Honeywell

Button Configuration Data Entry

SW11-570

Total Plant

Honeywell

Implementation
Engineering Operations - 1

Button Configuration Data Entry

SW11-570
Release 520
10/96

TotalPlant

Copyright, Trademarks, and Notices

Revision 04 – October 28, 1996

About This Publication

This publication explains how to enter button configuration data into the Universal Station screen displays.

Before reading this publication, you should be familiar with the following:

Button Configuration Forms, SW88-570
Button Configuration Form Instructions, SW12-570
Command Processor Operation, SW11-507

This publication supports **TotalPlant** Solution (TPS) System network releases 500 - 520. TPS is the evolution of TDC 3000^{X}.

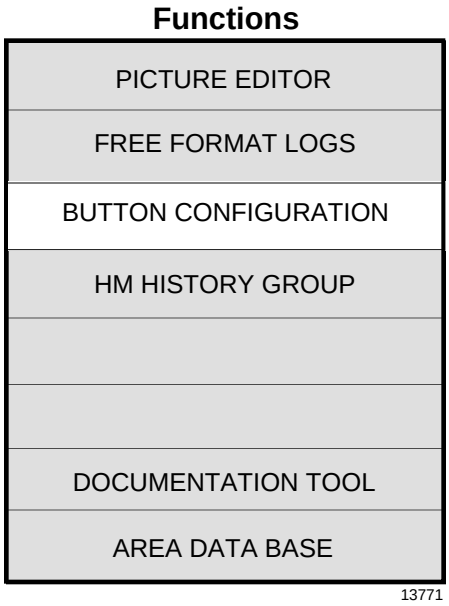
Change bars are used to indicate paragraphs, tables, or illustrations containing changes that have been made to this manual effective with release 520. Pages revised only to correct minor typographical errors contain no change bars.

Table of Contents

INTRODUCTION
Section 1

This publication provides instructions for configuring the user-function buttons on the Operator's Keyboard. Once the buttons are configured, you should label the blank keyboard insert to match the configuration of the buttons.

The button-configuration function covered by this publication is in the third column (labeled FUNCTIONS) of the Main Menu of the Universal Station's Engineering Personality.



1.1 WHO THIS PUBLICATION IS INTENDED FOR

The procedures in this publication are intended for process engineers, control system engineers, and application engineers, or anyone who does similar work. It is possible for a technician or clerk to enter data from filled-in configuration forms; therefore, the data-entry instructions are written so that minimal technical expertise is needed.

1.2 CONFIGURATION FORMS AND REFERENCES

While it is possible to configure buttons without configuration forms, you will almost certainly need filled-in forms to configure buttons for a new system or to reconfigure more than just a few buttons for an existing system. These are the forms and forms instructions that apply to this part of the configuration process:

Button Configuration Form Instructions—SW12-570

Button Configuration Forms—SW88-570 (contains forms SW88-570 and SW88-571)

The following publications give configuration-overview information. Some may be required to verify information on the filled-in Configuration Forms, and others can be used to determine what to enter in the data-entry displays:

Title	Publication No.	Binder
System Startup Guide - Cartridge Drive	SW11-504	Implementation/Startup & Reconfiguration - 1
Actors Manual	SW09-555	Implementation/Engineering Operations - 2
Picture Editor Reference Manual	SW09-550	Implementation/Engineering Operations - 2
System Control Functions	SW09-501	Implementation/Startup & Reconfiguration - 2
Command Processor Operation (Has PATHNAME Conventions)	SW11-507	Implementation/Startup & Reconfiguration - 1
Text Editor Operation	SW11-506	Implementation/Engineering Operations - 3
Control Language/Application Module Reference Manual	AM27-510	Implementation/Application Module - 3

1.3 BUTTON CONFIGURATION PREREQUISITES

The Button Configurator is a function of the Universal Personality (UP) and that personality must be running in a Universal Station, Universal Work Station, or Micro TDC Station (the Universal Personality contains both the engineer and operator functions).

The station should have either removable media, or a History Module (to store the data).

In general, Button Configuration (BC) is one of the last things done in the system-configuration process. Exactly when you fill in the Button Configuration Forms, and then use this publication to enter that information, depends on what actions (functions) you want to assign to the buttons and what Unit IDs you want to assign to the alarm-indicating light emitting diodes (LEDs). If you are entering the data directly from the Button Configuration Forms that you know are correctly filled in, you do not need to concern yourself with all the facets of how your system is "arranged;" however, if you are configuring or reconfiguring the buttons without filled-in Button Configuration Forms, you may have some careful thinking to do, as follows.

In the simplest scenario, the buttons could be configured simply to call-up certain standard displays or perhaps to do a cross-screen action (sending the display from one screen to another screen in your console). In this case, you need to know only which displays you want to see. Certain aspects of NETWORK CONFIGURATION and at least the point-naming portion of POINT BUILDING would need to be completed for this scenario. As another example, if you want to assign Unit IDs to the button Alarm-indicating LEDs, you need to know which units are assigned to the Console/Universal Station whose buttons are being configured.

At the other extreme, if you plan to make use of the extensive array of actors provided (described in the *Actors Manual*), you may need to know about particular accessible parameters in the system, or what CL Programs are implemented in which data points.

You should be working from a correctly filled-in Button Configuration Form. If you have not first filled in a form, you should do so, using the *Button Configuration Form Instructions*, (see Configuration Forms and References).

You may also need to format a floppy or cartridge disk to store configuration data. Use the CREATE command to do this; see the *Command Processor Operation* manual (see Configuration Forms and References).

1.4 WHAT YOU NEED TO KNOW BEFORE CONFIGURING THE USER FUNCTION BUTTONS

The following is a list of questions to help you get started in button configuration with minimal confusion and fewer false starts.

- What forms and reference material do I need? See 1.2.
- What does the whole button configuration process consist of? See Section 2—Overview.
- What does just the button-configuration data-entry process consist of? See Section 2—Button Configuration Data Entry Summary.
- What do I have to do before I can configure buttons? See 1.3.
- What's the minimum hardware required to enter button-configuration data? A Universal Station (or UWS or Micro TDC Station) with an Engineer's Keyboard and a Floppy or Cartridge Disk Drive, or History Module.
- What commands are used for Button Configuration? See 6.0.
- How do I build a Button Name File? See Section 7.0.
- How can actors be used to change Button Configuration? Refer to the Get Primmod and Store Primmod actors in subsection 3 of the Actors Manual. These are built into unique custom graphic displays as described in the *Picture Editor Data Entry* manual*.
- How are CL programs used to dynamically reconfigure buttons? Refer to the appropriate CL manual. Follow instructions in these manuals to write and compile CL programs*.

*CLprograms and actors can write to /read from the Lamp Specific Data section of a Button during operation. These are optional techniques available on Release 520 and later softwre.

OVERVIEW
Section 2

2.1 BUTTON CONFIGURATION SUMMARY

Button Configuration consists of the following major parts:

A. Collect button configuration data.

- Use the Button Configuration Form Instructions, to correctly fill in the Button Configuration Forms, SW88-570 and SW88-571 if needed.

B. Enter, save, and compile button configuration data.

- Load the Universal Personality into a Universal Station (US), Universal Station^{X}, Universal Work Station (UWS), or Micro TDC Station. Select the BUTTON CONFIGURATION function on the Engineering Main Menu.

- Enter the Button Configuration data directly from the forms into the appropriate screen forms (outlined under heading 2.2).

- If button configuration is not complete, but you want to save the partial data, use a WRITE command. This creates a Source file that can be read into the Universal Station for later editing/completion. You can WRITE (save) the source file to removable media or in the History Module. You could do this if you did not finish entering all the Button Configuration data in one session.

- Compile the completed Button Configuration File. This creates both an Object file that is used by the system to actually carry out the configured functions and a Source file that can be read into the Button Configurator for future changes/additions. The filename and Volume for the Button Configuration object file and/or Button Name file (if used) are specified in the Pathname Catalog when configuring the Area Database.

C. Label the Operator's Keyboard Insert (supplied with your system)

For many users, this completes button configuration. Those using a Button Name File, or CL programs/Actors that affect buttons should complete the following additional tasks:

D. Build a Button Name File if Form SW88-571 was filled in.

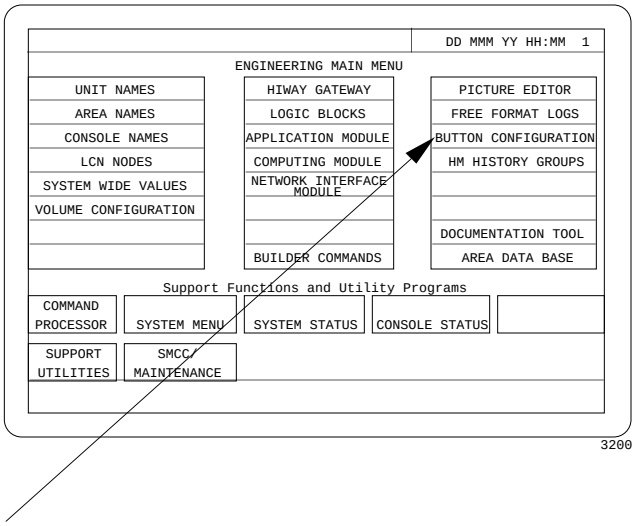
E. If the strategy includes dynamic Button LED reconfiguration, write the necessary CL programs (refer to the appropriate CL manuals for this task) and or build displays with the Get/Store Primmod Actors (refer to the Actors Manual).

The first part of this section summarizes the Button Configuration Data Entry process, using the actual displays to show the sequence of events. A brief description of the Button Configurator software is at the end of this section. This software provides the human interface to the Button Configuration process and provides the command functions that are individually described in Section 6.

2.2 BUTTON CONFIGURATION DATA-ENTRY

STEP 1. Selecting Button Configuration

A Button Configuration session requires a Universal Station, Universal Station^{X}, Micro TDC, or Universal Workstation running the Universal Personality. It always begins with this Engineering Main Menu on the screen. Press the MENU key (hold down CTL and press HELP) to call up the Engineering Main Menu.



