R A D I O N I C S

D5200 Programmer

Operation Manual

74-06176-000-B 9/95

Notice

The material and instructions in this manual have been carefully checked for accuracy and are presumed to be reliable. However, Radionics, Inc. assumes no responsibility for inaccuracies and reserves the right to modify and revise this manual without notice.

FCC Notice

This equipment generates and uses radio frequency energy. If not installed in accordance with the manufacturer's instructions, it may cause interference to radio and television reception. It has been type tested and found to comply with the specifications in Subpart J of Part 15 of FCC rules for Class B Computing Devices. If this equipment causes interference to radio or television reception – which can be determined by turning the equipment on and off – the user is encouraged to correct the interference by one or more of the following measures: 1) Reorient the antenna on the radio/television, 2) Connect the AC transformer to a different outlet so the programmer and radio/television are on different branch circuits, 3) Relocate the programmer with respect to the radio/television.

If necessary, the user should consult an experienced radio/television technician for additional suggestions, or send for the "Interference Handbook" prepared by the Federal Communications Commission. This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402, stock no. 004-000-00450-7.

The Radionics D5200 Programmer is registered with the Federal Communications Commission under part 68, for connection to the public telephone network. FCC Registration Number: AJ9USA-65062-AL-E

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1. Introduction

The D5200 Programmer is a state of the art rugged, compact tool for programming the advanced line of Radionics security products. The D5200 features include a four-line LCD display, compact keyboard, and expandable memory.

Features

- **LCD Display**

  The four-line LCD display is used to provide product handler programming information, help screens for prompts and program items, and status information.

- **Keyboard**

  The programmer keyboard features standard letter layout, function keys for sending (loading) and receiving (copying) records, and "navigation" keys to assist the user in moving through product handler levels. A **Help** key provides immediate access to programming assistance.

- **Removable Data Storage**

  A connector for a state of the art removable RAM card (32 kbytes to 1 Mbyte) is provided in the D5200. RAM cards with different programmed records can easily be interchanged. See *Removable RAM Card* in the *Specifications* section for available sizes. The D5200 Programmer is shipped with an internal 128 kbyte RAM disk for product handler and record storage.

- **Customize Product Handlers**

  Product handler records can be customized using the VisMode feature. Designate as invisible selected program items, categories – even entire modules.

- **Password Protection**

  Protect your data by limiting access to programmer functions. Eight passwords with specific function access authority can be programmed.

- **Easy to Update**

  Conveniently update your programmer - add new handlers and help files – over the phone lines. Transfer handlers and records between D5200 programmers quickly and easily via the built-in RS-232 serial interface.

- **Help Screens**

  Built-in help messages provide guidance for D5200 operation and product handler programming.

- **Power Saving Timeout**

  Automatic timeout feature safely powers down the D5200 after a programmed amount of time.

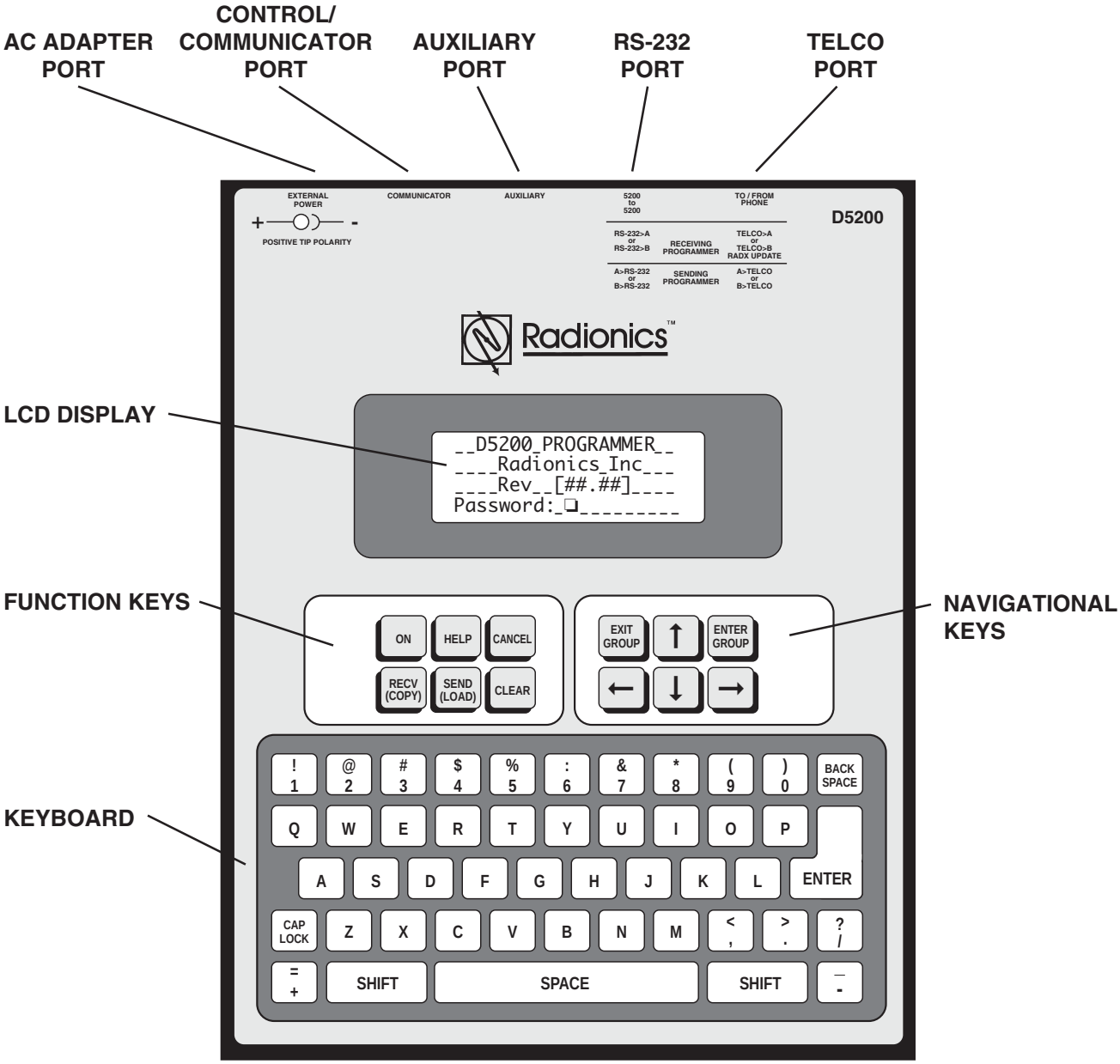


Figure 1: D5200 PROGRAMMER

Connectors

Four connectors are provided to interface the D5200 to control/communicators (panels) and other devices.

COMMUNICATOR: The COMMUNICATOR connector is used to interface the D5200 to programmable devices such as panels.

TELCO: Product handlers in the D5200 Programmer can be updated via the phone lines using the TELCO connector.

RS-232: Handlers in the D5200 Programmer can be updated at 19.2k baud by another D5200 using the RS-232 serial connector.

AUX: An auxiliary port is provided for future use.

A metal strip is provided on the back of the D5200 to hang the programmer on the enclosure of a panel. A camera strap can be attached to the D5200 using the two holes located below the metal strip.

Power Sources

Three sources are available to provide power to the D5200 Programmer: AC, internal batteries, and a panel power source. The D5200 can operate on any one – or a combination of – these three sources. The programmer also has an automatic time-out feature which safely powers down the D5200 after a programmed amount of time.

AC

An EXTERNAL POWER connector is provided for connecting the D5200 to a standard AC power source using an AC adapter (Radio Shack part# 273-1652A).

Batteries

Four alkaline C cell batteries inside the programmer provides power when other sources are not available. Tests conducted by Radionics have indicated that the programmer can operate on high-quality alkaline batteries (with no other power source) for 8 hours of continuous use.

Panel

The D5200 can also obtain power from a connection to a control/communicator.

Specifications

PROGRAMMER

Operating Temperature: 32°F to 122°F

Storage Temperature: -20°F to 150°F

Non-condensing Relative Humidity: 5 to 85% at temperature range of -20°F to 150°F

PROGRAMMER KEYBOARD

Operating Temperature: -40°F to 149°F

Storage Temperature: -40°F to 149°F

Maximum Key Presses (each key): 1.5 million

NOTE: Exposure to heat and direct sunlight exceeding the manufacturer's specifications can cause discoloration, delamination of the keypad.

EXTERNAL POWER TRANSFORMER

Radio Shack part# 273-1652A: 12VDC, 500 mA

FCC QUALIFICATIONS

Complies with FCC Parts 15 and 68 when connected to a phone network in parallel with a telephone or other device with ringing detection circuitry (see Figure 27).

FCC REGISTRATION NUMBER: AJ9USA-65062-AL-E

Removable RAM Card

Call Radionics Customer Service
For Removable RAM Card Information
Refer to Technogram 73-07504-000

1-800-538-5807

2. Overview of Operation

The D5200 is designed to store records for several product handlers (see Figure 2). Product handlers, records, and utilities in the D5200 are organized into programming "levels" (see Figures 3 and 8). At the top level are the titles of product and utility handlers stored on Disk A/B. When a product handler is selected, record titles appear. Each record can contain module, category, and program item levels, depending on the product handler. The current level is always displayed in the top "status line" of the LCD display.

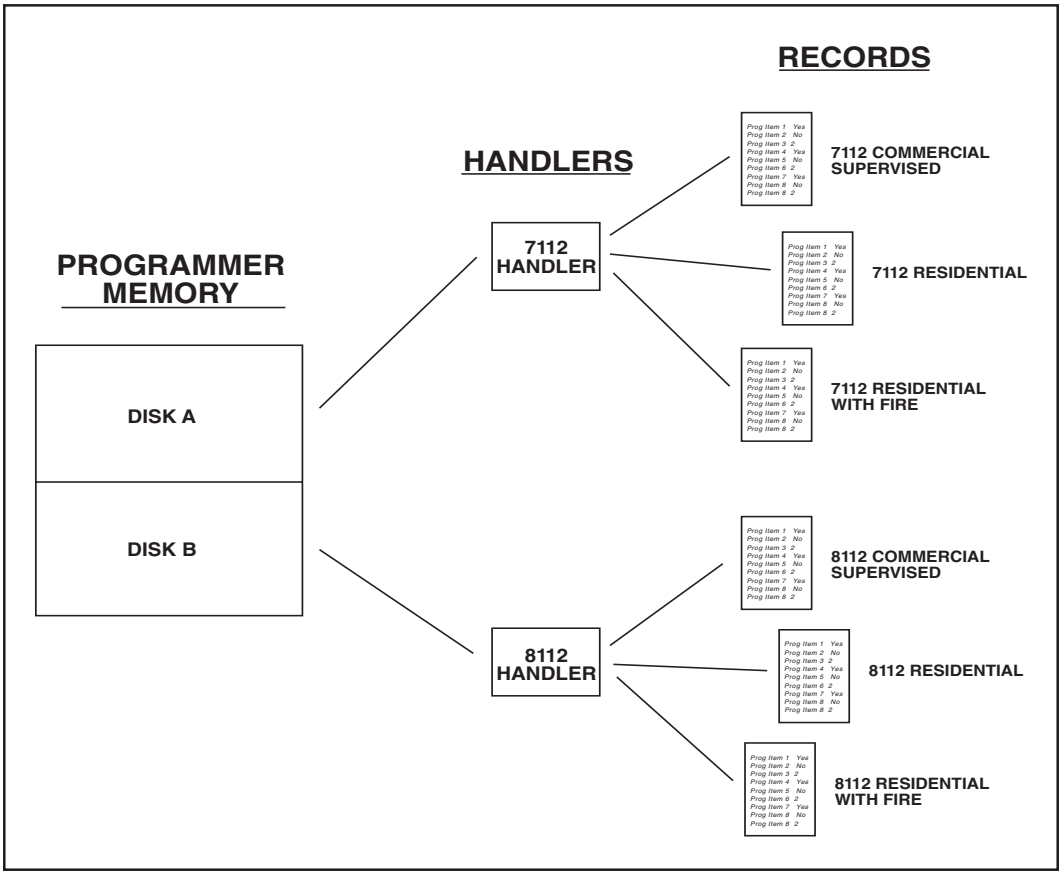


Figure 2: D5200 STRUCTURAL OVERVIEW

Keyboard

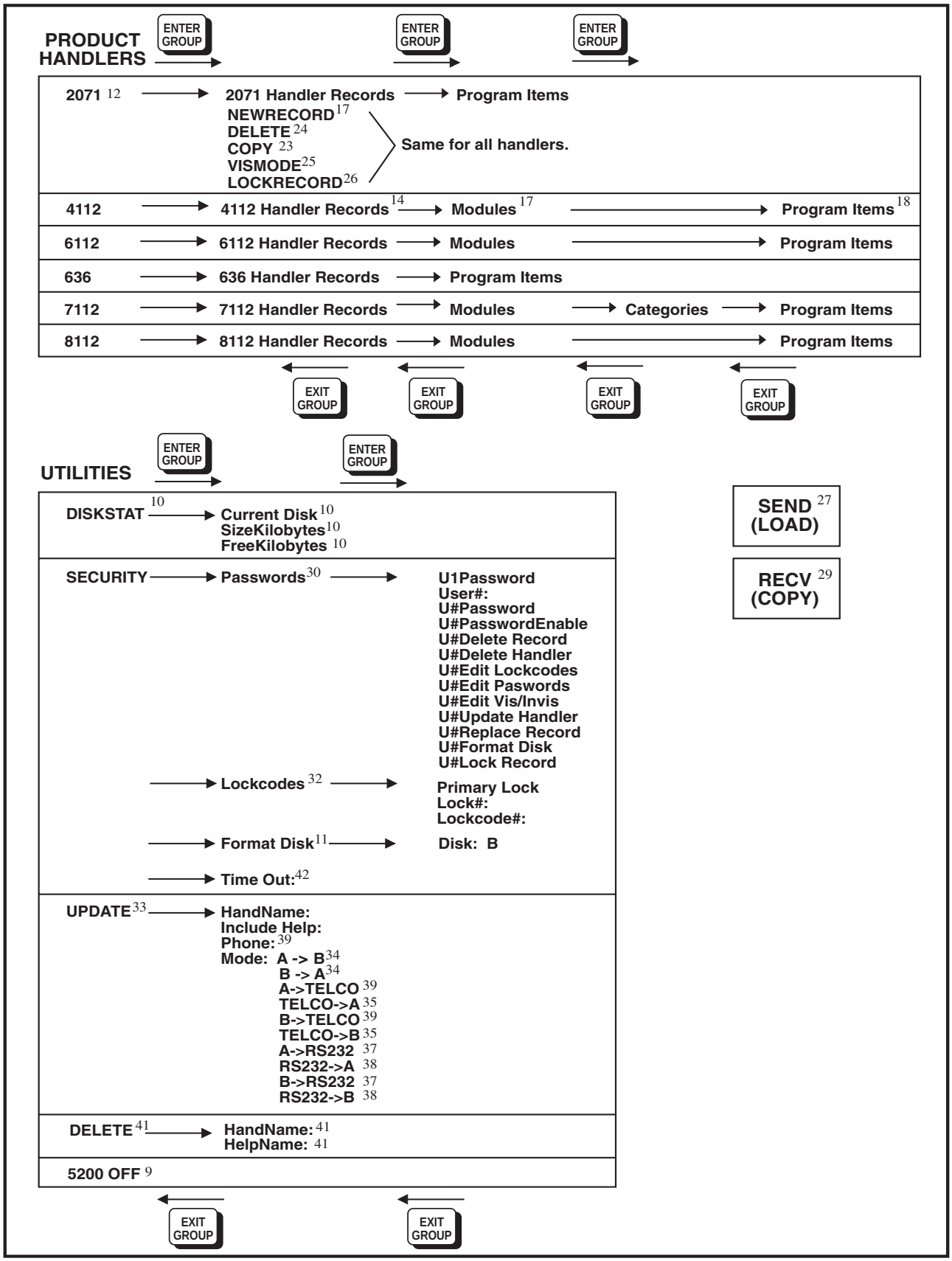
Level "navigation" and data entry are accomplished using the programmer keyboard. The programmer contains three types of keys on its keyboard: navigation keys, function keys, and data keys. (See Figure 1 for the locations of these key groups).

