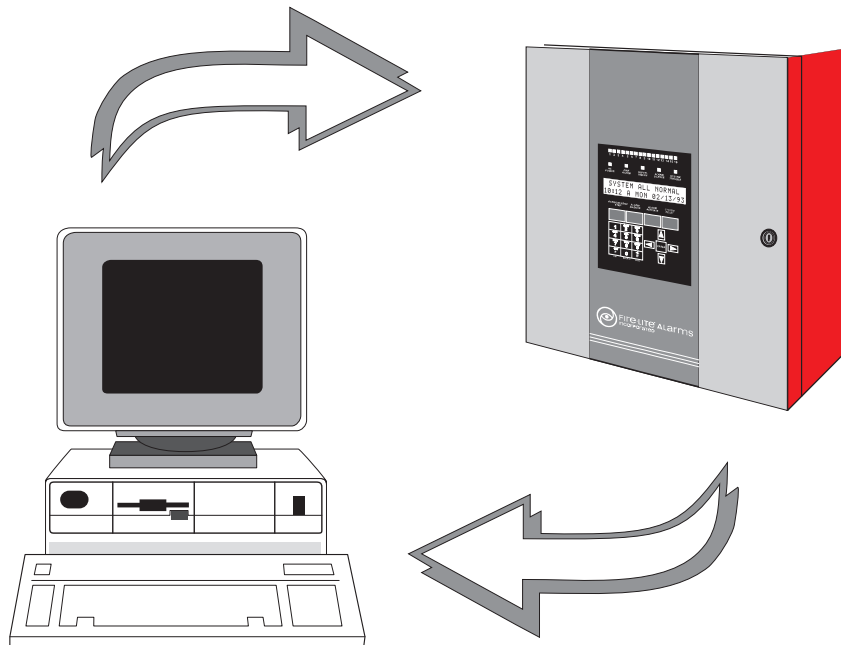# Fire·Lite

12 Clintonville Road
Northford, CT 06472
(203) 484-7161
Fax: (203) 484-7118

PK-9200
Off Line Programming Utility

for the
MS-9200 Addressable Fire Control Panel

Document 15677 **C**
5/7/97 REV:

P/N 15677:C1   ECN 97-161

Contents

1: Installation and Start-up

1.0 Introduction

This manual describes the use of the PK-9200 Off Line Programming Utility. Using the programming utility, the MS-9200 can be programmed directly from most IBM PC/XT/AT or compatible computers, including laptops and portables, equipped with a serial port. MS-9200 program files can also be created and stored on the PC, then downloaded to the panel.

Before attempting to operate the programming utility, the user should have a knowledge of basic computer operations and MS-DOS command structure.

After creating or modifying an MS-9200 program, the system must be thoroughly tested with the newly installed software. For more information on the control panel, refer to the MS-9200 Technical Manual (Document #15668).

1.1 Inventory

The PK-9200 Off Line Programming Utility Kit P/N PK-9200 contains the following:
- One 3.5" floppy disk (P/N 75298).
- Adapter, 9-pin male to 25-pin female (P/N 46029).
- PK-9200 Instruction Manual P/N 15677.
- PIM-24 Printer/PC Interface Module with cable and DB9F connector.

1.2 Program Installation

Before running the PK-9200 programming utility, you should read the **Readme.txt** file on the supplied disk to learn about updates or changes to the program which may not be covered in this manual.

You can run the MS-9200 programming utility directly from either of the supplied floppy disks or from a hard disk drive. To install the application on a hard drive, create a directory called MS9200 on the hard drive. Copy the files from the floppy disk to this directory on the hard drive.

1.3 Getting Started

The PK-9200 Off Line Programming Utility can be used in two ways: **Online**—the PC is connected to the control panel and program files can be transferred between the two devices; **Offline**—the PC is not connected to the control panel, but program files can be created or modified for later use.

To connect the PC to the control panel, connect the 9-pin end of the supplied cable to the 9-pin serial connector on the PC. If a 9-pin serial port is not available on the PC, use the supplied 9-pin to 25-pin adapter. Connect the other end of the cable to J11 (OPTIONAL PRINTER & UP/DOWN LOAD connector) on the control panel main circuit board *(see Figure 1-1)*.

Warning: Never connect a PC to the control panel when there is a preexisting earth ground fault condition on the panel, since damage can result.

