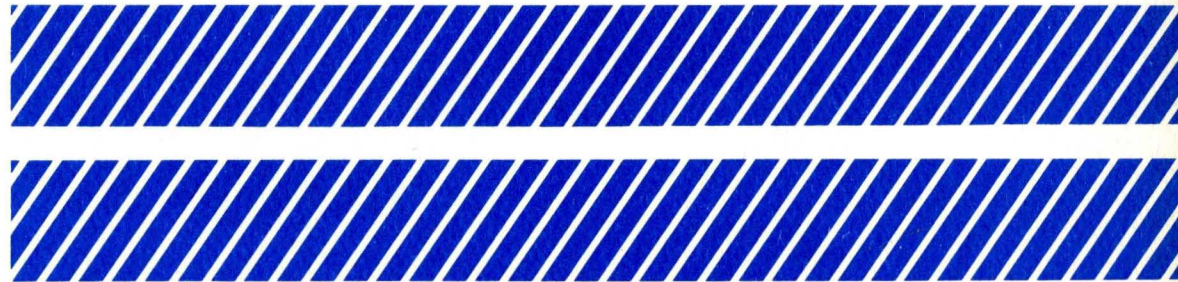


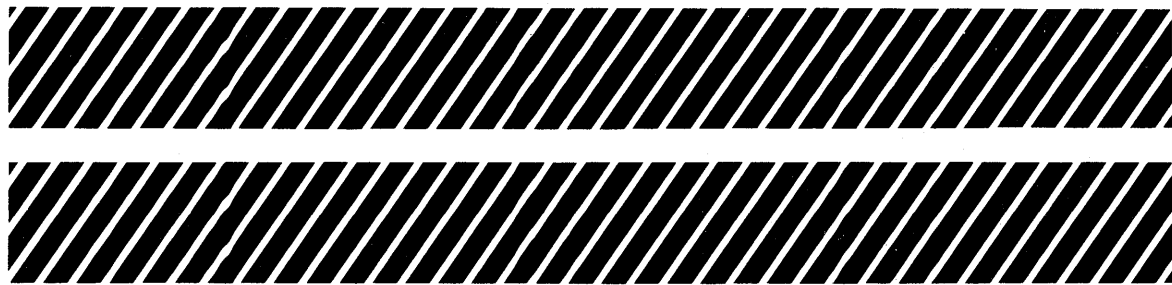
J500

Operating Instructions



J500

Operating Instructions



J500 OPERATING INSTRUCTIONS

SYSTEM II Release 8.1
TYPE-RITE Release 4.0

PRELIMINARY

TR-019-2
DECEMBER, 1980

This preliminary manual describes some basic operations for the AM Jacquard Systems 500 computer when used as an all-floppy system. These instructions apply when running Release 8.1 of the System II operating system with Release 4.0 of Type-Rite.

Included are procedures for setting up the system, using basic Type-Rite commands, and turning off the system. Further operations are described in the Type-Rite User Operating Instructions (VI-056) and related publications.

The purpose of this manual is to supply interim documentation to J500 users.