Navigational Keys

Program items are accessed by navigating through "levels" of the programmer. The red **ENTER GROUP** and **EXIT GROUP** keys are used to enter into and exit from each level (see Figures 3 and 8).

The red up ↑ and down ↓ arrow keys are used to scroll through the list of items at each level. Product handlers can be scrolled through at the Product Handler level, record titles can be viewed at the Record level, modules at the Module level, Categories at the category level, and program items at the Program Item level. The red left ← and right → arrow keys are used to move the cursor horizontally within one line of the LCD display.

An example of how navigational keys are used to move through D7112 product handler levels is shown in Figure 8. These keys have the same function for all product handlers.



NOTE: Small numbers (e.g. 35) indicate the page on which discussion of the item begins.

Figure 3: PROGRAMMER LEVELS

Function Keys

Six function keys simplify the use of the programmer.

ON: The red **ON** key switches the programmer on. This key does not power down the programmer. The D5200 is switched off by selecting **5200 OFF** in the **PRODUCT HANDLERS** menu, or it powers down automatically after the programmed Time Out time has elapsed.

HELP: The red **HELP** key switches the programmer into help mode. (See the *Help Mode* chapter for more information.)

CANCEL: The red **CANCEL** key erases unENTERed program item data and replaces it with the previously entered data.

CLEAR: The red **CLEAR** key erases unENTERed or ENTERED program item data, and replaces it with blank spaces.

RECV (COPY) : The red **RECV (COPY)** key initiates a transfer of data from a product into the D5200 Programmer.

SEND (LOAD): The red **SEND (LOAD)** key initiates a transfer of data from the D5200 Programmer to another product.

Data Keys

The white keys on the keyboard are used for data entry.

Helpful Tones

The D5200 Programmer emits four distinct sounds, which notify the user of key presses, data acceptance/rejection, and system errors.

CLICK
A short, sharp click occurs every time a key is pressed. The programmer does *not* click when the **ON**, **CAP LOCK**, and **SHIFT** keys are pressed.

PIP
A short, single frequency tone indicates that the key pressed or data entered was accepted.

TWEEDLE
A quick series of pips indicates that the key pressed or data entered was invalid or inappropriate.

BUZZ
A sour, flat tone indicates a system error, except when entering a product. Panel not connected to D5200, low battery condition, programmed Time Out elapsed, changing panel series type, deleting handlers and records are examples.

3. Disk Operations

The D5200 contains memory which holds programmer data. This memory includes internal battery-backed RAM chips which are permanently attached to the D5200 circuit board, and removable RAM cards.

- The internal battery-backed RAM is referred to as disk A.
- The removable RAM card is referred to as disk B.

Even though data may be stored on several RAM cards, the RAM card which is currently plugged into the programmer is always considered disk B.

Disk Status

The size of a disk and the amount of memory currently available on a disk can be viewed using the DISKSTAT feature. To view this information, scroll to **DISKSTAT** from the Product Handlers menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.

Current Disk: Disk A is the internal battery-backed RAM. Disk B is the removable RAM card. The programmer can display data from only *one* disk at a time (the disk indicated by Current Disk). See *Changing the Current Disk* to set up the programmer to display data from a different disk.

SizeKilobytes: Each disk can hold a certain amount of data, expressed in units of *bytes, kilobytes (K),* or *Megabytes (Mb)*. 1024 bytes = 1 K, 1024K = 1 Mb. The total amount of memory of the Current Disk (A or B) is displayed in **SizeKilobytes**.

FreeKilobytes: Handlers, records, and help files take up a certain amount of memory on a disk (see Figure 4). The **FreeKilobytes** field displays the amount of memory on the Current Disk (A or B) that is currently available for storing additional handlers, help files, and records. Figure 4 contains the following information:

Handler Size: The amount of memory consumed by the actual handler.
Help File Size: The amount of memory consumed by the handler help file.
Record Size: The amount of memory consumed by each record.
Space O/S Allots: The amount of memory that is reserved for use (by the **O**perating **S**ystem) when the first record for the handler is saved.
Number of Records: The number of records that can be saved in the memory reserved by the **Space O/S Allots**. When the number of records saved exceeds this amount (i.e. five D4112 records), another block of memory (Space O/S Allots) is reserved.

If your disk (A or B) is 512K or above, use the 512K and Above Columns in Memory Worksheet.
If your disk is below 512K, use Standard Columns.

PRODUCT	HANDLER SIZE	512K & ABOVE	HELP FILE SIZE	512K & ABOVE	RECORD SIZE	SPACE O/S ALLOTS	512K & ABOVE	NUMBER OF RECORDS	512K & ABOVE
D2071	5K	6K	2K	2K	35 bytes	2K	4K	29	58
D4112	9K	10K	5K	6K	173 bytes	2K	4K	5	11
D6112	11K	12K	7K	8K	179 bytes	2K	4K	5	11
D636	5K	6K	1K	2K	220 bytes	2K	4K	4	9
D7112	22K	22K		26K	612 bytes	2K	4K	1	3
D8112 SERIES	25K	26K			2689 bytes	17K	18K	6	6

Figure 4: HANDLER, HELP FILE, AND RECORD SIZE

Changing the Current Disk

At the **Current Disk** prompt in the DISKSTAT display, press the letter on the keyboard which corresponds to the desired disk. Press the white **ENTER** key. (NOTE: The **SPACE** bar *cannot* be used to toggle between available disk drives.) The message **LOGGED ON DISK!** is displayed, and the SizeKilobytes and FreeKilobytes fields are updated to reflect the status of the new Current Disk.

To exit the DISKSTAT display, press the red **EXIT GROUP** key. The cursor returns to the Product Handlers level of the Current Disk. NOTE: When the Programmer is switched on, the Current Disk always defaults to disk A.

Formatting a Disk

The D5200 Programmer can be used to format the internal battery-backed RAM memory (Disk A) and the removable RAM cards (Disk B). As shipped, the internal RAM Disk A is already formatted. Each new removable disk (Disk B) used with the programmer must be formatted. NOTE: This feature is *password dependent*. If the programmer is logged onto with a password that does not have the authority to format disks, the message **ACCESS DENIED** is displayed when trying to access this feature.

WARNING: All information stored on the disk will be lost when the disk is formatted!

1. Scroll to **SECURITY** in the Product Handlers menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.

2. Scroll to the **FormatDisk** item in the **SECURITY** menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.

3. The **FormatDisk** menu is displayed. Select the disk to be formatted by pressing the corresponding disk letter and then pressing the white **ENTER** key. A warning message is displayed. To abort the disk format process, type **N**. To continue with the format process, press **Y**. If the format is successful, the message **RAM FORMAT COMPLETED** is displayed.

   FORMAT ABORTED: This message is displayed if **N** was typed at the **Continue?** prompt, or if disk formatting failed.

   RAM CARD NOT PRESENT: This message is displayed if Disk B was selected for formatting and the RAM card is not plugged into the programmer.

   RAM DISK PROTECTED: This message is displayed if Disk B was selected for formatting and the RAM card in the programmer is write-protected.

4. To exit the **FormatDisk** display, press the red **EXIT GROUP** key. The cursor returns to the SECURITY menu.

5. To exit the SECURITY menu, press the red **EXIT GROUP** key. The cursor returns to the Product Handlers level.

4. Product Handlers Menu

When the D5200 **ON** button is pressed, the programmer executes a system check, and requests a password (see Figure 5).

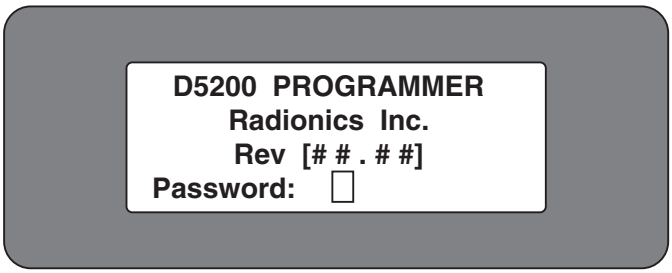


Figure 5: PASSWORD DISPLAY

No Passwords
The programmer is shipped with no passwords initially entered. The white **ENTER** key can be pressed to advance to the Product Handlers level.

Passwords
If passwords have been programmed into your system, enter your password and press the white **ENTER** key. (Passwords are *not* case-sensitive.) As each character of the password is pressed, an asterisk (✳) is displayed to prevent others from seeing your password. The programmer "tweedles" if an invalid password is entered. To clear an erroneous password, press the red **CANCEL** key. When a valid password is entered the Product Handlers menu is displayed.

Product Handlers Menu

The Product Handlers menu contains the titles of product handlers and utilities which are stored in the programmer (refer to Figures 4 and 8).

Programmer Tips – Scrolling and Wrap Around

- Move the flashing cursor block through the items in the Product Handlers menu by pressing the red down arrow ↓ key.
- The red up arrow ↑ key can be used to move the cursor up the list of items.
- Three Product Handlers menu items are always displayed. When the cursor is moved down from the last item in the menu (**5200 OFF**), the first menu item (title of first handler) scrolls into view. This is referred to as "wrap around".

Product Handlers

Several product handlers are pre-loaded into the programmer. ***Handler titles appear in the Product Handlers menu in the order in which the handlers were loaded.*** See *Updating Handlers* to add handlers to the Product Handlers menu. See *Programming Records* for information on entering data using product handlers.

DISKSTAT

The **DISKSTAT** menu provides disk information such as current disk drive (A or B), total amount of disk space, and the amount of disk space which is available for entering new data. See *Disk Operations* for more information.

SECURITY

The **SECURITY** menu includes items for programming passwords and panel lockcodes, formatting disks, and programming the D5200 automatic power-down time. See the *Passwords* and *Lockcodes* sections for more information.

UPDATE

This menu is provided for updating (copying) product handlers between disks on the same programmer, or between the disks of two different programmers via the phone lines or RS-232 interface. See *Updating Handlers* for more information.

DELETE

This menu item allows product handlers and help files to be deleted from D5200 memory. See *Deleting Handlers* for more information.

5200 OFF

This menu item is used to power down the programmer. To turn off the D5200, move the cursor to **5200 OFF** and press the red **ENTER GROUP** key.

NOTE: The D5200 powers down automatically if no keys have been pressed for the amount of time programmed in the programmer **SECURITY** menu **Time Out** parameter. See *Programmer TimeOut* for more information.

Selecting a Product Handlers Menu Item

Use the red ↑ and ↓ arrow keys to move the cursor through the list of items in the Product Handlers menu. When the cursor flashes on the desired item, press the red **ENTER GROUP** key. The next chapters of this manual describe how to "navigate" within each item in the Product Handlers menu.

Exiting the Product Handlers Menu

The cursor can be returned to the password display from the Product Handlers level by pressing the red **EXIT GROUP** key. This returns the display to the Password entry prompt.

The programmer can be powered down by returning to the Product Handlers level and selecting the **5200 OFF** prompt.

5. Programming Records

The example in this chapter shows how to program a record for a D7112 Control/ Communicator. The same principles apply to the programming of other product handlers. Refer to Figure 8, which is a "map" of the D7112 Product Handler.

Selecting a Handler

Starting from the Product Handlers level, scroll through the list of product handlers and utilities (using the red ↓ and ↑ keys) until the cursor flashes on the **7112** product handler title (see Figure 6). Press the red **ENTER GROUP** key.

Figure 6: SELECTING THE 7112 PRODUCT HANDLER

Record Level

The 7112 Record level menu is displayed (see Figure 7). **7112 [rev#]** appears on the top line of the LCD display. Move the cursor through the items in the menu with the red ↓ and ↑ keys.