The control panel does not have to be physically connected to the PC's serial port in order to use the programming application. The PC and the control panel need to be connected only during the transfer of files between the personal computer and the MS-9200.
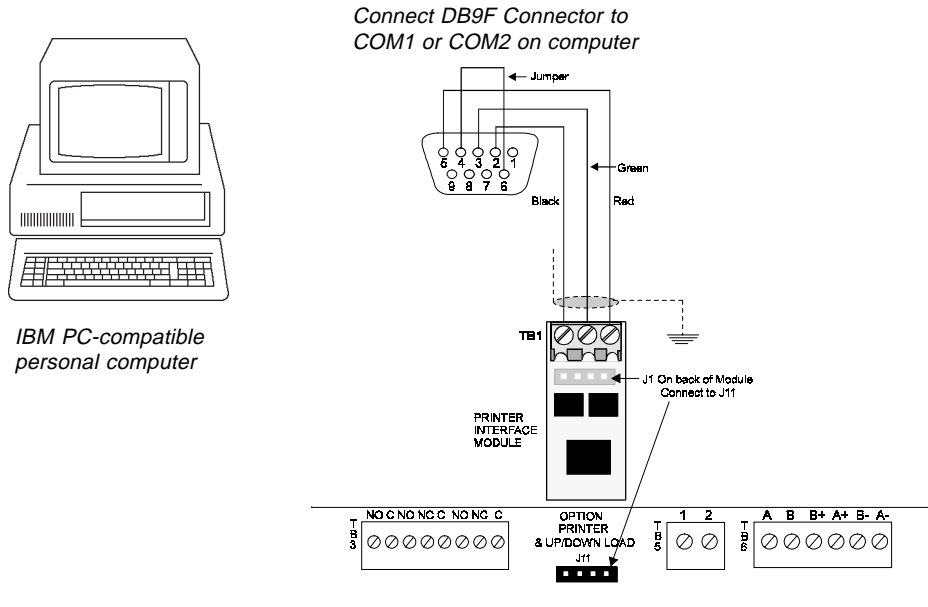
Figure 1-1: External Programming Connections for MS-9200

1.4 Start-up

From the MS9200 directory on the PC disk, begin by typing *MS9200* and pressing the *ENTER* or *RETURN* key. You should see the opening screen with the company logo. From the opening screen, pressing ENTER will cause the following screen to appear:

Figure 1-2: Serial Port Selection Screen

Choose the COM (serial) port which you will use to communicate with the control panel. Press the key (1 or 2) which corresponds to your selection.

The Available Services Screen (Figure 1-3) will now appear. This is the main option screen from which all available options may be selected. Options include the following:

Figure 1-3: Available Services Screen

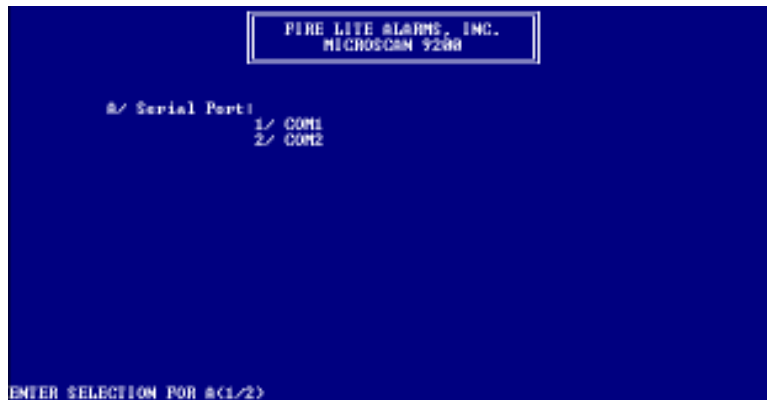| <u>Selection</u> | <u>Function</u> | <u>Description</u> |

1) **Call Diskfile to Display**—This choice displays an MS-9200 program previously stored on the disk. Upon initial power-up, this file is empty.

2) **Upload from MS-9200 to View**—This choice uploads an existing program stored in the control panel memory into the PC for editing or viewing. The PIM-24 Interface must be connected to perform an upload.

3) **Display Sample Program**—This choice displays a sample configuration file. This file may be used to gain an understanding of the basic operation of the Off Line Programming Utility. The Sample File must be used to create a new program.

4) **Download to MS-9200**—This option Downloads a program created and stored on the PC into the control panel memory. A PIM-24 must be connected to perform a download operation.