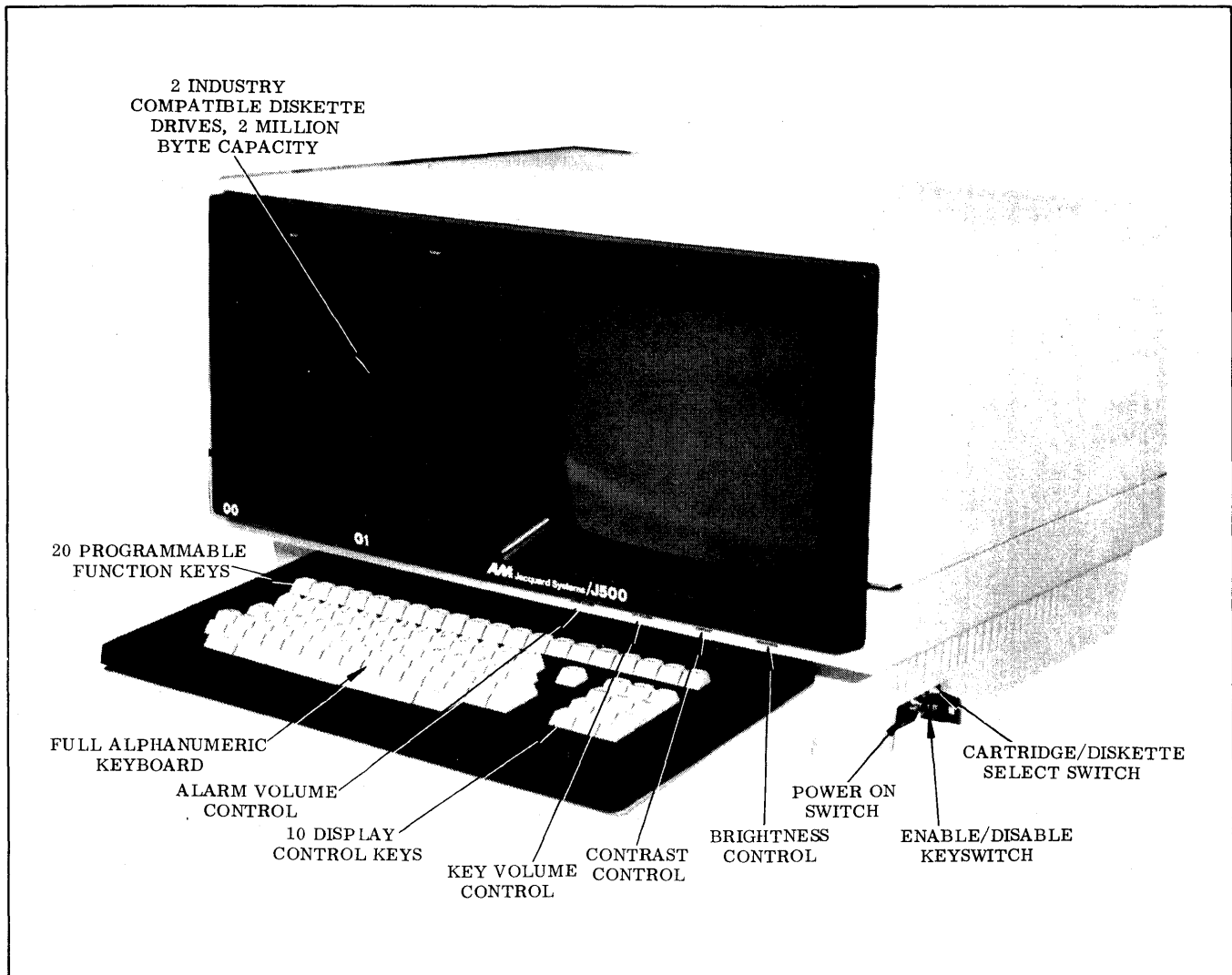
TABLE OF CONTENTS

SYSTEM OVERVIEW	1
SETTING UP THE SYSTEM	3
To turn the system on	3
To begin system operation	4
To call up Type-Rite	6
USING TYPE-RITE	7
Command mode	7
W - Write a new document	9
M - Modify this document	10
SO - Start Over	11
F - File this document.....	12
P - Print a document	13
Rules For Naming Type-Rite Documents.....	14
CA - CAtalog all documents	15
TURNING OFF THE SYSTEM	16
ADDITIONAL NOTES.....	18
CONTROLS AND SWITCHES.....	20
FUNCTIONAL AND PHYSICAL SPECIFICATIONS.....	21

SYSTEM OVERVIEW

The J500 is a standalone computer with two main physical components:

1. A CRT screen with two diskette drives;
2. A keyboard.



The following additional items are needed to run Type-Rite on the J500:

1. A diskette containing Release 4.0 of Type-Rite to be run under Release 8.1 of the System II Operating System;

NOTE: Your MSR has created a "BOOT" floppy containing: an Operating System; General Files; and TYPE-RITE.

2. A formatted document diskette. For formatting procedures see Type-Rite User Operating Instructions. This text will always assume that you are using double-density diskettes (FD00). Your MSR will provide these.
3. A printer.

