R A D I O N I C S

5100 Bar Code Programmer
Operation Manual

1. INTRODUCTION TO THE PROGRAMMER

The Radionics D5100 Bar Code Programmer is a tool for customizing parameters of the advanced line of Radionics security products. Modifying these parameters is easy with the use of the Programmer *wand* (see Figure 1) and bar codes. Application program data can be saved in memory or loaded directly into the product, making the Programmer extremely useful in the field.

The Programmer contains an internal power supply (a 9 VDC battery with a lithium back-up battery) so programs can be created and edited away from a job site. A data/power cord (provided with the D5100) is used when programs are transferred between the Programmer and the Radionics product, and also supplies power to the Programmer.

A tilt bail is provided to conveniently hang the Programmer on the door of a Control/Communicator enclosure, and to adjust the angle of the display when the Programmer is used on a tabletop. **Radionics recommends that the user hang the D5100 on the Control/Communicator door when programming, to prevent damage to the D5100 due to static discharge.** Two clips on the cover of the D5100 are provided to hold the Quick Access card. With this card, you can enter a program at several points, instead of advancing one line at a time from the beginning of the file.

The Omegalarm D5100 Programmer has an energy-efficient Liquid Crystal Display (LCD). The display is best viewed at an angle of about 70 degrees. The angle can be adjusted to suit your individual preference by turning the LCD potentiometer screw clockwise to increase, or counterclockwise to decrease, the viewing angle.

WARNING: Do not expose the Programmer to temperatures below freezing (32°F, 0°C). The LCD will become sluggish and can be damaged. Prolonged exposure to direct sunlight can also damage the LCD.
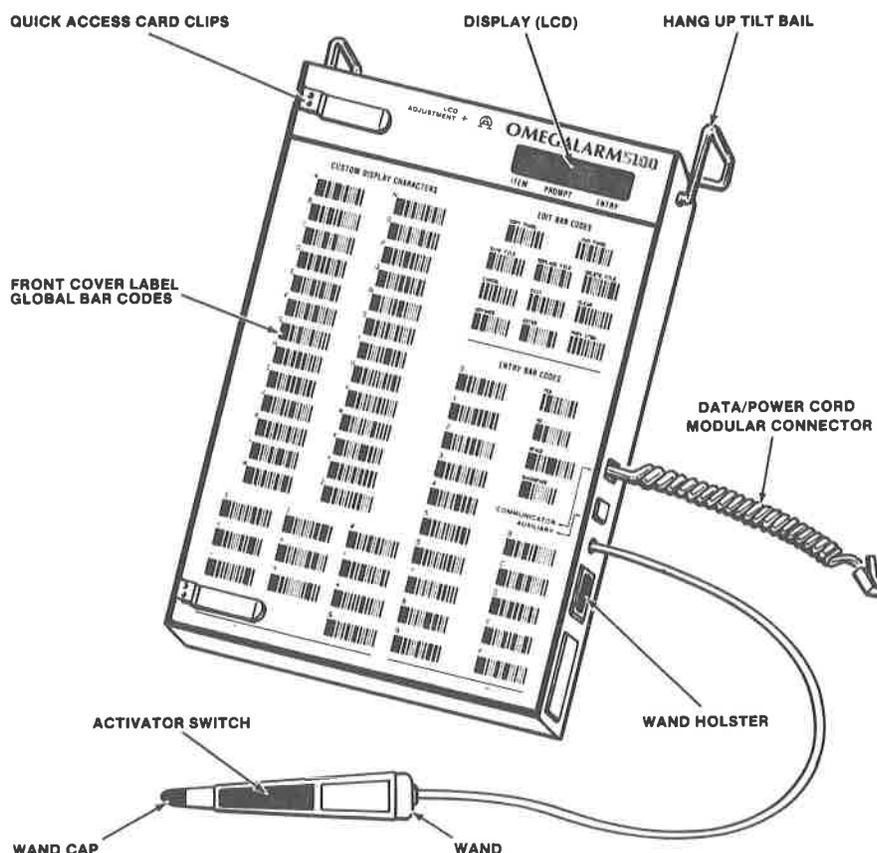

