
Operator's Guide

OPERATOR'S GUIDE

Specifications Subject to Change.

Convergent Technologies, Convergent, CTOS, CT-BUS, CT-DBMS,
CT-MAIL, CT-Net, AWS, IWS, and NGEN are trademarks of
Convergent Technologies, Inc.

First Edition (October 1983) A-09-00272-01-A

Copyright © 1983 by Convergent Technologies, Inc.

CONTENTS

GUIDE TO TECHNICAL DOCUMENTATION	v
1 OVERVIEW	1-1
USING THE OPERATOR'S GUIDE	1-1
THE WORKSTATION	1-2
CLUSTER ARCHITECTURE	1-2
2 OPERATOR CONTROLS	2-1
PROCESSOR MODULE	2-1
DUAL FLOPPY DISK MODULE	2-3
FLOPPY/HARD DISK MODULE	2-5
MONOCHROME MONITOR	2-7
KEYBOARD	2-8
3 USING FLOPPY DISKS	3-1
FLOPPY DISKS	3-1
FLOPPY DISK HANDLING PRECAUTIONS	3-1
FLOPPY DISK INSERTION	3-1
FLOPPY DISK REMOVAL	3-2
Floppy Disk File Protection	3-2
4 BOOTSTRAPPING YOUR WORKSTATION AND VERIFYING OPERATION	4-1
INTRODUCTION	4-1
POWER-UP OR RESET	4-1
Workstation Software Diagnostics	4-1
5 RELEASE NOTICES	5-1
6 SIGNING ON	6-1
INTRODUCTION	6-1
SIGNING ON	6-1

LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
2-1.	Processor Module Controls	2-2
2-2.	Dual Floppy Disk Module Controls	2-4
2-3.	Floppy/Hard Disk Module Controls	2-6
2-4.	Monochrome Monitor Controls	2-7
2-5.	Keyboard	2-9

GUIDE TO TECHNICAL DOCUMENTATION

This manual is one of a set that documents the Convergent™ Family of Information Processing Systems. The set can be grouped as follows:

Introductory

- Installation Guide
- Operator's Guide
- Executive Manual
- Installation Guide (NGEN)
- Operator's Guide (NGEN)

Hardware

NGEN

- Processor Manual: Model CP-001
- Dual Floppy Disk Manual
- Floppy/Hard Disk Manual
- Diagnostics Manual
- Keyboard Manual
- Power System Manual
- Monochrome Monitor Manual: Model VM-001
- Color Monitor Manual

IWS

- Workstation Hardware Manual
- Peripherals Hardware Manual
- IWS Peripherals Hardware Manual (SMD Version)

AWS

- AWS-210 Hardware Manual
- AWS-220, -230, -240 Hardware Manual
- AWS Color Workstation Hardware Manual

Operating System

- CTOS™ Operating System Manual
- System Programmer's Guide
- System Utilities Manual
- Batch Manual

Guest Operating Systems

- CP/M-86™
- MS-DOS™
- XENIX™

Programming Languages

- COBOL Manual
- FORTRAN Manual
- FORTRAN-86 Manual
- BASIC Manual
- BASIC Compiler Manual
- Pascal Manual
- Assembly Language Manual

Program Development Tools

- COBOL Animator
- Editor Manual
- Debugger Manual
- Linker/Librarian Manual

Data Management Facilities

- CT-DBMS™ Manual
- ISAM Manual
- Forms Manual
- Sort/Merge Manual

Text Management Facilities

- Word Processing User's Guide
- Word Processing Reference Manual
- Word Processing Quick Reference

Applications Facilities

- Project Planner Manual
- CT-MAIL™ User's Reference Manual
- CT-MAIL™ Administrator's Reference Manual
- Multiplan
- Business Graphics User's Guide
- Business Graphics Reference Manual
- Graphics Programmer's Guide
- Font Designer Manual

Communications

- Asynchronous Terminal Emulator Manual
- 3270 Terminal Emulator Manual
- 2780/3780 RJE Terminal Emulator Manual
- SNA Network Gateway Manual
- SNA 3270 Emulator Manual
- X.25 Network Gateway Manual
- Multimode Terminal Emulator User's Guide
- Multimode Terminal Emulator Reference Manual

This section outlines the contents of these manuals.

INTRODUCTORY

The Installation Guide describes the procedure for unpacking, cabling, and powering up a system.

The Operator's Guide addresses the needs of the average user for operating instructions. It describes the workstation switches and controls, keyboard function, and floppy disk handling.

The Executive Manual describes the command interpreter, the program that first interacts with the user when the system is turned on. It specifies commands for managing files and

invoking other programs such as the Editor and the programming language compilers.

The NGEN Installation Guide describes the procedure for unpacking, assembling, cabling, and powering up an NGEN workstation.

The NGEN Operator's Guide is a link between you, the NGEN workstation, and the workstation's documentation. The Operator's Guide describes the operator controls and the use of the floppy disk drives, as well as how to verify that the workstation is operational and how to use software release notices.

HARDWARE

NGEN

The Processor Manual: Model CP-001 describes the Processor Module, which houses the CPU board, Memory board, I/O board, Video/Keyboard board, and Motherboard. It details the architecture and theory of operations of the printed circuit boards, external interfaces, and the Memory Expansion Cartridge, as well as the X-Bus specifications.

The Dual Floppy Disk Manual and the Floppy/Hard Disk Manual describe the architecture and theory of operation for the NGEN modules. They discuss the respective disk drives, the controller, and contain the applicable OEM disk drive manuals.

The Diagnostics Manual describes the diagnostics available for the NGEN workstation. It discusses the Processor Module's bootstrap ROM program and error codes, and individual software diagnostics for modules in the workstation.

