Disk System
Installation Guide

Xerox

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INSTALLATION GUIDE

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Xerox 820 and 820-II Computers

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SCOPE

This guide is designed to take you step by step through the procedures to install and initialize your Corvus disk system for Xerox 820 computers.

This guide details only the installation and initialization procedures. It does not contain explicit explanations or descriptions of the Corvus disk system and software. Further information concerning your Corvus disk system and associated software can be found in the Corvus Systems User Guide for CP/M Computers.

CONVENTIONS

The word **"Type"** is used throughout this guide to mean that two or more characters are to be entered at the computer keyboard. The form of a **"Type"** statement is as follows:

Type RUN SYSGEN [RETURN]

Keytop symbols such as [SPACE] within or at the end of a statement to be typed represent a single typewriter key to be pressed. When a keytop symbol is used, press the key to which it refers.

The word **"Press"** is used throughout this guide to mean that a single letter, number, or symbol is to be entered at the computer keyboard. Examples:
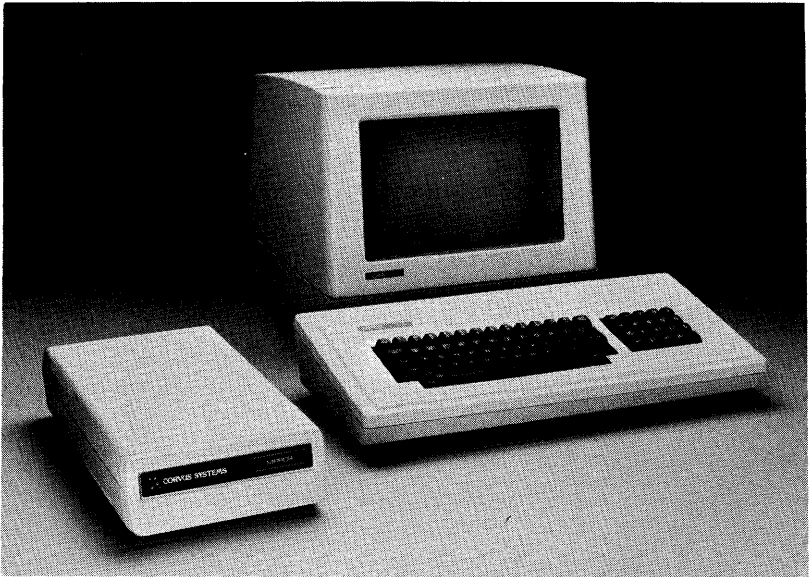
Press Y
Press [RETURN]

HARDWARE SETUP

To use your Corvus disk system with a Xerox computer, the following minimum hardware and software is required:

☐ Xerox computer with 64K RAM
☐ Single floppy diskette drive
☐ Corvus Hard Disk System for Xerox computer with CORVUS XR-H UTILITIES diskettes
☐ CP/M Version 2.2 diskette

Xerox 820 Computer System
*with Corvus Disk System*

1. Power off all equipment.
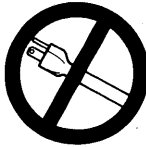
2. Place the disk unit on a flat surface, on its base. Be sure the disk drive has adequate ventilation. Also, protect the disk from strong electronic fields by not placing power cords or other electro-magnetic field generating equipment on top of the drive container.

   Since the Corvus disk system is a precision instrument, it must be handled carefully. The disk drive must not be operated when the unit is upside down, on its side, or if the long direction is at an incline.

