

DATAPOINT

7600 Processor

Operating Guide/Product Specification

50992

April, 1986

WARNING

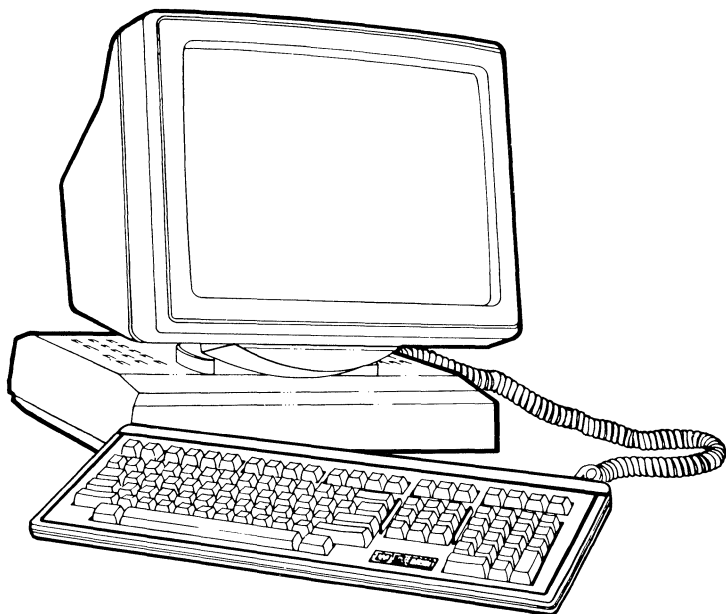
This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference.

Document No. 50992
Edition 01, 4/86

Copyright © 1986 by DATAPOINT Corporation. All rights reserved. The "D" logo, DATAPOINT, DATABUS, DATAFORM, DATAPOLL, DATASHARE, Lightlink, Integrated Electronic Office, DATACOUNTANT, ARC, Attached Resource Computer, and ARCNET are trademarks of DATAPOINT Corporation, registered in the U.S. Patent and Trademark Office. AIM, Associative Index Method, ARCGATE, ARCLINK, DASP, EASL, RMS, Resource Management System, PRO-VISTA, VISTA-VIEW, VISTA-GUIDE, VISTA-SCRIPT, VISTA-WORD, VISTA-MAIL, VISTA-SPELL, VISTA-PC, VISTA-STATION-82, VISTA-STATION-84, INX, Intelligent Network Executive, EMS, SHARE, STARPORT, VISTA-PRINT, VISTAFILE, and DATASORT are trademarks of DATAPOINT Corporation.

System features are subject to change without notice.

7600 PROCESSOR



Operating Guide/Product Specification

50992

April 1986

Preface

The DATAPOINT 7600 Processor is a general purpose, high-performance computer that operates in the DATAPOINT Attached Resource Computer (ARC) local area network.

This manual introduces you to the 7600 Processor and is intended for both experienced and novice computer users. This manual describes:

- 7600 features,
- how to operate the controls,
- how to adjust the monitor for comfortable viewing,
- the printer connector,
- the keyboard, and
- product specifications.

The *7600 Processor Technical Reference*, Document No. 50991, is available for those who require detailed information about the processor design, operation, and diagnostics.

CONTENTS

1. THE 7600 PROCESSOR

Overview	1-1
7600 Parts and Features	1-3
Connectors	1-6

2. OPERATOR CONTROLS

Overview	2-1
Adjusting the Display	2-3
Adjusting the Monitor Position	2-6

3. KEYBOARD

Overview	3-1
Typewriter Keyboard	3-7
Control Keys	3-8
Function Keys	3-9
Geometric Keys	3-10
Cursor Keypad	3-11
Numeric Keypad	3-12
Status Indicator	3-13

4. KEY CHORDING

Overview	4-1
Special Key Chord Functions.....	4-2
Operating System Log On	4-7
Off-Line Key Chords	4-11

CONTENTS

5. MAINTENANCE

Overview	5-1
Operating Precautions	5-3

6. SPECIFICATIONS

Overview	6-1
Serial Interface	6-6
Power and Environmental Specifications	6-8
Processor Features and Options	6-10

INDEX	I-1
-------------	-----

Chapter 1.

THE 7600 PROCESSOR

Overview

Introduction

The DATAPOINT 7600 Processor is a high-performance computer capable of providing low-cost applications processing for Attached Resource Computer (ARC) local area network systems.

Operating system

The processor supports both DATAPOINT proprietary software operating systems:

- Resource Management System (RMS) and
 - Disk Operating System (DOS).
-

Memory

The processor is equipped with 2 megabytes (MB) of random access memory (RAM). System RAM is provided with parity generation and checking. RAM capacity may be upgraded to 4 megabytes.

Additional information

The following publications provide additional information about the 7600 Processor and compatible hardware and software. This list is not comprehensive.

- *7600 Processor Technical Reference*
 - *RMS User's Guide*
 - *DOS User's Guide*
-

Contents

This chapter contains:

- a list of 7600 processor features,
 - a processor diagram,
 - a part/function table, and
 - a description of the processor connectors.
-

7600 Parts and Features

Introduction

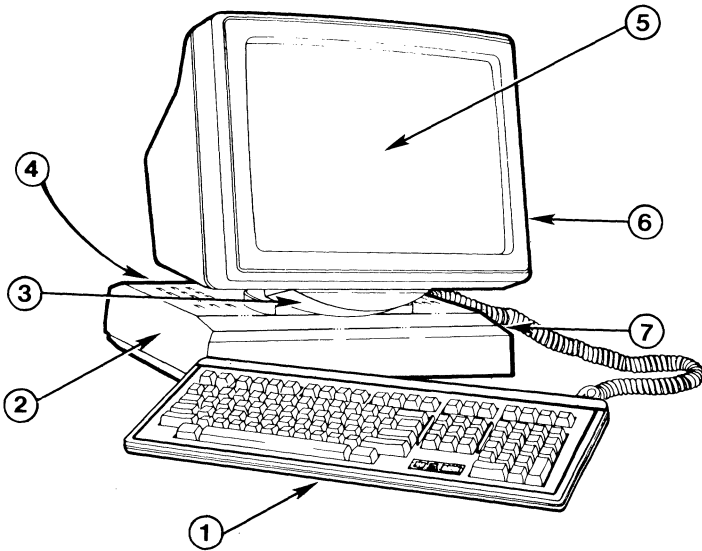
The 7600 Processor design incorporates human engineering concepts in an attractive enclosure that allows operator adjustments for comfort and efficiency.