Select the BUTTON CONFIGURATION target in the third column of the Engineering Main Menu by either touching the target (if you have a touchscreen), or moving the cursor to the target and pressing the SELECT key on the Engineering Keyboard.

Note that you may wish to use the SET NETWORK command to set the network on or off, depending upon what level of data-validation you desire. This depends upon how much of the system-configuration process has been completed. Refer to paragraph 6.2 for a description of the two possible uses of this command.

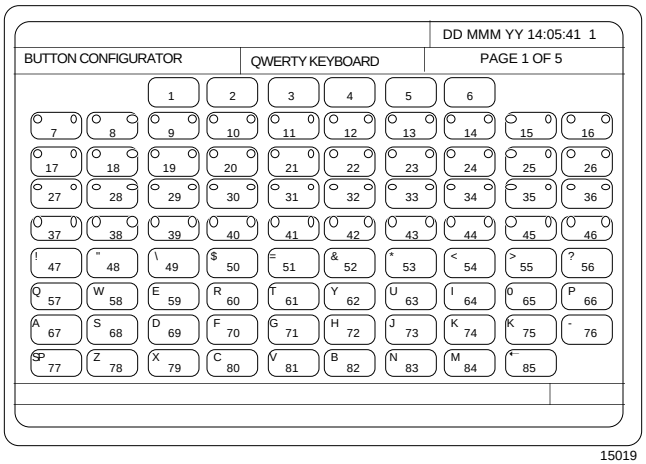
Universal Work Station or Micro TDC Station—If you are using a Universal Work Station (UWS) or a Micro TDC Station, keep the following differences in mind. The station must have an Engineering Keyboard connected. You may have to press the PF1 key to enable engineering entry functions on the Universal Work Station or Micro TDC Station.

STEP 2. Selecting a keyboard image

The first Button Configuration Menu appears on the screen. It presents a layout of the configurable buttons in the same format as on the corresponding Keyboard.

If this is not the correct image for the keyboard you are configuring, page forward. If you have a QWERTY or ABC keyboard, compare buttons 57 - 62 to see how they differ.

If this is the correct keyboard image, skip to Step 3.



15019

NOTE

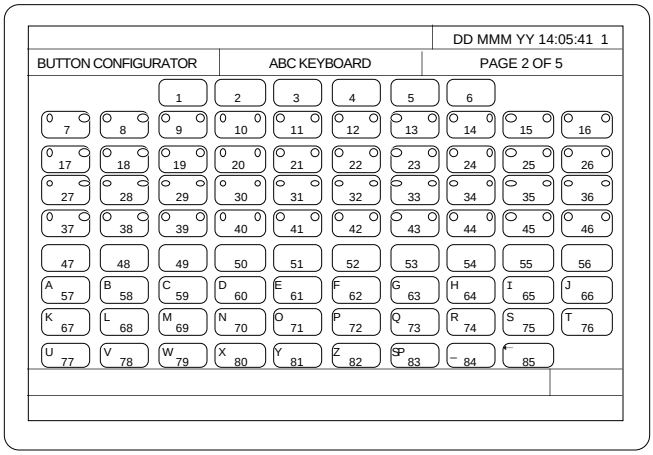
For those using R500 software, please note the following. Only the ABC keyboard image and the Engineer's keyboard image are displayed for button configuration purposes. Configurable button numbers are the same on either keyboard, if you have a QWERTY keyboard, use the ABC keyboard image for data entry.

STEP 2. Continued

Page 2 displays the ABC keyboard image.

If this is not the keyboard you wish to configure, page forward.

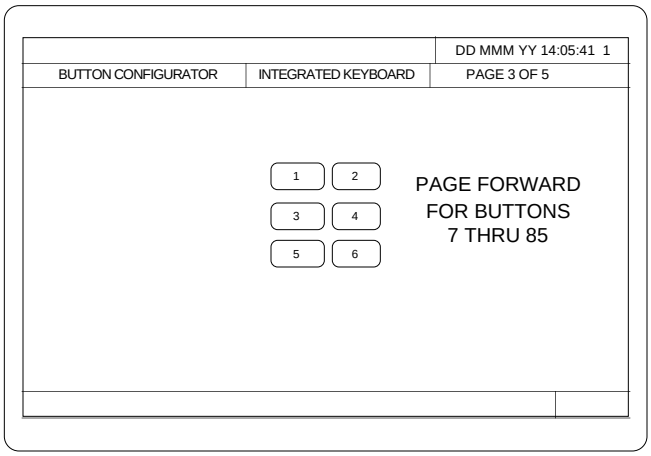
If this is the correct keyboard image, skip to Step 3.



15020

STEP 2. Continued

The next Button Configuration Menu appears on the screen. It presents a layout of the six configurable buttons on the Operator Control Panel section of the Integrated Keyboard.

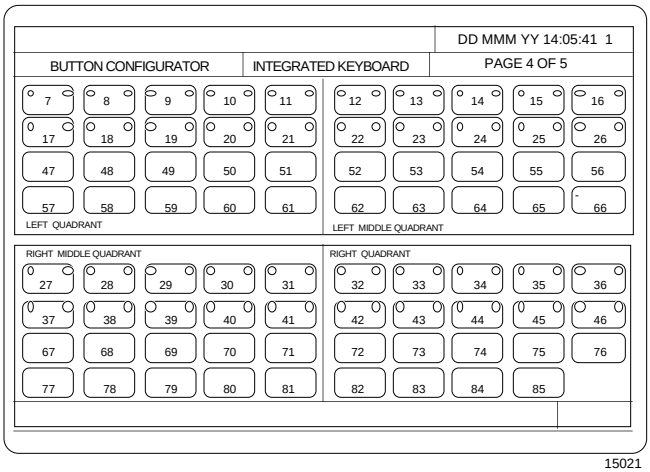


If this is not the right keyboard image, or you do not wish to configure these buttons, page forward.

If this is the correct keyboard image, note that the Integrated Keyboard contains additional configurable buttons as shown below and the configurable PF keys shown on the next page. Then, skip to Step 3.

Page forward to configure relegendable buttons 7 - 85 on the Integrated Keyboard.

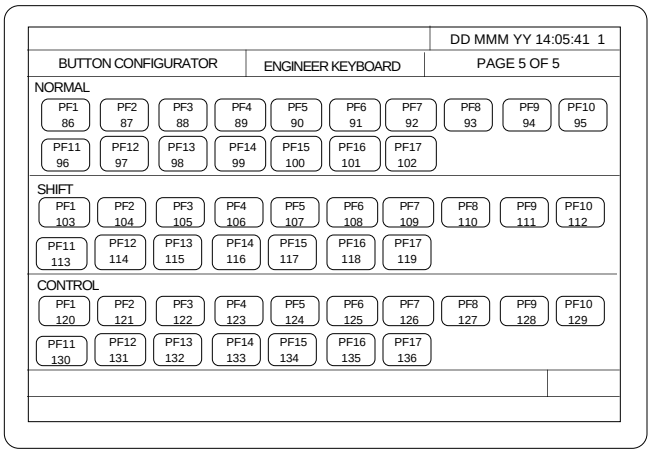
If this is not the right keyboard image, or if you wish to configure the PF keys on the Integrated Keyboard, page forward to the next display.



15021

STEP 2. Continued

The last Button Configuration Menu presents a layout of the PF keys used on the Universal Workstation, the Micro TDC keyboard, part of the Integrated keyboard and others.



15022

If this is the correct image, skip to Step 3.

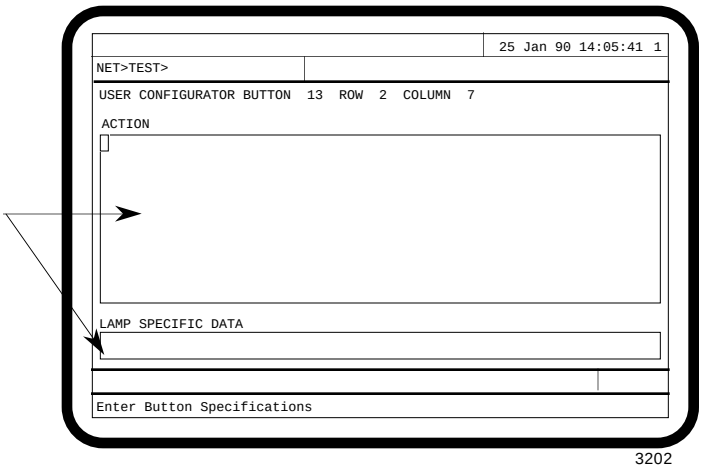
STEP 3. Selecting A Button

After selecting the proper keyboard image, You can either touch the desired button or use the BUTTON command (see Section 6). Buttons already configured are outlined in blue; unconfigured buttons are outlined in green.

STEP 4. Entering Data on the Configuration Data Entry Display

After a button(s) has been selected, the Configuration Data Entry Display appears on the screen.

This is where you enter the data from the Button Configuration Form for the selected button. Step 5 discusses how data is entered and Section 4 shows the correspondence between the fields on the Button Configuration Form and the fields on the display where you enter the data. Data must be entered EXACTLY as written on the form; pay particular attention to the syntax (commas, semicolons, parentheses, etc.).



3202

When you are finished entering data into **all** the appropriate fields on the display, press the ENTER key.

The Button Configurator checks the syntax of your entry. If a mistake is found, the incorrect characters turn red and an error message appears in the Error/Prompt Line of the screen.

When the syntax is found to be correct, the Configurator checks for completeness. If everything is complete and correct, the Button Configuration Menu appears on the screen with the newly configured button(s) outlined in blue.

There are two cases where a Parameter Entry Form (as described in Step 5 on the next page) is displayed for entering parameter data:

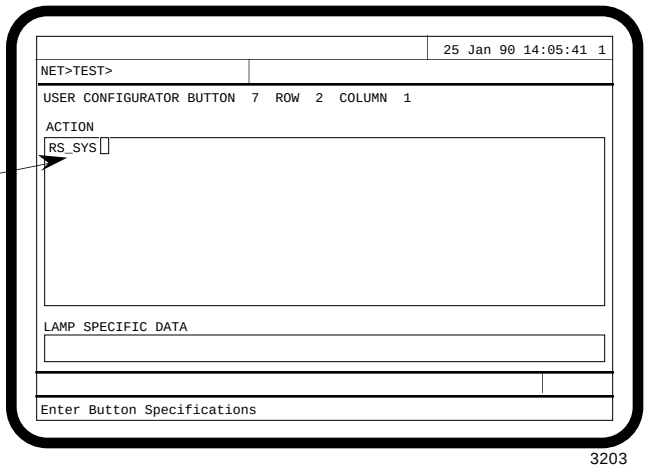
A. You did not enter the appropriate parameters for the action assigned.