SETTING UP THE SYSTEM

On the lower right side of the J500 CRT unit are three switches:

ENABLE	CARTRIDGE	OFF	ON
DISABLE	DISKETTE		
1	2		3

To turn the system on:

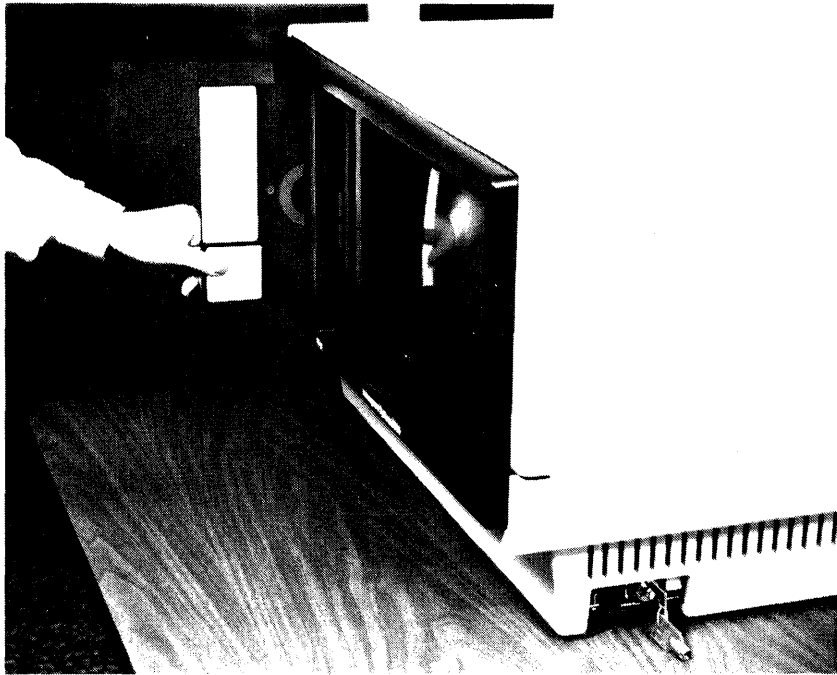
1. Set the power switch (position 3 above) to the ON position (away from the screen).
2. Turn the key clockwise (Position 1 above) to make sure that this switch is in the DISABLE position.
3. Set the second switch to the DISKETTE position by pressing the lower half of the button.
4. Turn the key counterclockwise to the ENABLE position.

NOTE: For purposes of this manual we are only concerned with the J500 as a standalone "floppy-based" system. On a cartridge disk system, other devices may need to be turned on. The initial steps for turning on a "disk" system vary slightly. Consult your Marketing Support Representative for specific instructions.

To begin system operation:

After the system has been turned on, several lines of characters may appear on the screen. As soon as the word STATUS appears on the top line:

5. Insert the "BOOT" diskette that has been programmed by your MSR and contains the operating system, in the left diskette drive (00);



Inserting a Diskette in the J500

Always insert diskettes with the label in the lower forward position and facing the screen. Push the diskette into the drive until it is securely in place, then close the door of the drive by sliding it to the left, to activate it.

When the **FD00** diskette drive has been activated, the red indicator light will blink; after about 20 seconds the word **BOOT** will appear in the lower left corner of the screen. Several seconds later the screen will display a pattern with the following prompt at the bottom:

System II 08.1 C1 80/09/25
ENTER DATE (YY/MM/DD) ___

6. Enter the current date using two digits each for the year, month, and day. Then press the RETURN key (shown with the characters RETURN).

ENTER DATE (YY/MM/DD) **80/12/05**

RETURN

The screen will then display:

ENTER TIME (HH/MM/SS) ___

7. Enter the time (based on a 24-hour clock) using two digits each for the hour, minutes, and (optionally) seconds. Press RETURN.

ENTER TIME (HH/MM/SS) **12/05/55**

RETURN

The J500 system is now in operation. The cursor will appear by itself on the bottom line of the screen.