Figure 1: Programmer Components

3. D5100 ORGANIZATION

For each application that you have, you will create a *program file.* All programs that are used for a particular Radionics product are developed using a *product handler.* All program files and product handlers are stored in the D5100 Programmer *memory.* You may want to think of the application programs as being "filed" in product handler "folders", and stored in the D5100 "filing cabinet". In Figure 2, application programs for the 8112 ("8112 Commercial Supervised", "8112 Residential", "8112 Residential with Fire") are "filed" in the "8112 MAIN x#" product handler "folder"; and application programs for the 6112 ("6112 Commercial Non-Supervised", "6112 Commercial Supervised", and "6112 Residential") are "filed" in the "6112 MAIN x#" product handler "folder". Both the "8112 MAIN x#" and the "6112 MAIN x#" product handler folders are "stored" in the D5100 "file cabinet".
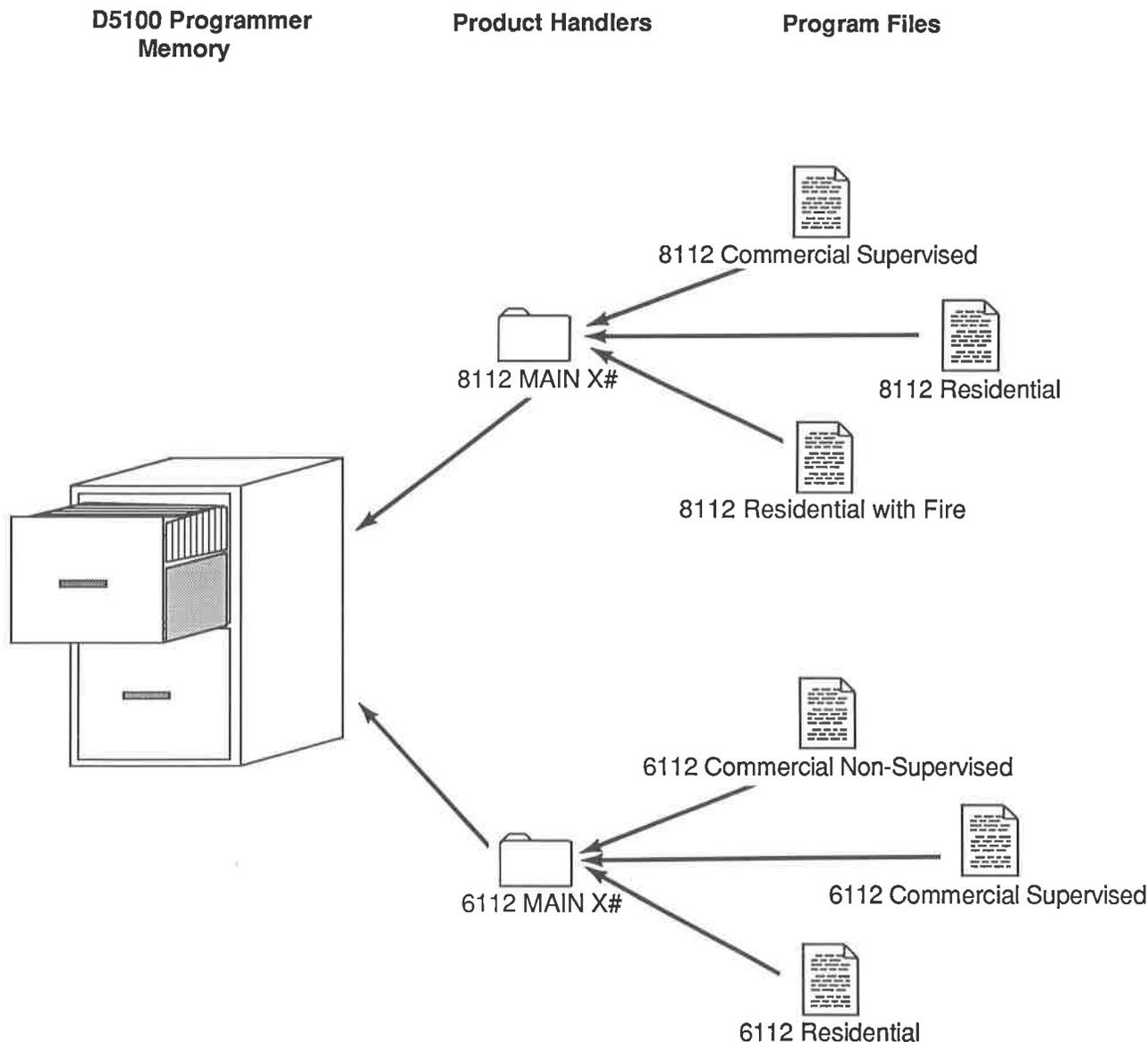