5) **Upload from MS-9200 to Diskfile**—This selection Uploads a program stored in the control panel and stores the program in the PC diskfile. The PIM-24 must be connected to perform this function.

6) **Exit to DOS**—This selection exits the PC from the Off Line Programming Utility, returning the computer to the DOS prompt.

A) **Change Serial Port**—This allows the operator to switch from COM1 to COM2.

2: Screen Navigation

Use the following keys and submenus to navigate through the various options and selections.

• *Arrow Keys*—Use the up, down, left, and right arrow keys to move the cursor.

• *Space Bar*—When in the device code screen, pressing the space bar while in the INS, TYPE, or CODE LABEL fields scrolls the available choices. When in the SYSTEM CODE screen, pressing the space bar in any field scrolls the available choices. When the desired option appears, use the arrow keys to move to the next field.

• *View Submenu (Alt + V)*—In addition to the space bar, various View submenus provide another method to see the available options. To utilize the view submenus, press and hold the **ALT** key while typing the letter **V**. A submenu will be displayed with a list of options. Use the up and down arrow keys to move through the list, then press the *ENTER* key to make your selection or type the letter or number corresponding to the option.

> **NOTE:** The PAGE UP and PAGE DOWN keys may be used while in the Device Code screen. The spacebar or typing over existing text is used to erase/delete characters. The PC's delete key will not function. Zone entries higher than 56 will not be accepted. An error message appears at the bottom of the screens.

• *ESC Key* - Pressing the Escape key calls various submenus to the screen. It also is used to abort entries.

3: System Programming

This chapter discusses the use of the Off Line Programming Utility to create and/or modify MS-9200 programs. If a control panel program has not previously been uploaded into the PC, the Display Sample Program selection ***must*** be used to create the initial program. The Display Sample Program is 'customized' for the application, then downloaded into an control panel. For additional information about the capabilities of the control panel and programming techniques, please refer to the MS-9200 Technical Manual.

3.0 Display Sample Program

If you are using the utility for the first time, choose *Display Sample Program* (selection *3)* before choosing other options. This is recommended since a thorough understanding of the basic operations is necessary. Once this selection has been made, the screen shown in Figure 3-1 will appear. Included as part of this screen are the View Submenu in the upper right corner and the Abort message in the bottom right corner. Pressing the ESC key will cause the display to revert back to the Available Services screen.

Figure 3-1: Display Sample Program Screen

System /Device Code Submenu
The submenu shown in Figure 3-2 gives the option of selecting the system code or the device code editing screens. Various submenus appear when selecting other available service functions.

To select one of the submenu options, use the *Up* and *Down* arrow keys or type the first letter of the selection on the PC keyboard then press the Enter key to finalize the selection.

Figure 3-2: System or Device Code Submenu

Escape Key
While the screens for System Code or Device Code editing are shown, pressing the *ESC* key will bring up a submenu with four choices as shown in Figure 3-3. From this menu, the available options are CHECK PROGRAM, SYSTEM CODE, DEVICE CODE and EXIT. See Section 4 for a complete description of these submenu functions.

Figure 3-3: Check Program, System Code, Device Code, and Exit Submenu

3.1 System Code

From the submenu shown in Figure 3-2, select System Code to bring up the display shown in Figure 3-4.

Figure 3-4: Sample System Code programming screen

From the screen shown above, you can program eight general system parameters. The options are listed below.

Selection	Option	Description
1/	ANNUN	None = No Annunciator
		56 Zone = Annunciate status of 56 zones
		198 Point = Annunciate status of 198 point addresses
2/	STYLE (4 or 6)	4 = SLC Loop wiring configuration Style 4
		6 = SLC Loop wiring configuration Style 6
3/	SILENCE INHIBIT	N = None
		Y = 60 seconds
4/	AUTO SILENCE	N = None
		Y = 10 minutes
5/	ALARM VERIFY	N = None
		Y = 13 second retard time, 107 second verification time
6/	PRESIGNAL	N = None
		Y = 15 second acknowledge period, 3 minute delay
7/	BELL CODING	S = Steady
		M = March Time
		T = Temporal
		C = California
8/	ALARM/TROUBLE REMINDER	N = No
		Y = 15 seconds for alarms, 2 minutes for troubles
9/	PRINTER/LCD-40	0 = Printer
		1 = LCD-40
		2 = None

Use the arrow keys to move the cursor. View options by pressing the space bar or ALT + V. When finished, press Escape key to bring up the submenu options.