Some features of the 7600 Processor are:

FEATURE	DESCRIPTION
Monitor position	Can be rotated and tilted: <ul style="list-style-type: none">• left, right,• forward, and backward
Keyboard	Low-profile: <ul style="list-style-type: none">• adjustable slope• attached by coiled cable
Monitor	14 inch with amber characters on a gray background
Screen brightness	Thumbwheel adjustment
Screen contrast	Thumbwheel adjustment

7600 Processor

The 7600 Processor enclosure combines a 14-inch adjustable monitor and a space-saving base. A coiled cable connects the low-profile keyboard to the processor base.



The numbers shown on the diagram correspond to the PART/KEY column of the Part/function table on the following page.

Part/function table

The following table describes the parts of the 7600 Processor.

PART/KEY	FUNCTION
Keyboard (1)	Provides data entry capabilities
Base (2)	Supports the monitor and contains interface and power connectors
Tilt/rotate assembly (3)	Allows adjustment of the monitor position
Back panel (4)	Contains: <ul style="list-style-type: none">● power cord receptacle● keyboard connector● printer connector● RIM ID switch● ARC connector (BNC)
Monitor assembly (5)	Displays data and limited graphics
Display controls (6)	Allow you to adjust screen contrast and brightness
Power switch (7)	Allows you to power the processor on or off

Connectors

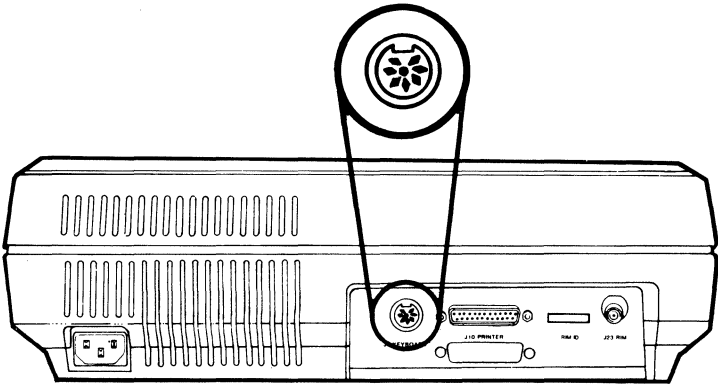
Introduction

The 7600 Processor has four external connectors:

- a keyboard connector,
 - an ARC coaxial cable connector,
 - a printer connector, and
 - a power cord connector.
-

Keyboard connector

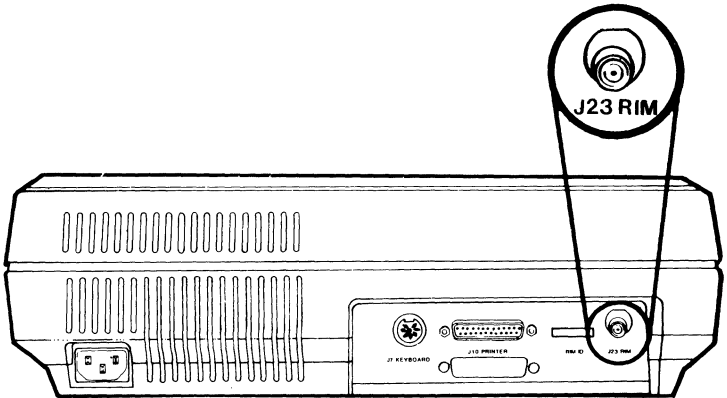
The keyboard connector attaches the coiled cable of the keyboard to the rear of the 7600 Processor base.



Connectors

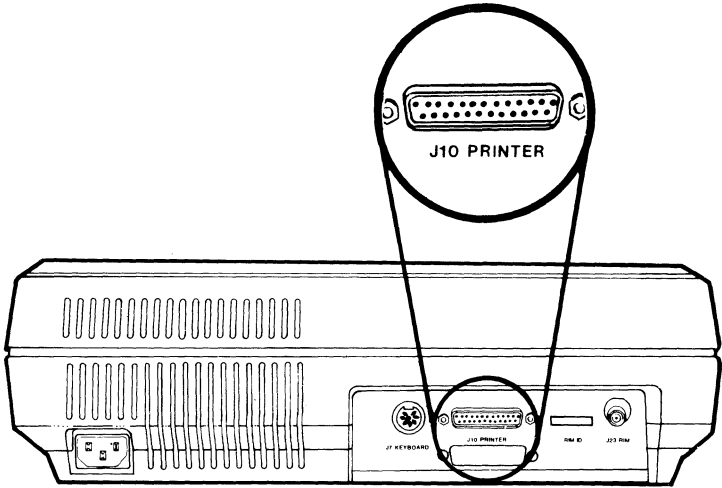
ARC connector

A coaxial cable connector (BNC), located on the back panel of the base, provides communications with the ARC local area network. This connector is labeled J23 RIM.



Serial printer connector

The serial interface connector located on the back panel of the base allows you to attach a local printer to your processor. This RS-232 interface is labeled J10 PRINTER.

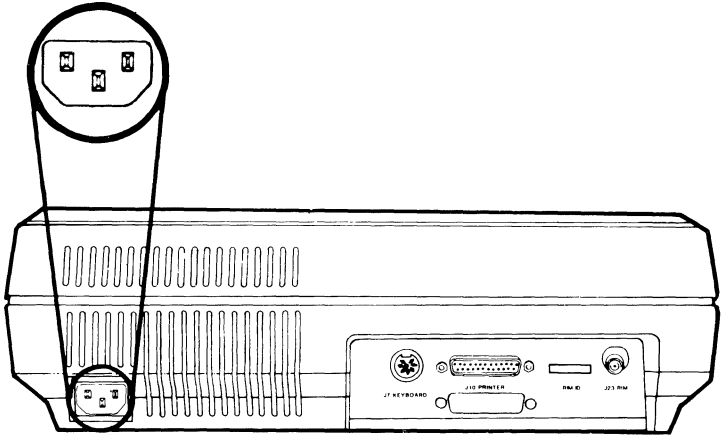


Power cord

The power cord for the 7600 Processor connects to a receptacle on the rear of the base. Insert the power cord securely in the power cord receptacle. If the power cord is not completely inserted, unwanted power interruptions can occur.

Warning:

Connect the power cord to a wall outlet with a three-wire protective ground. Use the power cord supplied with your processor only in North American sites using 125 Volt power supplies. For operation in other countries or for sites operating at 220 or 240 Volts, discard the supplied power cord and use a cord approved for your site. For more information about the power cord use, refer to the *7600 Processor Technical Reference*, Document No. 50991.



Chapter 2.