B. You elected to key-in only the actor name (without parameters) and then press the ENTER key.

   (Note that the content of Parameter Entry Displays are dependent upon which actor you key in.)

STEP 5. Entering Data on the Parameter Entry Display

This Configuration Data Entry Display shows an example of keying in the actor RS_SYS for button 7 and then pressing the ENTER key. These actions cause the Parameter Entry Display unique to the RS_SYS actor to appear.



3203

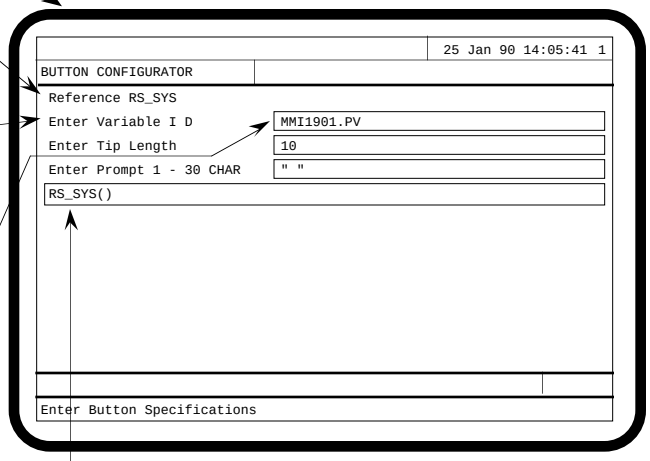
This display appears when any actor-parameters are needed.

This field repeats the name of the actor you entered into the Configuration Data Entry Display.

This text tells you what parameters to enter.

This is where you enter the required parameter(s). Each field is initialized with a default value, if a particular parameter type has a default value defined for it. If you want the default value for a particular parameter, skip past its entry area using the RIGHT TAB key, and go on to the next Parameter Entry Area. When you press ENTER after entering (or skipping past) all parameter values, the skipped default value is incorporated into the database.

This field shows the action sequence being worked on. Blinking white parentheses follow the referenced actor.



3204

After you enter all the required parameters, press the ENTER key. The Configurator checks for syntax correctness and completeness. If no errors are found, this button is correctly configured and the Button Configuration Menu returns with the configured button(s) outlined in blue. If an error is found, the Configurator again calls up the Configuration Data Entry Display. The incorrect parameter entry is in red and an error message appears in the Error/Prompt Line.

STEP 6. Disposing of the Button Configuration Data

All the data you have entered is stored in the Universal Station's memory until you dispose of it (store, or save the data). If you do not finish correctly configuring the button(s) in one session, you can WRITE the data into a temporary SOURCE file, which can then be READ into the Universal Station's memory for later additions/changes (see the READ/WRITE commands in Section 6).

If there are several different keyboards within the area or if there is an Integrated keyboard, you may need to configure up to three screens, depending on how many configurable buttons are needed. All configured screens must be stored together in the same file when you complete this task.

When the data is complete, you can compile the configuration data. Compiling creates a SOURCE file and an OBJECT file. The OBJECT file is used by the system to carry out the configured function. The pathname you use with the READ/WRITE/COMPILE commands specifies the storage medium (floppy disk, cartridge disk, or History Module). The preferred procedure is to compile to a user volume and then copy the object (.KO) file into the HM Area Database volume (&Dnn where nn = the area number).

This ends the Button Configuration Data-Entry process. Now all that remains is to properly label the Keyboard insert(s) to correspond with the functions the buttons perform. The inserts slide in from the top or sides depending on the keyboard.

While the Button Configuration Menu is still on the screen, you may want to obtain a record of the button configuration (see the PRINT command in Section 6).

When the the Operator Personality functions are active in the Universal Station, and the area database is installed, the button actions can be tested. In addition, when a particular unit, annunciator group, or Primmod point goes into alarm and that source was assigned to one of the button alarm indicating LEDs, check to see that the LED comes on.

2.3 THE BUTTON CONFIGURATOR

When you configure buttons, you are using the Button Configurator (see Figure 2.1). You need to know only enough about the configurator to understand how it leads you through the button-configuration data-entry process and to clarify some of the information that appears on the displays.

The Configurator presents a layout of the configurable buttons for each type of keyboard. As you proceed through the configuration process, the Configurator brings up the successive displays shown in Section 2. In addition to entering data from the Button Configuration Forms, there are various Configurator commands that can be used either to make configuration easier, or to process the data that has already been entered (see Section 6).

The Configurator also calls attention to any errors that you may make and prompts you for appropriate information throughout the configuration process.

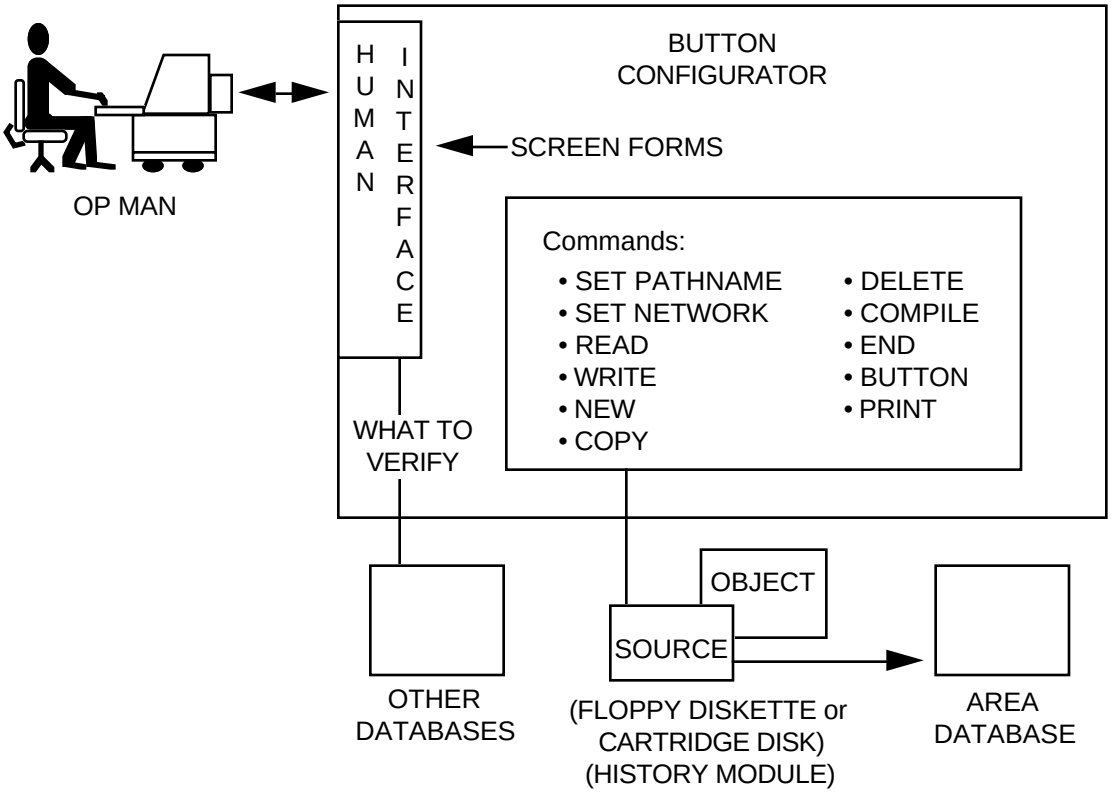


Figure 2-1 — Functional Diagram, Button Configurator 1421

DISPLAY FORMATS AND DATA ENTRY CONVENTIONS
Section 3

This section describes the general screen format and the specific formats of each Button Configurator Display: the Button Configuration Menu, the Configuration Data Entry Display, and the Parameter Entry Display. Further, it discusses how the Configurator commands relate to data entry.

3.1 GENERAL SCREEN FORMAT

Figure 3-1 shows the layout of the screen as used by the Button Configurator.

The top line contains the date, time, and station number. The next line is for the pathname of the source file you are working on. Initially, this line displays the words `Button Configurator`. After the first attempt to write, read, or compile, the current pathname is displayed. This can be established or changed at any time with the SET PATHNAME command (the default pathname is the current pathname). Refer to Section 6 for more details on the Set Pathname command.

The Menu/Edit region is the area used by the Configurator menu and display call-up and is where you enter the configuration data.

The Command Line is used for entering commands to the Configurator. The word "WAIT" appears on the right side of this line whenever the Button Configurator is busy executing a command.

The Error/Prompt Line is used by the Configurator to tell you when an error is made, and to prompt you for input.

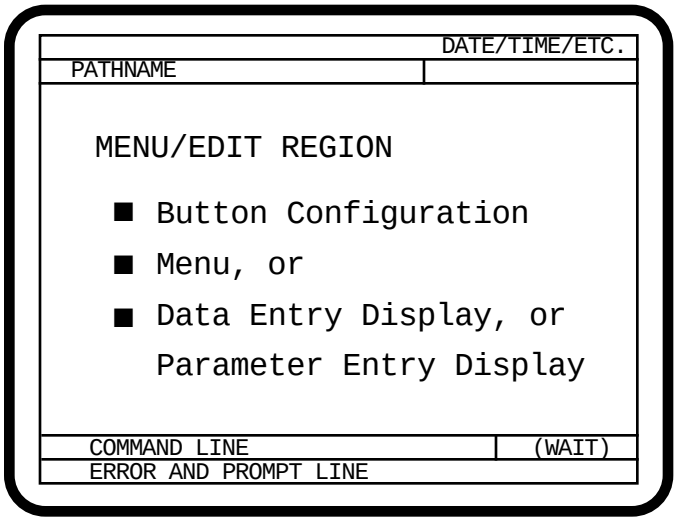


Figure 3-1 — General Screen Layout 3205

3.2 BUTTON CONFIGURATION MENU FORMAT

Figure 3-2 shows a typical Button Configuration Menu. This display is a graphic representation of the configurable buttons on the ABC Keyboard. Configured buttons are shown in blue, unconfigured buttons are shown in green. Some of the buttons have small circles that represent the alarm indicating LEDs on the physical buttons. These LEDs can be assigned a Unit ID for reporting alarms from a specified Unit, Annunciator Group, or Primmod point.