The Keyboard Manual describes the theory of operation for the NGEN keyboard.

The Power System Manual describes the operation and connections for the 36-Volt Power Supply Module and the dc/dc converters used with the NGEN workstation.

The Monochrome Monitor Manual: Model VM-001 describes the operation and connections of the 12-inch Monochrome Monitor Module used with the NGEN workstation.

The Color Monitor Manual describes the operation and connections of the 15-inch Color Monitor Module used with the NGEN workstation.

IWS

The Workstation Hardware Manual describes the mainframe, keyboard, and video display for the IWS family of workstations. It specifies system architecture, printed circuit boards (Motherboard, Processor, I/O-Memory, Multiline Communications Processor, Video Control, Graphics Control Board, ROM and RAM Expansions), keyboard, video monitor, Multibus interface, communications interfaces, power supply, and environmental characteristics of the workstation.

The Peripherals Hardware Manual describes the non-SMD single-board Mass Storage Subsystem (MSS) and Mass Storage Expansion (MSX) disk subsystems for the IWS family of workstations. It contains descriptions of the disk controller Motherboard, the two controller boards for floppy and Winchester disks, power supplies, disk drives, and environmental characteristics.

The IWS Peripherals Hardware Manual (SMD Version) describes the SMD MSS and MSX disk subsystems having one controller board.

AWS

The AWS-210 Hardware Manual describes the mainframe, keyboard, and video display of the AWS-210 workstation. It specifies architecture, theory of operation of the printed circuit boards (Motherboard, Deflection, and CPU), keyboard, video monitor, expansion interface, cluster communications interface, power supply, and environmental characteristics of the workstation.

The AWS-220, -230, -240 Hardware Manual describes the mainframe, keyboard, disk controllers, and video display of the AWS-220, -230, and -240 workstations. It specifies architecture, theory of operation of the printed circuit boards (Motherboard, Deflection, 8088 CPU, 8086 CPU, Floppy Disk Controller, and Hard Disk Controller), keyboard, video monitor, cluster communications interface, external interfaces, power supply, and environmental characteristics of the workstation.

The AWS Color Workstation Hardware Manual describes the mainframe, keyboard, and color video display of the AWS Color Workstation. This manual reports the architecture and theory of operation of the printed circuit boards (Motherboard, Graphics Control Board, Hard Disk Controller, Color Video, Color Deflection, and CPU), keyboard, color monitor, peripheral interfaces, cluster communications interface, power supply, and environmental characteristics of the workstation. This manual also contains four OEM disk drive manuals and a summary of adjustments for the color monitor.

OPERATING SYSTEM

The CTOS™ Operating System Manual describes the Operating System. It specifies services for managing processes, messages, memory, exchanges, tasks, video, disk, keyboard, printer, timer, communications, and files. In particular, it specifies the standard file access methods: SAM, the sequential access method; RSAM, the record sequential access method; and DAM, the direct access method.

The System Programmer's Guide addresses the needs of the system programmer or system manager for detailed information on Operating System structure and system operation. It describes (1) cluster architecture and operation, (2) procedures for building a customized Operating System, and (3) diagnostics.

The System Utilities Manual describes utilities such as Backup Volume, IVolume, Restore, Change Volume Name, PLog, Maintain File, Dump.

The Batch Manual describes the batch manager, which executes batch jobs under control of job control language (JCL) files.

GUEST OPERATING SYSTEMS

The CP/M-86 and MS-DOS Manuals describe the single-user operating systems originally designed for the 8086-based personal computer systems.

The XENIX Manuals describe the 16-bit adaptation of the UNIX system, including the XENIX environment for software development and text processing.

PROGRAMMING LANGUAGES

The COBOL, FORTRAN, FORTRAN-86, BASIC (Interpreter), BASIC Compiler, PASCAL, and Assembly Language Manuals describe the system's programming languages. Each manual specifies both the language itself and also operating instructions for that language.

The Pascal Manual is supplemented by a popular text, Pascal User Manual and Report.

The Assembly Language Manual is supplemented by a text, the Central Processing Unit, which describes the main processor, the 8086. It specifies the machine architecture, instruction set, and programming at the symbolic instruction level.

PROGRAM DEVELOPMENT TOOLS

The COBOL Animator describes the COBOL Animator, a debugger that allows the user to interact directly with the COBOL source code during program execution.

The Editor Manual describes the text editor.

The Debugger Manual describes the Debugger, which is designed for use at the symbolic instruction level. Together with appropriate interlistings, it can be used for debugging FORTRAN, Pascal, and assembly language programs. (COBOL and BASIC, in contrast, are more conveniently debugged using special facilities described in their respective manuals.)

The Linker/Librarian Manual describes the Linker, which links together separately compiled object files, and the Librarian, which builds and manages libraries of object modules.

DATA MANAGEMENT FACILITIES

The CT-DBMS™ Manual describes Convergent's data base management system (CT-DBMS), which consists of (1) a data manipulation language for accessing and manipulating the data base and (2) utilities for administering the data base activities such as maintenance, backup and recovery, and status reporting.

The ISAM Manual describes both the single- and the multiuser indexed sequential access method. It specifies the procedural interfaces (and how to call them from various languages) and the utilities.

The Forms Manual describes the Forms facility that includes (1) the Forms Editor, which is used to interactively design and edit forms, and (2) the Forms run time, which is called from an application program to display forms and accept user input.

The Sort/Merge Manual describes (1) the Sort and Merge utilities that run as a subsystem invoked at the Executive command level, and (2) the Sort/Merge object modules that can be called from an application program.