OPERATOR CONTROLS

Overview

Introduction

You can adjust your 7600 Processor through switches, thumbwheels, and physical manipulation. Switches also enable you to set your RIM ID and power on your processor. This chapter describes the following controls:

- RIM ID switch,
 - Power on/off,
 - Display adjustment, and
 - Monitor position adjustment.
-

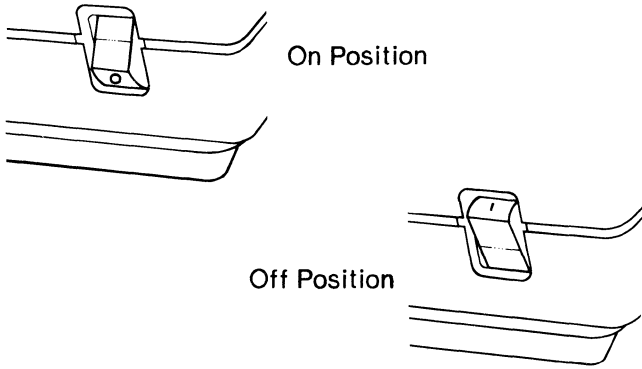
RIM ID switch

The RIM ID can be set through a dual in-line package (DIP) switch located in the processor back panel. The RIM ID enables the ARC system to uniquely identify the processor. Your computer systems administrator or qualified service personnel are responsible for setting the RIM ID switch. For information about setting this switch, refer to the *7600 Processor Technical Reference*, Document No. 50991.

Overview

Power switch

Power input is controlled by a switch on the right side of the base. When you power on the processor, a Liquid Crystal Display (LCD) on the front right-hand portion of the keyboard is activated.



Press the top of the switch labeled | to turn power on.

Press the bottom of the switch labeled o to turn power off.

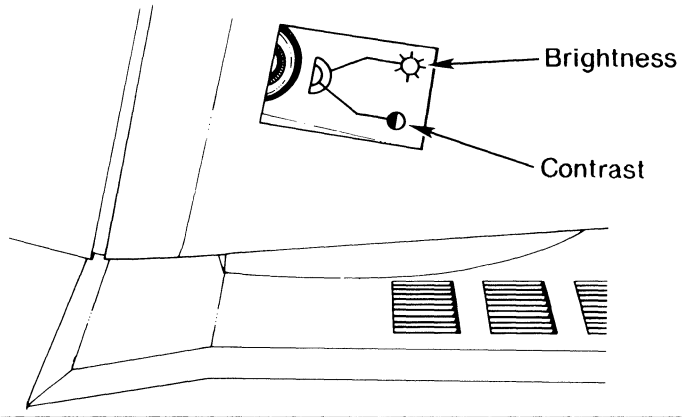
Adjusting the Display

Introduction

You can adjust the 7600 Processor screen for optimum viewing comfort. The following sections describe how to adjust screen brightness and contrast.

Display controls

The 7600 Processor features two display controls located on the right-hand side of the monitor enclosure. The brightness and contrast thumbwheels are identified by the universal symbols:



Adjusting the Display

To adjust the brightness level

The following table describes how to adjust the screen brightness level. The thumbwheels are located on the right side of the processor.

TO MAKE THE CHARACTERS...	TURN THE BRIGHTNESS THUMBWHEEL...
brighter,	clockwise until the display shows the desired brightness.
darker,	counterclockwise until the display shows the desired brightness.

To adjust the contrast level

Use the contrast thumbwheel to control the screen background brightness and change the contrast between characters and background.

TO MAKE THE BACKGROUND...	TURN THE CONTRAST THUMBWHEEL...
brighter,	clockwise until the display shows the desired contrast.
darker,	counterclockwise until the display shows the desired contrast.

Adjusting the Display

Screen dim feature

If the processor is idle for more than 15 minutes, an automatic display-save feature dims the screen. Press any keyboard key to restore the original brightness level.

Long-term operation at maximum brightness can cause screen damage and is not recommended.

Adjusting the Monitor Position

Introduction

The video monitor can be rotated (right or left) and tilted (forward or backward) for the most comfortable working position.

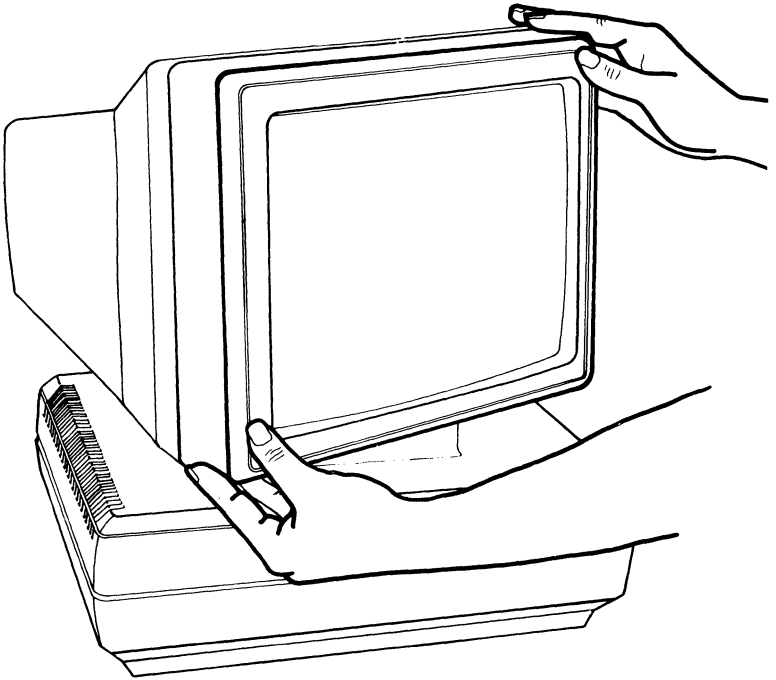
Caution:

The stops you feel when the monitor is at the maximum tilt or rotational positions are designed to protect internal assemblies. Do not force the monitor past the stops.