To call up Type-Rite:

8. Key in:

\$TYPIV RETURN

After about 60 seconds Type-Rite will be in operation. The screen will display the main commands menu; pressing the TAB key will call up further menus.

A command prompt appears in the lower left corner of the screen, followed by the cursor:

Command?

When the command prompt is displayed, Type-Rite is in command mode.

9. Insert a blank formatted document diskette in the right diskette drive (01).

Remember to insert both diskettes with the label in the lower forward position and facing the screen. Slide the door of the drive firmly to the left to activate it.

10. To identify the diskette in the **01** drive as the one you want to put your files on, key in:

Command? **GO \$CHNOM FD01** RETURN

PRESS RETURN WHEN READY will appear; press the return key to complete the procedure:

RETURN

NOTE: Assume that you have double-density capability. The drives throughout this manual will be referred to as **FD00** and **FD01**. For users with single-density diskettes use **FP** instead of **FD**.

You are now ready to use Type-Rite.

USING TYPE-RITE

Command mode

When the command prompt is displayed on the bottom line of the screen, Type-Rite is in command mode.

Command? __

Type-Rite must be in command mode to receive instructions from the keyboard. Commands are entered in the area following the command prompt, then executed when the RETURN key is pressed.

Positioning The Cursor

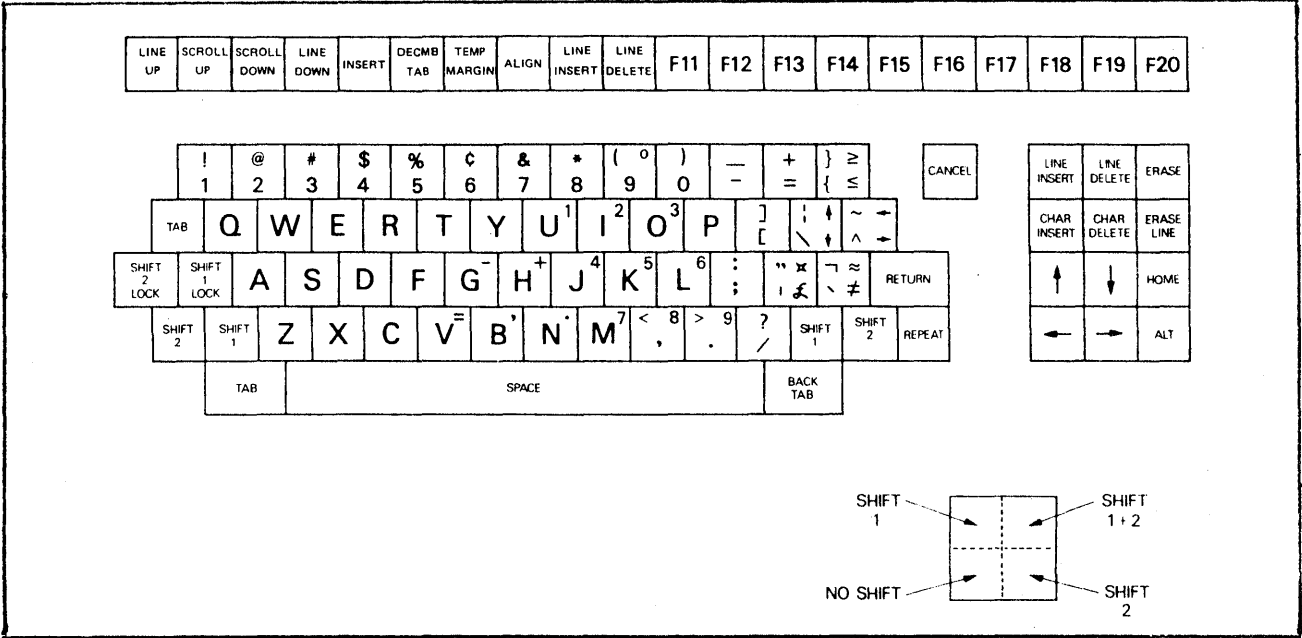
The cursor is a small flashing line that always tells you where the next character that you key in is going to appear. The cursor automatically moves across the screen as characters are typed from the keyboard. Errors may be corrected by repositioning the cursor and typing over the incorrect characters.