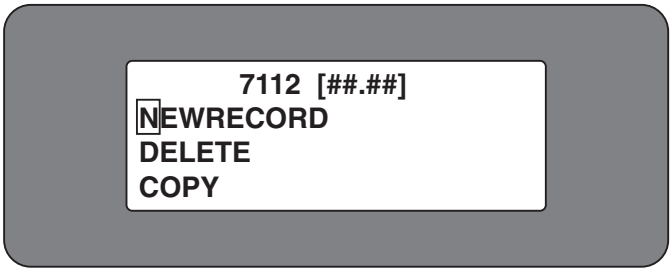


Figure 7: RECORDS IN THE 7112 HANDLER MENU

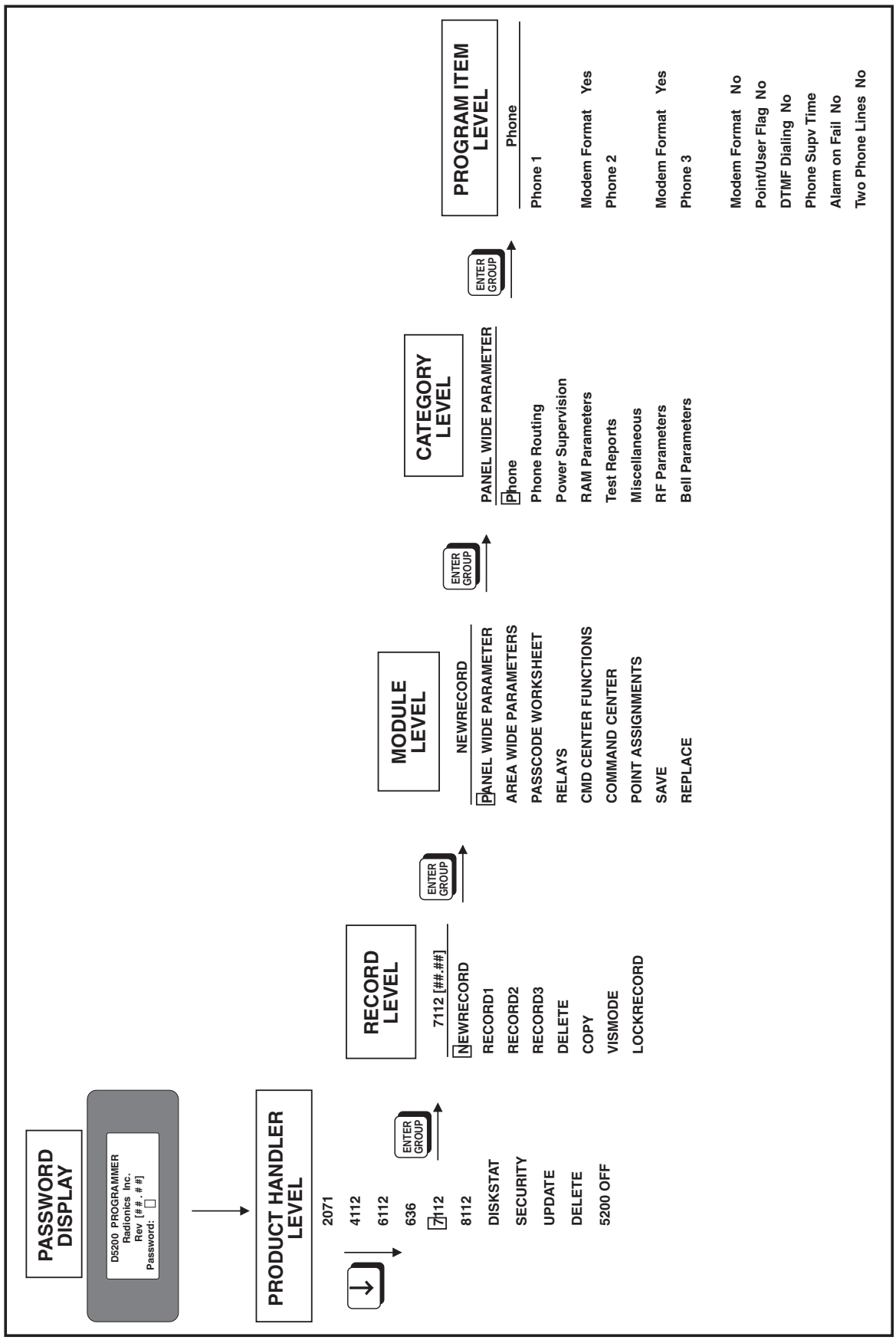


Figure 8: D7112 PRODUCT HANDLER STRUCTURE

The handler title is always shown in the top line of the LCD display at the Record level. Three additional items are always displayed below the product handler title. When the cursor is moved down from the last item in the menu (**LOCKRECORD**), the first menu item (title of first D7112 record) scrolls into view. The 7112 Record level menu contains the following items:

Records

The titles of D7112 records appear at the top of the Record level menu.

NEWRECORD

NEWRECORD is used to create new records.

TIMEOUTSAVE

This title is included in the list only if a record was still open when the D5200 Programmer went into a power-down timeout. If a timeout record exists, the programmer beeps when the handler is entered, and **SAVE TIMEOUT RECORD** appears among the items in the display. See the *TimeOut Save* section in this chapter for more information.

DELETE

This utility is provided for deleting unwanted records. See *Deleting a Record* in this chapter for more information.

COPY

This utility is provided for copying the programmed parameters from an existing record and saving the data under a different name. See *Copying Records* in this chapter for more information.

VISMODE

This utility is used to make selected program items in this handler invisible. See *Making Program Items Invisible* in this chapter for more information.

LOCKRECORD

This utility is provided to prevent modifications to specific records. See *Locking Records* in this chapter for more information.

Creating a New Record

Scroll through the 7112 handler menu (using the red ↓ and ↑ keys) until the cursor flashes on **NEWRECORD**. Press the red **ENTER GROUP** key. D7112 *module* titles appear in the LCD display (see Figure 9). Move the cursor through the items in the menu with the red ↓ and ↑ keys.

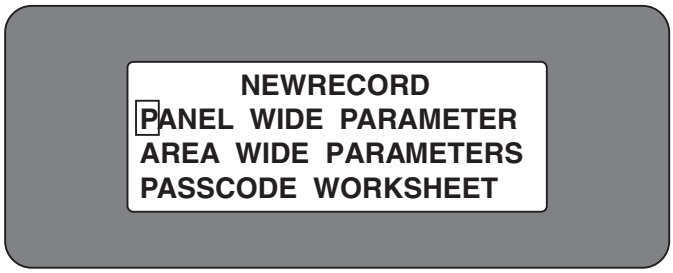


Figure 9: MODULES IN THE 7112 NEWRECORD MENU

The record title (i.e. NEWRECORD) is always displayed in the top "status" line. Three additional items are always displayed in the **NEWRECORD** menu. When the cursor is moved down from the last item (**REPLACE**), the first item (**PANEL WIDE PARAMETER**) scrolls into view. The **NEWRECORD** menu contains the following items:

Programming
The majority of the **NEWRECORD** menu is made up of D7112 handler *modules*: PANEL WIDE PARAMETERS, AREA WIDE PARAMETERS, etc. These correspond to the modules on the D7112 Program Record Sheet.

SAVE
This item is used to save a programmed record. See *Saving a Record* in this chapter for more information.

REPLACE
This item is used to save modifications to an existing record. See *Replacing a Record* in this chapter for more information.

Entering a Module

Scroll through the **NEWRECORD** menu (using the red ↓ and ↑ keys) until the cursor flashes on **PANEL WIDE PARAMETER** (see Figure 9). Press the red **ENTER GROUP** key.

Categories within the D7112 Panel Wide Parameters section appear in the LCD display (see Figure 10). These correspond to the Panel Wide Parameters categories shown on the D7112 Program Record Sheet (Phone, Phone Routing, Power Supervision, etc.). Move the cursor through the category titles with the red ↓ and ↑ keys. Three categories are always displayed in the Panel Wide Parameters menu. When the cursor is moved down from the last category (**BELL PARAMETERS**), the first category (**PHONE**) scrolls into view.

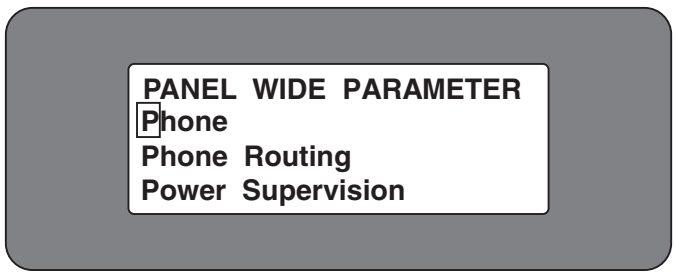


Figure 10: CATEGORIES IN THE 7112 PANEL WIDE PARAMETERS MODULE MENU

Entering a Category

Scroll through the Panel Wide Parameter categories (using the red ↓ and ↑ keys) until the cursor flashes on **Phone** (see Figure 10). Press the red **ENTER GROUP** key.

Program items in the **Phone** category appear in the LCD display (see Figure 11). These correspond to the program items in the Phone category shown on the D7112 Program Record Sheet (Phone 1, Modem Format, Phone 2, etc.). Move the cursor through the program items with the red ↓ and ↑ arrow keys. When the cursor is moved down from the last item (**Two Phone Lines**), the first item (**Phone 1**) scrolls into view. Some program items have *two-line* prompts. These prompts are provided for long strings of data (i.e. the **Phone 1** program item) and for program item title clarity (i.e. the **A1 Aux Relay Uses Bell Time** prompt in the Area Parameters category of the AREA WIDE PARAMETERS module).

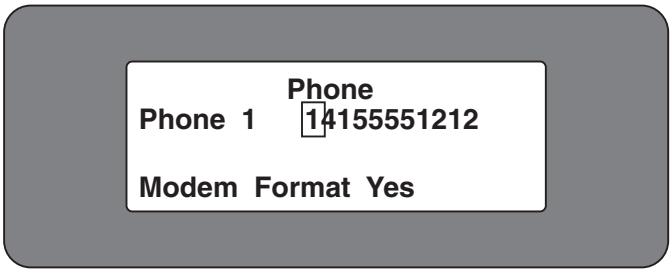


Figure 11: PROGRAM ITEMS IN THE 7112 PHONE CATEGORY MENU

Entering Data

Four types of data can be entered for program items:

Yes/No
Yes or No is selected by typing **Y** or **N**, or pressing the **SPACE** bar (which toggles the entry between Y and N).

Data
Data is entered using the D5200 Programmer keyboard.

Choice Lists
An entry is selected using the **SPACE** bar, which scrolls among the available choices.

Indexed Group
The first item in an *indexed group* modifies the titles of the rest of the items in the group.

Data Entry Example

1. Move the cursor to the **Phone 1** item. The cursor flashes in the blank space to the right of the **Phone 1** label.
2. Enter a phone number by pressing number keys on the programmer keyboard: (Example: **14155551212** in Figure 10).
3. When the number has been entered, press the white **ENTER** key on the programmer keyboard.

Programmer Tips – Sounds

- Each time a valid data entry is made, the programmer makes a "pip" sound.
- When an inappropriate entry is made, such as a the letter "Q" in the **Phone 1** program item, the programmer makes a "tweedle" sound.

Programmer Tips – Making Corrections
The following keys can be used to change data entered for a program item:

- Use the white **BACKSPACE** key on the programmer keyboard to erase characters.
- Use the red ← and → arrow keys to move the cursor to any character in the entry. (The arrow keys do not erase characters.)
- Use the red **CLEAR** key to erase the entire entry.
- Use the red **CANCEL** key to return the entry to its default entry.

Yes/No Entry Example

Move the cursor to **Modem Format**. The cursor flashes on the default entry **Yes**.

Press the white **SPACE** bar on the keyboard to toggle the entry to **Yes**. Pressing the **SPACE** bar again toggles the entry back to **No**. Yes and No entries can also be achieved by pressing the **Y** key or the **N** key on the keyboard.

When the appropriate Yes/No entry has been selected, press the white **ENTER** key on the programmer keyboard. The cursor moves down to the next program item.

Choice List Entry Example

Using the red ↓ key, move the cursor to **Phone Supv Time**. The cursor flashes in the blank space to the right of the **Phone Supv Time** label.

Press the white **SPACE** bar on the keyboard to scroll through the programming choices available: **2Min**, **4Min**, **8Min**, blank (No Supervision).

When the appropriate entry has been selected, press the white **ENTER** key on the programmer keyboard. The cursor moves down to the next program item.

Programmer Tip – Choice List Data Entry
Only the entries displayed using the **SPACE** bar will be accepted by the programmer for *choice list* entries. If numbers or letters are typed in using the keyboard, the programmer will "tweedle" when the **ENTER** key is pressed.

To view valid choices, move the cursor back to the first character, using the red **CANCEL**, **CLEAR**, or ← key, and press the **SPACE** bar.

Exiting a Category

To exit a category (i.e. **Phone**), press the red **EXIT GROUP** key. The cursor returns to the module level, and flashes on the next module title **AREA WIDE PARAMETERS**.

NOTE: The programmer will "tweedle" if the cursor is flashing on program item data that has not been entered. Press the white **ENTER** key to enter data or the red **CANCEL** key to return the previous entry, and then press the red **EXIT GROUP** key.

Indexed Group Entry Example

Exit the **Phone** category using the red **EXIT GROUP** key as described in the previous section. Move the cursor to the **Phone Routing** category in the Panel Wide Parameters module, and press the red **ENTER GROUP** key. The cursor flashes on the default entry of **1** to the right of the **Phone** program item. Note that the program items below **Phone** also have the number **1** (**Ph1 Fire Alarm/Res**, **Ph1 Fire Tbl/Res**, etc.). Press the **2** key and the white **ENTER** key. The titles of the next program items change to reflect this entry (**Ph2 Fire Alarm/Res**, **Ph2 Fire Trouble/Res**, etc.). The program items within the **Phone Routing** group are *indexed* to the entry of the **Phone** program item.

Press the red **EXIT GROUP** key to exit the Phone Routing category.

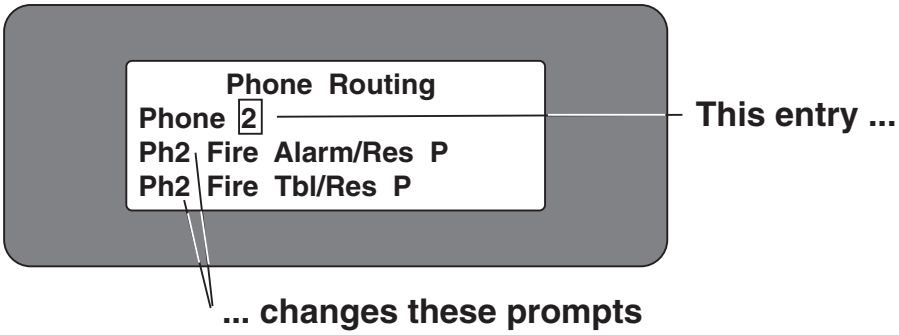


Figure 12: INDEXED PROGRAM ITEMS

Exiting a Module

To exit a module such as Panel Wide Parameters, press the red **EXIT GROUP** key. The cursor returns to the NEWRECORD menu.

Exiting a Record

To exit a record, press the red **EXIT GROUP** key.

Saving a New Record

If changes have been made to any program items, the SAVE display appears (see Figure 13). To save a new record, type a name (up to 12 characters) in the **NAME** field, and press the white **ENTER** key. A message indicates that the record has been saved. The cursor remains in the **SAVE** display, allowing the record to be saved under an additional name.

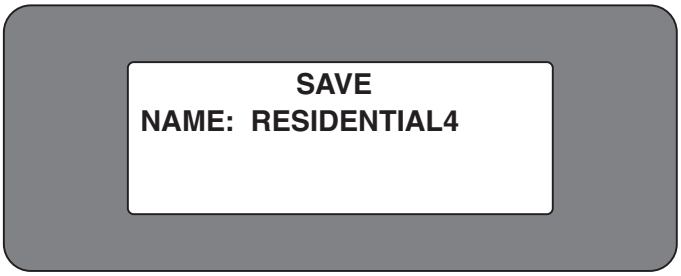


Figure 13: SAVING A RECORD

Programmer Tip – Record Names

- It is recommended that programmer prompts such as NEWRECORD, LOCKRECORD, VISMODE, COPY, DELETE, *not* be used as record names.
- The programmer does not accept a blank (all spaces) record name.

The cursor returns to the **NEWRECORD** menu, and flashes on **REPLACE**. To return to the D7112 record level, press the red **EXIT GROUP** key.

Programmer Tip – Saving and Replacing Records
Whenever changes have been made to record data, the programmer always goes to the **SAVE** display to provide the user with an opportunity to save the changes under the same (or different) name.

When the SAVE display is exited, the cursor automatically flashes on the **REPLACE** item in the menu, to provide the user with another chance to save any changes that have been made to the record.

Exiting a Handler

To return to the Product Handlers level, press the red **EXIT GROUP** key.

Programmer Tip – Creating New Records from a Template
A programmed record ("template") can be used to create new records. (It is not necessary to always start with **NEWRECORD**.) A "template" is especially useful when only a few items need to be changed to "customize" an existing record. See the next section *Editing a Record* for more information. NOTE: **NEWRECORD** can be unlocked.