Adjusting the Monitor Position

How to rotate the monitor

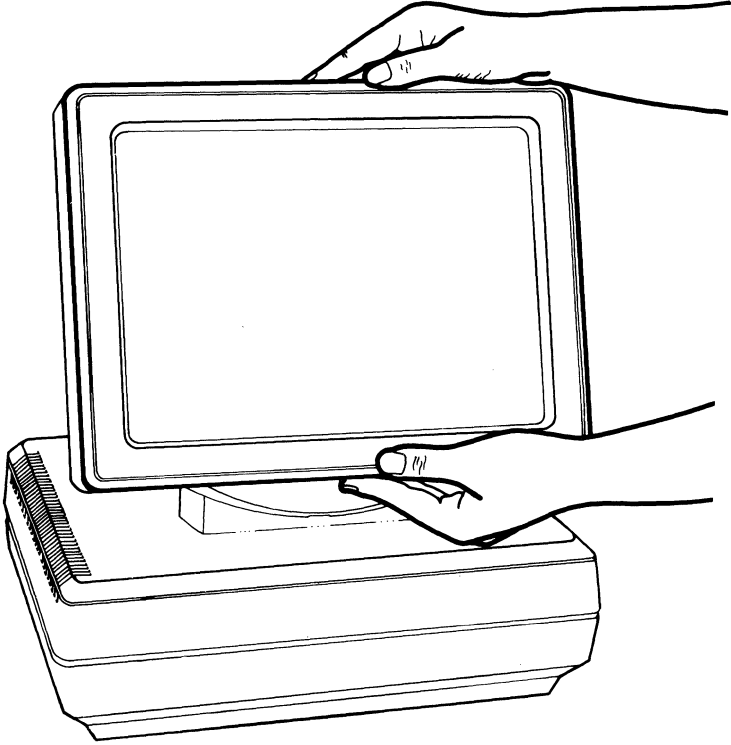
To rotate the monitor, grasp the monitor enclosure with both hands and turn it right or left to the desired position.



Adjusting the Monitor Position

How to tilt the monitor

To tilt the monitor, grasp the monitor enclosure with both hands and tilt it forward or backward to the desired position.



Chapter 3.

KEYBOARD

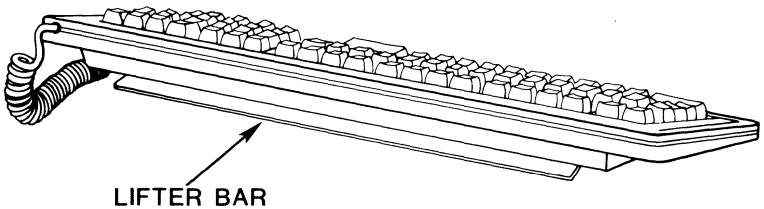
Overview

Introduction

The keyboard of the 7600 Processor is designed for operator efficiency, whether the job is data entry, word processing, or programming. This chapter describes the keyboard keys and their functions.

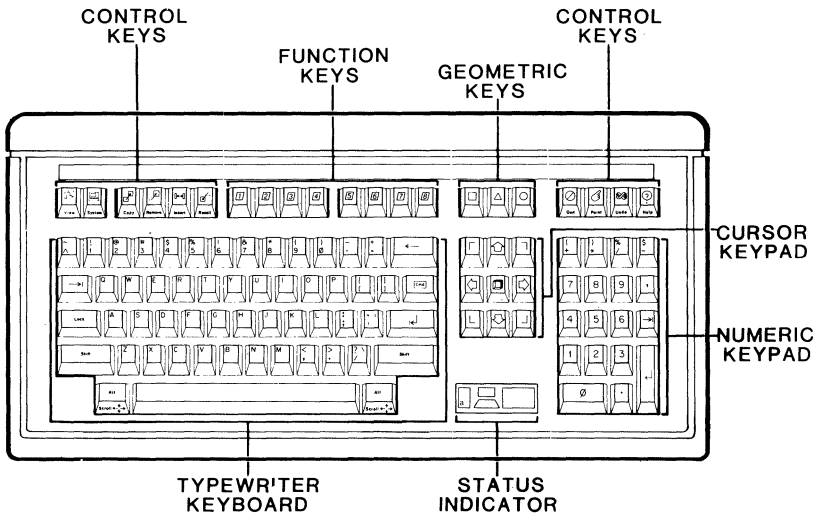
Features

- A coiled cable connects the keyboard to the processor, allowing the operator ease of keyboard movement.
- A lifter bar is located on the bottom of the keyboard. Position the bar toward the rear of the unit to lift the back of the keyboard and provide a comfortable slope for typing.



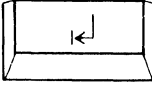
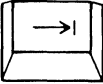
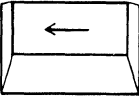
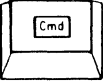
Overview

Keyboard



Graphic keycaps

The four graphic keycaps on the keyboard are illustrated and described in the following table.

KEY	DESCRIPTION
	<p>The Return key causes a line feed and a carriage return in most applications. It is similar in function to a typewriter return key.</p>
	<p>The Tab key's function varies with application software. Consult your software user's guide for operating instructions.</p>
	<p>The Backspace key moves the cursor back one character space, removing the character backspaced over. This operation may be modified by software. Consult your software user's guide for specific instructions and information on shifted operation.</p>
	<p>The Command key is under software control. In some software applications this key is used to switch to a command line so that a command can be activated without accidentally altering text on a screen.</p>

Shift Lock keys

Depending on the type of software application you are using, the 7600 Processor shift Lock key can function in the same manner as a typewriter shift lock. In this case, the key locks only the alphanumeric typewriter keys to upper case. The number pad and geometric keys remain unshifted.

- To lock the keyboard to upper case, press the shift Lock key one time. The keyboard status indicator displays an upper-case A when the shift Lock key is down.
 - To return the keyboard to the unshifted mode, press the shift Lock key a second time.
-

Alternate keys

The right and left Alt keys allow additional functions under software control. Read *Key Chording* and the appropriate software user's guide for specific instructions.

Operating features

The keyboard generates a unique keycode for each shifted and unshifted key except the Space Bar and decimal point. Keycodes are generated in the order the keys are pressed, and software interprets the keycode transmitted. Read the appropriate software user's guide for keystroke results.

Keyboard features include:

- alternate keycaps,
 - n-key rollover, and
 - repeat key action.
-

Changing keycaps

Each key allows a different keycap configuration. For financial applications you can replace the Shift, Backspace, Return, and numeric keypad zero keys.

Rollover capability

The n-key ($n \leq 7$) rollover capability allows keys to be pressed sequentially or simultaneously. A valid code is generated when a key is pressed, whether or not previously pressed keys are released. This feature allows key chording for extended functions under software control. Refer to *Key Chording*.

Repeat action

The keyboard provides an automatic key repeat function. All alphanumeric keys, the Backspace key, and the Space Bar generate repeating codes.

Key groups

The keyboard keys described in this chapter are divided into the following six categories:

- typewriter keyboard,
- control keys,
- function keys,
- geometric keys,
- cursor keypad, and
- numeric keypad.

Information about the LCD status indicator is also provided.