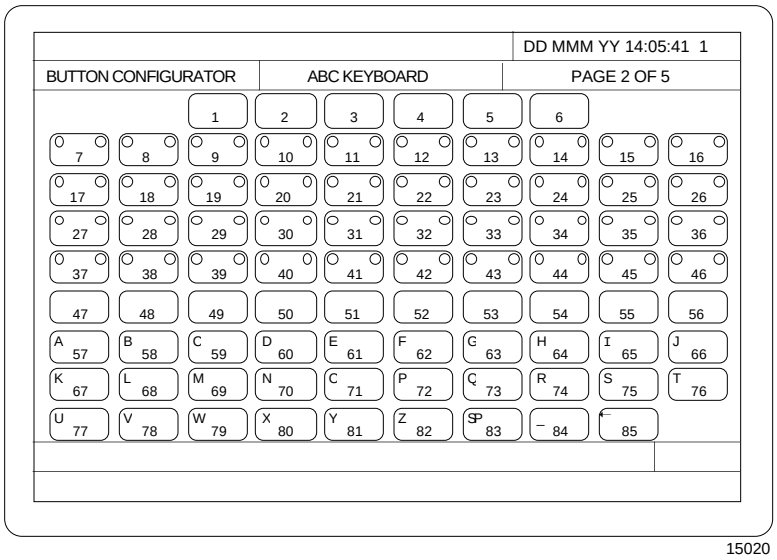


Figure 3-2 — Typical Button Configuration Menu

When a Button Configuration Menu is on the screen, you can use all of the Configurator commands described in Section 6. For systems with the touchscreen, each button representation is a touch target; when touched, that button is selected for configuration and the Configuration Data Entry Display appears on the screen. The touch-target method of selecting buttons for configuration can be used instead of using the BUTTON command described in Section 6.

Figure 3-3 shows button number 7 as the selected button.

3.3 CONFIGURATION DATA ENTRY DISPLAY FORMAT

Figure 3-3 shows the layout of the Configuration Data Entry Display.

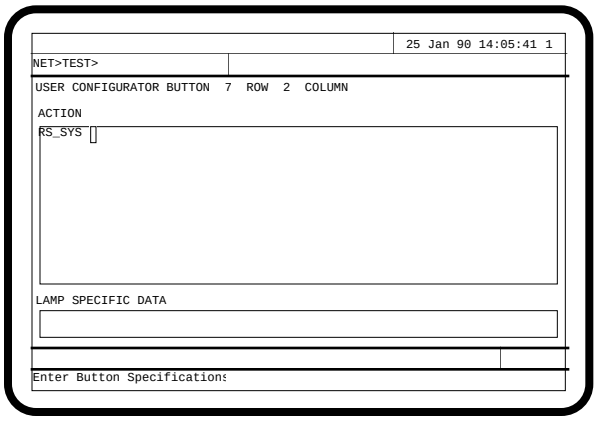


Figure 3-3 — Configuration Data Entry Display 3207

The format for the first line in the Edit region is

```
USER CONFIGURABLE BUTTON XXX   ROW XX   COLUMN XX
```

This line tells you which button number you are currently configuring and the location (row/column) of the button on the Button Configuration Menu.

```
ACTION Sequence Entry Region
```

is where you type in the data from the ACTION field on the Button Configuration Form. If the button was already configured, this region contains the action(s) previously entered. This region can be cleared by pressing the CLEAR ENT key on the Engineer's Keyboard with the cursor in the region.

```
LAMP SPECIFIC DATA Entry Region
```

is where you type in the Unit ID, Primod point name (or $MPROD string), or Annunciator Group from the Button Configuration Form. If the form entry does not contain a U/, P/, or A/ preceding an ID or name (for example, U/01), the Button Configurator assumes that a Unit ID is intended.

This region is displayed only if the button you are configuring has an associated alarm indicating LED (buttons 7 through 46). If the button's LED was already configured, this region contains the ID data previously entered. This region can be cleared by pressing the CLEAR ENT key on the Engineer's Keyboard, with the cursor in the region.

NOTE

If a Primmod or $MPROD name is used in the Lamp Specific Data region:
For R500 - R510 systems the Primmod Name must exist in the system.
For R520 and later systems, if the `AM Multiple Primmod Alarming` option in the Network Configuration File is set to—

- `Multiple Primmod Option Disabled`, the Primmod must exist.
- `Multiple Primmod Option Enabled Exclusive or Inclusive`, the Primmod Name does not have to exist in the system.

(Note that if you decide, as you are keying in data, that you don't want the keyed-in data to be entered into the system, press the CANCEL key. All entries are canceled and the Button Configuration Menu appears on the screen.)

When all of the data has been keyed into the display, press the ENTER key. The Configurator checks your entries for correct syntax and appropriateness of parameters. If parameters are missing or if the syntax is wrong (such as not enclosing parameters in parentheses), the portion of the entry that is in error is redrawn in red and an explanatory error message appears on the Error/Prompt Line. The Configurator displays a separate Parameter Entry Display for each actor that requires parameters. You must press the ENTER key again after keying in the data required by the Parameter Entry Display.

Once all data has been entered into the Parameter Entry Display and everything is complete and correct, the Button Configuration Menu appears on the screen with the newly configured button outlined in blue. If you need to enter lamp-specific data for this button, you can reselect it. The Configuration Data Entry Display reappears with the actor and its parameters configured in the action field. Move the cursor to the LAMP SPECIFIC DATA FIELD, key in the information, then press the ENTER key.

3.4 PARAMETER ENTRY DISPLAY FORMAT

Figure 3-4 shows the layout of a typical Parameter Entry Display. This type of display is repeated for each actor that requires parameters. The fields in the Menu/Edit region are as follows:

```
Reference RS_SYS(actor)
```

is at the top of the region. In this case the actor RS_SYS needs parameters specified for it. The word "Reference" always precedes any actor shown.

Enter Variable ID

etc.

describes what kind of parameter is needed and provides space for keying in parameter data. If the button was already configured, parameter data entry areas contain any previously entered parameters. This area and any other parameter-entry area can be cleared by pressing the CLEAR ENT key on the Engineer's Keyboard with the cursor in the given area.

ACTION SEQUENCE WINDOW

RS_SYS ()

contains a copy of the actor portion of the ACTION Sequence Entry Region from the Configuration Data Entry Display; the portion copied contains the actor that needs parameters. Blinking white parentheses, (), appear following the actor being referenced.

When all data has been entered or if you choose to use the default value(s) for the required parameter, press the ENTER key. The Configurator checks your entries for correct syntax and appropriateness of parameters. If there is an error, the Configuration Data Entry Display appears on the screen with the error in red. Also, an explanatory error message appears on the Error/Prompt Line.

If you press the CANCEL key before the ENTER key, any entries are canceled and the Configuration Data Entry Display appears on the screen.

If more than one actor specified on the Configuration Data Entry Display requires parameters, another Parameter Entry Display appears on the screen. This process continues until all actors have their required parameters.

Once all data has been keyed in and everything is complete and correct, the Button Configuration Menu appears on the screen with the newly configured button(s) outlined in blue.

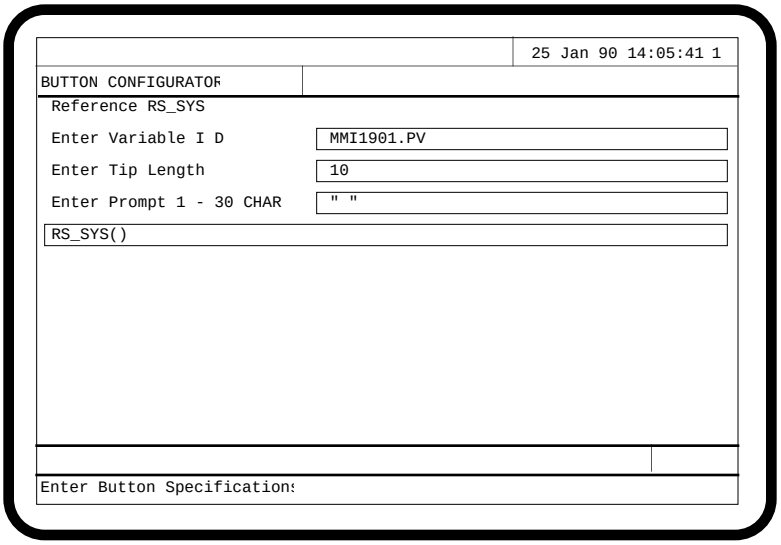
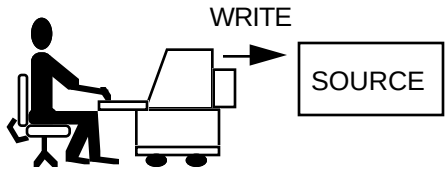


Figure 3-4 — Parameter Entry Display 3208

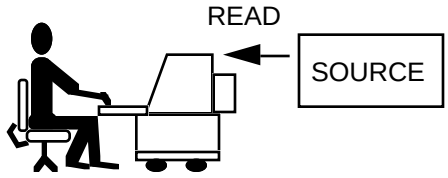
3.5 THE RELATION OF BUTTON CONFIGURATOR COMMANDS TO DATA ENTRY

There is no need to use any of the Button-Configurator Commands when you enter button-configuration data. When you have a display on the screen, the Configurator interacts with you as you enter the data. You can, however, use various commands in relation to data entry; some examples are as follows:

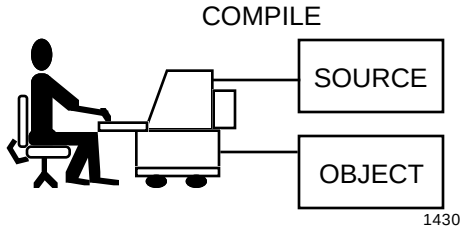
- To write (save) data you have entered in a Source file. The source file can be in a History Module or on a floppy or cartridge disk. For example, you might want to save partial data for some buttons so that you can work on them later.



