

Chapter 2

INTRODUCTION

Through the MAP programs, there are function keys that allow for special input and output. The names of these special function keys may vary among keyboard manufacturers, but the operation of the keys will remain the same. For example, the key labeled <Return> on one computer system will perform the same function as the key labeled <Enter> on another. The keys that have special meanings are described below:

<Backspace>

The <Backspace> key may also be identified as <BS>, <Rub>, <Rubout>, or <Ctrl-H>, depending on the machine being used. <Backspace> is used to correct entry errors on the input line BEFORE <Return> has been pressed. To correct an entry, press the <Backspace> key and the cursor will move one space to the left, deleting any existing character in that position. Hit <Backspace> repeatedly until the incorrect entry has been removed. After backspacing has been completed, you may then retype the correct entry.

<Esc>

If you wish to cancel one of PressureMAP's long listings, you may do so by hitting the <Esc> key. Used as a data interrupt key, <Esc> halts the listing of information and returns you to the last menu displayed.

<Ctrl P>

If you wish to make a hard copy of what appears on the screen, hit <Ctrl P> before selecting one of the MAP program options. If more than one printer is configured for the MAP system, you will then be prompted to select a printing option: use the printer selected at login, or select a printer for the current print job. Selecting the printer will save what appears on the screen to a printer file. To print the spooled printer file, enter <Ctrl P> again after the display is complete.

<Return>

The <Return> key (also identified as <Enter>, <CR>, or <Send>) is the "entry" key. <Return> completes an entry made by the user and initiates the program response. Depending on your keyboard setup, <Enter> on the keypad may not work the same as <Return> on the main keyboard.

Make a special note that pressing <Return> after typing an entry not recognized by the program will cause the program to re-display the last prompt. At this point, you should try to enter a valid response to the prompt issued by the program. Also, once a MAP program menu selection has been made, <Return> itself is always a valid response. Pressing <Return> will finish the current function and move the cursor back to the previous menu.

Data Interrupt Keys

There is one key sequence that will interrupt a data listing which is scrolling across the screen. Pressing <Ctrl S> will allow the listing of information to be paused, or continued, on a toggled basis. By pressing these two keys simultaneously (much like creating an uppercase S, except

that you use the **<Ctrl>** key instead of the **<Shift>** key) you are instructing PressureMAP to either pause the information being scrolled or continue the listing of data. Although **<Ctrl S>** works as a toggle on most computers, you may need to press **<Ctrl Q>** to resume scrolling.

Edit Mode Keys

When entering information into data fields such as the address or remarks field, it is now possible to invoke a field editor function. This special function enables you to overwrite or insert words or characters into a field, as well as replace all of the information currently in the data field. Pressing the **<Ctrl N>** key allows you to switch from the default replace mode to the overwrite mode. Once you are in this mode, you can toggle between the overwrite or insert modes by using the edit mode key (**<Ctrl N>**). A mode indicator message is displayed in the upper right corner of the screen, on the top dashed line of the edit window, as shown in the sample screen below (overwrite mode).

```

Device info for EXAMPLE: <PgUp>, <PgDn> more, <Esc> finish screen
                        <Return> next field, <Backsp> delete char, <Ctrl B> previous field

----- OVERWRITE -----
Device #: 011-A2-021A                               Type: MF Range: 19.0 S-M: 6.8
Address: MH102-NORTHWEST AND SOUTH STS             Loc: 20 Pipe: A OAU: 8.5
TD Type: AF/19.0
Sheath(s): 01 03 748
Cable: 32 Prim Pair: 1681 Sec Pair: TD13 Sort Key: RASE
Plat #: RT UG 73 Stickmap: 3

Remarks: *MF ON ROUTE A IS ALSO USED IN NORTHWEST OFFICE
          IT IS DEVICE 025-15 IN THAT OFFICE

Readings      Curr Last Tdy -1 -2 -3 -4 -5 -6 Wk-1 Wk-2 Wk-3 Wk-4
-----
              7.5 7.5 7.5 8.0 8.0 7.5 7.5 7.5 8.0 8.0 15.5 7.5 7.5
-----
                                           PressureMAP XX.XX.XX
    
```

SCREEN 2-1: DATA ENTRY SCREEN

The **Replace Mode** is the default; it's the mode the editor is in when moving to a data entry field. If you enter any character (other than a carriage return) into a field when in the replace mode, that character will replace all of the previous information in the field.