Editing a Record

To make changes to an existing record:

1. Scroll to the appropriate product handler from the Product Handlers menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.
2. Scroll to the appropriate record title using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.
3. *For product handlers with modules:* Scroll to the appropriate module using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.
4. *For modules with categories:* Scroll to the appropriate category using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.
5. Scroll to the appropriate program item using the red ↓ or ↑ keys, and edit the entry. Press the white **ENTER** key to enter the new data.
6. *For modules with categories:* Press the red **EXIT GROUP** key to return to the Categories level.
7. *For product handlers with modules:* Press the red **EXIT GROUP** key to return to the Modules level.
8. Press the red **EXIT GROUP** key to exit from the record. The **SAVE** display appears if changes have been made to any program item entries in the record.

   SAVING as a DIFFERENT Record: To save the edited record under a *new name*, type a name (up to 12 characters) in the **NAME** field, and press the white **ENTER** key. A message indicates that the record has been saved. The cursor remains in the **SAVE** display, allowing the record to be saved (duplicated) under another name. Press the red **EXIT GROUP** key to return to the Record level.

REPLACING the Record: To save the edited record under the *original name* (replace the old record), press the red **EXIT GROUP** key when the **SAVE** display appears. The cursor flashes on **REPLACE**. Press the red **ENTER GROUP** key. The name of the record automatically appears in the **REPLACE** display (see Figure 14). To replace the record, press the white **ENTER** key. The message **RECORD REPLACED** is displayed. Press the red **EXIT GROUP** key to return to the Record Level.

NOTE: This feature is *password dependent* . If the programmer is logged onto with a password that does not have the authority to replace records, the message ACCESS DENIED is displayed when trying to access this feature.

DISCARDING CHANGES to the Record: To discard changes that have been made to the record, simply press the red **EXIT GROUP** key when the **SAVE** display appears, and proceed to step 9.

RECORD NOT REPLACED: This message is displayed if the name entered (i.e. default current record title not used) does not match any record titles on the current disk. Check the title entered in the **NAME** field – it must exactly match the title of the record stored on the current disk.

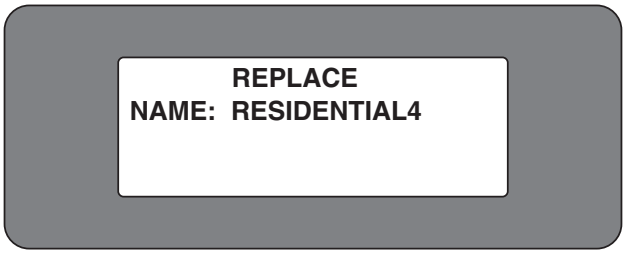


Figure 14: REPLACING A RECORD

READ ONLY RECORD: This message is displayed if the record you are trying to replace is locked. The edited record can be saved only under a different name.

9. Press the red **EXIT GROUP** key to return to the Record level.
10. Press the red **EXIT GROUP** key again to return to the Product Handlers level.

Copying a Record

To copy a record (save it under a different name):

1. Select a product handler from the Product Handlers level using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.

2. Select **COPY** using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key. The **COPY** display appears (see Figure 15).

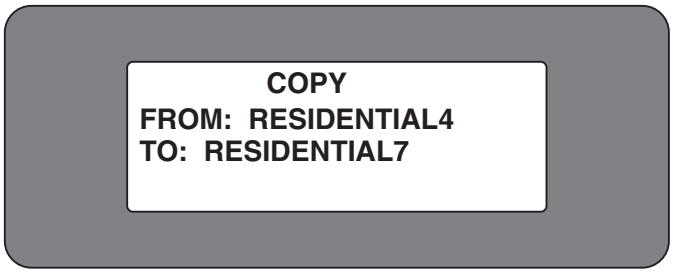


Figure 15: COPYING A RECORD

3. Type in the *exact* name of the record to be copied in the **FROM** field. Press the white **ENTER** key .

4. Type in the name of the new record (up to 12 characters) in the **TO** field and press the white **ENTER** key. The message **RECORD COPIED** indicates that the record has been copied. The cursor remains in the **COPY** display, allowing the record to be saved (duplicated) under another name.

   RECORD EXISTS: If a record has already been saved under the title entered in the **TO** field, the message **RECORD EXISTS** is displayed. Type in a different title for the new record.

   RECORD NOT FOUND: This message is displayed if the name typed in the **FROM** field does not match any record titles on the current disk. The **FROM** title must exactly match the title of the record stored on the current disk. The title can be verified by exiting the **COPY** display and viewing the list of records. If the record title is not displayed, it may be stored on a different disk. See *Changing the Disk* section in the *Disk Operations* chapter.

Programmer Tips – Copying from Disk to Disk

A disk can be specified in the FROM and TO fields by preceding the record titles with the disk designators A: or B: (see Figure 16). If no disk is specified, the current disk is assumed. See the *Disk Operations* section for a definition of "current disk". ***NOTE: The product handler associated with the record must be present on the TO disk before the record can be copied.***

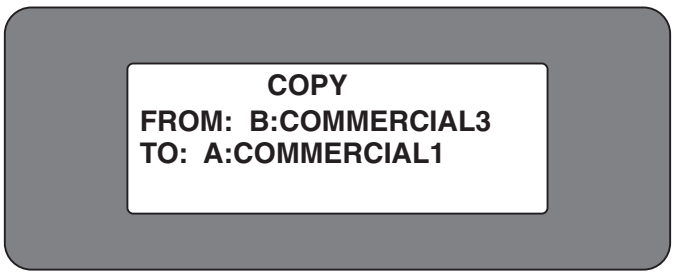


Figure 16: COPYING – SPECIFYING DISKS

5. Press the red **EXIT GROUP** key to return to the Product Handler level.

Deleting a Record

Follow the steps below to delete a record. NOTE: This feature is *password dependent*. If the programmer is logged onto with a password that does not have the authority to delete records, the message **ACCESS DENIED** is displayed when trying to access this feature.

1. Select the appropriate product handler from the Product Handlers menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.

2. Select **DELETE** using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key. The **DELETE** display appears (see Figure 17).

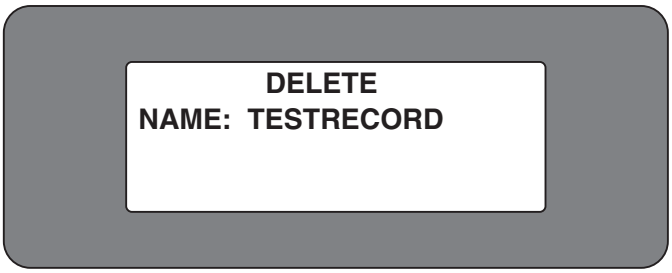


Figure 17: DELETING A RECORD

3. Type in the *exact* name of the record to be deleted in the **NAME** field, and press the white **ENTER** key. (NOTE: Record titles are *not* case-sensitive.) The message **Are You Sure?** is displayed. To proceed with the record deletion, type **Y** on the keyboard. The message **RECORD DELETED** is displayed. The cursor remains in the **DELETE** display, allowing other records to be deleted.

   RECORD NOT FOUND: If the name entered in the **NAME** field does not match any record titles on the current disk, the message **RECORD NOT FOUND** is displayed. Check the title entered in the **NAME** field – it must exactly match the title of the record stored on the current disk. (Record titles are not case sensitive.) The title can be verified by exiting the **DELETE** display and viewing the list of records. If the record title is not displayed, it may be stored on a different disk. See *Changing the Disk* section in the *Disk Operations* chapter.

   RECORD NOT DELETED: This message is displayed if the record you are trying to delete is the last record in the specific product handler database. The last record of each product handler cannot be deleted.

   READ ONLY RECORD: This message is displayed if the record you are trying to delete is locked. Locked records cannot be deleted.

4. Press the red **EXIT GROUP** key to return to the Product Handler level.

TimeOut Save

If a record is still open when the programmer goes into a power-down timeout, the record is saved under the title **TIMEOUTSAVE**. (NOTE: If a TIMEOUTSAVE record already exists, the new TIMEOUTSAVE record will overwrite the old TIMEOUTSAVE record.) When the programmer is switched on and the handler is entered, the programmer emits a "buzz" tone, and **SAVE TIMEOUT RECORD** appears among the items in the display. The name **TIMEOUTSAVE** appears in the list of record titles. The **TIMEOUTSAVE** record can be opened, saved under a different title, and deleted like any other record. See the *Editing a Record, Copying a Record,* and *Deleting a Record* sections in this chapter for more information. The time until programmer timeout power-down can be set from 2 to 10 minutes. See the *Programmer TimeOut* chapter for more information.

Making Program Items Invisible (VISMODE)

Program items, categories, and modules in each handler can be made invisible using VISMODE. NOTE: This feature is *password dependent*. If the programmer is logged onto with a password that does not have the authority to make program items invisible, the message **ACCESS DENIED** is displayed when trying to access this feature. To make a program item, category, or module invisible:

1. Select a product handler from the Product Handlers menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.

2. Select **VISMODE** using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.

3. Enable VISMODE by typing **Y** at the **VisMode** prompt, and pressing **ENTER**.

4. Press the red **EXIT GROUP** key to return to the Records level.

5. Select a record and press the red **ENTER GROUP** key. Program items, categories, and modules cannot be made invisible for locked records such as **NEWRECORD**. (**NEWRECORD** *can* be unlocked.)

6. *For product handlers with modules:* The letter **V** appears to the right of each module title. To make the entire module invisible, press the letter **I** and the white **ENTER** key. To make an invisible item visible, use the letter **V**. The **I** and **V** entries can be toggled by pressing the **SPACE** bar. To leave a module visible and make items within the module invisible, scroll to the appropriate module using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.

7. *For modules with categories:* The letter **V** appears to the right of each category title. To make the entire category invisible, press the letter **I** and the white **ENTER** key. To make an invisible item visible, use **V**. **I** and **V** can be toggled by pressing the **SPACE** bar. To leave a category visible and make program items within the category invisible, scroll to the category using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.

8. At the program item level, the letter **V** appears to the right of the program item prompt – where program item data would normally be entered (see Figure 18). To make the item invisible, press the letter **I** and the white **ENTER** key. To make an invisible item visible, use **V**. **I** and **V** can be toggled by pressing the **SPACE** bar.

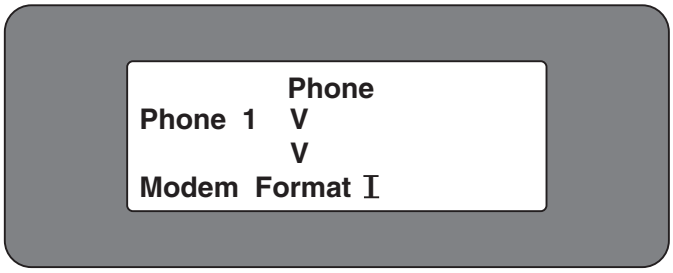


Figure 18: MAKING A PROGRAM ITEM INVISIBLE

9. When the desired program items, categories, and modules have been made invisible, return to the **VISMODE** display. (The **VISMODE** display is reached by using the red **EXIT GROUP** key to exit to the Record level, and selecting the **VISMODE** using the red **ENTER GROUP** key.) NOTE: The record is automatically REPLACED with the vismode information when the record is exited. Set **VISMODE** to **No** by pressing **N** or the **SPACE** bar, followed by the white **ENTER** key. Press the red **EXIT GROUP** key to return to the Records level.

10. Verify that each program item, category, and module designated invisible does not appear by reviewing the record.

Locking Records

Individual records can be locked, preventing data in the record from being edited. Locked records are copied along with product handlers during programmer-to-programmer and disk-to-disk updates, making it easy to transfer custom records. Locked records, including **NEWRECORD**, can be unlocked for custom programming. NOTE: This feature is *password dependent*. If the programmer is logged onto with a password that does not have the authority to lock records, the message **ACCESS DENIED** is displayed when trying to access this feature. To lock a record:

1. Scroll to the appropriate product handler from the Product Handlers menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.

2. Scroll to **LOCKRECORD** using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.

3. Type in the *exact* name of the record to be locked in the **NAME** field, and press the white **ENTER** key. (Record titles are *not* case-sensitive.)

   RECORD NOT FOUND: If the name that was typed in does not match any record titles on the current disk, the message **RECORD NOT FOUND** is displayed. Check the title entered in the **NAME** field – it must exactly match the title of the record stored on the current disk. The title can be verified by exiting the **LOCK RECORD** display and viewing the list of records. If the record title is not displayed, it may be stored on a different disk. See *Changing the Disk* in the *Disk Operations* chapter.

   To lock the record, type **Y** on the keyboard and press the white **ENTER** key. The message **RECORD LOCKED** is displayed. The cursor remains in the **LOCK RECORD** display, allowing other records to be locked.

   To unlock a locked record, enter the name and select **N** at the **LOCK RECORD** prompt.

4. Press the red **EXIT GROUP** key to return to the Record level.

> ***Programmer Tip – Working with Locked Records***
> After a record has been locked, program items can still be edited. Although locked records *cannot be replaced* (saved under the same name), records *can be saved under a different name*.
>
> If changes have been made to a locked record, and an attempt is made to **REPLACE**, the programmer emits a "buzz" tone, and the message **READ ONLY RECORD** is displayed.
>
> The edited record can still be saved under a different name by returning to the handler menu (by pressing the red **EXIT GROUP** key), selecting **SAVE**, and entering a new name. Note that after exiting **SAVE**, the original locked record title is still displayed. To view the edited program items of the newly saved record, exit to the Record level, and select the title of the new record.

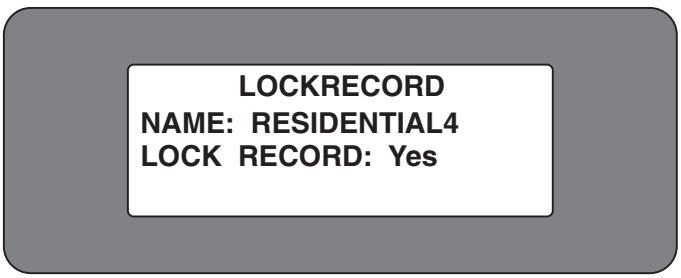


Figure 19: LOCKING A RECORD

6. Sending (Loading) Records

A record can be sent (loaded) into a panel or other device. The D5203 programmer cord can be connected directly to panels with 4-pin PROG ports and to panels which have phone jack PROG ports.

Connecting the Programmer

New D5203 Programmer Cord Design
The D5203 programmer cord has been redesigned with a new "Y" cable that eliminates the need for an adaptor. The new design combines the 4-pin connector plug and the phone jack connector plug on one cord.

Panel with 4-Pin PROG Port
The D5200 Programmer can be connected directly to a device with a *4-pin male* programming connector (D4112, D7112, D636, and D2071 control/communicators). An example of this type of connection is shown in Figure 20.

1. Plug the programmer cord's male phone plug into the D5200 **COMMUNICATOR** port.
2. Plug the D5203 programmer cord's 4-pin female connector into the 4-pin male programming (PROG) port on the panel.

