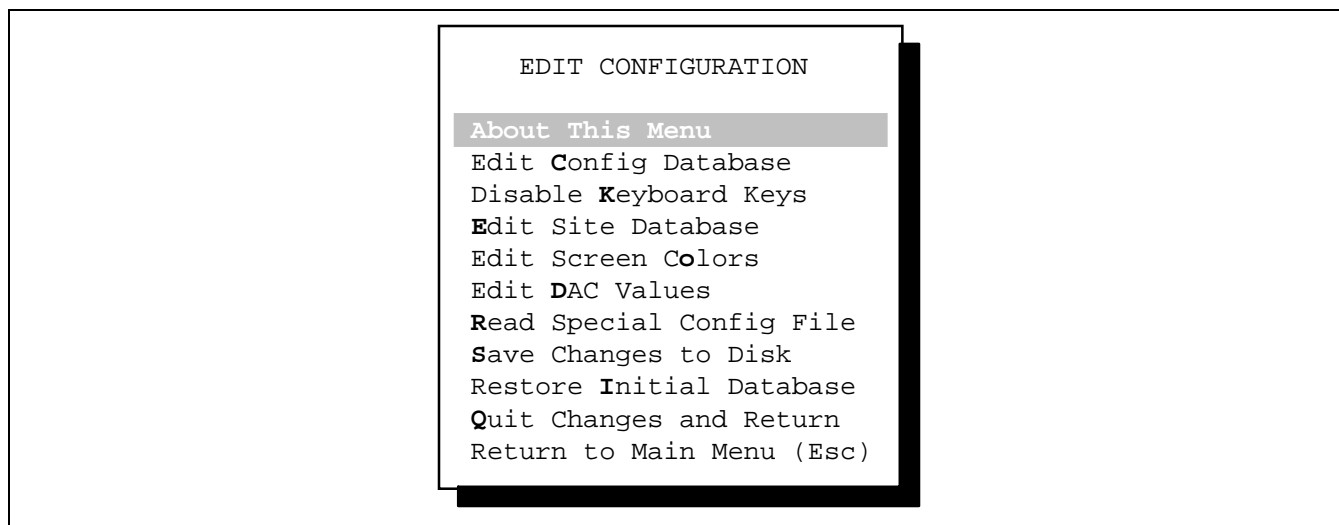
Figure 17 – Edit Configuration Menu

TABLE 10 – EDIT MENU CONFIGURATION SELECTIONS

MENU ITEM	ACTION	USE
About This Menu	Displays a window containing brief information about the parameters that can be edited.	General information
Edit **C**onfig Database	Displays the Configuration Data form.	Editing numeric and yes/no parameters used by the application at startup. (Section 8.1)
Disable **K**eyboard Keys	Displays the Disable Keys form	Disabling certain keys on the dispatch keyboard (Section 8.2)
Edit **S**ite Database	Displays the Site Data form.	Editing the text of the site names. (Section 8.3)
Edit Screen C**o**lors	Displays the Screen Colors form.	Changing the colors assigned to various fields and areas of the Maestro screen. (Section 8.4)
Edit **D**AC Values	Displays the Edit DAC Values control panel.	Changing the RGB values of the individual colors used by the application. (Section 8.5)
Read Special Config File	Prompts the user for a configuration filename.	Reading a special configuration file in for editing other than the default, **CONFIG.DAT**. (Section 8.6)
Save Changes to Disk	Prompts user to save changes to disk.	Saving the configuration changes to a file. The default is **CONFIG.DAT**. (Section 8.7)
Restore **I**nitial Database	Restores setup database to the values before editing began.	Restoring the memory image of the database to its values previous to editing.
Quit Changes and Return – and – Return to Main Menu	Returns user to Main Menu.	Select other main editing functions or return to MS-DOS.

8.1   EDIT CONFIG DATABASE

When "Edit Config Database" is selected, the Configuration Data form shown in Figure 18 is displayed. This figure shows default data.

The user can modify data by using the form navigation and text editing keys. The numeric data fields have different field widths depending on the maximum value that may be entered. The yes/no fields in the right column can only contain "Y" or "N".