TEXT MANAGEMENT FACILITIES

The Word Processing User's Guide introduces the Word Processor to the first-time user. It provides step-by-step lessons that describe basic word processing operations. The lessons show how to execute operations and apply them to sample text.

The Word Processing Reference Manual is a reference tool for users already familiar with the Word Processor. It describes the Word Processor keyboard and screen; basic, advanced, and programmer-specific operations; list processing; printer and print wheel configurations; and hardware considerations.

The Word Processing Quick Reference provides a concise summary of all word processing operations and briefly describes the keyboard and commands.

APPLICATIONS FACILITIES

The Project Planner schedules and analyzes tasks, milestones, and the allocation of resources in a project. By means of diagrams and several kinds of bar charts, Project Planner presents time and resource allocation results and shows the occurrence of project milestones. The Project Planner Manual explains the use of the program and also serves as a reference once the user is familiar with it.

The CT-MAIL™ User's Reference Manual introduces the first-time user to the CT-MAIL electronic mail system. It provides step-by-step instructions for using the basic CT-MAIL operations to create, send, and receive mail.

The CT-MAIL™ Administrator's Reference Manual provides the System Administrator with instructions for installing, configuring, and maintaining the CT-MAIL electronic mail system; setting up communication lines; creating and maintaining mail centers; adding mail users; creating distribution lists; and troubleshooting.

Multiplan is a financial modeling package designed for business planning, analysis, budgeting, and forecasting.

The Business Graphics User's Guide introduces Business Graphics to the first-time user. It provides step-by-step lessons that describe basic Business Graphics operations. The lessons show how to execute operations and apply them to sample charts.

The Business Graphics Reference Manual is a reference tool for users already familiar with Business Graphics. It describes the Business Graphics keyboard and screen; box and arrow cursor movement; obtaining information from Multiplan; operations; and plotter configurations.

The Graphics Programmer's Guide is a reference for applications and systems programmers. It describes the graphics library procedures that can be called from application systems to generate graphic representations of data, and it includes a section on accessing Business Graphics from an application system.

The Font Designer Manual describes the interactive utility for designing new fonts (character sets) for the video display.

COMMUNICATIONS

The Asynchronous Terminal Emulator Manual describes the asynchronous terminal emulator.

The 3270 Terminal Emulator Manual describes the 3270 emulator package.

The 2780/3780 RJE Terminal Emulator Manual describes the 2780/3780 emulator package.

The SNA Network Gateway Manual describes the SNA Network Gateway, which supports data communications over an SNA network. The SNA Network Gateway comprises the Transport Service and Status Monitor. The Transport Service allows a Convergent workstation to function as cluster controller and forms the foundation for Convergent SNA products.

The SNA 3270 Emulator Manual describes the SNA 3270 emulator package. The SNA 3270 emulator provides CRT and printer subsystems in addition to a Virtual Terminal Interface for use in application programs.

The X.25 Network Gateway Manual describes the X.25 Network Gateway, which supports CCITT Recommendation X.25 communications over a public data network. There are three levels of access to the network: packet, X.25 sequential access method, and the Multimode Terminal Emulator X.25 communications option.

The Multimode Terminal Emulator User's Guide introduces the Multimode Terminal Emulator to the first-time user. It describes the MTE video display, keyboard, display memory, and advanced operations for the X.25 communications option.

The Multimode Terminal Emulator Reference Manual is a reference tool for sophisticated users of the Multimode Terminal Emulator. It describes the MTE escape sequences and field verification program.

CP/M-86 is a trademark of Digital Research.

MS and XENIX are trademarks of Microsoft Corp.

UNIX is a trademark of Bell Laboratories.

1 OVERVIEW

The Operator's Guide is the link between you and the workstation's hardware and software. This manual assumes that your workstation is already installed. If it is not, see the Installation Guide for instructions. Also see the "Guide to Technical Documentation" at the front of this guide for information about other manuals referenced here.

USING THE OPERATOR'S GUIDE

This guide is divided into six sections:

Section 1, "Overview," describes the contents of the Operator's Guide, the nature of the workstation, and the cluster architecture.

Section 2, "Operator Controls," describes the operator controls for modules, displays, and keyboards presently available.

Section 3, "Using Floppy Disks," describes how to handle, insert, and remove floppy disks from the drives.

Section 4, "Bootstrapping Your Workstation and Verifying Operation," describes what to expect when powering up the workstation and how to verify that it is working properly.

Section 5, "Release Notices," describes what Release Notices are and what they contain.

Section 6, "Signing On," shows you how to sign on to your workstation operating environment.

THE WORKSTATION

The workstation you are using is composed of a group of modules, with each module providing certain storage or processing functions. The modules are building blocks, electronically tied together to allow you to make a workstation that uniquely fits your needs.

Depending on which modules you choose to make up your workstation, it can operate as a standalone workstation, as a master workstation providing facilities for several cluster workstations, or as a cluster workstation (see the subsection "Cluster Architecture" below).

In its most basic form, a workstation with a Processor Module, a keyboard, and a Monochrome Monitor can run a software application as a cluster workstation. In this configuration, the workstation uses the disk space on a master workstation to store the software applications and files.

If disk storage is added to this basic workstation, it can store its own software applications and files. In this configuration, the workstation can either operate as a standalone or provide disk storage services to cluster workstations as a master workstation.

Other modules, such as different or additional displays, processors, storage modules, communications modules, or keyboards can be added to (or just as easily removed from) the workstation as your processing needs change.

CLUSTER ARCHITECTURE

A cluster is a collection of workstations connected by a data communications line. Each workstation includes the memory and processing ability required for the workstation operator. This type of configuration, called distributed processing, allows the processing capabilities of the system to grow uniformly with the number of users.