- To read (retrieve) data you have entered from a Source file to continue to work on it.



- To compile data that is ready to be accessed by the Area Database Configuration Data-Entry process.



Other commands, such as COPY and DELETE help you to perform some data entry and changes more quickly. All commands are described in Section 6.

You can leave the Button Configurator by executing an END command or by pressing the MENU key on the Engineering Keyboard. You can temporarily switch to the Command Processor (e.g., to use a File Utility function) by pressing the ESC key. Pressing MENU returns the Button Configurator.

DATA SOURCES
Section 4

The principal source of button configuration data is filled-in configuration forms. Experienced users may find that they can do without filled-in configuration forms, especially if only a few buttons need to be configured or modified.

Heading 1.2 of this publication contains several references that you may need to consult either in filling in configuration forms or in making direct entries on the Configuration Data Entry and Parameter Entry displays. You may also need to consult various data bases (such as Point-Build and Network Configuration Files or filled-in configuration forms); these databases contain the proper parameter types and Unit IDs, respectively. This data is used to validate your entries when the SET NETWORK ON Command has been used.

The *Button Configuration Forms, Button Configuration Form Instructions,* and applicable reference publications are listed under Heading 1.2.

Figure 4-1 illustrates the relation of a button-configuration form to the Data Entry Displays, and shows that a single form has information that is entered on two or more displays. Depending on how the Button Configuration Forms were filled in, you could have each button's data on a separate form or multiple buttons on a single form. Watch the two left-most columns of the form for a change in button number, which signifies the start of a new button.

Figure 4-1 illustrates the last EXAMPLE from the *Button Configuration Form Instructions* publication. The arrows indicate where the data from the form goes on the appropriate Button Configuration Display.

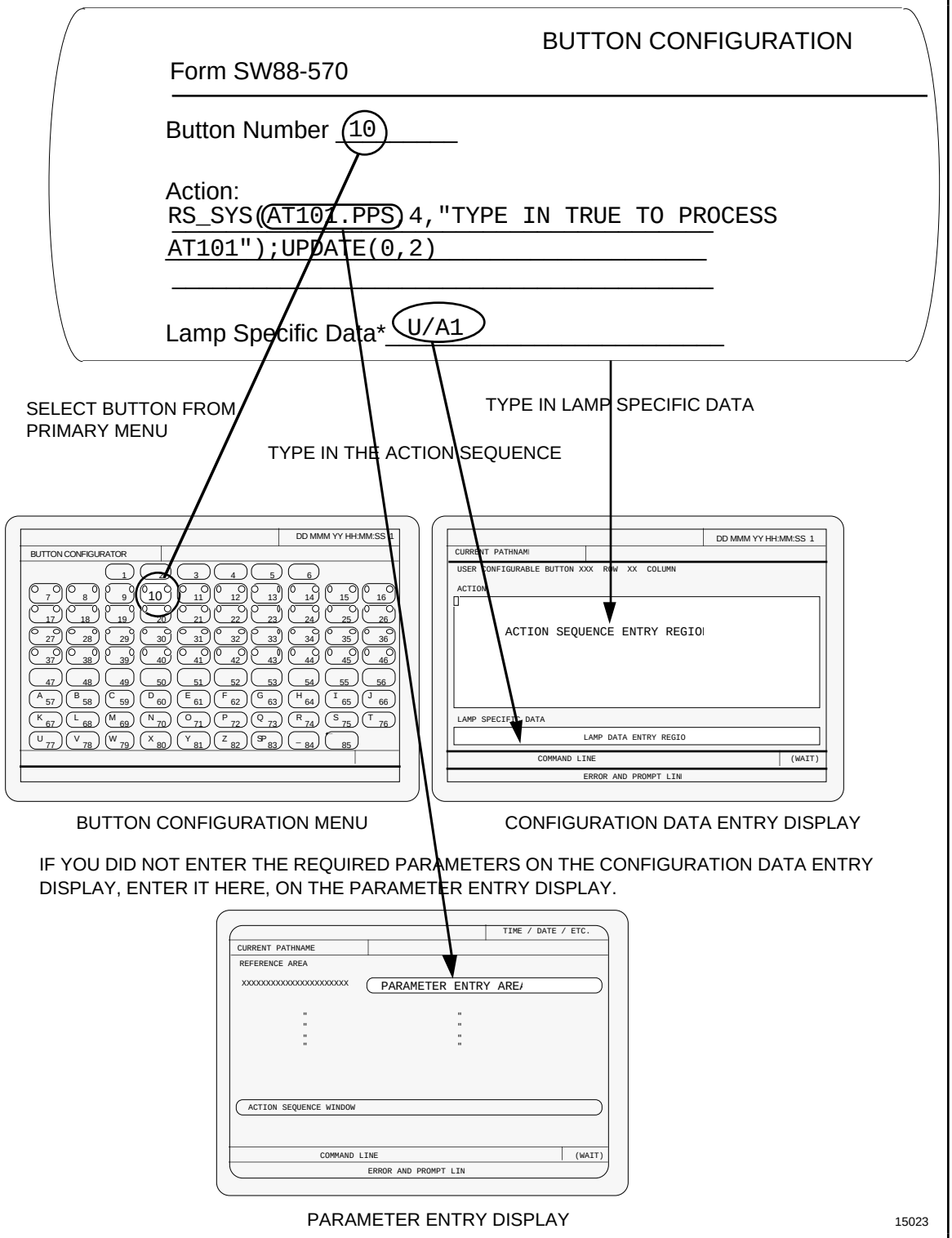


Figure 4-1 — Example Configuration Form and Corresponding Button Configuration Displays

ENGINEER'S KEYBOARD
Section 5

An Engineer's Keyboard is required for button configuration. Most of the keys function as would be expected. The only function keys that apply when using the Button Configurator are shown in Figure 5-1; these are described under heading 5.1. On some keyboards with PF keys, such as the Universal Work Station Engineer's Keyboard, when the Universal Personality is running, the PF1 key may need to be pressed to allow engineering configuration functions. If you want to configure PF keys to emulate Operator/Supervisor keys, refer to the Queue Key Actor in the *Actors Manual* (see References).

5.1 FUNCTION KEYS

The function keys that can be used with the Button Configurator are described as follows:

NOTE

To use a function on the side of a key, such as HOME or MENU, hold the Control (CTL) key down while pressing the key for the desired function (e.g., CTL/HELP = MENU).

- **HOME**—Moves the cursor to the upper-left corner of the screen.
- **TAB/CUR** (**arrow keys**)—These keys move the cursor. The following table explains how they work.

CTL Key Up	CTL Key Down
Pressing an arrow key moves the cursor one position in the indicated direction. Two cursor keys can be simultaneously pressed to cause diagonal movement. The cursor continues to move as long as the key or keys are held down.	Pressing an arrow key moves the cursor to the next port or target in the direction indicated. Within a port, if you hold CTL down, press LF, then press a left or right arrow key, the cursor moves to the end of the port.

- **CLR-ENT**—Clears all values in the region or area that the cursor is in. If the cursor isn't in a region or area, the station "beeps."

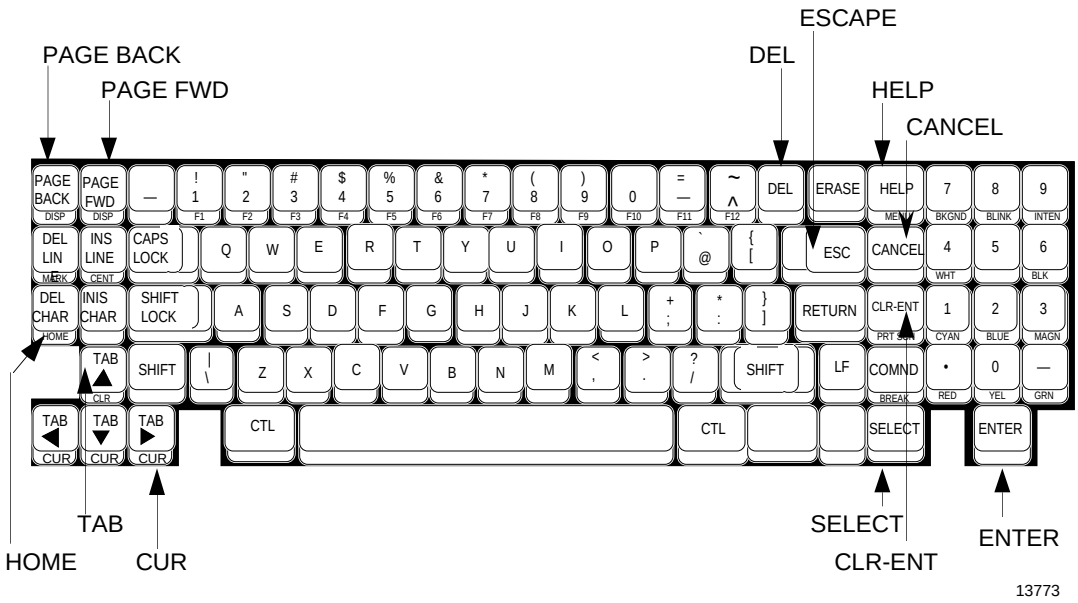


Figure 5-1 — Engineer's Keyboard, Summary of Button Configuration Function Keys

- **CANCEL**—(Note that his key must be pressed before the ENTER key is pressed, else data you wish canceled will be stored in memory.) With the Configuration Data Entry Display on the screen, this key cancels all entered data and returns the Button Configuration Menu to the screen. With the Parameter Entry Display on the screen, this key cancels all entered data and returns to the Configuration Data Entry Display.

- **ENTER** (with either the Configuration Data Entry or Parameter Entry display on the screen)—Used after all data is entered on a display. Requests that all the data typed into the display be processed and checked.

- **ENTER** (with the Button Configuration Menu on the screen)—You must type in one of the commands described in Section 6 before pressing the ENTER key.