Table 11 describes the parameters on the Configuration Data form. Parameters followed by an asterisk (*) are not settable at the CEC/IMC Manager; these items can only be changed by the Editor. Changes to parameters not marked with an asterisk (*) will override values from the CEC/IMC Manager and subsequent CEC/IMC Manager configuration messages will override any Editor changes. Default values are shown in square brackets.

```
                        CONFIGURATION DATA

Console Name      : MAESTRO
Console ID        : 800        19.2K Baud          : Y
Call Director ID  : 0          Alt Keyboard File   : N
Startup Setup     : 1          Call Director       : N
Language          : 0          I-Call Alias        : N
CLB IRQ           : 7          Mod Prog Quick Save : N
Speaker Config    : 2          Mod Ignores DV Mode : N
Tower PA Boards   : 1          Default to DV Mode  : N
CTIS Hang Time    : 0
System Msg Delay  : 2
AuxI/O Msg delay  : 3
```

Figure 18 − Configuration Data Form

TABLE 11 − EDIT CONFIGURATION DATABASE PARAMETERS

PARAMETER	DESCRIPTION AND VALID VALUES
Console Name	8-character console name or alias. Names less that 8 characters are space-padded. [MAESTRO]
Console ID	ID used by the console for normal radio communication via CIM channels 1 and 2. The valid ID range is 1 - 16382. [800]
Call Director ID	ID used by the console for call director patch via CIM channel 4. This must be a unique ID from the unit/console ID space. 0 or 16383 are valid for non-CD patch consoles. The valid ID range is 0 - 16383. [0]
Startup Setup*	The setup number that the console will start-up with. The valid setup range is 1 - 10. [1]
Language*	A number corresponding to a language text file that the console will read into memory at startup. [0] 0 = English 4 = Spanish 8 = Hungarian 1 = French 5 = Swedish 9 = Polish 2 = German 6 = Norwegian 10 = Dutch 3 = Italian 7 = Finnish 11 = Portuguese
CLB IRQ*	The PC bus hardware interrupt (IRQ) used by the Console Logic Board (normally referred to as simply the "Logic Board") to interrupt the PC. The valid IRQ numbers are 7, 10, 11, 12. CLBs identified "500-0006-000" (manufactured previous to 1993) can only use IRQ7. [7]
Speaker Config	This is actually the number of speakers in the console system. Valid numbers are 1 and 2 for single PA Board systems and 1 - 4 for dual PA Board systems. See "Tower PA Boards" below. [2]
Tower PA Boards	The number of Audio Tower PA Boards installed. Valid numbers are 1 or 2. Two (2) boards are required for call director patch or extra unselect speakers. [1]
CTIS Hang Time	Reserved for future use. [0]

(Continued)

TABLE 11 – EDIT CONFIGURATION DATABASE PARAMETERS (Continued)

PARAMETER	DESCRIPTION AND VALID VALUES
System Msg Delay*	The delay in seconds that a system message (queued, denied, etc.) will be displayed before being erased. Valid times are 1 - 30 seconds. [2]
AuxI/O Msg Delay*	The delay in seconds that an Auxiliary I/O input message will be displayed before being erased. Valid times are 1 - 30 seconds. [3]
19.2K Baud*	Serial data rate selection for console-to-CEC/IMC communications (COM1). The setting should be "N" for V.32 data modems. 19,200 baud is the preferred hardwired data rate. [Y] Y = 19,200 baud N = 9600 baud
Alt Keyboard File*	Allows the console to use the data file **ALTKBD.DAT** with an alternate keyboard table instead of the built-in keyboard table. [N] Y = Use **ALTKBD.DAT** table N = Use default table
Call Director	Status of call director connection. [N] Y = Call Director connected N = No Call Director
I-Call Alias*	Enables the I-Call numeric alias entry feature. As an alternative to name list selection or LID entry of an unprogrammed I-Call, a numeric alias of up to 8 digits can be entered after <ICALL SEL>. [N] Y = Enabled (<∗> is enabled) N = disabled
Mod Prog Quick Save*	Enables the immediate save to disk of module programming changes (add, modify, delete) when <MODL MODFY> is used. [N] Y = Immediate save to disk N = On-demand with <F10>
Mod Ignores DV Mode*	Modules can ignore the digital/clear voice mode of incoming calls, i.e. they will not follow the call mode. [N] Y = Modules ignore call mode N = Modules follow call mode
Default to DV Mode*	All units and groups may default to private (digital) when programmed. Even if module is saved as clear voice, it will be programmed as private when the application starts up. All module add/modify operation follow the setting. [N] Y = All units and groups are programmed as private N = All units and groups are added as clear voice or follow their saved mode at startup.