A cluster has one master workstation, which periodically polls the other workstations on the cluster for a service request. All communications pass between the master workstation and a cluster workstation; communication cannot occur directly between cluster workstations.

A cluster workstation can have its own disk and tape drives and can therefore stand alone, or it can share these resources with the master workstation.

2 OPERATOR CONTROLS

Many different modules, displays, and keyboards can be used with the workstation. This section describes the operator controls of those modules currently available.

PROCESSOR MODULE

At the far left of the workstation, on the Processor Module, is the ON/OFF slide switch. The Processor Module controls are shown in Figure 2-1. The workstation is off when the switch is in the down position. To turn the workstation on, move the switch to the up position.

CAUTION

Unplug the AC power cord before adding or changing modules on the workstation. Serious damage to the workstation can result if this precaution is not taken. Power is still applied to parts of the workstation when the Processor Module ON/OFF switch is set to OFF.

The RESET button for the Processor Module is at the top of the rear panel. Pushing the RESET button clears any extraneous data present in the workstation. A reset also causes the Processor Module to load the operating System Image from either your own disk drives or the master workstation, according to the way in which your workstation is connected. A reset automatically occurs when the workstation is turned on.

You can also press the RESET button on those very rare occasions when the workstation hangs up or fails, but do not press it unless you have a good reason. If you press RESET while you are running an applications program, be prepared to lose some of your work.

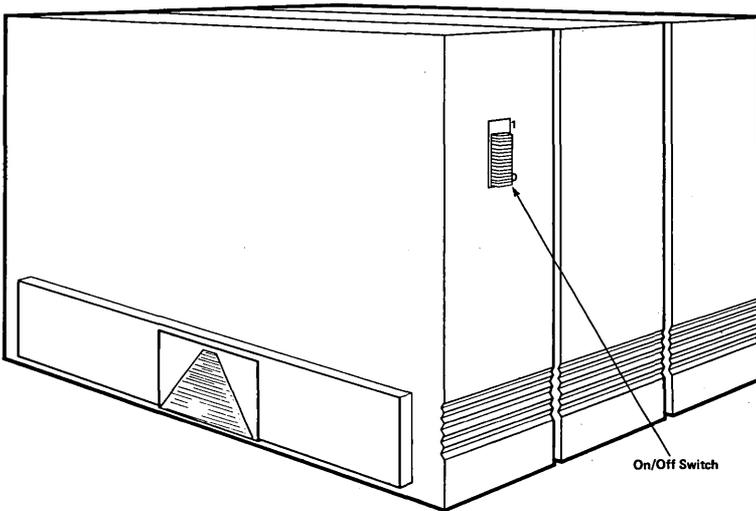
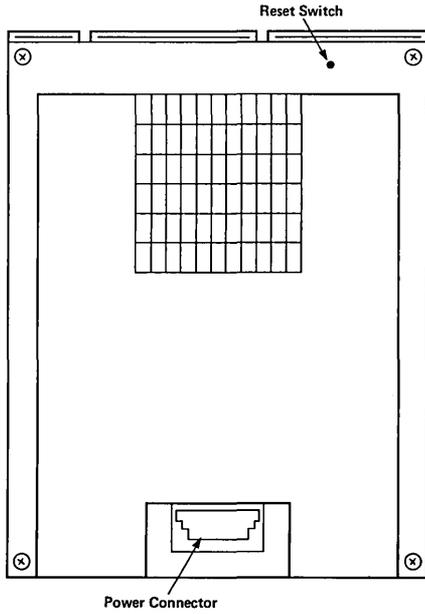


Figure 2-1. Processor Module Controls.

DUAL FLOPPY DISK MODULE

The Dual Floppy Disk Module can be identified by its two floppy disk drive latches, as shown in Figure 2-2. The left latch is for floppy drive F0 and the right latch is for floppy drive F1.

Two styles of drive latches are used, depending on the model of the floppy disk drive.

With one style of drive latch, a floppy disk can be inserted in one of the drives only when the drive latch is in the vertical position. To lock a floppy disk in the drive, turn the latch clockwise 90 degrees.

With the second style of drive latch, a floppy disk can be inserted in one of the drives just by pushing it in the drive slot with your finger until you hear the floppy disk click into place. When you let go of the floppy disk, it should stay inside the drive. Close the latch by moving the bar on the right to the left until it clicks. To remove the floppy disk, push the tab to the left of the drive slot. The floppy disk should then spring out.

For more information on using floppy disk drives, see Section 3, "Using Floppy Disks."