- **DEL**—Used to skip the Configuration Data Entry and Parameter Entry Display set for a button that is part of a multiple-button sequence that you are currently configuring. For example, if you typed in BUTTONS 1..5 and pressed the ENTER key while in the Button Configuration Menu, the Configurator would bring up a display set for Button 1, then a set for Button 2, and so on. Now, assume you have just finished configuring Button 2, the Configurator would bring the Configuration Data Entry Display for Button 3 on the screen. But, let's also assume that you do not really want to configure Button 3 at this time (or alternately, that you started to enter some information, but decided that you did not want that data in that button after all), press the ERASE key and the Configurator will proceed to Button 4's Configuration Data Entry Display.

- **MENU** (with the Button Configuration Menu on the screen)—Requests the Universal Personality's Engineering Main Menu. If data or selections have been entered but not yet written or compiled, the following prompt appears on the Error/Prompt Line: Modified Picture Exists. End?

- **SELECT**—(With the Button Configuration Menu on the screen) Selects the button the cursor is in. This duplicates touching a target with the touch-screen option, or using the BUTTON command.

- **PAGE FWD**—When the Primary menu is displayed, pressing PAGE FWD calls up the secondary button configuration menu. The Secondary Menu is used to configure buttons 86-136. These are the programmable function keys on the Universal Work Station's Engineering Keyboard.

- **PAGE BACK**—When the Secondary Menu is displayed, this key calls up the primary button configuration menu.

- **ESCAPE**—This key allows you to switch to the Command Processor from the Button Configurator (for example, to use a utility function). When you are ready to return to the Button Configurator, press the MENU key.

- **INSERT LINE/DELETE LINE -** These keys are useful for deleting/copying and inserting blocks of text. You can delete/copy and insert text using the following method:

  1. Move the cursor to the beginning of the text you want to copy or delete.

  2. Hold down CTRL and press DEL LINE. This places an invisible marker at the cursor location to mark the start of the text block.

  3. Move the cursor to the end of the text you want to copy or delete.

  4. To delete only, press DEL LINE, and the text disappears.

  5. To copy, first delete the text as described in steps 1 through 4. The deleted text is held in temporary memory. Without moving the cursor, press INS LINE to make the text re-appear. The text is now ready to copy elsewhere.

  6. To insert, move the cursor to the position where you want to add the text, then press INS LINE. You can repeatedly insert the text block until you choose another text block to delete or copy.

BUTTON CONFIGURATOR COMMANDS
Section 6

Button Configurator commands are entered by typing the command (or the appropriate abbreviation of the command) on the Command Line of the screen, and pressing the ENTER key.

Multiple commands can be entered by separating them with a semicolon (;). If the Configurator detects an error while executing a command in a multiple-command sequence, the remaining commands are not executed.

For commands that use a pathname (SET, READ, WRITE, and COMPILE), refer to the *Command Processor Operation* publication (see References), for a description of pathname conventions.

The following is a description of each Configurator command.

6.1 SET PATHNAME COMMAND

The SET PATHNAME command is used to specify a default storage device (for example, Floppy or Cartridge Disk Drive, or History Module), a default volume/directory on that storage device, and a default filename for saving button-configuration data (source file). When the general screen format was discussed earlier, the top line had the default pathname in it; SET PATHNAME defines (SETs) that pathname. Once the default pathname is set, it is used with the READ/WRITE/COMPILE commands. Refer to those commands for details on using a pathname.

6.1.1 Using the SET PATHNAME Command

The pathname is specified by typing:

```
SET PATHNAME pathname
```

on the command line and pressing the ENTER key.

The character-string "pathname" must have a form as defined in the *Utilities Operation* publication.

This command can also be used by typing the following abbreviated forms,

```
S PATHNAME pathname      SET NAME pathname      S NAME pathname

SET PATH pathname        S PATH pathname        SET P pathname

S P pathname
```

and pressing the ENTER key.

If the CANCEL key is pressed after the pathname is entered, the pathname reverts to the previous pathname.

6.1.2 SET PATHNAME Examples

```
SET PATHNAME $F1>CONF>BC_US1
```

This command specifies Floppy or Cartridge Disk Drive 1 ($F1) as the Logical Device being addressed. CONF is the volume/directory name formatted on the diskette or disk in drive 1, and BC_US1 is the name of the file assigned to hold the Button Configuration data.

```
S P NET>BUTT>US1
```

The word NET in this command specifies the History Module as the storage device, BUTT is the volume/directory on which the Button Configuration Source file is to be stored, and US1 as the filename of the Button Configuration Source file.

6.2 SET NETWORK COMMAND

The SET NETWORK command is used to enable or disable parameter type-checking and Unit ID verification. If the Universal Station is connected to the Local Control Network (LCN) and the Point and Unit names have been configured into the database, it makes sense to enable type-checking (SET NETWORK ON). Type checking does the following:

- ensures that only existing Unit IDs are assigned to alarm indicating LEDs
- ensures that the proper type of parameter is specified when entering parameters for the data points and display database variables. When you specify a parameter with type-checking enabled, the Configurator checks other configuration files on the Local Control Network to ensure that the parameter is the proper type (for example, real, integer, Boolean).

If a Unit ID or parameter cannot be verified, an appropriate warning message is displayed on the Error/Prompt Line. Either correct the entry, or override the nonverification by clearing your entry, disabling type-checking (SET NETWORK OFF), and re-entering the data. Unit ID(s) and parameter types are verified again when you compile the source file.

SET NETWORK OFF disables Unit ID verification and parameter-type checking. In this case, only the syntax of your parameter or Unit ID entry is checked for correctness. Disabling type-checking is appropriate if the Universal Station is disconnected from the Network, if the required configuration files do not yet exist or are incomplete, or if you want to override a nonverification message as previously discussed. If you use SET NETWORK OFF, all parameter types have to be entered as the parameters are entered.

6.2.1 Using the SET NETWORK Command

To ENABLE type checking

type `SET NETWORK ON`

into the command line, then press the ENTER key.

To DISABLE type checking

type `SET NETWORK OFF`

into the command line, then press the ENTER key.

This command can also be used by typing the following abbreviated forms,

`S NETWORK ON/OFF` `SET NET ON/OFF` `S NET ON/OFF`

`SET N ON/OFF` `S N ON/OFF`

and pressing the ENTER key.

If the CANCEL key is pressed after the command is executed, the enable/disable status reverts to its previous state.

6.3 READ COMMAND

The READ command is used to read a previously built source file into the Universal Station memory so that the Button Configurator can be used to modify the action sequences and UNIT ID assignments.

6.3.1 Using the READ Command

The READ command uses the pathname (or partial pathname - see READ Command Examples) typed in, or accepts the default pathname specified by the SET PATHNAME command at an earlier time. To read a button-configuration source-file, using the default pathname that appears at the top of the screen

type `READ`

on the command line and press the ENTER key.

To read a file different from the default pathname at the top of the screen.

type `READ pathname`

on the command line and press the ENTER key.

In this form, any part of the pathname can differ from the default pathname, and a partial pathname can also be given (see examples). In this case, you must have a file that exists under that pathname; otherwise, an error message appears on the Error/Prompt Line.

Refer to the Heading 6.3.2 for more clarification.

This command can also be used by typing the following abbreviated forms,

`REA pathname` `RD pathname` `R pathname`

and pressing the ENTER key.

After the source file is read, the Button Configuration Menu is updated to show the configured/unconfigured buttons.

If the CANCEL key is pressed after the command is executed, the Button Configuration Menu reverts to its previous state.

6.3.2 READ Command Examples

IF the SET PATHNAME command was used as follows,

```
SET PATHNAME $F1>CONF>BC_US1
```

the following READ commands would be valid for calling up that file:

```
READ BC_US1

REA CONF>BC_US1

R $F1>CONF>BC_US1
```

This READ command

```
READ BC_US2
```

would call up the source file named BC_US2 on device drive 1, volume/directory CONF. Also, "BC_US2" would replace BC_US1 in the pathname field at the top of the screen.

6.4 WRITE COMMAND

The WRITE Command writes (stores, saves) the button-configuration data into a source file under the specified pathname on the specified device.

6.4.1 Using the WRITE Command

The WRITE command uses the pathname (or partial pathname—see WRITE Command Examples) typed in, or accepts the default pathname specified by the SET PATHNAME command at an earlier time. To write the button-configuration data into a source file, using the default pathname that appears at the top of the screen

type `WRITE`

on the command line and press the ENTER key.

In this case, because the file already exists, a warning message stating that the existing file will be overwritten is displayed on the Error/Prompt Line. If you press the ENTER key, the write proceeds. If you press the CANCEL key, the write does not execute. Note that to stop a WRITE command from executing, you must press the CANCEL key at this point; this differs from other commands, in which you can press the CANCEL key after the command has executed, to cancel the command's effects.

To write button data into a file different from that specified by the default pathname

```
type  WRITE pathname
```

on the command line and press the ENTER key.

In this form, any part of the pathname can differ from the default pathname, and a partial pathname (see examples) can also be given. By specifying a different pathname you are either creating a new file with the specified pathname, or the different pathname exists; in the latter case, a warning message stating that the existing file will be overwritten is displayed on the Error/Prompt Line. If you press the ENTER key, the write proceeds. If you press the CANCEL key, the write does not execute.

During "WRITE pathname" execution, the pathname at the top of the screen is replaced by the specified pathname, but after completion the pathname reverts back to the previous pathname.

This command can also be used by typing the following abbreviated form

```
W pathname
```

and pressing the ENTER key.

6.4.2 WRITE Command Examples

IF the SET PATHNAME command was used as follows,

```
SET PATHNAME $F1>CONF>BC_US1
```

then the following WRITE commands would be valid for writing that file:

```
WRITE BC_US1

WRI CONF>BC_US1

W $F1>CONF>BC_US1
```

This WRITE command

```
WRITE BC_US2
```

would write the source file named BC_US2 on the Floppy or Cartridge Disk in Drive 1 (provided it has the volume/directory name CONF). Also, while the WRITE is executing, "BC_US2" would replace BC_US1 in the pathname field at the top of the screen.