8.2 DISABLE KEYBOARD KEYS

When "Disable Keyboard Keys" is selected from the Edit Configuration menu, the Disable Keys form shown in Figure 19 is displayed.

```
             DISABLE KEYS

<MODULE SELECT>         : N
<MODL MUTE>             : N
Module Volume Keys      : N
<MODL MODFY>            : N
<CONV FUNCS>            : N
<MODL FUNCS>            : N
<PVT>                   : N
<MUTE ALL>              : N
<ICALL SEL>             : N
<PRMPT TX>              : N
<ICALL TX>             : N
<EMER DECLR>            : N
All Alert Tone Keys     : N
All Patch Keys          : N
All Simulselect Keys    : N
All Telephone/Icom Keys : N
```

Figure 19 – Disable Keys Form

A key or group of keys is disabled by setting the Yes/No field to "Y". The key functions normally when the field is set to "N". *The corresponding PC keyboard key, if any, is also disabled*.

TABLE 12 – DISABLE KEYBOARD KEYS SELECTIONS

KEY	DESCRIPTION
<(Key Title)>	Disables the specific key labeled with the title in brackets.
<MODULE SELECT>	Disables <MODULE SELECT> but does not disable <Alt><MODULE SELECT> function for Call Director patch.
Module Volume Keys	Disables both the Volume Up and Down keys for modules, but does not affect <Alt><Volume> used for headset sidetone adjustment.
All Alert Tone Keys	Disables all three alert tone keys as a group.
All Patch Keys	Disables <P1> - <P5>, <P1 TX> - <P5 TX>, and <PATCH VIEW> as a group.
All Simulselect Keys	Disables <S1> - <S4> and <SIMUL VIEW> as a group.
All Telephone/Icom Keys	Disables <CALL RLSE>, <CALL HOLD>, <CALL ANSR>, <PHONE/ICOM TX> and <CALL FUNCS> as a group.

8.3   EDIT SITE DATABASE

When "Edit Site Database" is selected the Site Data form shown in Figure 20 is displayed.

```
                 SITE DATA

NUM      __NAME__     NUM     __NAME__
 1     SITE-1          17
 2     CAND 800        18
 3     MVR             19
 4     SIMULCST        20
 5                     21
 6     VOTER           22
 7     SITE-7          23
 8                     24
 9                     25
10     MSDS-1          26
11     MSDS-2          27
12                     28
13                     29
14                     30
15                     31
16                     32    SCAT
```

Figure 20 − Site Data Form

The site numbers 1 - 32 on the form are static. The user can add, delete or modify site names by using the form navigation keys and text editing keys. A site name can be deleted by making the name field blank with spaces or deleting all characters.

8.4   EDIT SCREEN COLORS

The Screen Colors window is displayed when "Edit Screen Colors" is selected. It contains 64 labels representing a screen area, field, or indicator. These color settings are stored in **CONFIG.DAT**. This menu selection should always be preceded by a selection of "Edit DAC Values" (see below) in order to set the colors to actual Maestro hues.

### 8.4.1   Color Descriptions

Table 13 describes the use of each of the 64 colors used in the Maestro. Where foreground is explicitly mentioned, the color is used against a background color defined elsewhere. For these special foregrounds, their backgrounds on this screen must remain black for proper mixing with their actual Maestro backgrounds. Where background is explicitly mentioned, the foreground color on this screen should be black for proper mixing.