Typewriter Keyboard

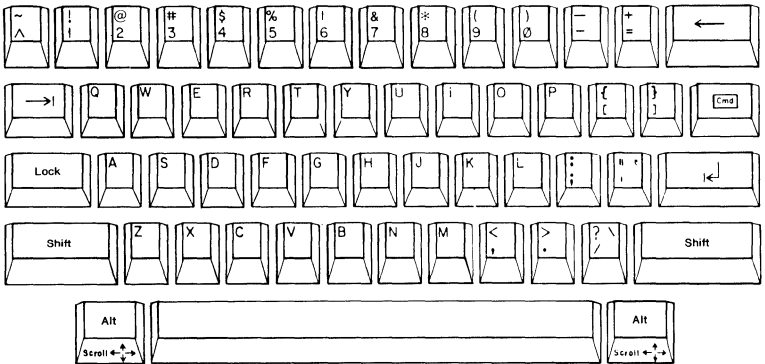
Purpose

The central group of keys allows you to perform alphanumeric data entry functions. Depending on the software application, the keys perform many functions similar to a typewriter--if you press the Q key, the screen displays (instead of prints) a q. The non-alphanumeric keys, such as the Alt key, have functions quite different from a standard typewriter. Refer to your software user's guides for information about what keys to use for a specific task.

Typewriter keyboard

Note:

Keycaps for international use are available as special kits. Contact your DATAPOINT Sales Representative for ordering information.

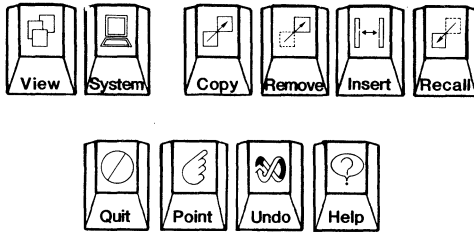


Control Keys

Introduction

You control system operations through two groups of keys. One group is located in the top row of keys. The other group consists of the central set of keys that resemble a typewriter keyboard. The keys may be used in many different ways, depending on software requirements. For detailed information, refer to Chapter 4, *KEY CHORDING* and the appropriate software user's guide.

Control keys



Function Keys

Introduction

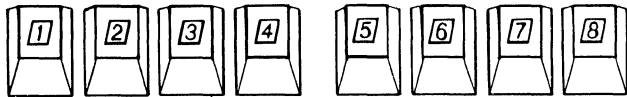
Eight function keys are located on the top row of the keyboard.

Purpose

Depending upon the software application, the keys perform different operations. In some applications, individual keys are programmable, enabling an operator to perform multiple operations with one keystroke.

Refer to the appropriate software user's guide for function key operations.

Function keys

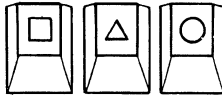


Geometric Keys

Purpose

Three geometric keys--a square, a triangle, and a circle--are located on the top row of keys, above the cursor keypad. Their functions depend on the application software being used. Refer to the appropriate software user's guide for specific key functions.

Geometric keys



Cursor Keypad

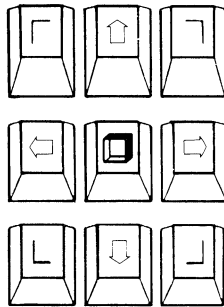
Purpose

A set of cursor control keys is located to the right of the typewriter keyboard. Pressing the System key and the Cursor keypad center key (Window) reverses the display:

- from amber on gray to gray on amber or
- from gray on amber to amber on gray.

This function, inverse video, is partially controlled by the Window key. Software determines the function of the other cursor keypad keys. Refer to the appropriate software user's guide for key use.

Cursor keypad

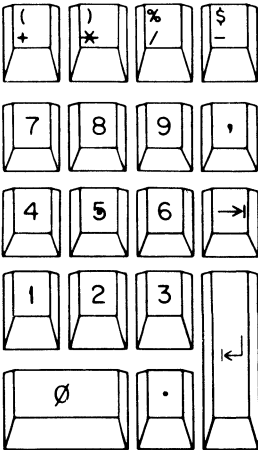


Numeric Keypad

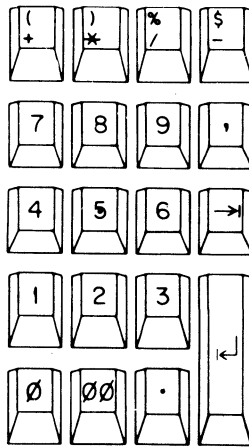
Purpose

A calculator-type keypad is located on the far right of the keyboard. Number, tab, and arithmetic symbol keys allow rapid calculations and data entry.

Numeric keypad



Standard



Financial (optional)

Status Indicator

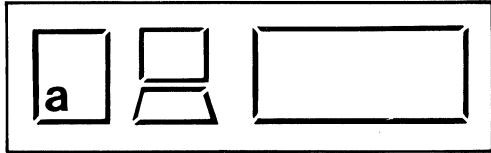
Introduction

A Liquid Crystal Display (LCD) located below the cursor control keys indicates system status through symbols. The LCD can indicate:

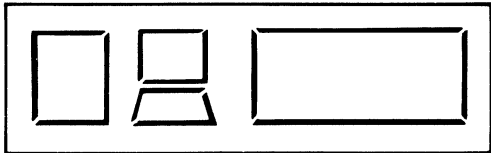
- keyboard power on,
- shift Lock off operation, and
- shift Lock on operation.

The following diagrams illustrate some of the LCD status symbols. All symbol interpretation can vary with the software being used. Refer to the appropriate software user's guide for more information.

Keyboard power on

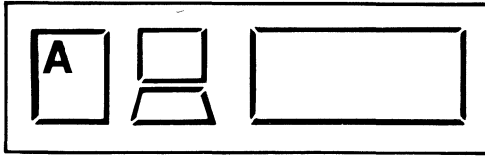


Shift Lock off

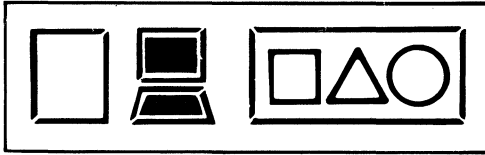


Status Indicator

Shift Lock on



Geometric symbols



Chapter 4.

KEY CHORDING

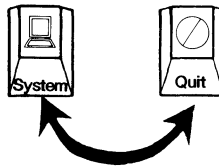
Overview

Introduction

The 7600 Processor performs predefined functions when special key code sequences are activated. These key code sequences are called **key chords**. To perform a key chord, you must press a sequence of keys in one of two ways:

- press and hold the first and each successive key until the last key is pressed and release all keys, or
- press and hold the first key as you press and release succeeding keys then release the first key.

Example:



This chapter describes key chords and how they are used to perform special functions. Additional instructions show how to sign on to two DATAPOINT operating systems: RMS and DOS.

Special Key Chord Functions


Overview


Several predefined functions are available to the operator. These key chords are discussed in this section.