6.5 NEW COMMAND

The NEW Command clears (erases) the button-configuration data in the Universal Station's memory.

6.5.1 Using the NEW Command

This command is used by

typing `NEW` on the Command line and pressing the ENTER key.

The Button Configuration Menu is initialized to show no configured buttons (as you have "cleared" any existing configuration data in the Universal Station's memory). The default pathname is the only thing that does not change. This puts the Configurator into the same state as when it is first selected from the Engineer's Main Menu.

If the CANCEL key is pressed after the NEW command executes, all data (and the display of that data, such as the Button Configuration Menu showing the configured buttons) is restored.

This command can also be used by typing the following abbreviated form,

```
N
```

and pressing the ENTER key.

6.5.2 NEW Command Examples

```
NEW

N
```

6.6 COPY COMMAND

The COPY Command is used to copy button data from one button to another, or from one button to multiple buttons. This command can save keystrokes when many buttons have the same basic action-sequence assignments.

6.6.1 Using the COPY Command

The COPY Command is used by

typing in `COPY x y`

on the Command line and pressing the ENTER key.

The x represents a "from-button" number and the y represents a "to-button" number.

Additional From/To sequences can be entered by separating the sequences from each other with a comma "," — for example

```
COPY 1 5, 6 7, 8 9
```

This command copies data from button 1 to button 5, and copies data from button 6 to button 7, and copies data from button 8 to button 9.

COPY can be used to copy data from buttons with an alarm indicating LED to buttons without the LED; in this case, the UNIT ID entry is ignored. If the "from-button" has no LED, but the "to-button" does, the "to-button's" LAMP SPECIFIC DATA field is initialized without any data.

The "from-button" OR "to-button" numbers can be a range instead of a single number. Two periods ".." are used to specify a range of button numbers. The ranges can be ascending or descending, as shown in the following:

```
COPY 10..20 65,6..3 12
```

This command copies data from buttons 10 through 20 inclusive, to the range of buttons BEGINNING AT BUTTON NUMBER 65 and ascending (65 to 75). Then data from buttons 6 descending through button 3 inclusive, is copied to the range of buttons BEGINNING AT BUTTON 12 and ascending to button 15.

```
COPY 6 15..10
```

This command copies from button 6 to buttons BEGINNING AT BUTTON 15 and descending to button 10.

If the CANCEL key is pressed after the command executes, the copy results are negated and the Button Configuration Menu reverts to its previous state.

This command can also be used by typing the following abbreviated forms,

`COP 1 2` or `C 1 2` and pressing the ENTER key.

6.6.2 COPY Command Examples—see text under "Using the Copy Command" heading.

6.7 DELETE COMMAND

The DELETE Command is used to delete (erase) all data configured for a single button or for multiple buttons.

6.7.1 Using the DELETE Command

The DELETE Command is used by

typing in `DELETE n`

on the Command line and pressing the ENTER key.
The n represents a single button number.

Data configured into multiple buttons can be deleted by typing in DELETE followed by a series of button numbers separated by a comma. For example,

typing in `DELETE 1,2,3,4`

on the Command Line and pressing the ENTER key deletes all data configured for buttons 1, 2, 3, and 4. Data configured into a contiguous range of buttons can be deleted by typing in DELETE followed by the beginning button number and then the ending button number, separated by two periods. For example,

typing in `DELETE 1..5`

on the Command Line and pressing the ENTER key deletes all data configured in buttons 1, 2, 3, 4, and 5.

If the CANCEL key is pressed after the command executes, all deleted button data is restored and the Button Configuration Menu reverts to its previous state.

This command can also be used by typing the following abbreviated forms,

`DEL 1` or `D 1` and pressing the ENTER key.

6.7.2 DELETE Command Examples

```
DELETE 23
```

deletes the data configured into button number 23

```
DELETE 9,10..20,6..3
```

deletes data configured into button 9, then deletes data in buttons 10 ascending through button 20 inclusive, then deletes data in buttons 6 descending through button 3 inclusive.

6.8 COMPILE COMMAND

The COMPILE Command creates an object file (a file that the **TotalPlant**® Solution (TPS) System uses to perform the configured function) from the button-configuration data.

COMPILE is used after you have completed button-configuration data entry for all buttons you intend to use on-process. In addition, every time you make a change to a button-configuration source file, before ending the session with the END command, you must use COMPILE to ensure that your system is using the most current button data.

6.8.1 Using the COMPILE Command

The COMPILE command uses the pathname (or partial pathname—see COMPILE Command Examples) typed in, or accepts the default pathname specified by the SET PATHNAME command at an earlier time. To compile the button-configuration data using the default pathname that appears at the top of the screen

type `COMPILE`

on the command line and press the ENTER key.

The first thing the COMPILE command does is write a source file into the memory space specified by the pathname; this is to ensure that the object file is not more current than the source file. If the source file already exists, a warning message stating that the existing source file will be overwritten is displayed on the Error/Prompt Line. If you press the ENTER key, the write proceeds. If you press the CANCEL key, the write does not execute. Note that to stop a COMPILE command from executing, you must press the CANCEL key at this point; this differs from other commands, in which you can press the CANCEL key after the command has executed, to cancel the command's effects.

To compile button data using a pathname different from that specified by the default pathname

type `COMPILE pathname`

on the command line and press the ENTER key.

In this form, any part of the pathname can differ from the default pathname, and a partial pathname (see examples) can also be given. By specifying a different pathname you are are either creating a new source file with the specified pathname, or the source file with the different pathname exists. In the latter case, a warning message stating that the existing file will be overwritten is displayed on the Error/Prompt Line. If you press the ENTER key, the write proceeds. If you press the CANCEL key, the write does not execute.

During "COMPILE pathname" execution, the pathname at the top of the screen is replaced by the specified pathname. After completion, the pathname reverts back to the previous pathname.

With either method, if there are no errors in the source file, the Configurator then compiles the source file into the specified object file.

If there are Unit ID or parameter-type verification errors in the source file, they are detected while the Configurator is writing the data into the source file. It notifies you of any errors by displaying the button outline on the Button Configuration Menu in flashing white.

If any errors occur, the button(s) should then be selected (either by touch target, or by using the BUTTON Command). The Configuration Data Entry Display appears on the screen with the error drawn in red. A message is also displayed on the Error/Prompt Line to clarify the detected error(s).

This command can also be used by typing the following abbreviated form,

```
COMP
```

and pressing the ENTER key.

6.8.2 COMPILE Command Examples

```
COMPILE

COMP BC_US1
```

Assume that Buttons 3, 6, 7, 8, and 12 had compile errors. Then, by typing in

```
BUTTONS 3, 6..8, 12
```

on the command line and pressing the ENTER key, the Configurator brings up the configuration displays for each of those buttons in that sequence for correction.

6.9 BUTTON COMMAND

This command is used to select the button or buttons you want to configure. It is used while the Button Configuration Menu is on the screen. It is an alternate way of selecting a button; the other way is by touching the button's outline on the Button Configuration Menu (for those systems with the touch screen).

6.9.1 Using the BUTTON Command

To select a single button you want to configure

type `BUTTON n`
or `BUT n`
or `B n`

on the Command line of the Button Configuration Menu and press the ENTER key.

The n represents the desired button's number.

You can select more than one button at a time by typing in a series of button numbers separated by a comma. For example,

typing `BUTTONS 1,2,3,4`

on the Command Line and pressing the ENTER key selects buttons 1, 2, 3, and 4 for configuration. A set composed of the Configuration Data Entry Display and a Parameter Entry Display(s) appears, in series, for each button selected.

Another way to select multiple buttons for configuration is to specify a range of buttons as follows,

type `BUTTONS 1..4`

on the Command Line and press the ENTER key.

The range can be an ascending sequence (for example, 5 through 10, inclusive) or a descending sequence (for example, 15 through 8, inclusive). Note that two periods ".." must be used to separate the range-end numbers. If a number outside the possible button numbers (1..85) is typed in, the error message "PARAMETER OUT OF RANGE" appears on the Error/Prompt Line.

If the CANCEL key is pressed **BEFORE** the ENTER key, the selection(s) are canceled and the Button Configuration Menu is redrawn in its previous state.

6.9.2 BUTTON Command Examples

```
BUTTONS 1..5,7,15..10
```

selects buttons from 1 ascending through button 5 inclusive, button 7, buttons from 15 descending through button 10 inclusive.

6.10 END COMMAND

The END Command is used to exit the Button Configurator and return to the Engineer's Main Menu.

6.10.1 Using the END Command

The END Command is used by

typing in `END`

This command can also be invoked using the following abbreviated form,

`E`

and pressing the ENTER key.

If data was entered, but not written or compiled, a warning message appears: **Modified Picture Exists. End?** Press the ENTER key to leave the Button Configurator, or press the CANCEL key to cancel the End command.

6.10.2 END Command Examples

```
END
```

```
E
```

6.11 PRINT COMMAND

This command is used to obtain a printed copy of the button configuration information. It is used while the Button Configuration Menu is on the screen.

6.11.1 Using the PRINT Command

The command format is PRINT or PRT followed by a button number, followed by a printer identifier. Additional button numbers can be specified by using a comma as a delimiter. Then press the ENTER key to execute the command.

You can specify a range of buttons instead of a button number. The range can be ascending or descending. If none of the specified buttons is configured, a message stating this fact is printed.

6.11.2 PRINT Command Examples

```
PRINT 23 $P1
```

means print configuration information for button 23 on printer 1.

```
PRT 10..20 $P2
```

means print configuration information for buttons 10 through 20 on printer 2

```
PRINT 9 $P2, 6..3 $P1
```

means print button 9 configuration information on printer 2; then print configuration information for buttons 6 through 3 on printer 1.

An example of how printed configuration information might appear is

```
Button 23

  Action Sequence
  OVW_EDIT

  Lamp Action
  01
```

6.12 SELECT COMMAND

This command is used to search for a specified string of text characters. It is used while the Button Configuration Menu is on the screen. Each designated button's configuration data is searched for a specified text string. If the text string is found anywhere in the button configuration data, the button outline turns white and blinks. You can then examine that configuration information.