Panel with Phone Jack PROG Port
Previously, a D5206 adapter was provided with the D5200 for devices with a *4-pin female phone jack* (D6112 Control/Communicator, D8112 Control/Communicator, D6500 Receiver). With the new cord design, the adaptor is no longer necessary An example of this type of connection is shown in Figure 21.

1. Plug the programmer cord's male phone plug into the D5200 **COMMUNICATOR** port.
2. Plug the programmer cord's 4-pin male connector into the 4-pin female programming phone jack (PROG) on the panel.

Sending (Loading) the Program

To load a record into a panel:

1. Scroll to the appropriate product handler from the Product Handlers menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.
2. Scroll to the appropriate record title using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.
3. When the record title is displayed in the top line, press the red **SEND (LOAD)** key. The message **SENDING** is displayed while the program is downloading into the device. When the program download is complete, the message **SEND SUCCESSFUL** is displayed.

   Plug In Device: If this message appears, check the connection from the programmer to the device.

   Tweedle: The programmer will tweedle if an attempt is made to load a panel with no record selected. Before pressing the **LOAD** key, select a record title and *press the red* **ENTER GROUP** *key.*

   INVALID LOCK CODE: Displays if the panel lockcode does not match any of the lockcodes programmed into the programmer. See the *Lockcodes* chapter for more information.

   SEND FAILURE or **Comm Error:** These messages are displayed if a communication

error disrupts the load process.

4. Press the red **EXIT GROUP** key to exit from the record. (The **SAVE** display appears if changes have been made to any program items in the record.)

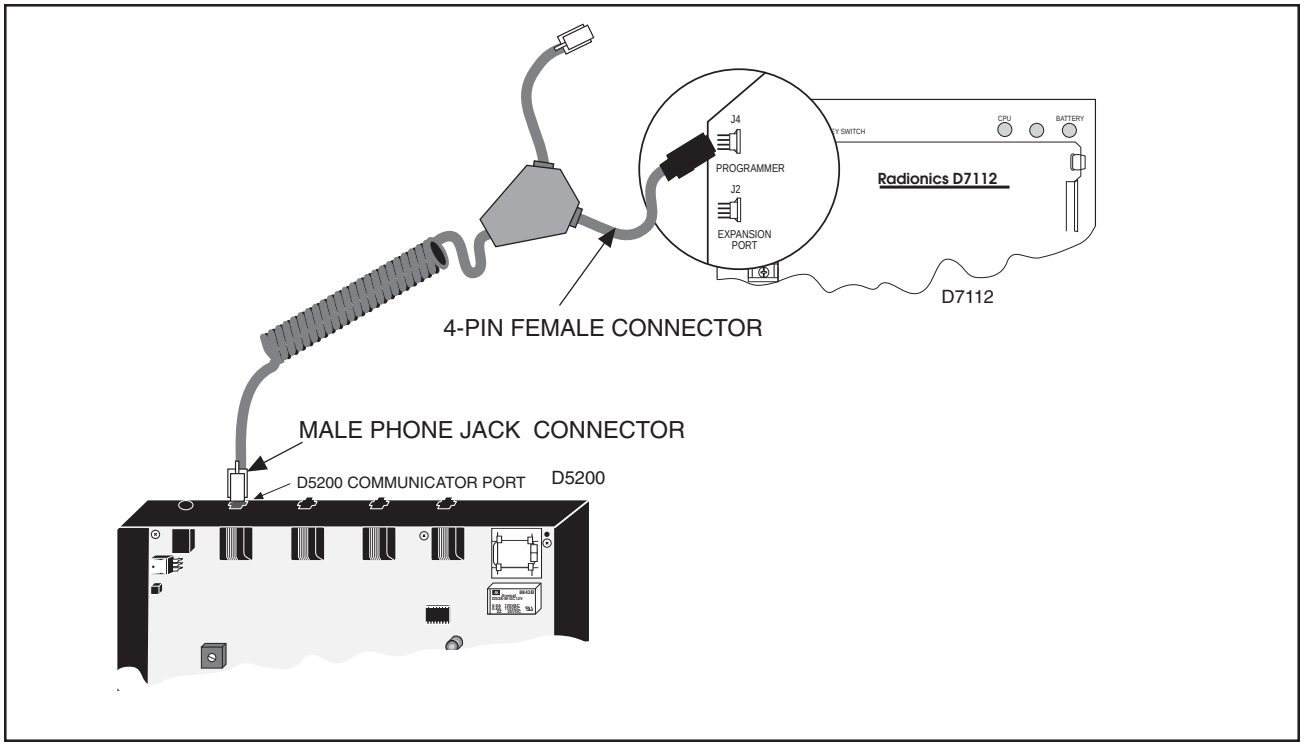


Figure 20: D5203 INTERFACE TO A PANEL WITH A MOLEX PROGRAMMER CONNECTOR

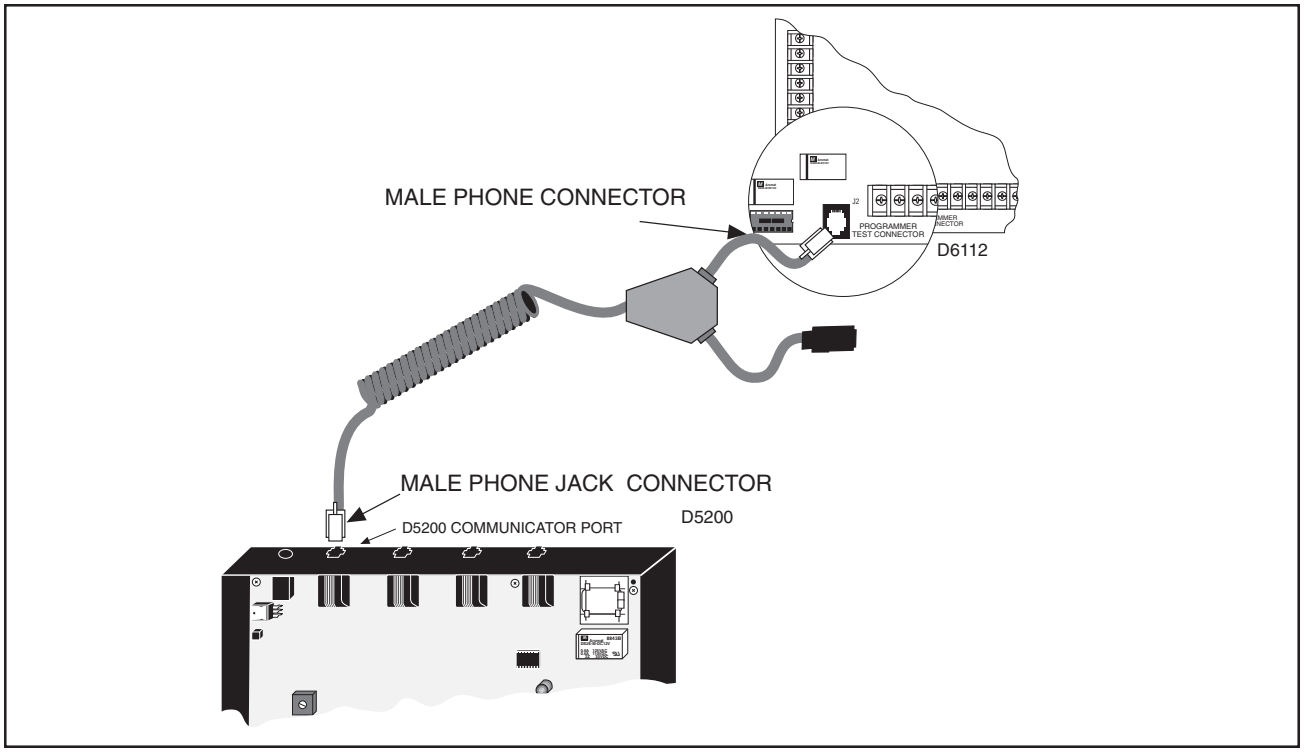


Figure 21:CONNECTING THE D5200 TO A PANEL WITH A PHONE JACK PROGRAMMER CONNECTOR

7. Receiving (Copying) Records

A record can be copied from a control/communicator or other device into the D5200 Programmer. The D5203 programmer cord can be connected directly to panels with 4-pin PROG ports and phone jack PROG ports.

Connecting the Programmer

Panel with 4-Pin PROG Port
The D5200 Programmer can be connected directly to a device with a *4-pin male* programming connector (D4112, D7112, D636, and D2071 control/communicators) as shown in Figure 20.

1. Plug the programmer cord's male phone plug into the D5200 **COMMUNICATOR** port.
2. Plug the programmer cord's 4-pin female connector into the 4-pin male programming (PROG) port on the panel.

Panel with Phone Jack PROG Port
A D5206 adapter is no longer necessary with the D5200 for devices with a 4-pin female phone jack (D6112 Control/Communicator, D8112 Control/Communicator, D6500 Receiver). The new D5203 cord has a phone jack connection. An example of this type of connection is shown in Figure 21.

1. Plug the programmer cord's male phone plug into the D5200 **COMMUNICATOR** port.
2. Plug the programmer cord's 4-pin female connector into the panel programming phone jack (PROG).

Receiving (Copying) the Program

To copy a record from a panel into the programmer:

1. Scroll to the appropriate product handler from the Product Handlers menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.
2. Place the flashing cursor on a record title (or **NEWRECORD**). This is the record to which the panel program will be copied. Press the red **RECV (COPY)** key. The message **RECEIVING** is displayed while the record is uploading from the panel into the programmer. When the record copy is complete, the message **RECEIVE SUCCESSFUL** is displayed.

   Plug In Device: If this message appears, check the connection from the programmer to the device, and verify that the handler of the record selected is appropriate for the device to which the programmer is connected.

   Tweedle: The programmer tweedles if an attempt is made to copy a program with no record title (or **NEWRECORD**) selected by the flashing cursor.

   INVALID LOCK CODE: Displays if the panel lockcode does not match any of the lockcodes in the programmer. See the *Lockcodes* chapter for more information.

   RECEIVE FAILURE or **Comm Error:** These messages are displayed if a communication error disrupts the copy process.
3. After a successful copy, the copied record is automatically entered, and module, category, or program item titles are displayed. The copied record can be saved under a different name, or replace the current record (see the *Editing a Record* section in the *Programming Records* chapter).

8. Passwords

Access to several functions of the D5200 can be limited through the use of passwords. Eight passwords can be programmed in the D5200. The D5200 Programmer is shipped with no passwords initially entered. NOTE: This feature is *password dependent*. If the programmer is logged onto with a password that does not have the authority to edit passwords, the message **ACCESS DENIED** is displayed when trying to access this feature.

If you forget all of the programmed passwords in your D5200, the programmer must be returned to Radionics (with an RMA number) for reinitialization. Please state on the RMA that you are locked out of the programmer. All data on Disk A (the internal battery backed RAM) is erased when the programmer is reinitialized.

To program passwords and designate authority to use certain functions of the D5200:

1. Scroll to **SECURITY** in the Product Handlers menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.

2. Scroll to **Passwords** in the SECURITY menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key. The Passwords menu is displayed.

   U1Password: Enter up to 8 characters for the User 1 password, and press the white **ENTER** key. The User 1 password is automatically provided access to *all* D5200 functions, and must be programmed before additional passwords (for User# 2 through 8) can be programmed.

   User#: The remaining fields are *indexed* programming fields. Enter the user number (2 through 8 – the default for the first round of programming is 2), and press the white **ENTER** key. The # in the **U#Password** field changes to match the number programmed in the **User#** field.

   U#Password: The # in this field name changes to the number programmed in the **User#** field. (The default is **U2Password** for the first round of programming.) Enter up to 8 characters for the User # password, and press the white **ENTER** key.

In the following program items, typing **Y** and pressing the white **ENTER** key enables the function for the **U#Password**. An entry of **N** disables the function for the **U#Password**. Pressing the **SPACE** bar toggles between **Y** and **N**.

U#PasswordEnable: Enter **Y** to enable the U#Password. Enter **N** to disable the U#Password. If this program item is set to N, entering this password will not be accepted as valid on programmer power-up.

U#Delete Record: Enter **Y** to give U#Password the authority to delete records. Enter **N** to disable this function for U#Password.

U#Delete Handler: Enter **Y** to give U#Password the authority to delete handlers. Enter **N** to disable this function for U#Password.

U#Edit Lockcodes: Enter **Y** to give U#Password the authority to change panel lockcodes. Enter **N** to disable this function for U#Password.

U#Edit Passwords: Enter **Y** to give U#Password the authority to change passwords. Enter **N** to disable this function for U#Password.

U#Edit Vis/Invis: Enter **Y** to give U#Password the authority to make program items invisible. Enter **N** to disable this function for U#Password.

U#Update Handler: Enter **Y** to give U#Password the authority to update handlers. Enter **N** to disable this function for U#Password.

U#Replace Record: Enter **Y** to give U#Password the authority to permanently change (replace) programmed account records. Enter **N** to disable this function for U#Password. NOTE: If this function is disabled for the Password, the user will still be able to edit records, but edited records must be saved under a different name.

U#Format Disk: Enter **Y** to give U#Password the authority to format disks. Enter **N** to disable this function for U#Password. NOTE: Formatting a disk *permanently erases* all data on the disk.

U#Lock Record: Enter **Y** to give U#Password the authority to lock records. Enter **N** to disable this function for U#Password.

3. After an entry is made for **U#Lock Record**, the display wraps around to **U1Password**. Press the white **ENTER** key or the red ↓ key to move the cursor to the **User#** field. Enter a new user number and press the white **ENTER** key. The # in all U# program item titles changes to match the new number programmed in the **User#** field. Passwords for up to 8 users are programmed as described in Step 2. (**U1Password** needs to be programmed only once, even though it scrolls into view after other U# password parameters have been programmed. Simply scroll past it with the red ↓ key .)

4. To exit the Passwords menu, press the red **EXIT GROUP** key. The cursor returns to the SECURITY menu.

5. To exit the SECURITY menu, press the red **EXIT GROUP** key. The cursor returns to the Product Handlers level.

If a user attempts to access a function to which the user's password has *not* been given authority, the message **ACCESS DENIED** is displayed.

9. LockCodes

The DataLock system uses lockcodes to lock panels from programming by unauthorized programmers. A Datalocked panel has a lockcode in memory that the 5200 must match to one of the lockcodes in the 5200 lockcode records before the programming session can continue. The 5200 can not match the lockcode in the panel, the programming session is terminated.

Ram II organizes its lockcodes into four different types, default, primary, alternate, and unaltered. See *LockCode Types* below.

NOTE: This feature is *password dependent*. If the programmer is logged onto with a password that does not have the authority to edit lockcodes, the message **ACCESS DENIED** is displayed when trying to access this feature.