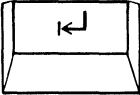
- ARC boot
 - Debug mode
 - Off-line mode
 - Inverse video
 - Screen copy
 - Keyboard lockout
 - Restart lockout
-

ARC boot key chord

To boot the processor and initialize the system, press and hold:

System, 

then Quit, 

then Return, 

and release all three keys.

Debug mode key chord

To enable use of the Debug mode, press and hold:

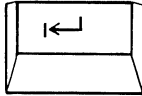
System,



then **Help,**



then **Return,**



and release all three keys.

Note:

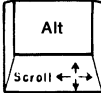
For more information about the Debug mode and how to use it, read the *7600 Processor Technical Reference*, Document No. 50991.

Special Key Chord Functions

Off-line mode key chord

To place the processor off-line for option configuration or terminal diagnostic testing, press and hold:

System, 

then Alt (right side), 


and release both keys.


Note:

For more information about off-line activities, read the *7600 Processor Technical Reference*, Document No. 50991.

Inverse video

To change the display from amber on gray to gray on amber or from gray on amber back to amber on gray, press and hold:


System, 


then Window 

and release both keys.

Screen copy key chord

To print a copy of the current screen display on the local printer, press and hold:


System, 

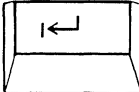
then **Copy,** 

and release both keys.

Keyboard lockout key chord

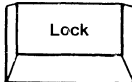
To lock the keyboard with a password to prohibit its use by others, press and hold:

System, 

then **Return,** 

and release both keys.

Enter a password of up to four alphanumeric or punctuation characters and press and release:


Lock. 

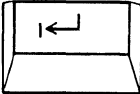
Note:

To unlock the keyboard, repeat the key chord, including the proper password.

Restart lockout key chord


To disable the keyboard's ability to perform boot, Debug, and off-line operations, press and hold:

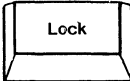
System, 

then **Return,** 

and release both keys.

Enter a password of up to four alphanumeric or punctuation characters and press and hold:

Quit, 

then **Lock,** 





and release both keys.

To unlock the Restart Lockout, repeat the key chord, including the proper password.

Operating System Log On

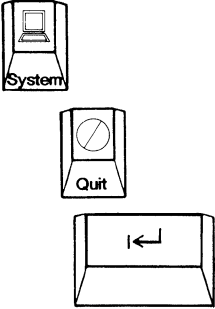
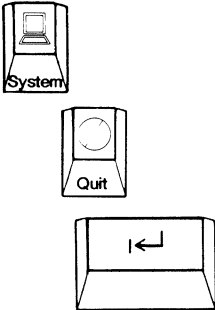
How to log on to an RMS ARC system

The following table shows how to log on to or off of RMS in an ARC network system.

KEY CHORD	PROCEDURE
<p data-bbox="285 459 490 483">Log on to RMS</p>  <p data-bbox="333 621 391 638">System</p>  <p data-bbox="410 719 469 735">Undo</p>	<p data-bbox="569 459 923 548">Press and hold: System then Undo, and release both keys.</p> <p data-bbox="569 589 678 613"><u>Result:</u></p> <p data-bbox="569 654 939 768">The system displays the log-on prompt. Enter your user ID and a password if required.</p>
<p data-bbox="285 841 458 865">Log off RMS</p>  <p data-bbox="333 995 391 1011">System</p>  <p data-bbox="410 1092 469 1109">Undo</p>	<p data-bbox="569 841 934 930">Press and hold: System, then Undo, and release both keys.</p>



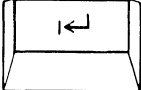


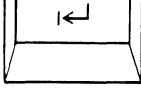
How to log on to a DOS ARC system

The following table describes how to log on to DOS in an ARC network system.

KEY CHORD	PROCEDURE
<p data-bbox="210 418 416 475">Log on to DOS (boots ARC)</p> 	<p data-bbox="492 418 859 540">Press and hold: System, then Quit, then Return, and release all three keys.</p> <p data-bbox="492 578 604 605"><u>Result:</u></p> <p data-bbox="492 643 894 797">The system displays the log-on prompt. Enter your log-on name, password if required, and your DOS Volume ID.</p>
<p data-bbox="210 865 334 889">Boot DOS</p> 	<p data-bbox="492 865 859 987">Press and hold: System, then Quit, then Return, and release all three keys.</p> <p data-bbox="492 1024 604 1052"><u>Result:</u></p> <p data-bbox="492 1089 878 1243">The DOS operating system boots and prompts you for your log-on name, password, and DOS Volume ID.</p>



How to log on to a RMS/DOS ARC system

The following table describes how to log on to DOS in an ARC environment that runs both RMS and DOS.

KEY CHORD	PROCEDURE
<p data-bbox="306 431 516 456">Log on to DOS</p>  <p data-bbox="295 570 359 589">System</p>  <p data-bbox="359 672 423 691">Quit</p>  <p data-bbox="440 732 472 751">↵</p>	<p data-bbox="561 431 998 516">Press and hold: System, then Quit, then Return, and release all three keys.</p> <p data-bbox="561 558 671 583"><u>Result:</u></p> <p data-bbox="561 621 992 769">The screen displays the prompt: WELCOME TO RMS ARC. Enter a *, your log-on name, password if required, and the DOS Volume ID.</p>
<p data-bbox="306 878 434 902">Boot DOS</p>  <p data-bbox="295 1016 359 1036">System</p>  <p data-bbox="359 1118 423 1138">Quit</p>  <p data-bbox="440 1179 472 1198">↵</p>	<p data-bbox="561 878 998 963">Press and hold: System, then Quit, then Return, and release all three keys.</p> <p data-bbox="561 1005 671 1029"><u>Result:</u></p> <p data-bbox="561 1068 979 1216">The processor boots and the system displays the log-on prompt. Enter your user ID and a password if required.</p>

Quit a program

The following table shows how to quit a program from the RMS operating system.

KEY CHORD	PROCEDURE
<p data-bbox="194 423 419 509">Quit a current program from RMS</p>  <p data-bbox="235 639 302 656">System</p>  <p data-bbox="330 737 376 753">Quit</p>	<p data-bbox="481 423 844 509">Press and hold: System, then Quit, and release both keys.</p> <p data-bbox="481 553 589 574"><u>Result:</u></p> <p data-bbox="481 618 879 732">The system terminates processing on the current program and returns to the RMS command line.</p>

Off-Line Key Chords

Introduction

The 7600 Processor combines processor functions with the features of the DATAPOINT 7350 Workstation. Therefore, two independent off-line operations are available:

- Workstation configuration and diagnostics
 - Processor diagnostics
-

Off-line operations

The two types of off-line operations allow you to configure the 7600 Processor at installation, modify the configuration when necessary, and monitor the 7600 Processor through diagnostic routines. This section only describes how to gain access to the off-line Workstation Configuration and Diagnostic menu and how to return to your operating system.