6.12.1 Using the SELECT Command

The command format is SELECT followed by the text string you want to search for (enclosed in quotation marks), followed by an optional range specification—

SELECT "string" [option]

Press the ENTER key to execute the command.

Text string—the text string can be up to 60 characters long. The search is not case sensitive. A search for **ABC**, will locate **aBC**, **aBc**, **abc,** etc.

Range option—you can specify a single button or a range of buttons. If a button or a range of buttons is not specified, the entire button file is searched.

6.12.2 SELECT Command Examples

```
SELECT "HG1001" 67
```

means search button 67's configuration information for the string: HG1001.

```
SELECT ".PV" 10..50
```

means search the configuration information for buttons 1 through 50 for the string: .PV

```
SELECT "DISP1"
```

means search all button configuration information for the string: DISP1.

BUTTON NAME FILE
Section 7

A button name file is used to rename any of the 40 configurable buttons with LED indicators. It has the following requirements:

- software release 520 or later is required.
- a Button Name file must have the same file name as the Button Configuration file.
- a Button Name file must have an extension of **.**KN.
- a Button Name file must be stored in the same volume as the Area Database file.

The standard button names are called Default Symbolic Button names and the new button definitions are called User Defined Symbolic names. These should be listed on the *Button Name File* form, SW88-571. Figure 7-1 shows an example of a completed form.

7.1 BUILDING THE NAME FILE

A Button Name File is built with the Text Editor. If you are unfamiliar with keyboard use for this application, refer to the Text Editor manual.

At the Universal Station, hold down the Control (CTL) key and press the HELP key. This calls up the Engineering Main Menu.

On the Engineering Main Menu, select `Command Processor`.

Type in an Edit command with the pathname as specified on the Button Name File form. For example: `ED Net>&D01>Buttons.KN` and then press the Enter key.

NOTE

You do not have to build the Button Name File in the &Dnn directory (where nn = the Area number), but if not you must later copy it to the path specified in the Area Data Base Pathname catalog.

The Text Editor opens with a note that the file was not found but will be created upon exit.

Type in data from the SW88-571 form. The requirements are—

- Any line that begins with at least one space is a comment line. In the example, the words `Area 01 - Process 4`.... make up a comment line and are indented. Also note that the words `These buttons are used`.... make up a comment line that is indented.
- A button name must be a 1-8 character ASCII string that obeys all the rules of a Total Plant Solution (TPS) point ID.

Honeywell TPS System **BUTTON NAME FILE** **Form SW88-571 10/96**

Pathname: Net>&D01>Buttons .KN **Date** _____

Default Symbolic Button Name	User Defined Symbolic Name	Comments
		Area 01 - Process 4 Button Name File
		These buttons are used when making TerrabenzideXCl
AN_CNF9	BUTTON_A	This button starts the vacuum pump
AN_CNF14	BUTTON_B	This button starts filling the slurry tank
		The following buttons are used to start a shutdown:
AN_CNF22	BUTTON_ X	This button shuts off pump 7
AN_CNF23	BUTTON_Y	This button starts exhaust fan 1
AN_CNF27	BUTTON_Z	This button cuts off heat to furnace 1

Notes: Button Names = Any ASCII string that could parse as a valid Point ID 1-8 characters.
Leading space = comment line.
Default Symbolic Button names are listed in the Actors Manual, Appendix C.

References:
Button Configuration Form Instructions, SW12-570 in the *Implementation/Engineering Operations - 2* binder.
Button Configuration Data Entry, SW11-570 in the *Implementation/Engineering Operations - 2* binder.

Figure 7-1 — Example of a Filled in Button Name File form

- Enter a standard Default Symbolic Button Name flush with the left margin. Leave one or more spaces between this column and the next.
- Enter a User Defined Symbolic Button Name in the next column. Leave one or more spaces between this column and the next.
- Enter any comments that follow the two button name columns. If the comment should wrap around to the next line, be sure to leave at least one leading space at the left edge to properly interpret the text as a comment.
- Continue in this way to key in all the data from Form *SW88-571*. Note that there is a limit of 1000 lines in a Button Name File.

Figure 7-2 illustrates how this text from the example form in Figure 7-1 might appear on the Universal Station screen.

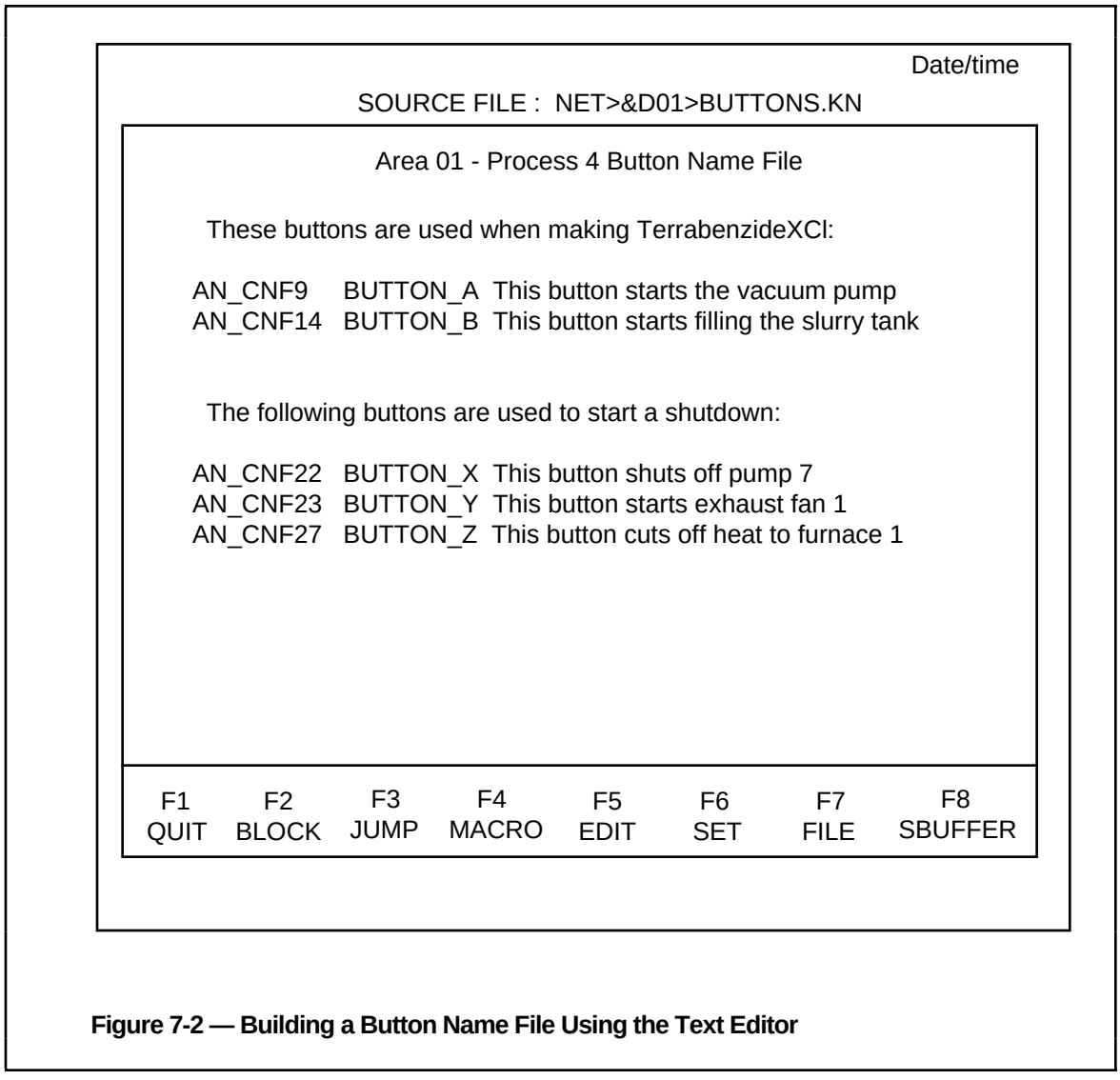


Figure 7-2 — Building a Button Name File Using the Text Editor

When all text has been entered, hold down the CTL key and press the 1 key. The menu at the bottom of the display is highlighted.

Hold down the CTL key and press the 2 key to update the file and exit the Text Editor. The Command Processor screen should return with a message such as:

```
&D01>Buttons.KN.    File Was Updated      nn Lines Written.
```

This completes building the Button Name File. Remember, it must be located in the same volume as specified in the Area Database Pathname Catalog.

Either the Button Configuration File name or the Button Name File name (without an extension) must be listed in the Area Pathname Catalog. This is part of the Area Database Configuration and is explained in the *Area Form Instructions* manual.

The Button Name File is read into the Universal Stations at startup or during an Area change. If the Button Name File is read successfully, the message `Button File OK ...Button name file was successfully copied to memory` appears on the US node's Status Detail display. If after successfully reading a Button Name file the US is changed to another Area where a Button Name file is not found, the message is changed to `Button File OK ...Button name file no longer exists!`

READER COMMENTS

Honeywell IAC's Automation College welcomes your comments and suggestions to improve future editions of this and other publications.

You can communicate your thoughts to us by fax or mail using this form, or by placing a toll-free telephone call. We would like to acknowledge your comments—please include your complete name, address, and telephone number.

BY FAX: 1-602-313-4842

BY MAIL: Honeywell Inc.
Industrial Automation and Control
Automation College
2820 W. Kelton Lane
Phoenix, AZ 85023-3028

BY TELEPHONE In the USA, use our toll-free number 1-800-822-7673 (available in the 48 contiguous states except Arizona; in Arizona dial 1-602-313-5558).

Title of Publication: **Button Configuration Data Entry** Issue Date: **10/96**

Publication Number: **SW11-570** Writer: **Andrea Simmons**

COMMENTS: _____

_____

_____

_____

_____

_____

_____

RECOMMENDATIONS:_____

_____

_____

_____

_____

_____

Name _____ Date _____

Title _____

Company _____

Address _____

City _____ State _____ ZIP _____

Telephone_____ FAX _____

Honeywell

Industrial Automation and Control
Honeywell Inc.
16404 North Black Canyon Highway
Phoenix, Arizona 85023-3033

Helping You Control Your World