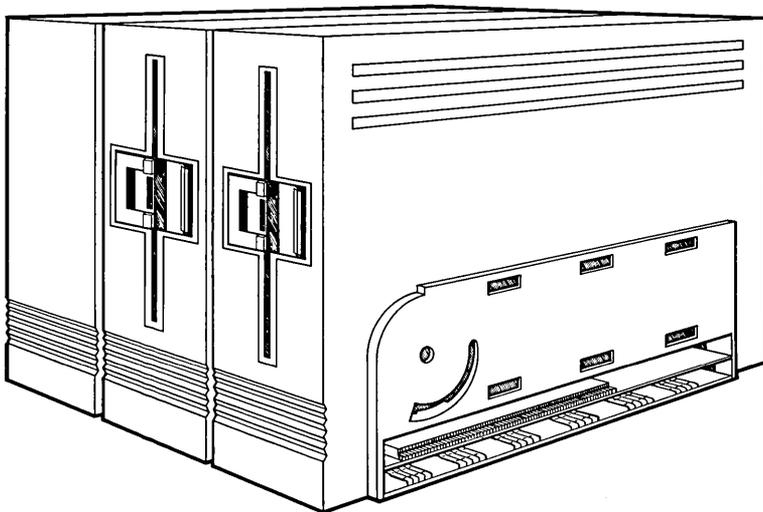
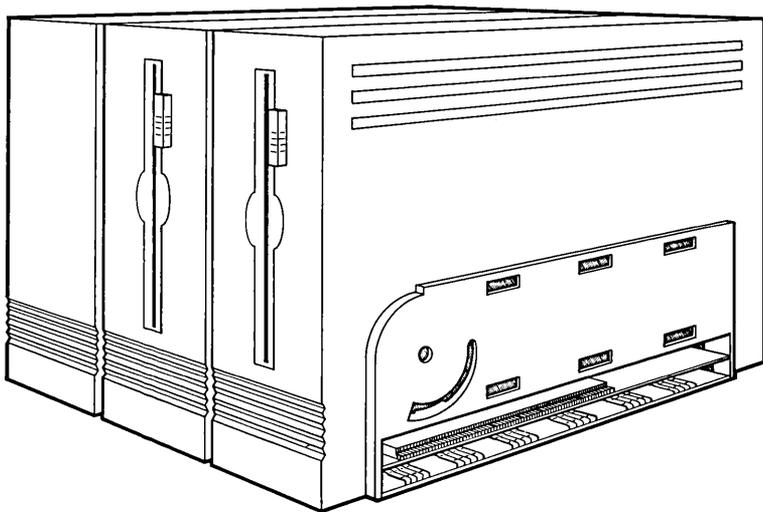


Figure 2-2. Dual Floppy Disk Module Controls.

FLOPPY/HARD DISK MODULE

The Floppy/Hard Disk Module can be identified by its one floppy disk drive latch, as shown in Figure 2-3. The latch is for floppy drive F0. The hard disk drive does not have any other controls.

Two styles of drive latches are used, depending on the model of the floppy disk drive.

With one style of drive latch, a floppy disk can be inserted in one of the drives only when the drive latch is in the vertical position. To lock a floppy disk in the drive, turn the latch clockwise 90 degrees.

With the second style of drive latch, a floppy disk can be inserted in one of the drives just by pushing it in the drive slot with your finger until you hear the floppy disk click into place. When you let go of the floppy disk, it should stay inside the drive. Close the latch by moving the bar on the right to the left until it clicks. To remove the floppy disk, push the tab to the left of the drive slot. The floppy disk should then spring out.

For more information on using floppy disk drives, see Section 3, "Using Floppy Disks."

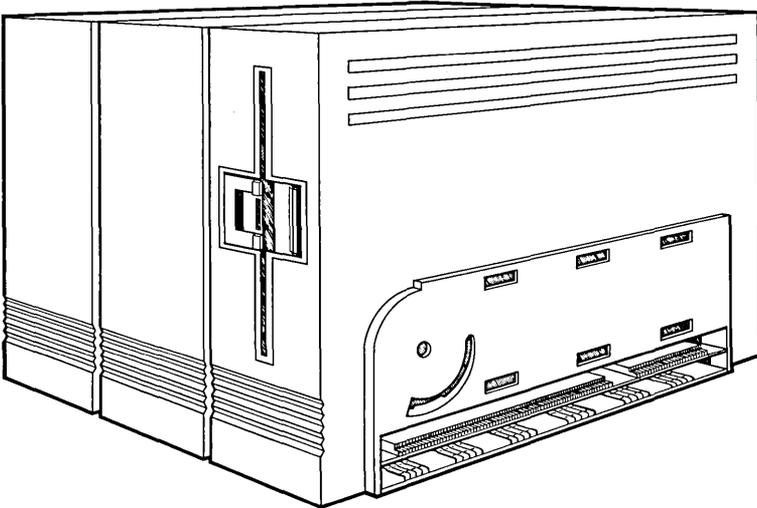
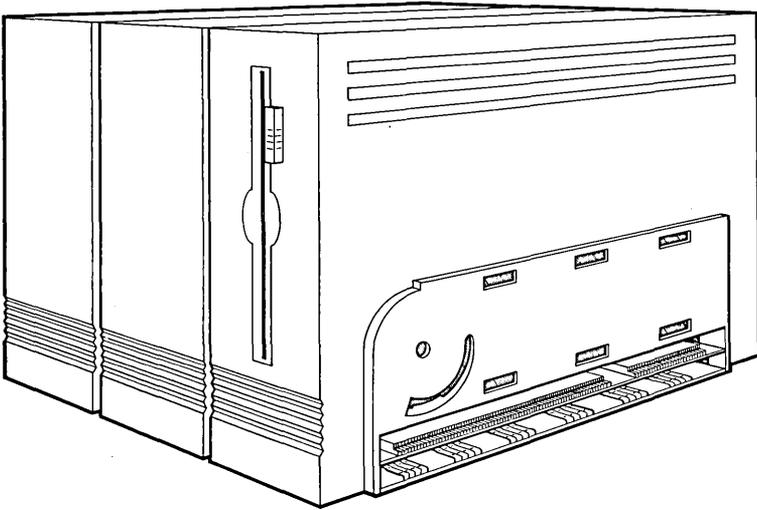


Figure 2-3. Floppy/Hard Disk Module Controls.

MONOCHROME MONITOR

The brightness of the Monochrome Monitor can be adjusted by a thumbwheel control located under the left edge of the monitor, as shown in Figure 2-4. Also, the tilt and swivel of the monitor can be adjusted by grasping both sides of the monitor housing and positioning it for the most comfortable viewing position.

The screen automatically turns off if you do not touch any keys on the workstation's keyboard for several minutes. This feature protects the face of the monitor from "burning." All you have to do to restore the image on the monitor is press any key on the keyboard.