The operator may use either of the following to reposition the cursor:

The space bar moves the cursor from left to right, one position at a time and erases all characters it passes.

The cursor movement keys (each marked with an arrow) move the cursor right, left, up, or down, one position at a time, without erasing any characters.

The J500 keyboard is shown on the following page. A detailed description of the function keys is given in the Type-Rite User Operating Instructions, VI-056.



J500 Universal Keyboard

W Write a new document

To create a new document:

1. Enter the letter **W**, a space, and the new document name in the area following the command prompt. Press RETURN twice. For example, to create a document called ATLAS:

Command? **W ATLAS** RETURN
RETURN

Pressing RETURN once validates a command. Pressing RETURN a second time causes Type-Rite to enter edit mode.

In edit mode, text will appear on the screen as it is being typed. Corrections may be made by repositioning the cursor and typing over the incorrect characters.

You may use the following sample text to create a new document.

In Greek mythology, Atlas was the son of the Titan Iapetus and Clymene. He was the father of the nymphs and, according to Homer, he was also the father of Calypso. As a penalty for aiding the Titans against Zeus, Atlas was condemned to hold up the heavens with his head and hands.

When your document is complete, you may exit by first pressing the CANCEL key which will take you out of the edit mode, (the text of your document will disappear from the screen) and then entering the following command:

Command? **F** RETURN

Rules for naming documents are given on page 14 of this document.

M Modify this document

To call up an existing document currently filed on the diskette in order to make changes in it:

1. Press CANCEL to go into command mode.
2. Enter the letter **M**, a space, and the document name in the area following the command prompt. Press RETURN twice.

Command? **M ATLAS** RETURN
 RETURN

After RETURN is pressed the second time, the document will appear on the screen and Type-Rite will enter edit mode.

Changes keyed into the document during a "Modify" operation will be stored when the document is filed. Until then, the previously stored version remains on the diskette; it may be saved by entering a "Start Over" command in place of a "File" command. (See the following section.)

When issuing a "Modify" command, be sure to key in the document name (including extension) exactly as it was originally given. Even a minor error will cause the message DOCUMENT DOES NOT EXIST to be displayed. Pressing CANCEL will clear the command line so that the command can be re-entered.

After a "Modify" command has been executed, no other documents can be written until the first document has been filed onto the diskette.

SO Start Over

To recover the previous version of a document after keying in (but before filing) modifications:

1. If you are currently in the edit mode of your document, press the CANCEL key to return to the command mode.
2. Enter the letters **SO** in the area following the command prompt. Press RETURN.

Command? **SO** RETURN

No document name need be given.

The system will restore the original version of the document you are currently working with and discard changes. The cursor will return to the command line.

F File this document

When you are finished with a document, this command is used to close the document and file it on your diskette.

To file a document:

1. Press CANCEL to go into command mode.
(The document will disappear from the screen.)
2. Enter the letter **F** in the area following the command prompt. Press RETURN.

Command? **F** RETURN

As a "File" command is executed, text disappears from the screen and is stored on the document diskette. Type-Rite then returns to command mode and the command prompt reappears on the bottom of the screen.

P Print a document

Documents must be filed on a diskette before they can be printed. There are many possible procedures for printing a document; the simplest of them is given here.

NOTE: Turning on the J500 Videocomputer will not automatically turn on the printer. The printer is a separate unit. Make sure the printer is connected to the main power source.

To print a document:

1. Insert paper in the printer.
Continuous paper should be used for documents longer than one page.
2. Go into command mode.
3. Enter the letter **P**, a space, and the document name of an existing document currently on the diskette, in the area following the command prompt. Press RETURN.

Command? **P ATLAS** RETURN

Executing a "Print" command will cause a print initialization menu to display on the screen. The print initialization menu defines conditions for printing the document; you may optionally override any or all of the values currently displayed by keying in new values directly over the old in the righthand column of the menu.

4. Press F3 to print the entire document with no pauses.

While a document is printing, the terminal may be used for creating or editing other documents.