TABLE 13 – SCREEN COLOR DESCRIPTIONS

| NO.	DESCRIPTION	NO.	DESCRIPTION
0	Main *background*	32	Menu title
1	Page, status, call history headers	33	Menu normal text
2	Normal module *background*	34	Menu highlight bar
3	Emergency module *background*	35	Not used
4	Picked module border	36	Name list title, ID
5	Unpicked module border	37	Name list normal text
6	Selected module *background*	38	Name list highlight bar
7	Module name *foreground*	39	Not used
8	CALL and caller *foreground*	40	Not used
9	XMT	41	Not used
10	BUSY *foreground*	42	Not used
11	PBY *foreground*	43	Not used
12	PRIV *foreground*	44	Debug window
13	Conventional indicators *foreground*	45	Debug window
14	Phone/intercom ind. *foreground*	46	Prompt line
15	Reserved	47	Warning/error message banner
16	Volume bar	48	System message banner
17	MUTE *foreground*	49	Cross-mute (banner area)
18	Sign-on screen company info	50	Telephone or intercom call banner
19	Sign-on screen title, version	51	Emergency status indicator, banner
20	Normal page	52	Not used
21	Active call page	53	Clock
22	Current page	54	P1, S1 indicators
23	Active emergency page	55	P2, S2 indicators
24	Status window attribute #1	56	P3, S3 indicators
25	Status window attribute #2	57	P4, S4 indicators
26	Status window attribute #3	58	P5 indicator
27	Status window attribute #4	59	Low VU
28	Normal call history	60	Medium VU
29	Emergency call history	61	High VU
30	Emergency declare call history	62	No VU, VU *background*
31	Call history detail	63	Reserved

8.4.2   Keys

The following keys are used to navigate around the window and adjust the labels attributes.
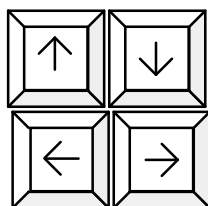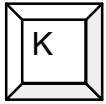
Navigation from label to label. The small white arrow points to the selected label for which the foreground, background or blink can be changed.
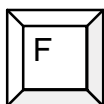
Increments the foreground color to the next color. After color 15, the color reverts back to color zero.
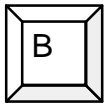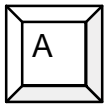
B   Increments the background color to the next color. After color 7, the color reverts back to color zero.

K   Toggles the blink attribute for the foreground/background colors.

**R**   Restores the selected label to the colors previous to the beginning of the editing.

A   Restores all labels to the colors previous to the beginning of the editing.

NOTE

Recommendation: Make a backup copy of the **CONFIG.DAT** file before changing colors <u>or</u> save the changed color configuration with a different file name (Section 8.7)

8.5   EDIT DAC VALUES

When "Edit DAC Values" is selected, the Edit DACs screen shown in Figure 21 is displayed. When the screen is first displayed, the screen colors will change dramatically. They will be adjusted to those of the Maestro screen color palette as defined in **CONFIG.DAT**. Colors are displayed as they appear on the Maestro screen during normal operations.
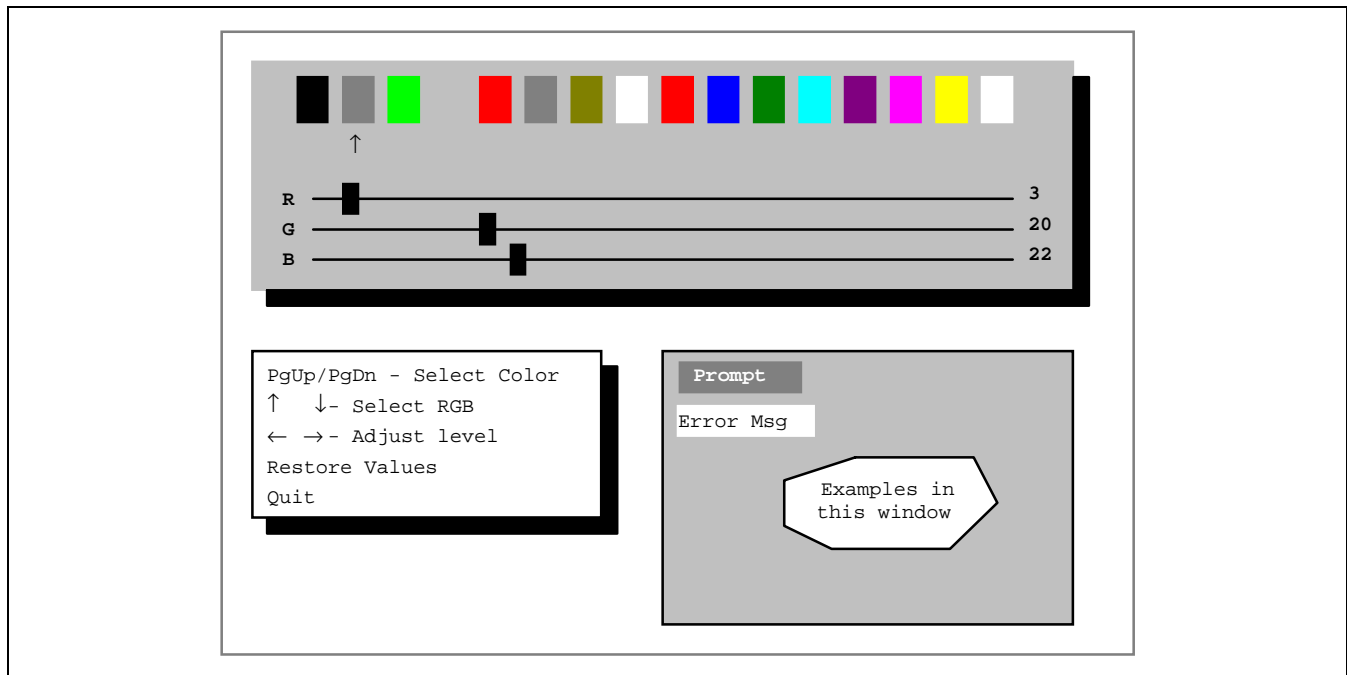
Figure 21 − Edit DACs Screen