1. Scroll to **SECURITY** in the Product Handlers menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.
2. Use the red ↓ key to scroll down to **LockCodes**, and press the red **ENTER GROUP** key.
3. The cursor flashes in the **Primary Lock** data entry field. Enter a primary lockcode (from **1** to **65535**) and press the white **ENTER** key. NOTE: Due to an internal security algorithm, one of *255* lockcodes can result from an entry for the D4112 and D6112 control/communicators.
4. The cursor flashes in the **Lock#** data entry field. Enter the number of the lockcode you wish to program (from **1** to **50**) and press the white **ENTER** key.
5. The cursor flashes in the **Lockcode** data entry field. This program item is indexed to the **Lock#** entry. The number entered in **Lock# will** be added to the **Lockcode** prompt. For example, if **2** is entered for **Lock**, the next prompt will be **Lockcode2**. Enter a lockcode (from **1** to **65535**) and press the white **ENTER** key. NOTE: Due to an internal security algorithm, one of *255* lockcodes can result from an entry for the D4112 and D6112 control/communicators.
6. The cursor flashes in the **Primary Lock** data entry field, which has wrapped around in the display. Use the red ↓ key to scroll down to the **Lock#** prompt.
7. Enter the number of the new lockcode you wish to program and press the **ENTER** key.
8. The cursor flashes in the **Lockcode** data entry field. Enter a lockcode (from **1** to **65535**) and press the white **ENTER** key.
9. Repeat steps 6 through 8 until all desired lockcodes have been programmed. To return to the SECURITY menu, press the red **EXIT GROUP** key. To return to the Product Handlers level, press the red **EXIT GROUP** key again.

Programmer Tips – Working with Lockcodes

For panels with the datalock feature, the panel lockcode is verified when the panel is accessed (record send or receive). There are four types of lockcodes:

- **Default Lockcode:** The code **12345** is the default entry for all D5200 lockcodes.
- **Primary Lockcode:** This is the lockcode programmed in the **Primary Lock** field.
- **Alternate Lockcode:** If the lockcode in a panel matches one of the first 35 "alternate" lockcodes (Lockcodes 1 through 35), the panel lockcode is changed to the primary lockcode, and the message **LOCK CODE SET** is displayed.
- **Unaltered Lockcode:** If the panel lockcode matches one of the remaining lockcodes (36 through 50), the panel lockcode is not changed.

If the panel lockcode does not match *any* of the programmer lockcodes, the message **INVALID LOCK CODE** is displayed, and the panel cannot be accessed.

10. Updating Handlers

The update feature of the D5200 can be used to add product handlers to the programmer, update existing programmer handlers, and copy locked records from one programmer to another. Handlers can be added and updated via the phone lines at 300 baud using the programmer TELCO connector, via a serial interface at 19.2k baud using the RS-232 connector, and between internal Disk A and removable RAM Disk B within the programmer (see Figure 22). The time required to updatehandlers in a programmer depends upon the interfaced used (see Figure 23). Since it is much quicker to update a D5200 via the RS-232 serial interface, Radionics recommends updating only the first programmer via the phone (Telco) lines, and updating additional programmers from the first programmer via the RS-232 interface.

NOTE: This feature is *password dependent*. If the programmer is logged onto with a password that does not have the authority to update, the message **ACCESS DENIED** is displayed when trying to access this feature.

	FROM	TO	DISK A	DISK B
	INTERNAL DISK	DISK	B->A	A->B
	RADIONICS PHONE UPDATE SYSTEM	D5200	TELCO->A	TELCO->B
SENDING	D5200 (local)	D5200	A->RS232	B->RS232
RECEIVING	D5200 (local)	D5200	RS232->A	RS232->B
SENDING	D5200 (phone)	D5200	A->TELCO	B->TELCO
RECEIVING	D5200 (phone)	D5200	TELCO->A	TELCO->B

Figure 22: UPDATE METHODS

PRODUCT HANDLER	PHONE UPDATE WITH HELP	PHONE UPDATE WITHOUT HELP	RS-232 UPDATE WITH HELP	RS-232 UPDATE WITHOUT HELP
D2071	6:00	4:41	00:13	00:11
D4112	10:21	8:52	00:23	00:15
D6112	12:49	8:23	00:29	00:20
D636	5:24	4:46	00:15	00:10
D7112	:	15:13	:	00:34
D8112 SERIES	*37:00	*28:00	*1:33	*1:10

NOTE: Phone times shown above are for "clean" phone lines. Line noise can increase the update time.

* 8112 Times are best estimate at time of printing. Data not available for blank entries.

Figure 23: UPDATE TIMES (MINUTES:SECONDS)

Disk to Disk Updates

Handlers and locked records can be copied from Disk A to Disk B (and Disk B to Disk A) in the programmer. If the "receiving" disk already has the handler to be updated, the "sending" disk transfers only its locked records (i.e. **NEWRECORD**) to the "receiving" disk. If the "receiving" disk does not currently contain the handler to be transferred, the "sending" disk transfers the handler and all locked records (i.e. **NEWRECORD**) to the "receiving" disk.

1. Scroll to **UPDATE** in the Product Handlers menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.

2. Type the handler name (i.e. **7112**) at the **Handler** prompt, and press the white **ENTER** key. The cursor moves down to the **Include Help** prompt.

3. The **Include Help** entry defaults to No. To include the handler help file in the update, press the **SPACE** bar to toggle the entry to Yes. Press the white **ENTER** key. The cursor moves down to the **Phone** prompt.

4. Use the red ↓ key to scroll down to the **Mode** prompt.

   A → B

   To transfer a handler from internal Disk A to the removable RAM disk B: Press the **SPACE** bar until the **A→B** selection is displayed (see Figure 24).

   B → A

   To transfer a handler from removable RAM Disk B to internal Disk A: Press the **SPACE** bar until the **B→A** selection is displayed.

5. Press the white **ENTER** key. If the transfer is successful, the message **UPDATE SUCCESSFUL** is displayed. The cursor returns to the **UPDATE** menu. To copy additional handlers, repeat steps 2 through 5.

   If the transfer is not successful, the message **UPDATE FAILURE** is displayed. If the specified handler does not exist on the "sending" disk", the message **HANDLER NOT FOUND** is displayed.

6. To return to the Product Handlers level, press the red **EXIT GROUP** key.

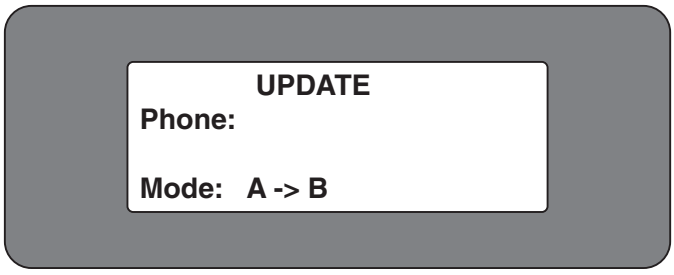


Figure 24: DISK TO DISK HANDLER COPY

Updating using the Radionics Update System via the Phone

The programmer can be set up to receive handler updates from the Radionics Update System via the phone (pulse dialing only). If the programmer already has the handler to be updated, the Update System transfers only its locked records (i.e. **NEWRECORD**) to the programmer. If the programmer does not currently contain the handler to be transferred, the Update System transfers the handler and all locked records (i.e. **NEWRECORD**) to the programmer. Connect the programmer to the phone line (TELCO port to phone jack) as shown in Figure 25, and set up the programmer as shown below.

1. Scroll to **UPDATE** in the Product Handlers menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.

2. Type the handler name (i.e. **7112**) at the **Handler** prompt, and press the white **ENTER** key. The cursor moves down to the **Include Help** prompt.

3. The **Include Help** entry defaults to No. To include the handler help file in the update, press the **SPACE** bar to toggle the entry to Yes. Press the white **ENTER** key. The cursor moves down to the **Phone** prompt.

4. Enter the phone number of the Radionics Update System, **14087577832**, in the **Phone** field. (Add or remove prefix information as required for dialing from your area.) Press the white **ENTER** key. The cursor moves down to the **Mode** prompt.

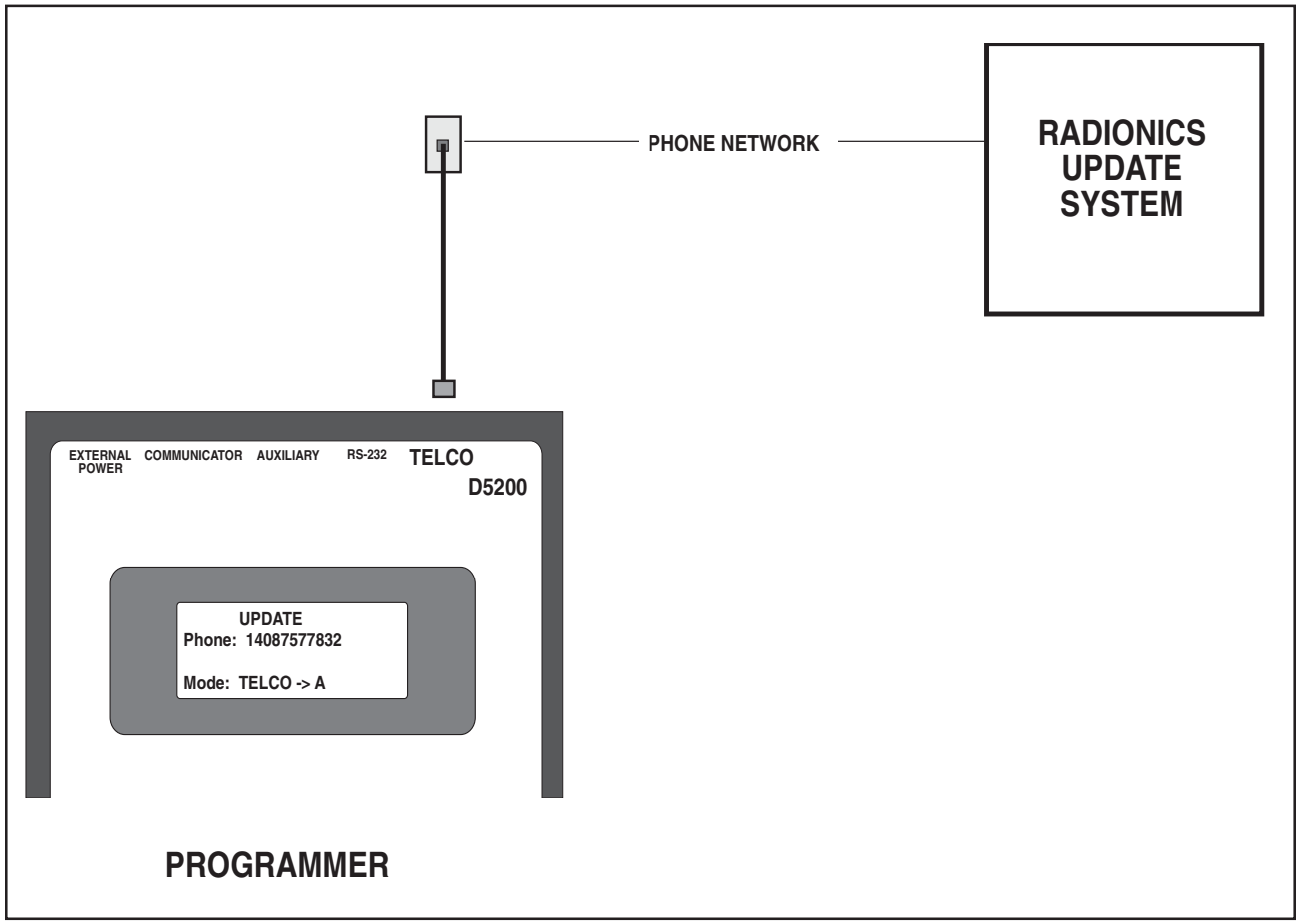


Figure 25: CONNECTING TO THE RADIONICS UPDATE SYSTEM

5. **Mode** prompt entry:

TELCO → A

To transfer a handler to internal **Disk A**: Press the **SPACE** bar until the **TELCO→A** selection is displayed.

TELCO → B

To transfer a handler to removable RAM **Disk B**: Press the **SPACE** bar until the **TELCO→B** selection is displayed.

6. Press the white **ENTER** key. The programmer clicks as it dials out, and the message **WAITING for CARRIER** is momentarily displayed, followed by the message **WAITING for CONNECT to Update System** is displayed. When this handler request is detected by the Update System, the Update System transfers the requested handler. The progress of the handler reception is displayed on the programmer (see Figure 26). If the transfer is successful, the message **UPDATE SUCCESSFUL** is displayed. The cursor returns to the **UPDATE** menu. To update additional handlers, repeat steps 2 through 6.

   If the transfer is not successful, the message **UPDATE FAILURE** is displayed. If the handler requested by the programmer was not available in the Update System, the message **HANDLER NOT FOUND** is displayed.

7. To return to the Product Handlers level, press the red **EXIT GROUP** key.

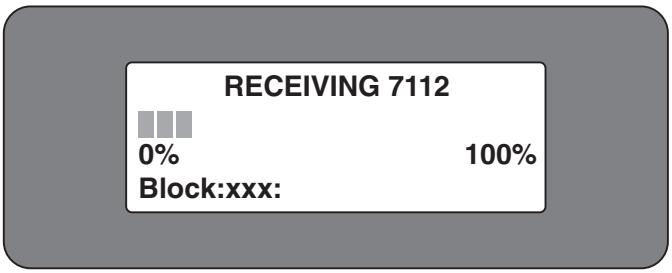


Figure 26: "RECEIVING PROGRAMMER" UPDATE PROGRESS

Programmer Tip – Updating Multiple Programmers

The time required to updatehandlers in a programmer depends upon the interfaced used (see Figure 23). Since it is much quicker to update a D5200 via the RS-232 serial interface, Radionics recommends updating only the first programmer via the phone (Telco) lines, and updating additional programmers from the first programmer via the RS-232 interface (see "Updating Via RS-232" on the following pages).

Updating via RS-232

Using the serial interface, handlers and locked records can be quickly transferred from one programmer to another. One D5200 is the "Sending Programmer" of handlers and records, and the second D5200 is the "Receiving Programmer". If the Receiving Programmer already has the handler to be updated, the Sending Programmer transfers only its locked records (i.e. **NEWRECORD**) to the Receiving Programmer. If the Receiving Programmer does not currently contain the handler to be transferred, the Sending Programmer transfers the handler and all locked records (i.e. **NEWRECORD**) to the Receiving Programmer. Connect the two programmers together (RS-232 port to RS-232 port) with a Radionics D5204 cable (2 feet long) as shown in Figure 27. A 25-foot cable in this configuration can be purchased from Radio Shack (Cat. No. 279-422). To build a custom cable, purchase Radio Shack Cat. No. 279-421. This kit consists of 10 six-pin modular connectors. (A crimping tool is required to build a custom cable.) *All six conductors are required.*

SENDING PROGRAMMER – RS-232

This programmer will be **sending** the updated handler to the Receiving Programmer.

1. Scroll to **UPDATE** in the Product Handlers menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.
2. Use the red ↓ key to scroll down to the **Mode** prompt.

A → RS232

To transfer a handler from internal **Disk A**: Press the **SPACE** bar until the **A→RS232** selection is displayed.

B → RS232

To transfer a handler from removable RAM **Disk B**: Press the **SPACE** bar until the **B→RS232** selection is displayed.