3.2 Device Code

From the submenu shown in Figure 3-2, select Device Code to bring up the display shown in Figure 3-5. From this screen, you can program the various parameters for up to 99 addressable detectors and 99 monitor and/or control modules. *Note that both Main PC Board Notification Appliance Circuits are assigned to zone Z00 (General Alarm) and cannot be changed.* Circuit 1 is silenceable and circuit 2 is non-silenceable. Use the PgDn, PgUp, and arrow keys to move the cursor.
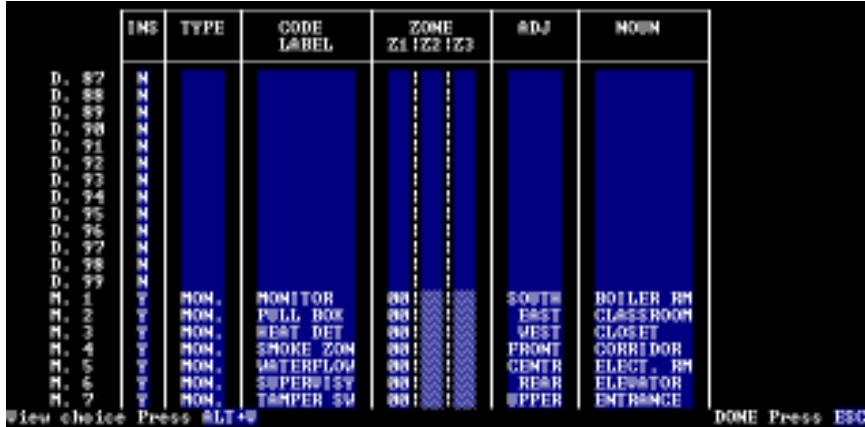

Figure 3-5: Sample Device Code programming screen

The device parameters to be programmed are defined in the table below:

LABEL	DEFINITION	CHOICES
D = Detector M = Monitor	Device Address	01-99
INS	Device Installed?	Y=Yes, N=No Use ALT V or Space bar to view choices
TYPE	Device Type Selection	Use ALT V or Space bar to view choices
CODE LABEL	Changes functional operation of module	Use ALT V to view choices
SOFTWARE ZONE ASSIGNMENT	Each control module can be assigned up to 3 software zones. Smoke Detectors and Monitor Modules may only be assigned to one zone.	Zone '00' is general alarm. Maximum zone number = 56
ADJ	Enter descriptor, i.e. NORTH, SOUTH, etc.	Use ALT V to view choices
NOUN	Enter descriptor, i.e. HALL, STAIRS, etc.	Use ALT V to view choices

Custom labels may be typed for the ADJ and NOUN labels. Use entry #1 or move the cursor to the appropriate location and type the custom label. To duplicate a custom label without keying in each character again, move the cursor to the first position of the new ADJ or NOUN field and type ALT + 0 (zero). Any numeric entries may be incremented by pressing and holding the ALT + I keys, as long as the number is the last character in the field..

Document 15677 Rev. C1   5/7/97   P/N 15677:C1

Zone Assignments

Each initiating circuit can be assigned to only one software zone. A zone number from 1 to 56 can be typed in the Zone column labeled Z1 (Entries under Z2 or Z3 are not allowed). Zone numbers higher than 56 are not allowed to be entered.

Each output circuit (control module) can be assigned to three different software zones (Z1, Z2, Z3) to accomplish floor of alarm, floor above and floor below programming, if desired. For example, a detector on the first floor is assigned to Zone 1, a detector on the second floor to Zone 2 and another on the third floor to Zone 3. A control module (controlling a notification appliance) on the second floor may be assigned to Zone 1, Zone 2 and Zone 3. This will cause activation of the notification appliance on the second floor if an alarm occurs on floor one, two, or three.

When Device Code entry is complete, press the ESC key. Selection of C - CHECK PROG will verify if all devices are assigned to software zones. Errors will be displayed at the bottom of the screen.

4: Saving Programs

After you have finished working in a screen, press the *ESC* key. For example, pressing the ESC key while in the System Code screen brings up the submenu shown in Figure 4-1.

Figure 4-1: ESC Key Submenu

Check Program - This option reviews the data you have entered into the system and checks for programming errors. *NOTE: It is recommended that Check Program be used as an aid for error checking whenever a program is edited.*

System Code - This selection returns the user to the System Code screen.

Device Code - With this option, you can move to the Device Code screen.

Exit - Choosing Exit brings up another submenu shown in Figure 4-2.