8.5.1   About Colors

There are sixteen (16) colors available for use on the Maestro screen. The colors will be referenced by a number from 0 - 15, where 0 is usually black, and 15 is usually white. Colors 0 - 7 may be used as foreground and background colors while colors 8 - 15 can only be used as foreground colors. Each color is made up of three component colors: Red, Green, and Blue (RGB). Each component color can be adjusted to have a level (intensity) of 0 - 63. Up to 262,144 possible color hues are possible by mixing various levels of the component colors. The three component colors (red/green/blue) cannot be changed.

S   The simple "S" box to the left represents a single character cell on the Maestro screen. The area around the letter is the background color, gray, and the foreground color is black.

A VGA-compatible PC contains sixteen Digital-to-Analog Converters (DACs) that convert the digital (0 - 63) RGB levels stored in registers to analog voltages that are fed to the color display. This part of the Editor changes the RGB levels stored in those registers. When all RGB levels are 0, the color is black. When they are all at maximum (63), the color is white. When the RGB levels are nearly equal, shades of gray from black to white are possible as the levels increase.

8.5.2   Palette Window

The palette window is the top window on the Edit DACs screen. It consists of sixteen blocks of colors (the "palette"), an arrow pointing to the blocks, three horizontal RBG slide controls (the "sliders"), and an arrow pointing to the sliders. To adjust any color, the user selects the color, then selects the component color, and then adjusts the level of the component color. The level of any or all of the three component colors determines the hue of the selected color.

As the selected slider is moved, the digital value is displayed at the right edge of the slider. The portions of the screen that use the selected color change along with the changes made by the sliders.

The sliders "wrap around" − when a slider moves past its maximum value it returns to zero to continue forward instead of remaining at the maximum position.

8.5.3   Samples Window

This window has   no active controls. It displays the sample color changes as they will appear on the Maestro screen. Several common screen areas, fields, and indicators are shown in the samples window.
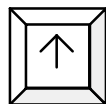
8.5.4   Keys

The following keys are used to control the color selection from the palette, pick the component color for adjustment, and to adjust the level of the component color:
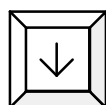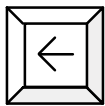
| Page Up | Selects previous color (moves arrow left) from palette |

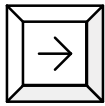| Page Down | Selects next color (moves arrow right) from palette |

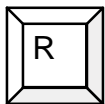| ↑ | Selects B (blue) then G (green) then R (red) |

| ↓ | Selects R (red) then G (green) then B (blue) |

Decreases component color level

Increases component color level

Restores all colors to their component values previous to beginning color editing.