Figure 2: D5100 "Filing" Analogy

5. CREATING PROGRAM FILES

Once a product handler is loaded into the D5100 memory, program files may be developed. The first product handler title that appears in the Programmer display is *OmegaWand 2.1*. This is the Programmer operating system, and is not user-programmable. The software in the D5100 is "navigated" in two directions: "horizontally " with the **ADVANCE** bar, and "vertically" with the **ENTER** and **EXIT** bars. Figure 3 displays how a user can sequence through the D5100 software.

- Starting at *OmegaWand 2.1*, scanning the **ADVANCE** bar displays the *product handlers* that have been loaded into the Programmer.

- Scanning the **ENTER** bar displays the first *program file* associated with the particular product handler. Other program files created using the product handler may be reviewed by scanning **ADVANCE.**

- When you have **ADVANCE**d to the appropriate program, scanning **ENTER** will display the first *program item* of the program.

- When a program has been edited and saved, scanning **EXIT** one to four times (as required) will return the Programmer display to *OmegaWand 2.1*.

Figures 4 through 8 show the organization of several product handlers and associated programs. All application programs are developed with the product handler *New File* programs. Examples of user-created programs are shown in quotations (i.e. *6112M: "Resw/Fire"*). Begin Programmer "navigation" at the *OmegaWand 2.1* display, and scan the **ADVANCE** bar code until the product handler of interest appears in the Programmer display.

Naming a Program

The following example displays the method for naming a new program for the D6112 Control/Communicator. *This example can be easily modified for other Omegalarm products, such as the D8112 Control/Communicator and the D6500 Receiver.*

1. Scan the **EXIT** bar until *OmegaWand 2.1* is displayed.

2. Scan the **ADVANCE** bar to scroll through the product handler titles until the *..6112 MAIN X#..* product handler title is located.

3. Scan **ENTER** to display *6112M: New File*

4. Scan **ENTER** once more to provide space in the display to construct a title for the new program. The display *6112M:* appears.

5. Up to nine characters can be used to construct a meaningful title by scanning bar codes for letters, numbers, marks, and spaces.

   Example: *6112M: Resw/Fire* (Residential with Fire)

   NOTE: Each new program must have a title that is *different* from any other program stored in the Programmer. If *Check Title* appears in the Programmer display, the name you have entered has already been used for another program. Giving the program a different name saves both the new program and the original program. Scanning the **REPLACE FILE** bar code replaces the original program with the new program, and *erases the original program.* Temporary programs (that you do *not* want to save) do not need a title.