Further instructions for printing documents are given in the Type-Rite User Operating Instructions.

Rules for Naming Type-Rite Documents

1. A document name must begin with a letter, but may contain both letters and numbers.

EXAMPLES:

REPORT
ATLAS
SANTA
R2D2
J500
J

2. A name may have one to six characters.
3. A name may have an extension consisting of a period and one or two characters.

EXAMPLES:

REPORT.SK
SANTA.M4
ATLAS.2
T.TW
T.4

4. On any given diskette, no two documents may have both the same name and the same extension.

A series of documents on one diskette may have different names but the same extension:

REPORT.SK
ATLAS.SK
FILE.SK
FILE2.SK
etc.

Or documents may have the same name but different extensions:

REPORT
REPORT.SK
REPORT.3
REPORT.ML
REPORT.3D
etc.

CA CAtalog all documents, with comments

To obtain a listing of all documents filed on a diskette:

1. Press CANCEL to go into command mode.
2. Enter the letters **CA**, a space, and the name of the floppy to be catalogued (FD01) in the area following the command prompt. Press RETURN.

Command? **CA FD01** RETURN

NOTE: Type-Rite will not accept the CA command while there is a document in use at your terminal. You must close all currently open documents by entering one of the following commands:

- F - File This Document
- SO - Start Over

After several seconds the system will display a catalog similar to the one shown below. Every listing will include the document name and the number of characters in the document.

ATLAS.ML	1078	D	Sample Lines of Text	10:00	80/06/13	80/06/
FILE.2D	226	D	Facilities Overview Script Pages	10:13	80/12/05	80/12/
REPORT.HK	264	D	Monthly Project Control Sheet	09:51	80/12/05	80/12/
SANTA.HK	4700	D	Christmas Committee Report	14:35	80/06/13	80/11/

If a format appears at the beginning of a stored document, the catalog will also show any description that has been keyed into the description line, the time and date of the document's creation, and the date of the most recent revision.

TURNING OFF THE SYSTEM

Turning off the J500 is the reverse of setting up the system. It includes removing the diskettes, exiting Type-Rite, and turning the power off. Make sure that there is no program currently in use.

Remove diskettes

1. Press CANCEL to go into command mode.
2. Issue a "Remove" command for each diskette. Key in the letters **RM**, a space, and the device name in the area following the command prompt. Press RETURN.

Command? **RM FD00** RETURN

The system will display:

PRESS RETURN WHEN READY

Press RETURN and remove the diskette by pressing the Light Indicator Button to release the drive door. A spring loaded ejector will slide the diskette out of the drive so it can be easily removed. Repeat the procedure for the diskette in the **01** drive.

Both diskettes should be stored in their protective sleeves. Diskettes should never be scratched or bent. Always use a felt-tipped pen pen to write on the label; ballpoints or pencils may damage the diskette.

Exit Type-Rite

3. Enter the letters **EX** in the area following the command prompt.

Command? **EX** RETURN

The system will display:

TYPE-RITE IV TERMINATED

Turn the power off

4. Turn the key (position 1, page 3) clockwise to the DISABLE position.
5. Set the power switch to the OFF position toward the screen).

ADDITIONAL NOTES

1. Formatting a Disk

When a disk is used for the first time, it must be formatted. Formatting a disk erases all of its contents.

To format a double-density disk (can store up to 500,000 characters) key in the following:

\$FORMAT/I FD01:AM

To format a single-density disk (can store up to 250,000 characters) key in the following:

\$FORMAT/I FP01:AM

The device name, in this case AM, can be any extension of up to six characters.

2. Copying Disks

DSKOPY will duplicate a floppy. All information is transferred in identical form to the new floppy. The source and target floppy must be the same format. (i.e. FD00 to FD01; FP00 to FP01.)

3. Build Copy

In most cases the Build Copy utility will be the best way to move files from a single-density to a double-density floppy. Both can be inserted in the J500 at the same time. **BLDCPY** operates as specified in the System II Utilities Manual.