For information about altering the configuration and using the workstation and processor diagnostics, refer to the *7600 Processor Technical Reference*, Document No. 50991.

When to to use off-line operations

Off-line operations are available when the processor is powered on and not running an applications program or task.

- The service representative uses off-line operations during equipment installation.
- The systems administrator uses off-line operations to:
 - modify processor configurations when system changes are implemented, or
 - run diagnostic tests to verify proper operation or to isolate problems.
- The experienced computer operator can use off-line operations to modify certain operator convenience options as a personal preference or for a particular application.

How to gain access to the main menu

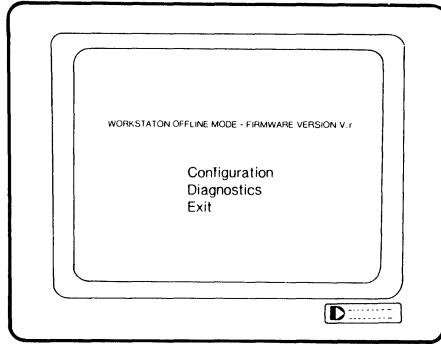
To take the 7600 Processor off line for workstation configuration or diagnostics, press and hold the System key, then press the right-hand Alt key, and release both keys.

Note:

When you take the processor off line, you are no longer communicating with the operating system but with a set of predefined programs resident in the machine.

Main menu

The screen displays the following menu.



How to operate the program

All off-line operations are selected through interactive screen displays.

Note:

Before you select any of the operations, refer to the *7600 Processor Technical Reference*, Document No. 50991. This document describes how to use each configuration and diagnostic operations.

- Use the Up Arrow and Down Arrow keys to move the cursor to the option you want to modify. When the cursor is on the desired option, press the Return key.
- When the cursor reaches the top of the menu, pressing the Up Arrow key again moves the cursor to the bottom of the menu. The reverse operation is true for the bottom of the display.

How to exit off-line operations

When you have completed off-line operations, move the cursor to Exit on the menu and press the Return key. The operating system (RMS or DOS) then becomes available to you.

Testing RAM

When you press the Return key to exit from an off-line menu, your screen clears and Random Access Memory (RAM) test information appears in the upper left corner of your screen.

Screen One

```
RAM ADDRESSABILITY TEST 2048K
```

Screen Two

```
RAM DATA INTEGRITY TEST 2048K
```

These two functions test the main memory of your 7600 Processor. After they are complete, your processor begins its boot cycle.

Chapter 5.

MAINTENANCE

Overview

Introduction

The 7600 Processor requires minimum maintenance. Reasonable care and occasional cleaning help maintain efficient operation. This chapter discusses:

- Preventive maintenance and
 - Operating precautions.
-

Warning

The 7600 Processor does not contain operator-serviceable internal parts; therefore, do not remove the covers from the keyboard and monitor.

Preventive maintenance

The best maintenance for your 7600 Processor is to prevent damage. You should:

- install the 7600 Processor in a clean area that is free from wide temperature variations,
 - never put liquids on or near the 7600 enclosure or the keyboard,
 - avoid dropping objects, especially metal objects, between keys or between the vent slots on the base, and
 - keep ventilation slots free from obstructions.
-

Cleaning the enclosure

Regular cleaning helps prolong the useful life of your 7600 Processor. Clean the unit in the following way:

- Vacuum the keyboard using a brush attachment.
- Regularly remove any dust from the base and monitor with a soft cloth.
- For more extensive cleaning, turn off the processor and clean the monitor enclosure and base using a mild detergent and a slightly damp cloth.

Caution:

Use only water. Do not use solvents such as alcohol or commercial cleaners.

Operating Precautions

Operating guidelines

The 7600 Processor is designed to minimize maintenance and repair time. This section includes guidelines for efficient operation and a checklist for processor failure.

Operating Guidelines:

- Ensure that your line power supply is adequate and stable. Power variations can impair processor performance.
 - For best operation, protect your processor from dust, wide variations in temperature, and excessive humidity.
 - Inspect the keyboard for any objects that can impede key motion. If vacuuming with a brush attachment does not remove debris, contact a qualified service representative.
-

Operating Precautions

7600 processor failure

The following table outlines the steps to take in the event that your 7600 Processor fails to operate.

IF YOUR 7600 PROCESSOR ISN'T WORKING...	
CHECK THE...	THEN...
power cord for improper seating at wall and processor,	correct any improper seating.
power switch for correct position,	push the switch to the ON position.
AC power for inactive socket or power failure,	use another wall socket or follow power restoration procedures determined by your organization.
interface cable for improper seating at the processor,	correct any loose seating.
interface cable to ensure you are using the correct cable for your task,	check with your service representative or system manuals.
keyboard connector for poor seating,	correct any loose seating.
IF YOUR PROCESSOR STILL DOESN'T WORK... CONTACT YOUR SERVICE REPRESENTATIVE	

Chapter 6. Specifications

Overview

Introduction

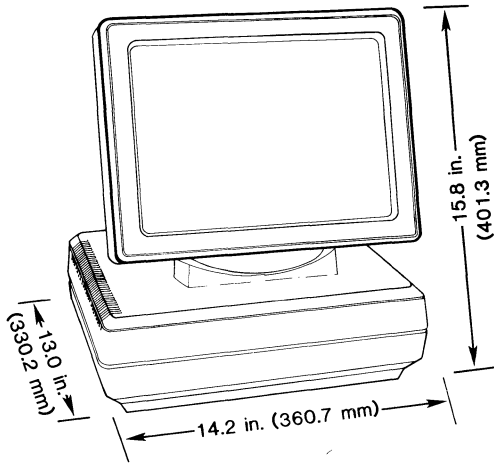
This chapter provides general performance information about the 7600 Processor.

These topics are described:

- physical specifications,
 - serial interface specifications, and
 - power and environmental specifications.
-

Overview

7600 physical description (without keyboard)



FEATURE	MEASUREMENT	
	U.S. UNITS	SI UNITS
Width	14.2 in.	360.7 mm
Depth	13.0 in.	330.2 mm
Height	15.8 in.	401.3 mm
Weight	30.0 lb.	13.6 kg

Overview

Keyboard

FEATURE	MEASUREMENT		
	U.S. UNITS		SI UNITS
Width	19.30 in.		490.22 mm
Depth	7.39 in.		187.71 mm
Weight	3.88 lb.		1.76 kg
Height at home row	DOWN	1.14 in.	29.00 mm
	UP	1.38 in.	35.00 mm

Note:

Your keyboard dimensions may vary slightly from those specified in this table.