Figure 4-2: Exit Submenu

Main Menu - This selection returns to the main menu, *without saving the program.*

Print - This option sends the completed program to a printer attached to the PC. *NOTE: If a printer is not connected to the PC when this option is selected, an error message will be displayed on the screen stating "Printer is off line. Press <ESC> to Exit or any key to Continue.".*

Save - Choosing this selection saves your program to the file in the PC's MS9200 subdirectory. The application will prompt you to name the file. Type the name, press *ENTER*, and the file will be saved to the disk. *NOTE: To delete files, exit to DOS and use DOS commands.*

Download - This Downloads the program to an MS-9200 connected to the PC. It is recommended that you save the program before downloading it. *NOTE: Do not make this choice if an MS-9200 is not attached to the PC.*

5: Editing Programs

Use Main Menu option 1, *Call Diskfile to Display*, to call up an existing MS-9200 program stored on the disk. The application will prompt you to enter the file name. Type the file name, press *ENTER*, and the file will be available for editing.

6: File Transfer

6.1 Setup

See Chapter One for information on connecting the control panel to the serial port on your PC. You will not be able to transfer data if this connection is not made correctly. Also, the text "CONNECT COMPUTER NOW RUN PROGRAM FROM PC" must appear on the LCD display of the control panel. See the MS-9200 Technical Manual for more information.

6.2 Downloading to an MS-9200

To download a program to a control panel, begin by making sure the panel to PC connection is correct. If the PC has two serial ports, note which is connected.

Next, choose the COM port to which you have connected the control panel. From the Available Services Screen, choose *4) Download to MS-9200.* The screen shown below will appear.
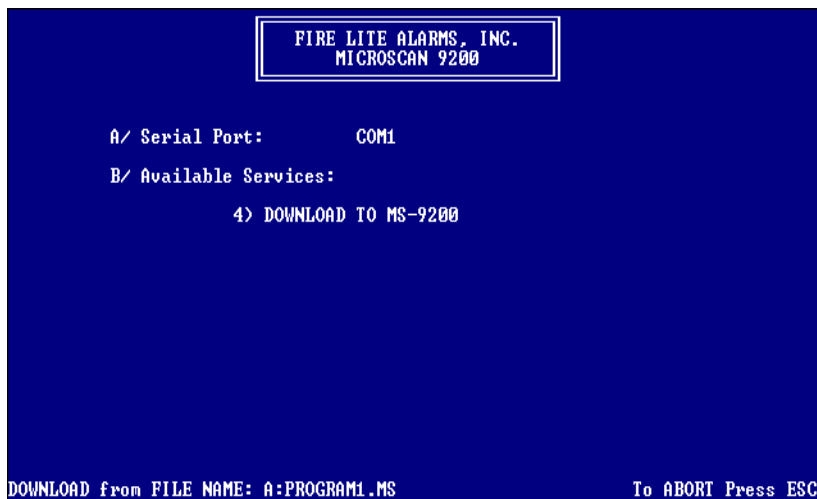

Figure 6-1: Download to MS-9200 Screen

The application will prompt you to enter a file name. (The screen above shows **PROGRAM1.MS** entered)**.** The **A:** denotes the disk drive which contains the file. After you type the name and press the ENTER key, the application will begin copying the program stored on the computer's disk to the memory of the MS-9200. The application will prompt you when the program has finished downloading.

If the control panel is not correctly connected to the proper COM port of the PC, the application will cease to respond for a short period, and then return to the main menu.

6.3 Uploading from an MS-9200

To upload a program from a control panel to be viewed on the PC, select 2) Upload from MS-9200 to View. To upload a program from the MS-9200 directly to a diskfile to be stored, select 5) Upload from MS-9200 to Diskfile. The word UPLOADING will appear at the lower left side of the screen along with incrementing four digit numbers. When the numbers stop counting, the uploading is complete. When selecting option 2) Upload from MS-9200 to View, remember that the file is brought up to the PC for viewing purposes only. Use the SAVE submenu to save the file.

Upload files may be edited and stored to disk or downloaded back into the control panel.

Figure 6-2: Upload from MS-9200 to Diskfile Screen

If an error is encountered during communications, the following message will be displayed:

"UPLOADING.... ERROR!!!....TRY AGAIN....(Y/N)?"

Make certain the cable connectors are firmly seated in the correct COM ports and try uploading again by pressing Y. If the error persists, check the cable for continuity.