The **Overwrite Mode** allows you to overwrite and replace individual characters in the field. Any character entered when you are in overwrite mode will replace the character at the current cursor position, and the cursor will advance to the next position in the field. Any characters entered at the end of the current text will be added to the data field.

The **Insert Mode** enables you to insert characters into an existing data field. The characters are inserted into the data field before the cursor position, and the cursor moves to the next position in the field. Any characters entered at the end of the current text will be added to the data field.

Invoking the Field Editor

As stated above, the field editor feature is invoked by pressing the edit mode key (**<Ctrl N>**). Once you are in this editing mode, the special edit key functions (shown in TABLE 2-1) can be used to advance through the data fields.

Key Name	Key Used	Action
Edit Mode key	<Ctrl N>	Enter Edit Mode
Left key	<Left Arrow> or <Ctrl G>	Left, Back
Right key	<Right Arrow> or <Ctrl V>	Right, Forward
Home key	<Home> or <Ctrl W>	Start of Field
End key	<End> or <Ctrl E>	End of Field
Backspace key	<Backspace/Ctrl H>	Delete, then Back
Delete key	 or <Ctrl O>	Delete
Enter key	<Return> or <Ctrl J>	Complete Field
Terminate key	<Esc>	Complete Screen

Table 2-1: Edit Mode Key Definitions

The overwrite and insert edit modes share the following cursor movement and deletion keys. In either edit mode, you can move the cursor backward and forward in the text using the left and right keys. The cursor can be positioned anywhere from the first character in the data field to the position just beyond the last character of the data field. The <Home> key moves the cursor to the first character in the field, and the <End> key to just beyond the last character of field, including any "hard" spaces in the text. The <Backspace> key deletes the character in front of the cursor, and moves the cursor back one position. The <Delete> key removes the character at the current cursor position and leaves the cursor at the same position in the text.

Note: In replace mode the left and right keys move back a field or advance a field. Only in overwrite and insert modes do they operate on the position within the field.

You can hit the edit mode key at any time while in replace mode to change to the overwrite or insert modes. If you select the overwrite mode after entering one or more characters in the replace mode, all text entered so far **overwrites** text in the field from the beginning, and the cursor is positioned after the new text. The net effect is as if you had selected overwrite mode before any text was entered.

When you have finished entering or modifying the data, you can switch back to the replace mode by exiting the editor screen using the <Esc> key.

Help Screens

Entering a ? <Return> at most of the prompts will bring up a help screen which will explain the current procedure. Note that not all menus have help screens. However, at prompts where a question mark is entered to retrieve a list of available offices, type **HELP** to request the help screen.

Choosing an Option That Is Not Displayed

Choosing an option that is not displayed will have one of two results. It will either cause the prompt to be repeated on the screen or the entire menu will disappear and be re-displayed.

Question Mark

At many of the system prompts, you may enter a ? followed by <Return> to call up a help screen. If no help screen is available, the prompt will be re-displayed. However, at a prompt for an office name (e.g., **Which office?**), the user can enter ? to call up a listing of all offices in spreadsheet format.

Arrow Keys

On some terminals, pressing an arrow key will end the current data entry procedure, regardless of which data field you are working on at the time. This happens because the terminal is slower at sending characters than PressureMAP expects. While pressing most keys sends a single character to the computer, the arrow key, as well as several others, sends a series of characters. If the terminal takes too much time between one character and the next, PressureMAP will read the first character of the series as if it were a single character. The first character in the arrow key series happens to be a break character. If pressing an arrow key on your terminal ends the procedure that you are working on, we recommend that you avoid using the arrow keys while in Dispatcher. Other keys that may cause problems are: Home, Page Up, Page Down, End, Insert, Delete, Num Lock, Scroll Lock, and Print Screen.