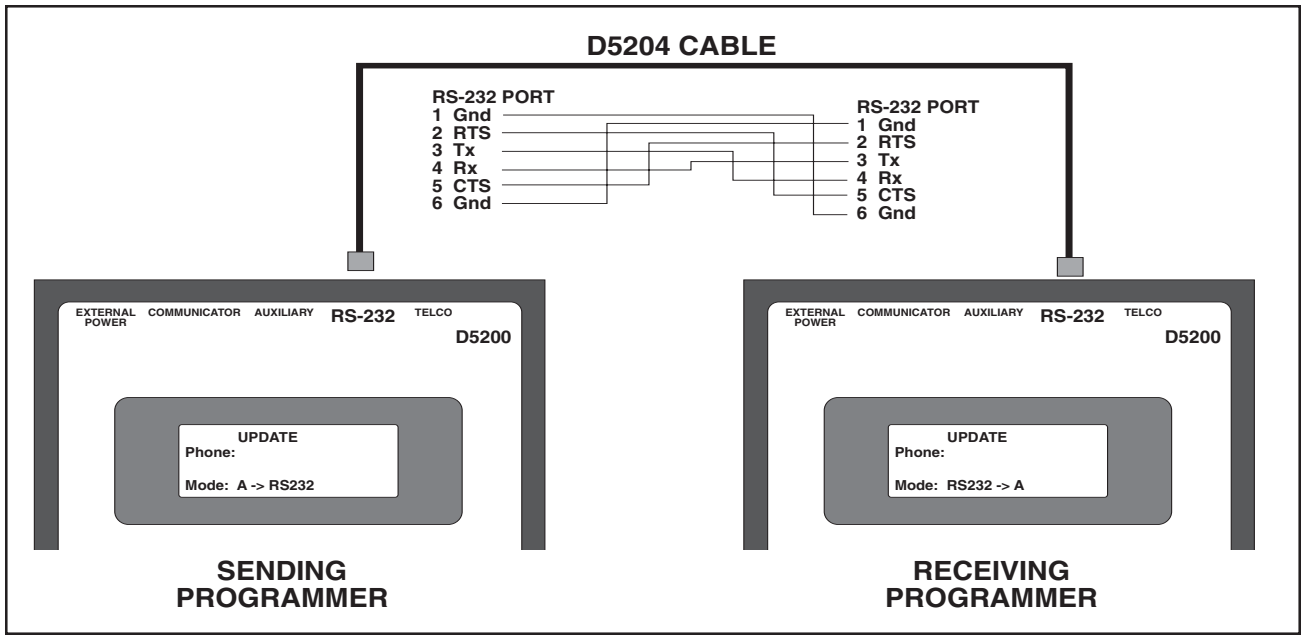


Figure 27: RS-232 UPDATE CONFIGURATION

3. Press the white **ENTER** key. The message **WAITING for Handler Request...** is displayed. When the handler request from the Receiving Programmer is detected, the Sending Programmer transfers the requested handler. The progress of the handler transmission is displayed (see Figure 28). If the transfer is successful, the message **UPDATE SUCCESSFUL** is displayed. If the transfer is not successful, the message **UPDATE FAILURE** is displayed. The cursor returns to the **UPDATE** menu.

4. To update additional handlers, repeat steps 2 and 3. To return to the Product Handlers level, press the red **EXIT GROUP** key.

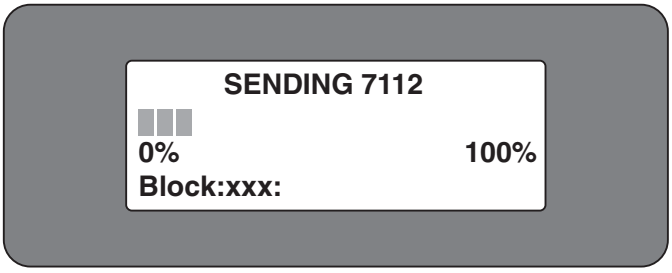


Figure 28: SENDING PROGRAMMER UPDATE PROGRESS

RECEIVING PROGRAMMER – RS-232

This programmer will be **receiving** the handler update from the Sending Programmer.

1. Scroll to **UPDATE** in the Product Handlers menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.

2. Type the handler name (i.e. **7112**) at the **Handler** prompt, and press the white **ENTER** key. The cursor moves down to the **Include Help** prompt.

3. The **Include Help** entry defaults to No. To include the handler help file in the update, press the **SPACE** bar to toggle the entry to Yes. Press the white **ENTER** key. The cursor moves down to the **Phone** prompt.

4. Use the red ↓ key to scroll down to the **Mode** prompt.

RS232 → A

To transfer a handler to internal **Disk A**: Press the **SPACE** bar until the **RS232→A** selection is displayed.

RS232 → B

To transfer a handler to removable RAM **Disk B**: Press the **SPACE** bar until the **RS232→B** selection is displayed.

5. Press the white **ENTER** key. The message **WAITING for CONNECT to Update System** is displayed. When this handler request is detected by the Sending Programmer, the Sending Programmer transfers the requested handler. The progress of the handler reception is displayed (see Figure 26). If the transfer is successful, the message **UPDATE SUCCESSFUL** is displayed. The cursor returns to the **UPDATE** menu. To update another handler, repeat steps 2 through 5.

   If the transfer is not successful, the message **UPDATE FAILURE** is displayed.

   If the handler requested by the Receiving Programmer was not available in the Sending Programmer, the message **HANDLER NOT FOUND** is displayed.

6. To return to the Product Handlers level, press the red **EXIT GROUP** key.

Updating via the Phone

Handlers in one programmer can be updated by a second programmer via the phone (pulse dialing only). One D5200 is the "Sending Programmer" of handlers and locked records, and the second D5200 is the "Receiving Programmer". If the Receiving Programmer already has the handler to be updated, the Sending Programmer transfers only its locked records (i.e. **NEWRECORD**) to the Receiving Programmer. If the Receiving Programmer does not currently contain the handler to be transferred, the Sending Programmer transfers the handler and all locked records (i.e. **NEWRECORD**) to the Receiving Programmer. Connect the SENDING and RECEIVING Programmers to phone lines (TELCO port to phone jack) as shown in Figure 29, and set up each programmer as described below.

SENDING PROGRAMMER – TELCO

This programmer will be sending the updated handler to the Receiving Programmer.

1. Scroll to **UPDATE** in the Product Handlers menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.
2. Use the red ↓ key to scroll down to the **Mode** prompt.

A → TELCO To transfer a handler from internal **Disk A**: Press the **SPACE** bar until the **A→TELCO** selection is displayed.

B → TELCO To transfer a handler from removable RAM **Disk B:** Press the **SPACE** bar until the **B→TELCO** selection is displayed.

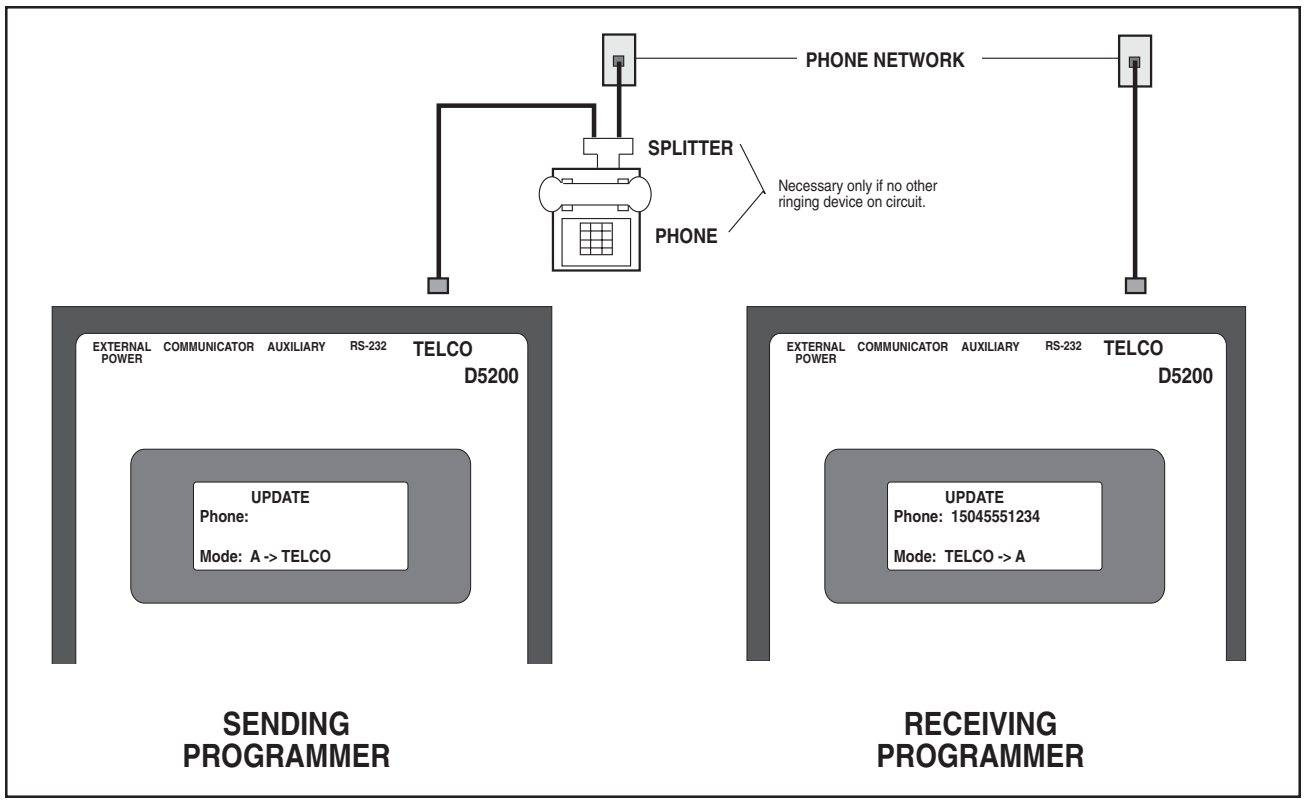


Figure 29: TELCO UPDATE CONFIGURATION

3. *Wait until the phone rings,* and then press the white **ENTER** key. The message **WAITING for Handler Request...** is displayed. When the handler request from the Receiving Programmer is detected, the Sending Programmer transfers the requested handler at 300 baud. The progress of the handler transmission is displayed (see Figure 28). If the transfer is successful, the message **UPDATE SUCCESSFUL** is displayed. If the transfer is not successful, the message **UPDATE FAILURE** is displayed. The cursor returns to the **UPDATE** menu. To update additional handlers, repeat steps 2 and 3.

4. To return to the Product Handlers level, press the red **EXIT GROUP** key.

RECEIVING PROGRAMMER – TELCO

This programmer dials out and receives the handler update from the Sending Programmer.

1. Scroll to **UPDATE** in the Product Handlers menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.

2. Type the handler name (i.e. **7112**) at the **Handler** prompt, and press the white **ENTER** key. The cursor moves down to the **Include Help** prompt.

3. The **Include Help** entry defaults to No. To include the handler help file in the update, press the **SPACE** bar to toggle the entry to Yes. Press the white **ENTER** key. The cursor moves down to the **Phone** prompt.

4. Enter the phone number of the Sending Programmer in the **Phone** field. This entry can be up to 24 characters: 0-9, C (3 second wait), D (7 second wait), and can wrap around to the second line under the **Phone** prompt. Press the white **ENTER** key. The cursor moves down to the **Mode** prompt.

5. **Mode** prompt entry:

TELCO → A To transfer a handler to internal **Disk A**: Press the **SPACE** bar until the **TELCO→A** selection is displayed.

TELCO → B To transfer a handler to removable RAM **Disk B**: Press the **SPACE** bar until the **TELCO→B** selection is displayed.

6. Press the white **ENTER** key. The programmer clicks as it dials out, and the message **WAITING for CONNECT to Update System** is displayed. When this handler request is detected by the Sending Programmer, the Sending Programmer transfers the requested handler. The progress of the handler reception is displayed (see Figure 26). If the transfer is successful, the message **UPDATE SUCCESSFUL** is displayed. The cursor returns to the **UPDATE** menu. To update additional handlers, repeat steps 2 through 6.

   If the transfer is not successful, the message **UPDATE FAILURE** is displayed. If the handler requested by the Receiving Programmer was not available in the Sending Programmer, the message **HANDLER NOT FOUND** is displayed.

7. To return to the Product Handlers level, press the red **EXIT GROUP** key.

11. Deleting Handlers

To delete a handler from a disk on the programmer, follow the steps below. NOTE: This feature is *password dependent* . If the programmer is logged onto with a password that does not have the authority to delete handlers, the message **ACCESS DENIED** is displayed when trying to access this feature.

1. Scroll to **DELETE** in the Product Handlers menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.

2. Type the handler name (i.e. **7112**) at the **HandName** prompt, and press the white **ENTER** key. A warning message is displayed. To abort the handler delete process, type **N**. To continue with the delete process, press **Y**. When the handler has been deleted, the message **HANDLER DELETED** is displayed.

   HANDLER NOT FOUND: If the name entered in the **HandName** field does not match any handler titles on the current disk, the message **HANDLER NOT FOUND** is displayed. Check the title entered in the **HandName** field – it must exactly match the title of the handler stored on the current disk. The title can be verified by exiting the **DELETE** display and viewing the list of handlers. If the handler title is not displayed, it may be stored on a different disk. See *Changing the Disk* section in the *Disk Operations* chapter.

3. To delete a help file, use the red ↓ key to scroll down to the **HelpName** prompt.

4. Type the help file name, which is identical to the handler name (i.e. **7112**) at the **HelpName** prompt, and press the white **ENTER** key. A warning message is displayed. To abort the help file delete process, type **N**. To continue with the delete process, press **Y**. When the help file has been deleted, the message **HELP DELETED** is displayed.

   HELP NOT FOUND: If the name entered in the **HelpName** field does not match any handler titles on the current disk, the message **HELP NOT FOUND** is displayed. Check the title entered in the **HelpName** field – it must exactly match the title of the help file stored on the current disk. The title can be verified by exiting the **DELETE** display and viewing the list of handlers. If the handler title which is associated with the help file is not displayed, the handler and help file may be stored on a different disk. See *Changing the Disk* section in the *Disk Operations* chapter.

5. To return to the Product Handlers level, press the red **EXIT GROUP** key.

12. Programmer Time Out

The D5200 Programmer is equipped with a power-saving timeout feature – the D5200 automatically powers down if no keys have been pressed within a programmed amount of time. Follow the steps below to program the timeout.

1. Scroll to **SECURITY** in the Product Handlers menu using the red ↓ or ↑ keys, and press the red **ENTER GROUP** key.
2. Scroll to **Time Out** in the SECURITY menu using the red ↓ or ↑ keys. Enter the desired timeout value (from 02 to 10 minutes) and press the white **ENTER** key.
3. To exit the SECURITY menu, press the red **EXIT GROUP** key. The cursor returns to the Product Handlers level.