6. When the title is complete, scan **ENTER**. The first program item will be displayed.
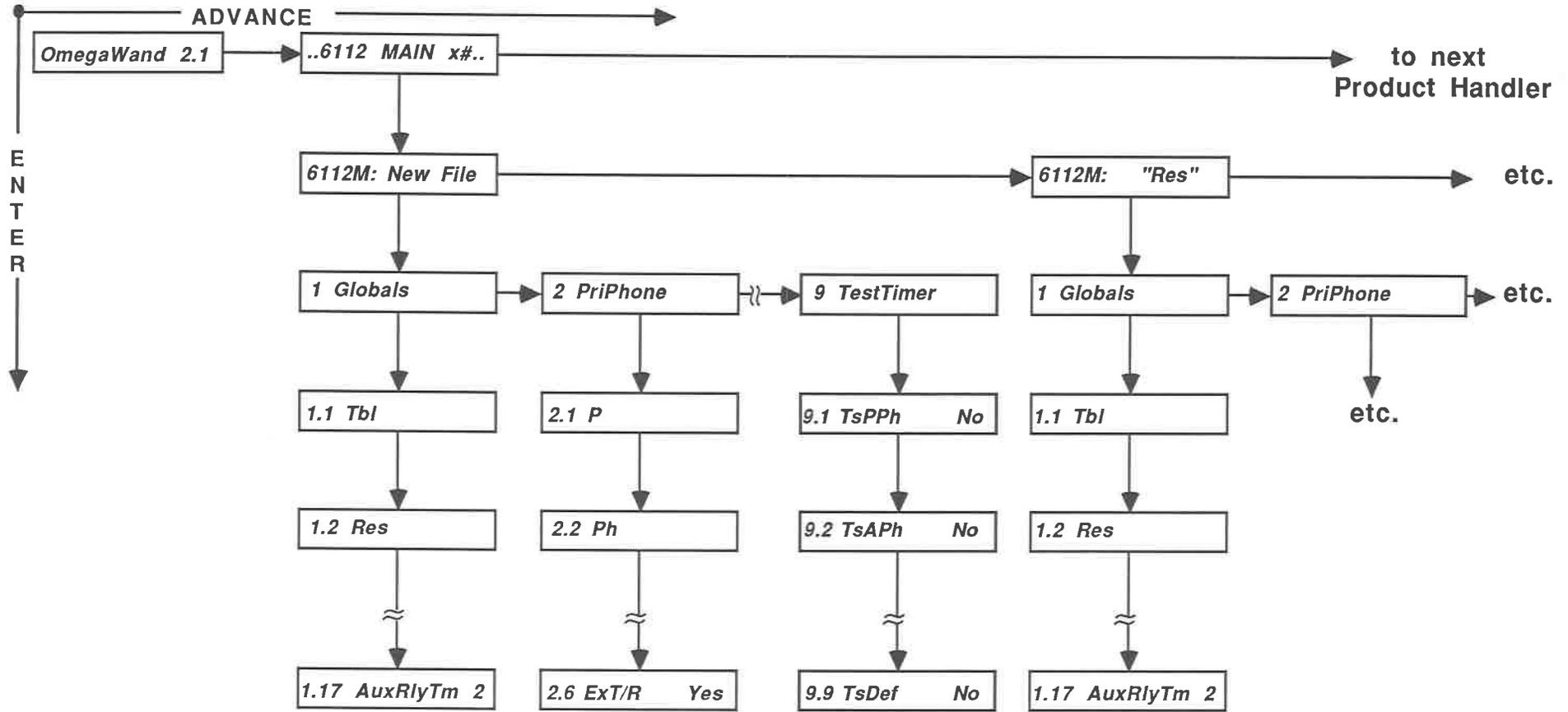
ADVANCE

E
N
T
E
R

| OmegaWand 2.1 | → | ..6112 MAIN x#.. | → to next Product Handler |

| 6112M: New File | ... | 6112M: "Res" | → etc. |

| 1 Globals | → | 2 PriPhone | →≀→ | 9 TestTimer | | 1 Globals | → | 2 PriPhone | → etc. |

| 1.1 Tbl | | 2.1 P | | 9.1 TsPPh   No | | 1.1 Tbl | | etc. |

| 1.2 Res | | 2.2 Ph | | 9.2 TsAPh   No | | 1.2 Res |

≈

| 1.17 AuxRlyTm 2 | | 2.6 ExT/R   Yes | | 9.9 TsDef   No | | 1.17 AuxRlyTm 2 |

Figure 4: 6112 MAIN Product Handler

A-5100-030-100

ENTER

ADVANCE

| OmegaWand 2.1 |

| ..8112 AUX x#.. |

to next
Product Handler

| 8112A: New File | | 8112A: "ResAux" | etc.