Number Keys

Most keyboards have a "Num Lock" key which acts as a toggle switch for the numeric keyboard. Within the MAP System, the number keys will work only if **<Num Lock>** is toggled for numbers. If **<Num Lock>** is toggled against numbers, the keys of the numeric keyboard may send erratic messages that interfere with either the MAP software or the communications software.

Default Option

At many of the prompts, a default option will appear in parentheses. A default option is a value or entry that is preprogrammed into the system. The default option may be selected by pressing **<Return>**.

Time Default

After a specified amount of time, the program will back out of some menus and display the previous screen. This process will continue until the program backs up to the user's entry menu level. The Time Default, which can be manually adjusted by the system administrator, prevents users from inadvertently tying up the program. However, for cpams and progs level users, the timeout period is five minutes of user inactivity.

X Key Option

PressureMAP offers additional history information for options 1 through 9 of the Device Histories Menu and option 2, Device Log, from the CPAMS Information Menu. To obtain this extended information, type **X** after your Device Histories Menu selection. Doing so will produce a second line of data under each device listed.

The supplemental data line for the Device Histories selection includes the pipe designation, the Location Code, the Optimum Air Usage (OAU) of the device (if the device monitors air flow) and the device's utility hole address. The extended data for the CPAMS Device Log includes information regarding sheath number, a remarks line and office and field information.

Alternate Consoles

To view the MAP Program's Status Display, press **<Alt>** and **<F12>**. A list of incoming alarm activity can be viewed by pressing **<Alt><F10>**. To switch back to one of the eight user-designated consoles, press **<Alt>** and **<F1>** through **<F8>**. For more information on the Status Display, see the "Overview" section of this guide.

Screen Browser

When using an editor login such as CPAMS, PDATA, CDATA or ADATA, a feature called Screen Browser enables you to use the special Browser Keys. The screen and input key format allows you to browse through the data presented on the screen. You can scroll up or down a single line or a page at a time, or to the top or bottom of the report. If you have selected a list or range of task numbers, a specific task or device may be found by using the **F**, **N**, or **B** keys. The Browser Key format also allows you to group lines within the report, allowing you to customize each report's output.

Knowing how to properly use the Screen Browser Function Keys will save time when you would like to quickly view or print a report. This section offers a detailed definition for each of these keys.

Note: Not all keyboards or remote access programs will support the special function keys such as **<PgDn>** or **<PgUp>**. If this proves to be the case, only the single character keys such as **J** or **K** can be used.

<Esc>

Entering the **<Esc>** key will exit the current screen, returning you to the previous menu, regardless of where you are in the report at the time.

J

The **J** key will move the cursor one line down in the spreadsheet. The **<Tab>**, **<Ctrl J>** and **<Down Arrow>** keys will also move the cursor down one line.

K

The **K** key will move the cursor one line up in the spreadsheet. The **<Up Arrow>** key will also move the cursor up one line.

H

A special editor key help screen will be displayed by entering either the **H** key, a question mark **?**, or the **<Ctrl Z>** keystroke. The following special keys and their functions are displayed and can be used when moving through the spreadsheet. To exit the help screen, enter **<Return>**.

Type **U** or **<Page Up>** to scroll up one screen of data.

Type **,** (comma), **<** (less than) or **<Home>** to scroll to the top.

The **,** (comma), **<** (less than) and **<Home>** keys will move the cursor to the first task field on the screen.

Type **D** or **<Page Down>** to scroll down one screen of data.

Type **.** (period), **>** (greater than) or **<End>** to scroll to the bottom.

The cursor will move to the last task field on the screen by pressing either the **.** (period), **>** (greater than) or **<End>** key.

Type **<Ctrl L>** to clear and redraw the screen.

The **<Ctrl L>** keystroke will redraw the screen, displaying the entered data for all data fields.

This keystroke is useful when viewing the MAP programs remotely since it clears any characters created by line noise.

Type **P** to print the report.

Selecting **P** allows the user to print to a system printer or the screen. Printing to the screen is useful when logged in remotely because it allows the user to capture the report and print to a printer attached to a Windows computer.