Records Open When TimeOut Occurs

One minute before the D5200 goes into TimeOut power-down, the programmer emits a "buzz", and the message **59 SEC TO POWER DOWN** is displayed. The programmer "counts down" until the time programmed in **Time Out** has expired. If a record is still open when the D5200 Programmer goes into a power-down timeout, the record is saved under the title **TIMEOUTSAVE**. One TIMEOUTSAVE record can be saved per handler. If a TIMEOUTSAVE record already exists for a particular handler, the new TIMEOUTSAVE record will overwrite the old TIMEOUTSAVE record.

When the programmer is switched on and the handler is entered, **the programmer emits a "buzz" tone**, and the words **SAVE TIMEOUT RECORD** appear among the items in the display. Press the red ↓ key to scroll to the **TIMEOUTSAVE** record. The TIMEOUTSAVE record can be opened, saved under a different title, and deleted like other records (see *Editing a Record, Copying a Record,* and *Deleting a Record* in the *Programming Records* chapter).

13. Help Screens

Help screens can be accessed from almost all prompts displayed on the D5200. Help screens are also available for individual product handler program items. Product handler help screens can be installed when updating the handler (see the Updating Handlers chapter).

Accessing Help Screens

1. To view the help screen for a particular item, move the cursor to the item and press the red **HELP** key.

   If there is no help screen for a particular program item or prompt, or the help file for a particular handler has not been loaded, the message **NO HELP AVAILABLE** is displayed.

2. The item is displayed in the top line, and the help screen is displayed below. Use the red ↑ and ↓ keys to scroll through the help screen.

3. Data can be entered in program item help screen. When the white **ENTER** key is pressed, the cursor exits the help screen and flashes on the next program item.

4. The help screen can be exited by pressing the red **HELP** key. The red **EXIT GROUP**, **ENTER GROUP**, **RECV**, and **SEND** keys can also be used to exit help screens, provided that pressing the particular key is an appropriate action for the item displayed in the help screen.

14. Inside the Programmer

The inside of the programmer needs to be accessed when inserting a RAM disk (Disk B), changing the batteries, and adjusting the LCD display contrast.

Opening the Programmer Case

1. **Power down the programmer.** (Select **5200 OFF** in the Product Handler menu.) **Ground yourself before opening the programmer case. Do not touch any components on the D5200 circuit board.**
2. Unplug the External Power cord.
3. Place the left side of the programmer in the crook of your left elbow and jam the fingertips

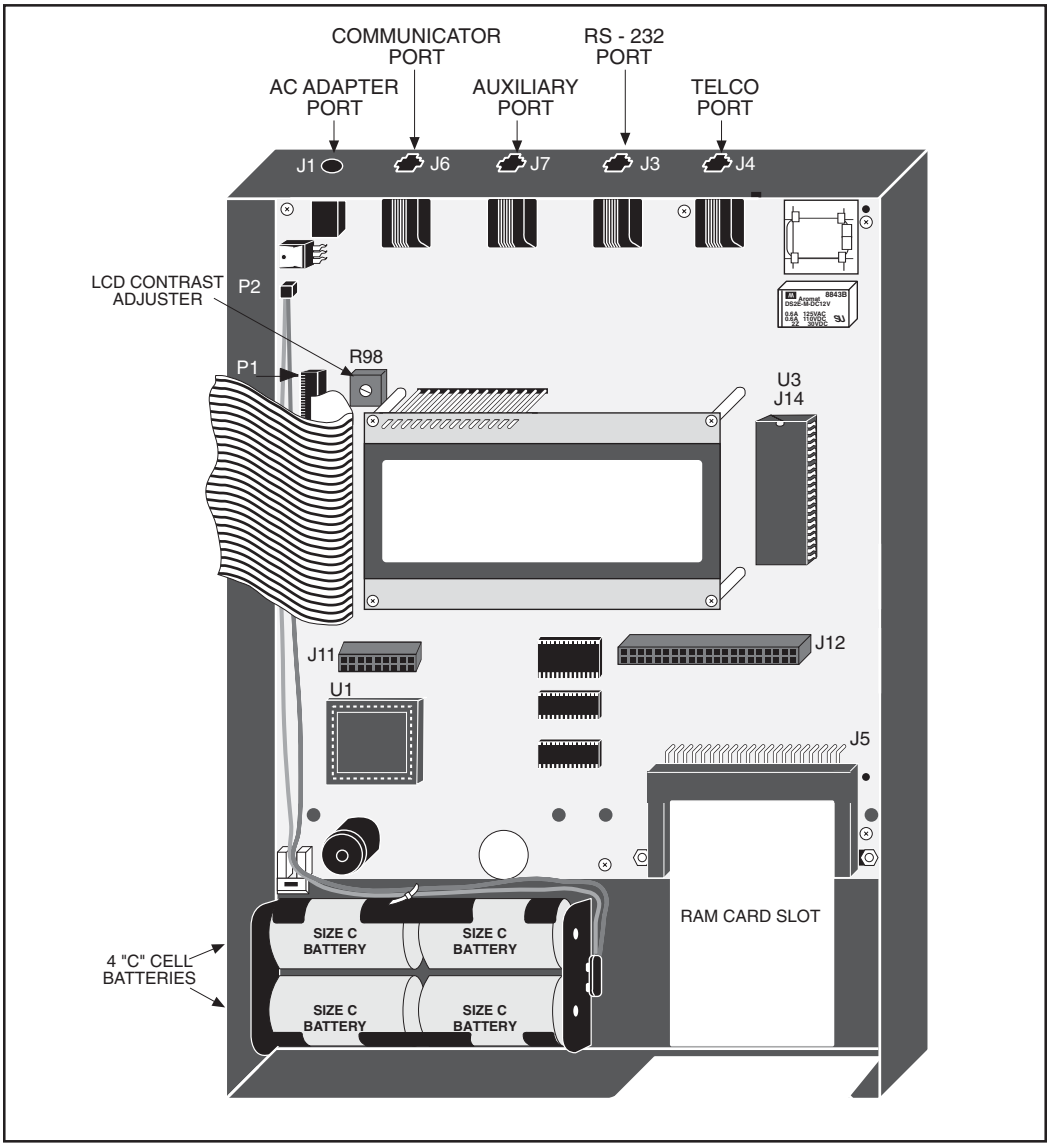


Figure 30: INSIDE THE PROGRAMMER

of both hands in the flared handle of the case. Pull the front of the case out and away from the back – enough to clear the two metal latching pins.

Inserting a RAM Card (Disk B)

1. **Power down the programmer before installing a RAM card.** (Select 5200 OFF in the Product Handler menu.) RAM cards are *not* hot pluggable. Inserting a RAM card with the programmer powered up may result in damage to disk data and system software.

2. Unplug the External Power cord and open the programmer case as described on the previous page.

3. One end of the RAM card has a shiny metallic strip, and the other end has a write-protect switch. Insert the metallic-strip end of the RAM card into the RAM card slot (see Figure 28) with the shiny metallic strip facing *down*.

WARNING: Do not touch the RAM card connector assembly! Static discharge can damage or destroy programmer components and data stored in programmer memory. An error message will be displayed on power-up if programmer components have been damaged.

To Remove a RAM Card:

1. **Power down the programmer before removing a RAM card.** (Select **5200 OFF** in the Product Handler menu.) RAM cards are *not* hot unpluggable. Removing a RAM card with the programmer powered up may result in damage to disk data and system software.

2. Unplug the External Power cord and open the programmer case as described on the previous page.

3. Grasp the RAM card from its sides, and gently ease it out of the socket.

To Write-Protect a RAM Card:

With the card plugged into the programmer, move the write-protect strip to the left position.

To Replace the RAM Card Battery:

Leave the RAM card plugged into the programmer. If the RAM disk does not have a source of power (i.e. from the programmer) when the battery is removed, all data on the disk will be erased.

Locate the tiny slot for removing the RAM card battery (in the black plastic edge near the write-protect switch). Insert the end of a small screwdriver into the tiny slot and pry out the battery holder. Replace the battery, inserting the new battery + side up as marked on the battery holder. Insert the battery holder back into the RAM card battery + side up.

Changing the Batteries

When the message **LOW BATTERY** is displayed, it is time to replace the four alkaline C cell batteries. Simply open the programmer case as described above, take out the four old batteries, and install new ones. Proper battery direction is pictured on the base of the battery holder (beneath the batteries). NOTE: The D5200 does not recharge the batteries. Tests conducted by Radionics have indicated that the programmer can operate on high-quality alkaline batteries (with no other power source) for 8 hours of continuous use. Rechargeable batteries may provide only 1/2 the life of high quality non-rechargeable alkaline batteries.

Adjusting the LCD Display Contrast

With a small screwdriver, turn the LCD contrast screw clockwise to increase display contrast, or counterclockwise to decrease contrast. Test the contrast setting by holding down a repeat key (i.e. scroll the display with the red ↓ key). If the contrast is set incorrectly, the display may blur when scrolled quickly.

15. Troubleshooting Guide

This chapter contains a list of warning messages that can be displayed on the programmer, and general programmer problems.

Programmer Problems

LCD Display Blank — If the LCD display is blank, but the programmer is emitting normal operating sounds (tweedle, pip, etc.), turn the LCD contrast adjuster located next to the display on the inside of the programmer.

Warning Messages

59 SEC TO POWER DOWN — The D5200 automatically powers down if no keys have been pressed within the time programmed in **Time Out** (**SECURITY** menu). To prevent the programmer from powering down, press any key ***(an arrow key is recommended, since it will not change data or levels)***.

ACCESS DENIED — The password used to log on to the programmer has not been given the authority to access the function.

BAD DATABASE FILE — This message is displayed if an attempt was made to copy a record to a disk that does not contain the associated product handler.

LOW BATTERY — This message is displayed approximately one hour prior to low-battery power down. This message is displayed every 10 minutes until shut down. When this message is displayed, save the record that is currently open, power-down the programmer, and replace the batteries. NOTE: Powering up a programmer with a low battery condition may drain the batteries in less than one hour, depending upon the quality of the batteries.

****BAD SYSTEM FILE * Press any key to default SYSTEM FILE** — This message is displayed when the D5200 system file has been damaged. Press any key to configure the D5200 with a new system file. ***All passwords and lockcodes are lost*** when a new system file is installed, and the programmer can only be accessed with the default all blank password (simply press the white **ENTER** key). Reprogram all passwords and lockcodes (SECURITY menu). NOTE: This message signifies an unusual event. If this message is displayed, consider returning the unit to Radionics for repair.

Comm Error — Displayed if a communication error disrupts a send (load) or receive (copy) process.

DISK A (or B) **BAD FORMAT IMMEDIATELY Press any key** — This message is displayed when the internal RAM disk (Disk A) or RAM Card (Disk B) has been damaged. Press any key to access the **PRODUCT HANDLERS** menu. *Format the disk* (**FormatDisk** in the SECURITY menu) *as soon as possible*. NOTE: This message signifies an unusual event. If this message is displayed, consider returning the unit to Radionics for repair.

HANDLER NOT FOUND This message is displayed if the handler requested by the Receiving Programmer during an update was not available in the Sending Programmer, or the handler was not found on the current disk when attempting to delete the handler.

HELP NOT FOUND This message is displayed if the help file requested by the Receiving Programmer during an update was not available in the Sending Programmer, or the help file was not found on the current disk when attempting to delete the help file.

INVALID LOCK CODE This message is displayed if the panel lockcode does not match any of the lockcodes programmed into the programmer. See the *Lockcodes* chapter for more information.

NO HELP AVAILABLE There is no help screen for the particular program item or prompt selected, or the help file for a particular handler has not been loaded.

Plug In Device If this message appears during a send (load) or receive (copy), check the connection from the programmer to the device. Verify that one end of the programmer cord is plugged into the D5200 Programmer cord, and the other end is plugged into the device (panel, etc.).

RAM CARD NOT PRESENT This message is displayed if Disk B was selected and the RAM card is not plugged into the programmer.

RAM DISK PROTECTED This message is displayed if Disk B was selected and the RAM card in the programmer is write-protected.

READ ONLY RECORD This message is displayed if the record you are trying to replace or delete is locked. Changes to a locked record can be saved only under a different name.

RECEIVE FAILURE This message is displayed if a communication error disrupts a copy process.

RECORD EXISTS This message is displayed if you are attempting to save a copied record under a name which has already been given to a record on the current disk. Type in a different title for the new file.

RECORD NOT DELETED This message is displayed if the record you are trying to delete is the last record in the specific product handler database. The last record of each product handler cannot be deleted.

RECORD NOT FOUND The record name entered does not match any record titles on the current disk. The title must exactly match the title of a record stored on the current disk. If the record title is not displayed, it may be stored on a different disk. See *Changing the Disk* section in the *Disk Operations* chapter.

RECORD NOT REPLACED This message is displayed if the name entered in a REPLACE display does not match any record titles on the current disk. Check the title entered in the NAME field – it must exactly match the title of the record stored on the current disk.

SEND FAILURE This message is displayed if a communication error disrupts a load process.

UPDATE FAILURE This message is displayed if a handler transfer (RS-232 to RS-232 or TELCO to TELCO) is not successful.

D5200 Security Utility
Passwords and Lockcodes Record Sheet

Make additional copies of this blank form before marking on it.
You may need to make changes when updating the programmer.

Passwords

PROMPT & DEFAULT	ENTRY	ENTRY	ENTRY	ENTRY	ENTRY	ENTRY	ENTRY
U1Password							
User#: 2	2	3	4	5	6	7	8
U#Password							
U#PasswordEnable No							
U#Delete Record No							
U#Delete Handler No							
U#Edit Lockcodes No							
U#Edit Passwords No							
U#Edit Vis/Invis No							
U#Update Handler No							
U#Replace Record No							
U#Format Disk No							
U#Lock Record No							

Lockcodes

PROMPT & DEFAULT		ENTRY	ENTRY	ENTRY	ENTRY	ENTRY	ENTRY	ENTRY
Primary Lock: 12345								
Lock#:	1	1	2	3	4	5	6	7
Lockcode:	12345							
Lock#:	8	9	10	11	12	13	14	15
Lockcode:								
Lock#:	16	17	18	19	20	21	22	23
Lockcode:								
Lock#:	24	25	26	27	28	29	30	31
Lockcode:								
Lock#:	32	33	34	35	36	37	38	39
Lockcode:								
Lock#:	40	41	42	43	44	45	46	47
Lockcode:								
Lock#:	48	49	50					
Lockcode:								

Radionics D5200 Programmer – Memory Worksheet

Product Handler	A Number of records saved (or expected to be saved)	B Space Allotted by Operating System (O/S)	C Max. No. of Records for O/S Space	D Space Required for Records (A/C) x B ↑ round up to nearest whole number	E Handler Size (make entry for each one used)		F Help File Size (make entry for each one used)	
2071								
4112								
6112								
636								
7112								
8112 Series								

Make additional copies of this blank form before marking on it. You may need to make changes when updating the programmer.

G Total Space Required for Records:	H Total Space Required for Handlers:	J Total Space Required for Help Files:

To fill out this worksheet, reference page number 10, Figure 4.

Total Memory Required (G + H + J):
(Total must NOT exceed disk capacity.)