Monitor tilt/rotate parameters

FEATURE	LIMITS
Monitor tilt	7° forward, 15° back
Monitor rotate	45° arc from right to left

Display characteristics

FEATURE	SPECIFICATION
Display area	7.2 x 9.6 in. (182.8 x 243.8 mm)
Characters per line	80
Number of lines	25
Character size (upper case)	0.093 x 0.185 in. (2.4 x 4.7 mm)
Character format (with descenders)	7 x 9 dot matrix in 9 x 14 cell
Character spacing	0.120 in. (3.0 mm)
Line-to-line spacing	0.287 in. (7.3 mm)
Brightness	operator adjustable
Contrast	operator adjustable
Cursor	nondestructive, blinking

Display characteristics

FEATURE	SPECIFICATION
Character color	amber phosphor (European amber)
Background color	gray
Glare reduction	direct etch
Attributes	<ul style="list-style-type: none">● 2-level highlight● underline● character blink● reverse video● blank● inverse video field

Serial Interface

Serial interface pin-out

The printer port is a serial interface that uses 25-pin D connectors. The following printer handshaking signals are provided on the J10 serial interface.

SIGNAL	FUNCTION	PIN ASSIGNMENT
GND	Protective Ground	1
TX	Transmitted Data	2
RX	Received Data	3
RTS	Request To Send	4
CTS	Clear To Send	5
DSR	Data Set Ready	6
SG	Signal Ground	7
DTR	Data Terminal Ready	20

Serial Interface

Baud rates supported

The serial interface connector supports the following communication baud rates (16X clocking).

50	110	300	1200	2400	4800
75	150	600	1800	9600	19200

- The interface cable length must not exceed 50 feet.
 - Voltage levels and mechanical characteristics of the interface conform to EIA Standard RS-232-C.
-

Power and Environmental Specifications

Power requirements

The 7600 Processor operates at 90 to 132 VAC, jumper selectable at 180 to 265 VAC, and at 47 to 63 Hz.

Environmental requirements

REQUIREMENT	SPECIFICATION
Operating temperature	50° to 100° Fahrenheit 10° to 38° Celsius
Storage temperature	-40° to 158° Fahrenheit -40° to 70° Celsius
Relative humidity, storage	5 to 95% noncondensing
Relative humidity, operating	20 to 90% noncondensing

Power and Environmental Specifications

Regulatory conformance

REQUIREMENT	SPECIFICATION
Radiated and conducted emissions	FCC Part 15, subpart J, Class A
Regulatory compliance	UL 478, CSA C 22.2 No. 154-1975
Acoustic level	Less than 5.5 bels, A-weighted sound power, reference one picowatt

Note:

Operation with noncomplying equipment is likely to result in interference. See the FCC warning inside the front cover of this document.

Processor Features and Options

Introduction

The 7600 Processor uses a TLX286 microprocessor enabling instruction set translation, when desired, in real time. For more information about the 7600 Processor's CPU, refer to the *7600 Processor Technical Reference*, Document No. 50991.

CHARACTERISTIC	CAPABILITY
Compatibility	DATAPOINT RMS or DOS operating systems
Memory address	maximum of 4 MB memory address capability

Main memory

The 7600 Processor includes parity checking read/write RAM. Additionally 16 K bytes of EAPROM/ROM storage holds firmware and diagnostics. The following memory sizes are available.

SIZE	FUNCTION
2 MB (standard)	RAM with parity
4 MB (optional)	RAM with parity

INDEX

General Index

A

ARC, 2-1
 boot key chord, 4-2
 connector, 1-7
Additional information, 1-2
Adjustments
 brightness, 2-4
 contrast, 2-4
 display, 2-3
 monitor position, 2-6
Alternate keys, 3-4

B

Baud rates, 6-7

C

CPU, 6-10
Changing keycaps, 3-5
Cleaning the enclosure, 5-2
Configuration, 4-11
Connectors, 1-6
Control keys, 3-8
Cursor keypad, 3-11

D

Debug mode, 4-3
Diagnostics, 4-11

Display
 characteristics, 6-4
 to 6-5
 controls, 1-5, 2-3
DOS, 1-1
 log on, 4-8 to 4-9

E

Environmental
 requirements, 6-8

F

Function keys, 3-9

G

Geometric keys, 3-10
Graphic keycaps, 3-3

I

Inverse video, 4-4

K

Keyboard, 1-3, 3-2,
 3-14, 6-3
 connector, 1-6, 3-1
 financial keypad, 3-12

General Index

kits, 3-7
lifter bar, 3-1
parts, 6-3
lockout, 4-5
 rollover, 3-5
Key caps, 3-5
Key chords, 4-1
 ARC boot, 4-2
 debug mode, 4-3
 inverse video, 4-4
 lockout, 4-5
 off-line mode, 4-4
 restart lockout, 4-6
 screen copy, 4-5

L

LCD indicator 2-2, 3-13
 geometric symbols, 3-14
 power on, 3-13
 shift lock off, 3-13
 shift lock on, 3-14
Log On
 DOS ARC system, 4-8
 RMS/DOS ARC system, 4-9
 RMS ARC system, 4-7

M

Memory, 1-1
 options, 6-1

 types, 6-1
Monitor, 1-4 to 1-5
 rotating, 2-6
 tilting, 2-7
 tilt/rotate parameters,
 6-3

N

Numeric keypad, 6-3

O

Off-line, 4-12
 exiting, 4-14
 main menu, 4-12 to 4-13
 mode key chord, 4-4
 operations, 4-11 to
 4-13
Operating
 features, 3-5
 guidelines, 5-3
 precautions, 5-1 to
 5-3
Operating systems
 DOS, 1-1
 RMS, 1-1, 4-10

P

Power, 6-8

General Index

cord, 1-9
requirements, 6-8
switch, 1-5, 2-2
Preventive maintenance, 5-2

R

RMS

log on/off, 4-7
quit a program, 4-10
RIM ID switch, 2-1
Regulatory conformance, 6-9
Repeat action keys, 3-6
Restart lockout, 4-6

S

Screen

brightness, 1-3
contrast, 1-3
copy, 4-5
dim, 2-5

Serial

interface pin out, 6-6
printer connector, 1-8
7600 Processor, 1-4
features, 1-3
parts, 1-5
physical description, 6-2
processor failure, 5-4
Shift lock keys, 3-4
Status indicator, 3-13

T

Testing RAM, 4-14
Typewriter keyboard,
3-7