After entering **<P>** you will be prompted to select a printing option: use the default printer, select a system printer for the current print job, or print to screen. If more than one printer is configured for the MAP system, the default printer is the one selected at login, and the option to select a printer displays the available printers in spreadsheet selection mode (described later in this section). Entering **<Esc>** from the spreadsheet takes you out of the selection process and gives you the default printer.

When you select the Print to Screen option, the screen will prompt you to turn on the printer before the process begins, and to turn the printer off when the report is done.

PATTERN SEARCH KEYS

The next four keys all search for a pattern of characters that the user types in. Because the report you have selected may contain information for many devices, searching for a character pattern can greatly aid in finding the information you need. A pattern can be as simple as a single number or letter, or as complex as a utility hole number or pipe name. For example, if you want to view device information for a device that you know is located in MH 592, then the following pattern entry will display all devices in that utility hole:

```
{MAP Prompt}: MH592
```

Type **G** to group lines.

The Group Option will modify the screen display to show only the lines that include the user specified pattern. You enter a pattern when the following prompt is displayed:

```
Group Which Lines?
```

If you wish to redisplay the entire spreadsheet after viewing the grouped lines, simply select **G** (for group) again and press the **<Return>** key when the prompt is displayed.

Type **B** to search back.

This pattern search function will scroll back through the spreadsheet, stopping each time the user-supplied pattern is found. This pattern is entered when the following prompt is displayed:

```
Search Back For?
```

Type **F** to search ahead.

This pattern search function will scroll forward through the spreadsheet, stopping each time the user supplied pattern is found. This pattern is entered when the following prompt is displayed:

```
Search Forward For?
```

Type **N** to search again.

The **N** key will search for the next occurrence of a previously entered pattern. It will move the cursor either forward or backward through the spreadsheet, depending on which search function has been selected.

List/Range Syntax

Often, when a MAP program requests an office name, task number or device number, it is possible to make a multiple selection. Using the List/Range entry method, you can specify just about any combination of offices, tasks or devices that you may want to inspect.

Office Name Syntax

In order to specify a list of offices at a program prompt, enter all the desired offices and separate each one with a comma. For example, the following prompt indicates that you want to include office 1, 5, and 7 in the program function:

```
{MAP Prompt}: 1,5,7
```

Furthermore, a range of offices may be specified at a PressureMAP prompt by entering the lowest and highest office numbers in the range, separated by a slash (/). For example, if you want to specify that offices 5, 6, 7, and 8 be included in a PressureMAP function, then the following entry will carry out this command:

```
{MAP Prompt}: 5/8
```

To provide even more user control, both the list and the range method of requesting offices may be used in conjunction. To make use of both the list and the range methods of specifying offices, simply place the range of offices within the list being specified. The following example should help to clarify this point:

```
{MAP Prompt}: 6,8,13/15
```

This entry will successfully indicate offices 6, 8, 13, 14, and 15 for the function being carried out. (This is assuming, again, that there are at least 15 offices in your system.) If you are unsure of the available office names, type a question mark (?), followed by <Return>, for a complete list of the offices supported by your PressureMAP system.

Task Number Syntax

You may generate a report for several Task Numbers at once by entering the Task Numbers, separated by commas. This will generate a Detailed Task Report for the specified Task Numbers.

You can also specify a range of Task Numbers by typing the first (lowest) Task Number, a forward slash (/) and then the last Task Number. In this case, the whole range of Task Numbers will be listed in the Detailed Task Report. For example, the following entry indicates that you want to include Task Numbers 002002 through 002012 in the report:

```
Task Dispatching for which Task #? 2002/2012
```

Also, when requesting a Detailed Task Report, you may combine multiple requests with range requests. This feature offers a flexible means of listing Task Numbers for a Detailed Task

Report. Notice that you are not required to type the leading zeros when entering Task Numbers for the Detailed Task Report.

Selecting Devices by Device Number

To generate a Specific Device Report for a single device, enter the device number, followed by **<Return>**. If you wish to generate a report for more than one device, enter multiple device numbers separated by commas. Hit **<Return>** after the last device number entered. Enter a range of devices by typing the lowest device number, a forward slash (/) and the highest number. Ranges for device numbers that begin with a letter must be entered in alphabetical order—for example, DRYER/K001. Complete the entry by pressing **<Return>**.