| 2 Zonex | | 3 ABCDKeys | | 7 Cmd5's | | 2 Zonex | | 3 ABCDKeys | etc.

| 2.1 Zonex   No | | 3.1 AKey | | 7.1 Cmd51   No | | 2.1 Zonex   No | etc.

| 2.2 Hrzntl   No | | 3.2 BKey | | 7.2 Cmd52   No | | 2.2 Hrzntl   No |

| 2.12 Z8Points 00 | | 3.4 DKey | | 7.8 Cmd58   No | | 2.12 Z8Points 00 |
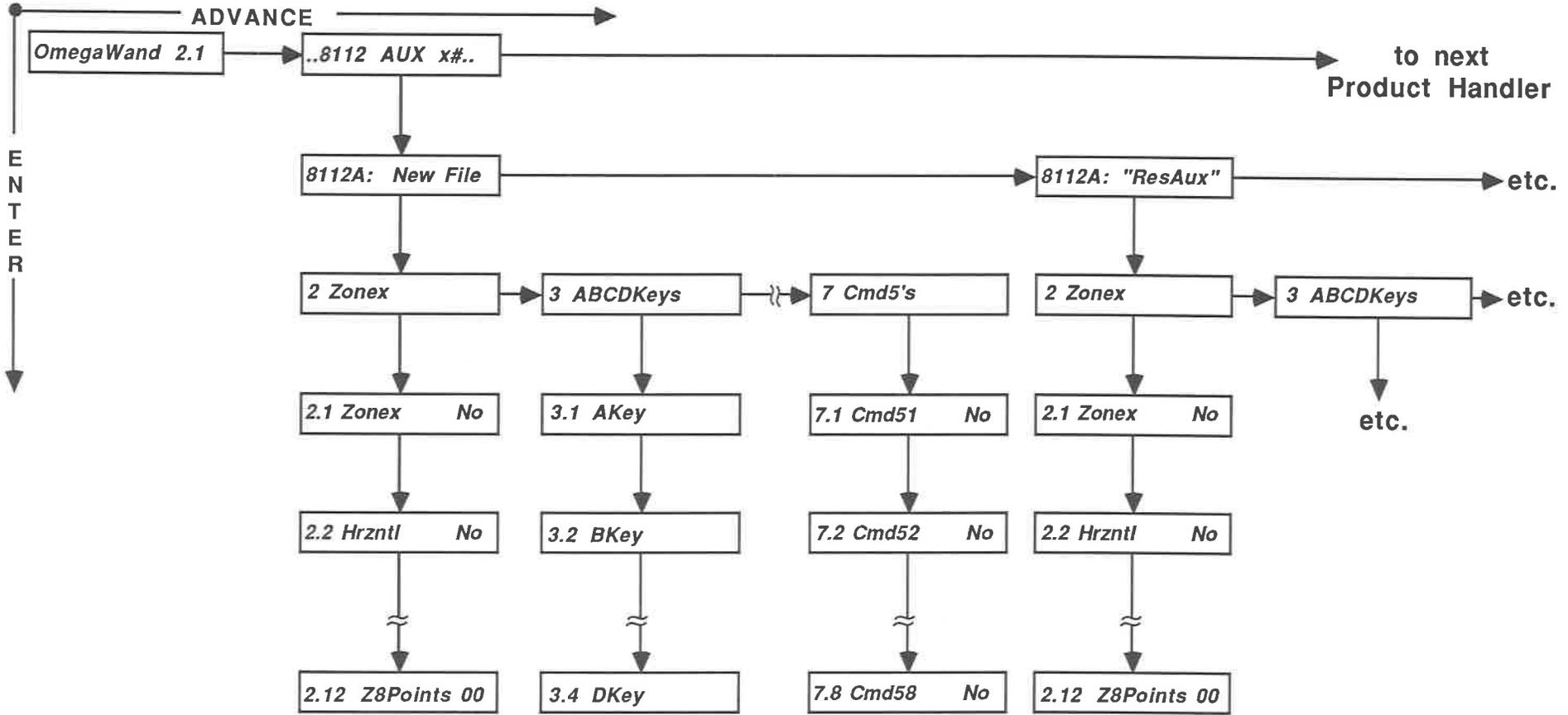
Figure 6: 8112 AUX Product Handler