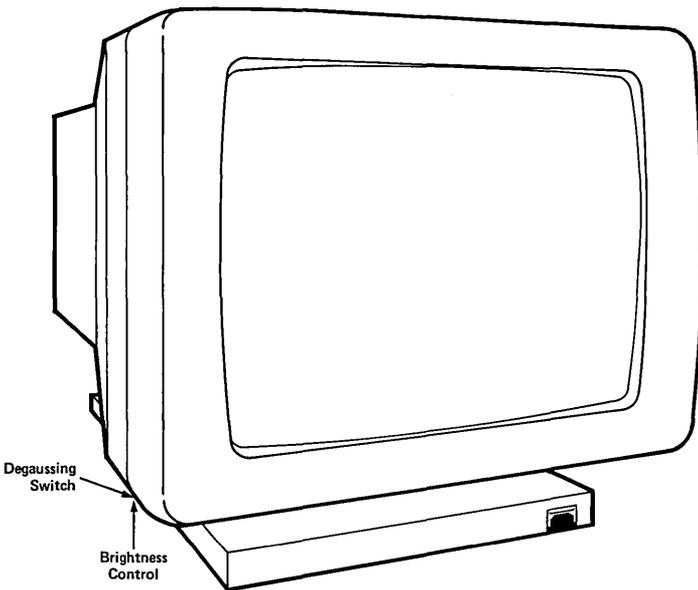


Figure 2-4. Monochrome Monitor Controls.

KEYBOARD

The keyboard has 98 keys in 6 distinct groups, as shown in Figure 2-5.

- o The alphanumeric keys include all letters, numbers, and most of the punctuation and control characters for data entry. The set of alphanumeric keys also contain the CODE key in two positions, to the left and right of the space bar.
- o To the right of the alphanumeric keys are the numeric keys. They include numbers 0-9, several more punctuation characters, the NEXT key, and the GO key.
- o Above the numeric keys are the cursor control keys. This set of keys contains four directional cursor (arrow) keys, a MARK key, and a BOUND key.
- o Across the top of the keyboard are the f1 through f10 function keys. These keys can change their function depending on which software application is controlling them. The f1 through f3 and the f8 through f10 keys contain status light-emitting diodes (LEDs).

Above the function keys is a space for a keyboard label strip, which is used to define the function of each key when software applications make use of them.

- o On the left side of the alphanumeric keys are a set of workstation control keys for the workstation. Included are the CANCEL, MOVE, HELP, DELETE, ACTION, OVERTYPE, FINISH, and COPY keys. The OVERTYPE key has a status LED indicator.
- o Above the workstation control keys are the four screen control keys. These keys allow you to move from page to page in a document or simply scroll the document up or down.

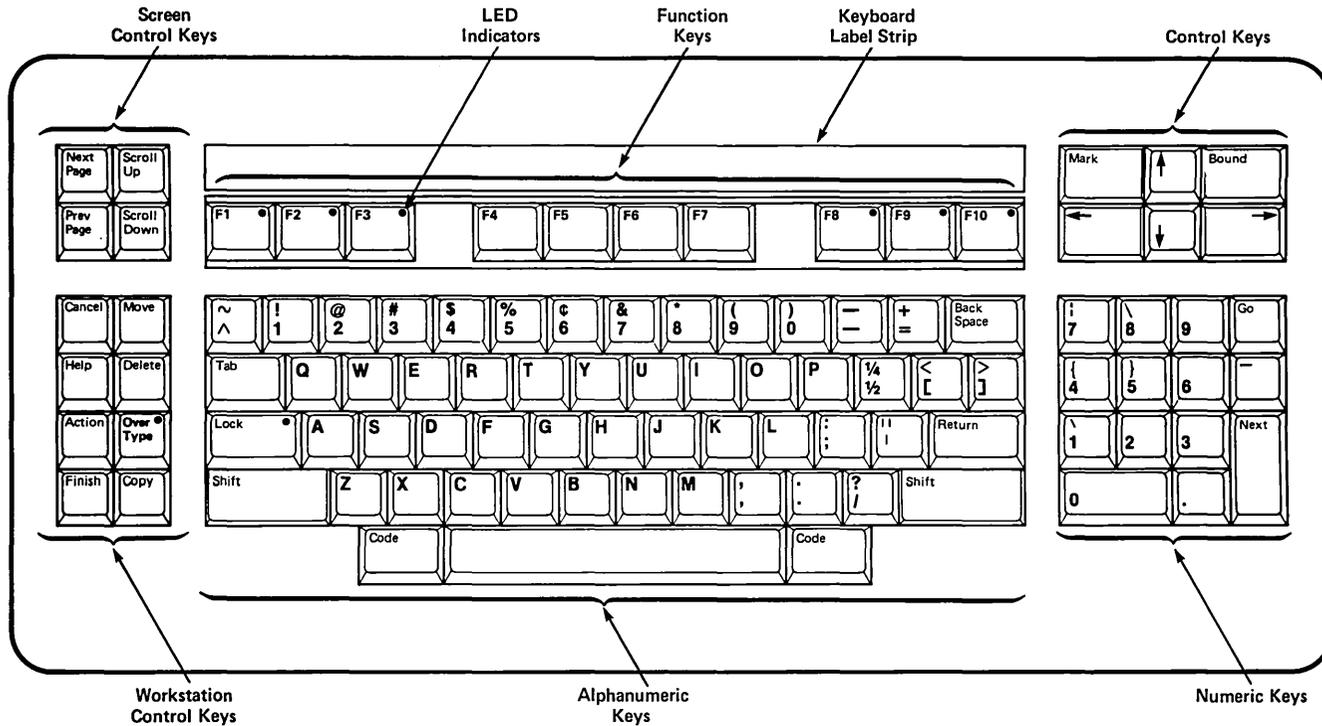


Figure 2-5. Keyboard.