In addition to the methods outlined above, you may combine multiple selections with range selections. This feature allows you to easily create a Specific Device Report for as many devices as you wish. For example, entering 001-01, 001-03, 001-04/001-15 will give you a report for devices 1, 3 and 4 through 15 on the first relay card in an office monitored by a 289 LSS. All is also a valid selection, and will list all devices in the office.

Note: For both **Sparton** and **Chatlos** monitoring systems, it is not necessary to enter the letter **T** or **P** when accessing information on pressure or flow transducers (unless you are using user-defined device types). However, CPAMS letter coding is required when requesting information on contact alarms or contactors. (More information on CPAMS letter coding can be found in TABLE 1-1 in this section.)

Selecting Devices by Access Number

If you are viewing an office that has User Defined Devices turned on, you may also select a monitoring device by entering the corresponding access number. Access numbers are entered with a leading sharp character (eg. #001A) to distinguish them from device numbers and may be abbreviated (except for addressable transducers). For example, #1 is interpreted as #P -001 for a Chatlos L2, #T-001 for Sparton, and #001A for E2A. For 289H LSS devices, the device/access number is a card/pair combination. For example, "#2-1" is interpreted as "002-01". However, to look at a device with access number 001-02, you could enter either "#1-2" or "#2" since if you only specify the pair, the program assumes card 1.

You may use the following three methods of entering device access numbers for the Specific Device Report:

- Enter a single device access number, followed by **<Return>**.
- If you wish to generate a Specific Device Report for more than one device, enter multiple access numbers separated by commas (eg. #1, #55). Hit **<Return>** after the last number entered.

Note: Unlike device numbers, you cannot separate access numbers with a forward slash (/).

- Access numbers may also be combined with device numbers in the same entry (e.g. #1, #2, A1P1/B1F3). Complete the entry by pressing the **<Return>** key.

It is important to note that the sharp (#) is already allowed as a valid character in user defined device numbers and continues to be allowed in these numbers. All user input entered with a leading sharp that **exactly** matches an existing device number (leading sharp included) are NOT

treated as access numbers, but reference the matching device number. For example, if an E2A office has a user defined device number #11, then entering #11 selects the device, NOT access number 011A.

Selecting Devices When Access Number Translation Is Enabled

In addition to the methods outlined above, when viewing an office that has the Access Number Translation feature enabled, you may also select a monitoring device by entering the translated access number with two leading sharp characters (eg. ##001-03). For more information on the Access Number Translation Capability, please refer to User Support in the PressureMAP section of this manual.

You may use the following three methods of entering translated device access numbers for the Specific Device Report:

- Enter a single device access number, followed by **<Return>**.
- If you wish to generate a Specific Device Report for more than one device, enter multiple access numbers separated by commas (eg. ##001-03, ##002-03). You can not separate access numbers with a forward slash (/). Hit **<Return>** after the last number entered.
- Access numbers may also be combined with device numbers in the same entry (eg. ##001-03, A1P1/B1F3). Complete the entry by pressing the **<Return>** key.

Spreadsheet Selection

When PressureMAP displays a prompt for an office name (e.g., **Which office?**), the user can enter a question mark (?) and **<Return>** to call up a listing of all offices in spreadsheet format. The selection line for each office contains the office label (number), the office name, the monitor type, the phone number (or IP address), and the modem site name (if applicable). If the office is disabled, the last field will be "DISABLED". Use the up and down keys to move to the desired office, and press **<Return>** to select it. Please note that you can only select one office at a time by this method.

The spreadsheet may be searched or sorted for viewing using the commands described previously in "Pattern Search Keys." For example, enter **G** at the **Select Office** prompt, then enter **289H LSS** for all offices of monitor type 289H LSS.