A-5100-030-120

ENTER

ADVANCE

| OmegaWand 2.1 |

| ..6500 MPU x#... |

| ..6500 LINE x#.. |

to next
Product Handler

| 6500M: New File | → | 6500M:"Rec1MPU" | → etc.

| 6500L: New File | → | 6500L:"LineCd#1" | → etc.

| 1 Receiver# 1 |

| 1 Receiver# 1 |

| 1 Tone1 2 |

| 1 Tone1 2 |

| 2 AutAck Yes |

etc.

| 2 Tone2 1 |

etc.

| 34 HdrChar 1 |

| 12 LnSniff Yes |
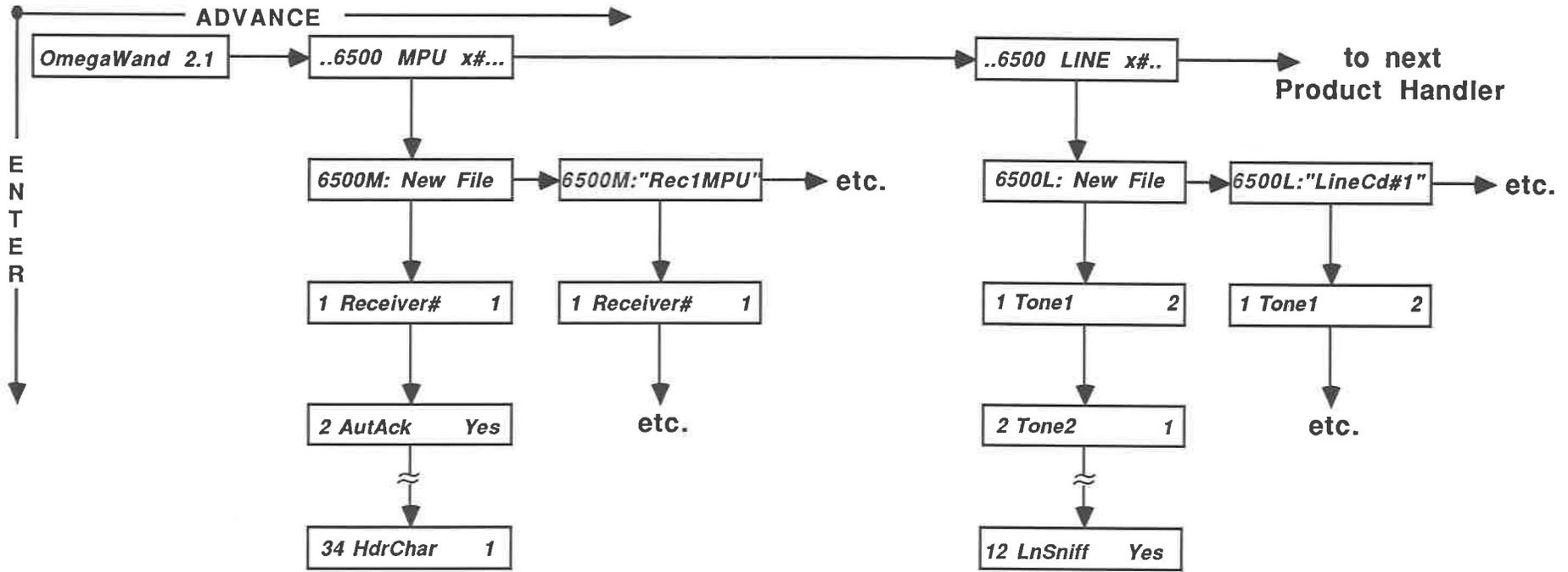
Figure 8: 6500 MPU and LINE Product Handlers

To Make an Entry Visible:

1. Scan the bar code of the entry to be made visible. These bars are found on the Program Master Card of the product being programmed.

2. Scan the **VISIBLE** bar code after the entry appears in the display. The program item returns to its original format.