8.5.5 Accepting Changes

When the user has completed color editing, the Edit DACs screen can be exiting by pressing <Q> or <Esc>. As shown in Figure 22, the user will then be prompted with a window asking if the original palette colors should be restored.

```
Restore original palette colors? N
```
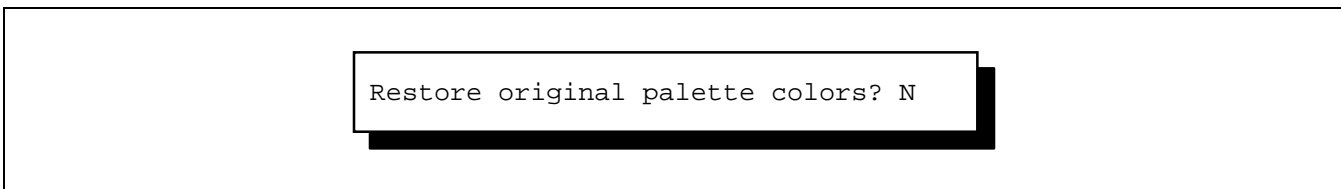
Figure 22 − Restore Original Palette Colors Confirmation Window

If further foreground/background color changes for screen areas or indicators are to be made, continue with the default answer − No. However, if the color editing is complete the user may answer Yes if it is desired to return to the normal Editor screen colors. The color changes are permanent when the "Save Changes to Disk" option is selected from the Edit Configuration menu.

8.6 READ SPECIAL CONFIG FILE

When "Read Special Config File" is selected, the user is prompted for a file name. The default file name is **CONFIG.DAT**, but the user can edit the name to a new file. The file must already exist before it is read. The normal MS-DOS file naming conventions are expected. Typical names would be **CONFIG.000**, **CONFIG.001**, **CONFIG.NEW**, etc. If the user is going to create a modified configuration file based on **CONFIG.DAT**, use the default for reading but save it using a different filename after the changes have been made.

```
Filename : CONFIG.DAT
```
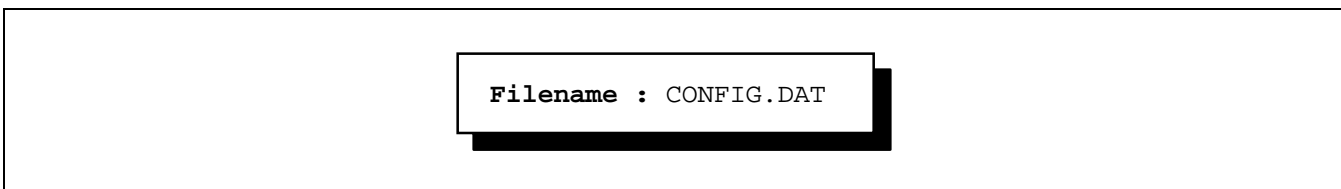
Figure 23 − Read Special Configuration File Filename Input Window
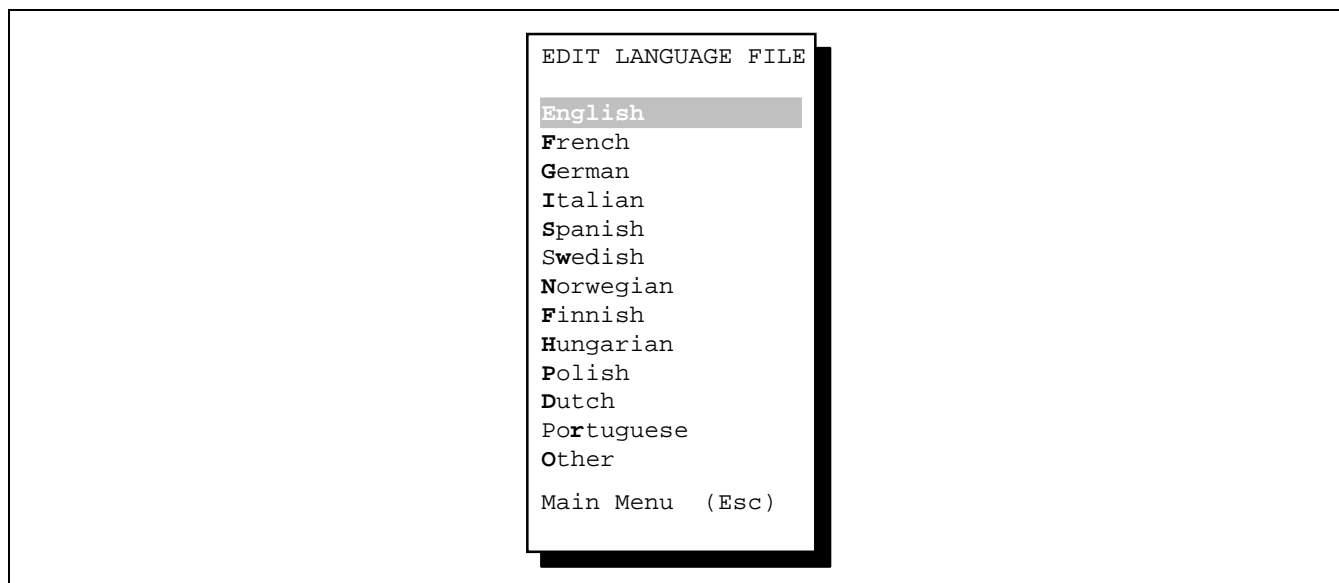
8.7 SAVE CHANGES TO DISK