4. 10-Key Pad

Statistical information similar to using an adding machine may be entered by depressing the SHIFT 1 LOCK and SHIFT 2 LOCK keys and using the 10 display control keys.

The digits 1 - 10 are arranged on the pad as follows:

7	8	9
4	5	6
1	2	3
Backspace	0	.

No special program outside of Type-Rite is necessary to use this 10-key function.

5. Site Considerations

There must be a minimum of 6" of air space between the equipment and the wall.

There is a standard 6 foot power cord to the J500.

It requires 117V AC power and dedicated line.

Temperature should be between 60-85 degrees (preferably at about 68 degrees F.)

6. Communications

The J500 cable is a ribbon cable with a 26-pin flat connector on the J500 end and a 25-pin male D-type connector on the (RS232 compatible) modem end.

To connect a J500 to J500 via hardwire you need a null modem.

The programmable communications chip permits programming of the sync/asynch mode, baud rate, parity, character size, and number of stop bits.

Auto Dial Controller interfaces to RS-366 compatible connector on the rear of the J500. This must be connected to a Bell 801 compatible auto dial unit.

There are two independent, but identical programmable communications controllers (asynch or synch.)

CONTROLS AND SWITCHES

Control/Switch	Function
POWER ON Switch	Applies AC line voltage to power supply and internal cooling fans.
ENABLE/DISABLE Keyswitch	Allows unit to operate in ENABLE position.
CARTRIDGE/DISKETTE Switch	Device select switch which specifies which device the Auto-Program Load will occur from.
ALARM VOLUME potentiometer	Audible alarm volume control.
KEY VOLUME potentiometer	Keyboard audible "click" volume control.
CONTRAST potentiometer	CRT contrast control.
BRIGHTNESS potentiometer	CRT brightness control.

FUNCTIONAL AND PHYSICAL SPECIFICATIONS

PROCESSOR

- Word Size - 16 Bits
- Accumulators - Four
- Push Down Stack - 16 Deep
- Status Register
- Program Counter
- Memory Address Register
- Direct Memory Access
1,500,000 bytes/sec.
- Programmed I/O approx.
375 K bytes/sec.
- Interrupt System
- Real Time Clock
- Powerful instruction set

KEYBOARD

- Removable via cable
- Full Upper/Lower
ASCII Key Layout
- Display Control
Keys (10)
- Edit/Function Keys (20)
- "n" Key Rollover

PHYSICAL

J500 Videocomputer:
Height 14.5 in.
Width 24.5 in.
Depth 17.25 in.
Weight 95 lbs.

Keyboard:
Height 3.5 in.
Width 18.5 in.
Depth 9.25 in.
Weight 2.5 lbs
Total Depth (J500 and
Keyboard): 26.5 inches.

CRT DISPLAY

- 12" CRT
- 80 x 24 Format
- High Resolution
Characters
- Full ASCII Character
Set
- 128 User Programmable
Characters
- High Contrast
- Low Reflectance
faceplate
- No flicker
- Update at CPU speed

DISKETTES

- 2 Drives Built-in
- Industry compatible
format
- 250K, 500K or 1M
bytes/Drive
- Random access
- Removable Media

MEMORY

- Semi-Conductor
- 128K bytes (Standard)

ENVIRONMENTAL

Operating Temperature
60° F to 85° F
(15.5° C to 29.4° C)
ambient air

Humidity: 20% to 80% RH
(non-condensing)

More detailed instructions for using the J500
are included in the following publications:

Type-Rite User Operating Instructions V1-056

Type-Rite Training Manual V1-055

System II Operating System Programming
Reference Manual V1-005

System II Utilities Manual V2-005

J500 Videocomputer System Reference Manual
JPS 500-01

J500 Videocomputer System Installation Manual
J500/TM-02

COMMENT SHEET

FROM:

Name _____

Business Address _____

Does this publication meet your requirements? Yes No

If not, please explain _____

COMMENTS
Describe any errors and/or suggested changes. Please include page number.

**3340 Ocean Park Boulevard
Santa Monica, California 90405**



**3340 Ocean Park Boulevard
Santa Monica, California 90405**