3. All program files (including New File) now have that entry made visible.

After the program is completed, you can:

* **SAVE FILE**, which stores the file in the Programmer memory, if no other file of the same title exists in memory.

* **REPLACE FILE**, which stores the file in the Programmer memory if a file with the same title as the revised version already exists in memory.

* **LOAD PANEL**, which enters the program into a Radionics product, but does not save the file in the Programmer memory.

* **EXIT**, which abandons the program in the editing buffer.

Storing the Program
SAVE FILE can be used at any point in modifying a program file, provided that the file has a title. Scanning **SAVE FILE** enters the new program into the D5100 memory and returns the display to
6112M: New File .

If the Programmer tweedles and displays *Check Title* when **SAVE FILE** is scanned, an existing file has the same title as the file you are attempting to save.

* To *change the title* of the new file, scan the **ADVANCE** bar code, enter a new title, scan **ENTER**, and then scan **SAVE FILE**.

* To *replace* the original file with the new file scan **REPLACE FILE**. *The original file is lost.*

If *(#) Enters Save?* is displayed after you have scanned **EXIT**, you have one last chance to save the file before abandoning it.

* To *abandon* the file scan **EXIT**. **All the changes that you have made to that particular file will be lost.** The *previous revision* of the file (if one exists) will be maintained in the Programmer memory.

* To *save* the file, scan the **ADVANCE** bar code. The title prompt (example: *6112M:*) appears. After scanning the the bar codes for your selected title, scan **ENTER**. The first program item in the file reappears. Scan **SAVE FILE**.

Entry Bar Codes

The largest group of bar codes consists of words, spaces, and characters. Use these bars to name files or to select the features of the product to be programmed. These bar codes differ from the edit bar codes in that they **enter** characters into the Programmer display, while the edit bar codes are used to **modify** program items and **"navigate"** in the D5100 software.

YES:	turns the feature represented by the item prompt ON.
NO:	turns the feature represented by the item prompt OFF.
BACKSPACE:	inserts one blank space at the far left of the display, moving any letter or number entries to the right. Characters can be entered into or removed from the display using this bar.
SPACE:	inserts one blank space at the far right of the display, moving any letter or number entries to the right. Characters can be entered into or removed from the display using this bar.
NUMBERS, LETTERS, AND MARKS:	Ten numbers, a complete alphabet, and various punctuation marks are supplied for program entries. Some number and letter codes select special functions for the Omegalarm products. Any of the characters can also be used to create custom text displays for the Omegalarm Alpha Command Module.

8. ABANDONING AND DELETING FILES

Abandoning a File

When a file in the editing buffer is no longer needed, it can be deleted by scanning the **EXIT** bar code. You can **EXIT** at any point while programming a file. If the file contains revised data (new entries), the Programmer displays *(#) Enters Save?* This shows the number of entries made during programming. Scan the **EXIT** code again to abandon the file. The **EXIT** bar abandons only the file held in the editing buffer, and does not affect files stored in memory.

Deleting a File

If you attempt to save a file and the Programmer memory is full the Programmer displays *File Index Full*. If you are attempting to load a new Product Handler and the memory is full, the Programmer displays *Needs Memory*. No more files can be saved and no new Product Handlers can be loaded until one or more files are deleted. Obsolete files can easily be removed from program storage to make room for new files by following these steps:

1. **ADVANCE** to the appropriate product handler, and scan **ENTER**.

2. **ADVANCE** until the title of the program file to be deleted appears in the display.

2. Scan the **DELETE FILE** bar code. The complete file is now deleted, including the title.

10. PROGRAMMER MAINTENANCE

The following a list of recommended maintenance practices for the D5100 Bar Code Programmer.

- Replace the 9-volt battery inside the Programmer every 30 days.

- On a regular basis, unscrew the wand tip casing and clean the wand tip with a clean lint-free cloth.

- Clean the Programmer faceplate with glass cleaner and a lint-free cloth. CAUTION: Spray the glass cleaner on the cleaning cloth and then apply the cloth to the Programmmer faceplate. Do not spray any cleaning agent directly on the Programmer faceplate.