The user is prompted for a file name when "Save Changes to Disk" is selected. The default file name is **CONFIG.DAT**, but the user can edit the name to a new file. Saving the data to a new file name allows multiple screen color combinations by using the different files.

9.   EDIT LANGUAGE FILES

The Edit Language File menu is shown in Figure 24. The user should select one of the languages. "Other" should be selected for a language not on the menu.


```
EDIT LANGUAGE FILE

English
French
German
Italian
Spanish
Swedish
Norwegian
Finnish
Hungarian
Polish
Dutch
Portuguese
Other

Main Menu  (Esc)
```

Figure 24 – Edit Language Files Menu

When the language is selected, the large text string edit window is displayed with the first twenty text strings displayed. The first string is a "null" string and it will appear empty. Do not edit this string. A string is selected by moving the highlighted bars over the desired string and pressing <Enter>. This will open up a one-line form with the current string contents. Editing is done within this window. Press <Enter> to accept the edit changes. Figure 25 shows the two windows.

The windows use the same navigation and editing keys that are used when editing entities. Care should be taken to keep the width of the text for indicators exactly the same; do not to exceed the width of the warning/error banner.
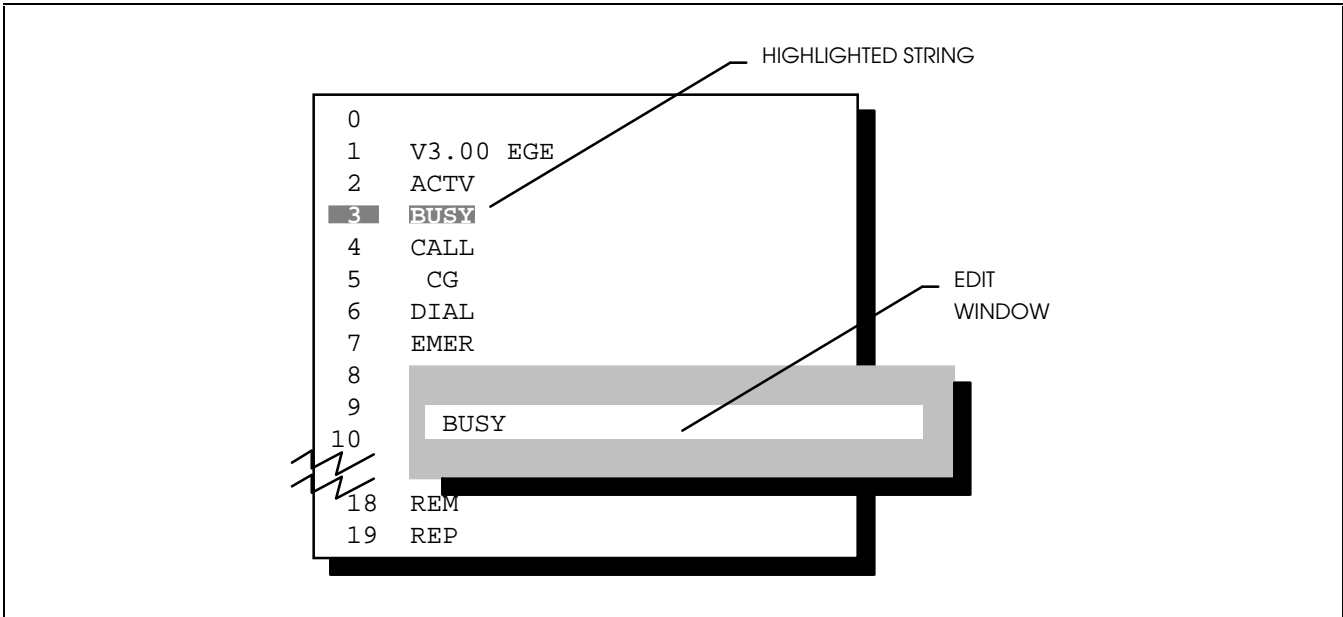
Figure 25 − Text String Edit Windows