If a system has more than one printer configured, the user may select a printer for screen capture or Browser printing during the current session at login, via spreadsheet selection mode. The selection line for each printer contains the printer name, type (local or remote), and comment. Thereafter, whenever the user elects screen capture printing (**<Ctrl P>**) or Browser printing (**<P>**), a prompt will offer the option of selecting a printer. Please note that you can only select one printer at a time from the spreadsheet listing.

Beginning in Version 25, the spreadsheet selection method was expanded to include Alarm Centers, Report Centers and USAM Centers. The selection line for each center includes fields for identifying the center label (A, B, C, etc.), the center name, phone number information (or IP address, email designation, console or none), and the modem site (for Digi system).

Kilo and Mega Data Values

PressureMAP's data fields for information such as **Range, S-M/K, OAU**, and readings can take entries up to four characters. Because the decimal point is automatically added by the PressureMAP editor, the final digit of each entry will represent the number one place to the right of the decimal point. For data values that are in the hundreds, thousands or millions, you need to enter the numbers using a K (kilo) or M (mega) format, as shown in Table 2-2. If the value can be displayed in four digits, it will be, as shown in the first two examples in the table. If the value is too large to be displayed in four digits, the fractional portion of the value is rounded or truncated, as shown in the last two examples.

Value	Input	Display
500	5K or .5K	500.
1,000	10K or 1.0K	1000
10,000	100K	10K
100,000	1M or .1M	100K
1,000,000	10M or 1.0M	1M
2,700,000	27M or 2.7M	3M
99,900,000	999M	100M

Table 2-2: Kilo/Mega Data Value Entry

The LONG Dispatch Priorities Report Option

On any day, it is possible for PressureMAP to generate more than five dispatches for a single office. However, the Dispatch Priorities Report will generally list only the top five dispatches found in an office. Because of this, an office may have more dispatches than what is shown on the Dispatch Priorities Report. (It is important to note, however, that all 3 and 4 star dispatches will be listed on a Dispatch Priorities Report, even if they together total more than five dispatches.)

Dispatches which are not listed on the Dispatch Priorities Report will not be issued individual Task Numbers. Instead, all unlisted dispatches will be given a Task Number according to a preset format. Dispatches which are not included on the Dispatch Report will receive a Task Number composed of a Julian date (representing the day on which the dispatch occurred) and a four character alphanumeric value equal to "0000." For example, a dispatch that fails to make the Dispatch Report on the Julian date 261 will be given the Task Number:

2610000

By using the LONG Dispatch Report option, even dispatches with a four-digit task number of "0000" will be listed in the Dispatch Priorities Report. It is possible to get a listing of the dispatches that have not been cleared (that is, all dispatches that are not associated with another dispatch and that have dropped in priority until they were "pushed off" the Dispatch Report). When the long feature is used, all dispatches will be listed, including all "0000" dispatches and all dispatches that have dropped in priority level.

To take advantage of this feature, type the keyword **LONG** followed by a comma (,) before you make your office selections at the **Dispatch Priorities for which office?** prompt. The following example shows how to obtain a long dispatch listing for offices 1, 3, 4, 5 and 8:

```
Dispatch Priorities for which office?
long, 1,3/5,8
```

After requesting a long dispatch, enter **SHORT** to return to a standard format.

CableMAP Selector Worksheet

With computer terminals capable of displaying a spreadsheet, a partial opening number or the "?" character brings up a selector worksheet sorted by date/time, with the cursor at the first text match or the first (most recent) activity. You enter the number or question mark at the CableMAP Activity Log Menu prompt:

Opening number to list:

Type the desired opening number, followed by **<Return>**. You may enter a complete number, a partial opening number or a question mark. A complete opening number selects just that number. If your terminal is capable of displaying a selector worksheet, a partial number brings up a selector worksheet sorted by date/time, with the cursor at the first text match. A ? brings up the worksheet, with the cursor at the first (most recent) activity.

If your terminal is not spreadsheet capable, a partial entry will select all activities whose opening number contains a match for the user entry, and ? will display a help message.

After you have entered an opening number, CableMAP will issue the printer prompt, allowing you to be sure the printer is ready to receive the Activity Log Report. When ready, press **<Return>** and a report will be generated.