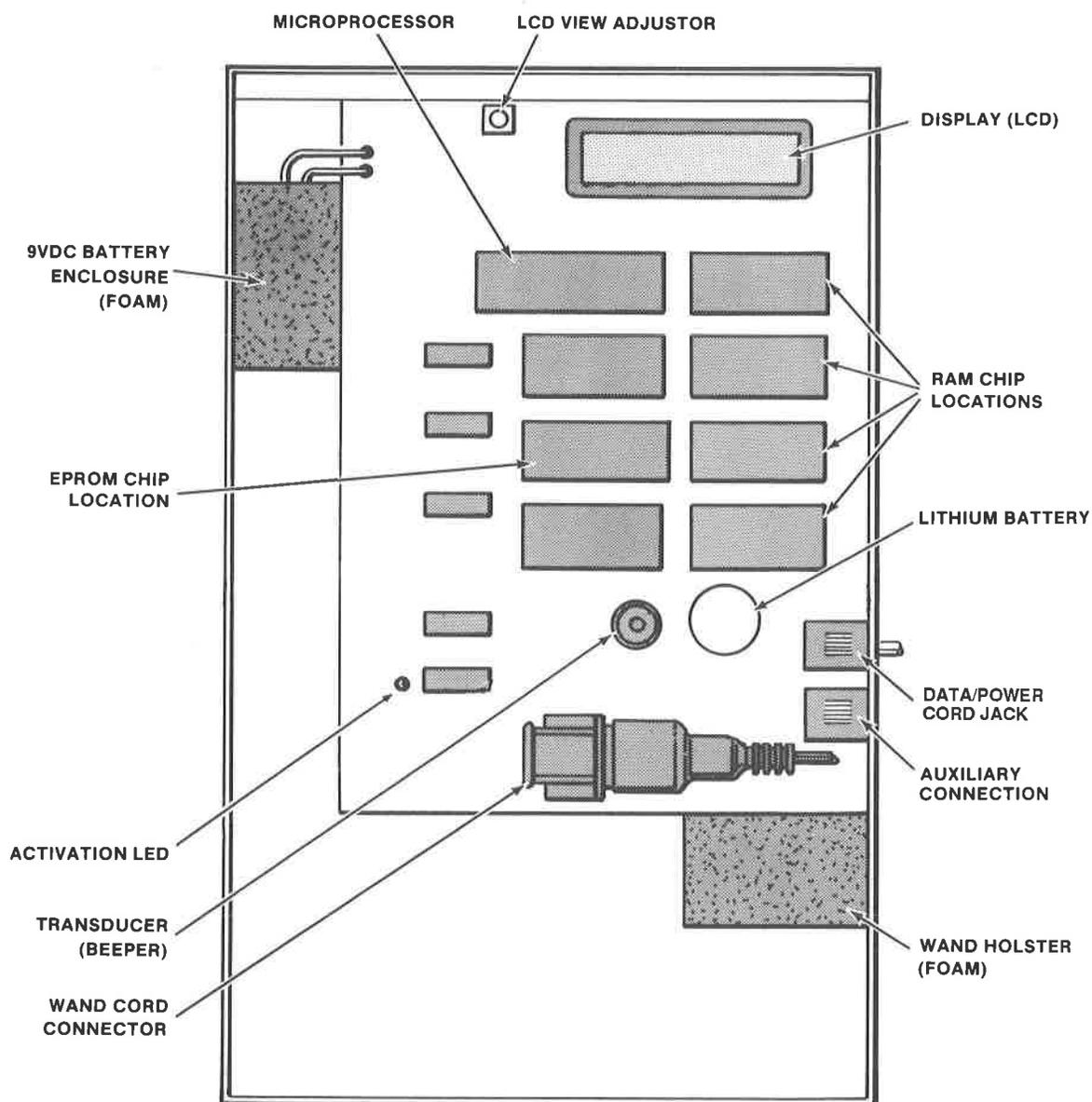 If the D5100 Programmer faceplate becomes damaged or worn out, call Radionics Customer Service for a replacement.

Figure 9: Inside the Programmer