10. VIEW AUX I/O

When "View Aux I/O" is selected, the Aux I/O window shown in Figure 26 is displayed. This window is for viewing only. Editing of this data is done only at the CEC/IMC Manager. There are 30 auxiliary I/O "events" to view. The up/down arrow, page, and home/end keys can be used to view the other events. <Esc> returns the user to the previous menu. Table 14 describes each field.

```
NUM  TYPE  STATE  BIT  ACT  DEACT  _____MESSAGE_____
1     O     H     0    F1   MOM
2     I     L     1                DOOR IS OPEN
3     O     H     1    F2   MOM
4     I     L     2                SITE LINK
5     ?
6     I     L     3                SYSTEM ERROR
7     ?
8     I     L     4                EMERGENCY
9     ?
10    I     L     5                BACKUP SYSTEMS FAILURE
11    ?
12    I     L     6                INPUT 6 ACTIVE
13    ?
14    ?
15    ?
```

Figure 26 − Aux I/O Window

TABLE 14 – VIEW AUX I/O FIELDS

FIELD	DESCRIPTION
NUM	The AUX I/O event number (1 - 30)
TYPE	Type of event: I = Input O = Output ? = undefined
STATE	Active state that triggers input event, or active output state H = High L = Low
BIT	Controller Board register bit number that corresponds to input or output
ACT	\<Alt\> Key that activates output
DEACT	MOM = Momentary output, output is deactivated when key is released \<Key\> = Alternate action output, \<Alt\> key that deactivates output
MESSAGE	Up to 25 character message that is displayed when input is triggered

11.   CHANGE PASSWORD

This function allows a qualified user to change the program password. The user must know the current password in order to change it. When the function is selected, the user is prompted for the current password. If the password is entered correctly the user is then prompted for a new password. The new password may be up to fifteen (15) characters consisting of letters and numbers. Password characters are not displayed on the form as they are entered, only the movement of the cursor is seen.

Password control can be disabled by pressing \<Enter\> when prompted for the new password. This sets the password to a null string, which is interpreted by the program as no password.

```
Current Password:
```

```
New Password:
```

Figure 27 – Change Password Windows

12.   COMPATIBILITY

Editor Version 3.x is compatible with C3 Maestro Version 3.x and later support (*.DAT) files. Use of Editor with Version 2.x support files will result in erroneous data displays and corrupted files if they are saved. Conversely, the use of previous versions of Editor with Version 3.x support files will have the same results.

13.   TECHNICAL INFORMATION

13.1   SYSTEM REQUIREMENTS

The Editor program requires the following minimum configuration:

- IBM PC-AT computer or compatible

- MS-DOS 3.3 or later

- One floppy disk drive and a hard disk

- VGA display

- 640K RAM

13.2   OPERATING SYSTEM

Unlike the Maestro application that uses a proprietary multi-tasking operating system, Editor is a MS-DOS application. Screen displays are done by writing directly to video RAM, bypassing the BIOS and MS-DOS. Keyboard I/O is done at the BIOS level.

13.3   DISPLAY MODE

The user may notice that the Editor characters appear different than the characters seen in MS-DOS. Editor operates in color 80-column by 28-row text mode. The normal 25-row 16×9 pixel character set is changed to a 14×9 pixel "EGA" character set. This provides an extra three (3) display rows, since shorter characters are used. The display is returned to 80 $\times$ 25 text mode when the program terminates.

Due to the color choices used in the program, Editor displays may not be easily readable on monochrome displays. There is no way to modify the colors to rectify this situation.

If "Print Screen" is used to print the Editor screens, certain PC BIOS versions may only output the first 25 rows of the display.

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