3 USING FLOPPY DISKS

FLOPPY DISKS

Floppy disks are used to store your data or word processing files, application programs, or an operating system. If you have not used floppy disks before, there are a few things you should know. For example, how to handle them, and how to insert and remove them from floppy disk drives.

A floppy disk is just that: a flexible plastic disk coated with a brown substance that allows data to be recorded on it. The floppy disk is protected from dirt and fingerprints by a square plastic envelope. When you place a floppy disk in a disk drive, the floppy disk spins around inside the envelope, and a read/write head in the disk drive reads or writes the data. Each floppy disk can hold a great deal of data; about 630,000 bytes, or roughly 170 pages of typewritten material.

FLOPPY DISK HANDLING PRECAUTIONS

Always take the following precautions when using floppy disks:

- o Always store a floppy disk in its paper envelope. Do not leave the disk lying around on a desk where it can collect dust.
- o Insert the floppy disk into the disk drive slot carefully so as not to bend it.
- o Never touch the open slot on a floppy disk. Your fingers contain oil that can damage the recording surface.
- o Be careful about temperature extremes. Store the floppy disk at between 50°F and 125°F (10°C and 52°C).
- o Never allow the floppy disk to come within several feet of any magnet or magnetized tool or device.

FLOPPY DISK INSERTION

To insert a floppy disk in one of the drives,

1. Take the floppy disk out of its protective envelope.
2. Orient the floppy disk so that the label side (the side that does not have the folds over it) faces toward the right and the write-protect notch (or the write-protect tab) points up.

3. Gently slide the floppy disk into the selected floppy disk drive until it clicks, and then let go. The floppy disk should stay in the drive.
4. Close the latch. by moving the bar on the right to the left until it clicks.
5. If the floppy disk drive is the type that has a latch that you can turn, close the latch that way.

FLOPPY DISK REMOVAL

CAUTION

Never remove a floppy disk from a drive when the activity light beneath the drive is on. To do so can result in an incomplete transfer of data or, worse yet, destruction of the floppy disk and all of your data.

To remove a floppy disk from one of the drives,

1. Depending on the style of drive mechanism on your module, do one of the following:
 - Turn the floppy disk drive latch on the drive counterclockwise until the latch is vertical.
 - Press the tab on the left side of the drive.

The floppy disk should spring out of the drive far enough for you to grasp it.
2. Replace the floppy disk in its protective envelope.

FLOPPY DISK FILE PROTECTION

To protect information already on a floppy disk, place a foil write-protect tab over the notch on the floppy disk. The write-protect tabs can be found in the box along with the floppy disks.

4 BOOTSTRAPPING YOUR WORKSTATION AND VERIFYING OPERATION

INTRODUCTION

When you reset the workstation, either by turning it on or by pressing the RESET button on the back of the Processor Module, a program in a small, permanent memory (the bootstrap ROM) tests all of the memory in the workstation then loads the operating system into it.

The operation is called bootstrapping because the workstation automatically loads a small program in order to load a much bigger program later, in this case, the operating system. The workstation figuratively pulls itself up into operation by its bootstraps.

POWER-UP OR RESET

Every time the workstation is powered up or reset, a program permanently stored in the Processor Module performs a self-test of the workstation. The program first tests the amount of memory, displaying an asterisk (*) for every 64K bytes tested. Next, the program loads the System Image (part of the operating system) from its floppy disk drive (if it is there) or from its local hard disk drive. If the System Image is not on a local hard disk drive, the program loads the System Image from the master workstation of the cluster. For every 256 bytes transferred when the System Image is loaded, a period (.) appears on the screen.

If the power-up or reset sequence is not successful, an error code indicating what the problem is appears on the screen. For a complete description of the program in the Processor Module bootstrap ROM, and a list of error codes that might occur, see Section 2, "Bootstrap ROM Firmware" in the Diagnostics Manual or, if you wish, the Status Codes Manual.

WORKSTATION SOFTWARE DIAGNOSTICS

The software diagnostics are a series of tests that exhaustively exercise almost every part of the workstation. The diagnostics should never be performed as a routine matter; use them only when a problem is encountered. For more information about software diagnostics, see the Diagnostics Manual.

5 RELEASE NOTICES

Release Notices are issued to accompany software applications, standard software, and other software packages. A Release Notice is always packaged with the distribution disks for the new software.

Release Notices contain information about installing software and short-term, last-minute information about how the software operates. Release Notices should always be read before the new software is installed.

Release Notices contain a wealth of vital and timely information for anyone using the workstations. A Release Notice usually includes the following items:

- o The Notice of Changes section describes how the software is different from previous versions.
- o The Contents of Distribution Diskettes section describes what files are actually on the floppy disks supplied.
- o The Software Installation section tells you how to go about installing the files on the Distribution Diskettes and what to do with them once they are installed.
- o The Updates to Documentation section describes any changes to existing manuals. Software can change faster than the software manual can be updated. The Release Notice can give you information to hold you over until the manual is updated.
- o The Configuration Information section contains important information about the workstation configurations required to use the software.
- o Other sections can include summaries of new commands, conversion of existing software or data for use with the new software and/or data, or other information.

6 SIGNING ON

INTRODUCTION

This section tells you how to sign on to the workstation and an operating environment (for example, Word Processing or the Executive). The operating environment can vary depending on such factors as, for example, the applications you are running and which operating system your workstation is using. Refer to the "Guide to Technical Documentation" for a list of appropriate system manuals for your operating environment.

To use this section, make sure that the operating system is installed and that your system administrator has given you a user name and, if desired, a password.

SIGNING ON

The SignOn form acts as a gateway to the operating system. The SignOn form is displayed when the workstation is first turned on and also whenever you logout.

The SignOn form has three fields to type information in, User name, Password, and Date/Time.

The highlighted bar on the screen indicates the current field. You move from field to field using the RETURN key, the NEXT key, or the up arrow or down arrow cursor key. When you have filled in the information on the SignOn form, press GO.

To sign on,

- o **Type your user name in the User name field and press RETURN, NEXT, or the up arrow or down arrow cursor key.**

Each user on the workstation or cluster of workstations should have a user name assigned by the System Administrator.

- o **Type your password in the Password field and press the RETURN, NEXT, or the up arrow or down arrow cursor key.**

Each user on the workstation or cluster of workstations should have a password assigned by the System Administrator.

If your volume (the disk) was password protected when your disk was initialized, you should enter a password in this field. You can leave this field blank if the volume has no password.

Access to files within the workstation or cluster are restricted to those files for which the password you enter applies. If you have a password-protected volume, you can still sign on without a password, but your access to files will be restricted. Once you are signed on, you can enter the password using the Path command.

- o **Type in the date and time in the "Date/Time" field.**

When the workstation's clock has not been set, the workstation looks on its disk for the latest internal date and uses it for a Date/Time setting. The date will flash on the screen until you indicate that you wish to accept it by pressing GO. You can reject the flashing date by entering the correct time and date and pressing GO. To enter the date and time, use the example shown on the SignOn form as a model. That is, use the same abbreviations, punctuation, and spaces.

The Date/Time information is used to indicate creation and modification dates for files. Setting the time on any workstation in the cluster sets the clock for the entire cluster.

- o **Press GO**

Pressing GO causes the information you have typed in to be processed. The operating system reads your user configuration file (that is, your name.user file, created by your System Administrator to identify you to the workstation) and sets the time, if necessary. Your "name.user" file also contains the name of a volume and directory you are placed into when you sign on. An example of a file specification used for a user configuration file is [Sys]<Sys>Allen.user.

When the sign on procedure is complete, you are in your operating environment.

USER'S COMMENT SHEET

Operator's Guide

A-09-00272-01-A EN-070

We welcome your comments and suggestions. They help us improve our manuals. Please give specific page and paragraph references whenever possible.

Does this manual provide the information you need? Is it at the right level? What other types of manuals are needed?

Is this manual written clearly? What is unclear?

Is the format of this manual convenient in arrangement, in size?

Is this manual accurate? What is inaccurate?

Name _____ Date _____

Title _____ Phone _____

Company Name/Department _____

Address _____

City _____ State _____ Zip Code _____

*Thank you. All comments become the property of
Convergent Technologies, Inc.*



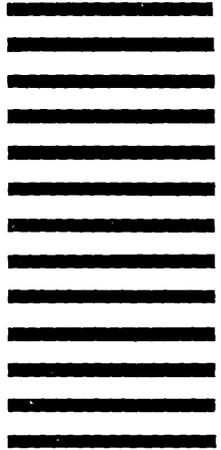
NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS PERMIT #1309 SANTA CLARA, CA

POSTAGE WILL BE PAID BY ADDRESSEE

Convergent Technologies
2500 Augustine Drive
Santa Clara, CA 95051

Attn: Technical Publications



Fold Here

Convergent Technologies

500 Augustine Drive, Santa Clara, Ca. 95051, (408) 727-8830

NOTES

TO FORMAT FLOPPY (INITIALIZING VOLUME)

COMMAND: IV (return)

1. Device Name= F0
2. Device Password= F0 (Optional)
3. Volume Name= TDICK
4. System Image= 0
5. Log File= 0
6. Primary File Header= Y
7. Double Sided= Y

TO READ WHATS ON FLOPPY

COMMAND: File (return)

1. File List= [F0]<*>*
2. Details "Optional"= yes or no
3. GO

TO READ SPECIFIC FILE ON FLOPPY

COMMAND: File (return)

1. *.MP (Multiplan)
2. GO

TO LOAD FLOPPY ONTO DISK

COMMAND: Copy (return)

1. File from= [F0]<SYS>THEN SPECIFIC FILE
2. File to= TO WHAT EVER FILE YOU WANT, I.E. MP-I
3. GO

TO COPY FROM HARD DISK TO FLOPPY

COMMAND: Copy (return)

1. File from= FILENAME, FILETYPE (ex: BURR.MP)
2. File to= [F0]<SYS>FILENAME, FILETYPE (ex: [F0]<SYS>BURR.MP)
3. Go

TO READ WHATS ON HARD DISK

COMMAND: File (return)

1. *
2. Go

TO CHANGE OPERATING SYSTEM (VOLUME)

COMMAND: Path (return)

1. Volume= D0
2. Directory= SYS
3. [Default File Prefix]= Optional
4. [Password]= Optional

Other Examples:

F0
SYS

TO MAKE GLOBAL DELETE

COMMAND: Delete (return)

1. File List= * Plus FILENAME, FILETYPE

Example = Delete All "Old" Multiplan Files
Enter in file list = * Old.mp (Return or Go)

BACKUP

COMMAND: Copy (return)

1. File from= [D0]<SYS>*
2. File to= [F0]<SYS>*
3. [Overwrite OK?]= Optional
4. [Confirm Each?]= Optional

DELETE FILES FROM FLOPPY

COMMAND: Delete (return)

1. * (For all files) or FILE NAME
2. Go