   To ensure cool running equipment, the airflow slots located at the rear of the drive container should not be blocked. Also, avoid putting the unit in a sealed container (such as in a box or drawer).
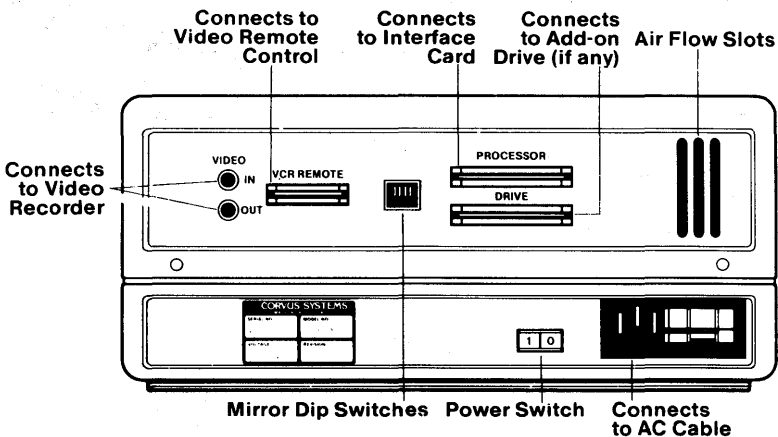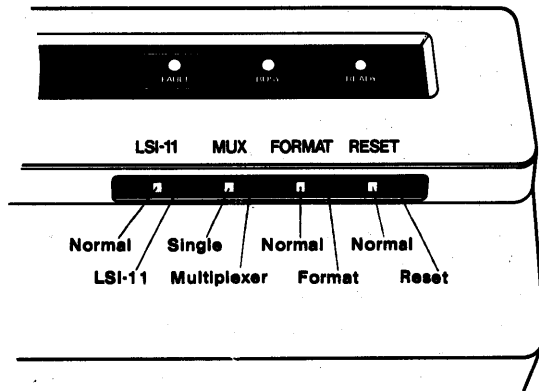

Drive Cabinet Back Panel

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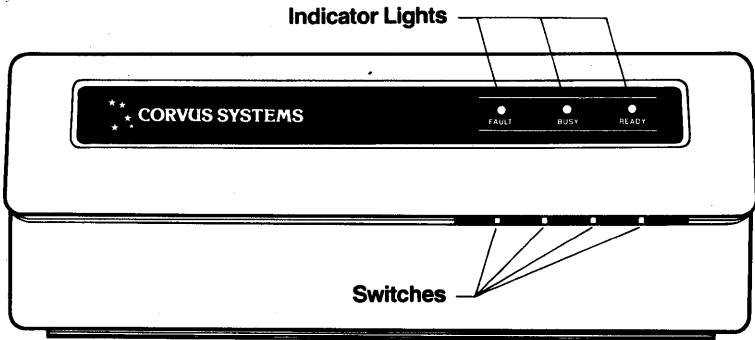
Drive Cabinet Front Panel

3. Flip all of the red drive controller switches to the left, which is the normal position for each of them.

Approximately two inches (5 cm) below the indicator lights, the front panel protrudes slightly. The four switches are located directly beneath the lights, and up under the lip of the protrusion.

Switches and Lights

4. Verify that the voltage setting for the drive matches the local voltage (100v, 120v, 220v, or 240v). The drive works with 50 or 60 Hertz power in any of the voltage settings. The voltage setting, fuse, and local voltage must match. Any type of mismatch here causes damage to the drive hardware.

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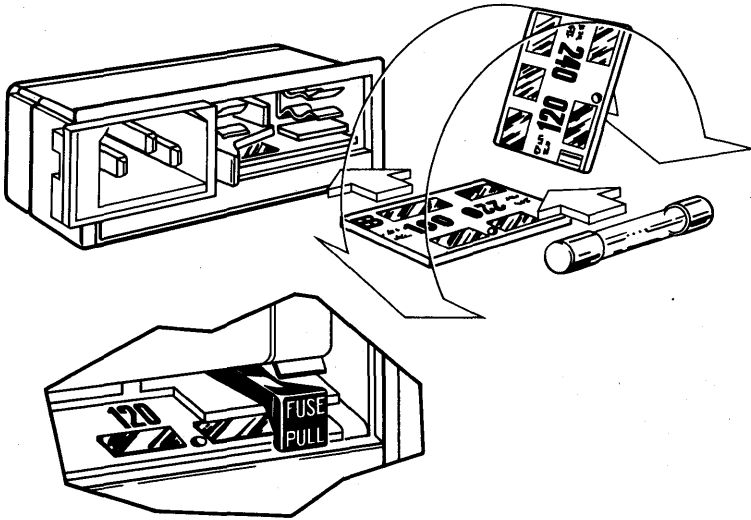
Voltage Selection and Fuses

The AC power cord connector and fuse are found at the bottom right of the back panel on all drive models. To change the voltage selection, flip the small circuit board and install the proper fuse as follows:

☐ Slide open the clear plastic cover door, pull the fuse-pull lever to the left, and remove the fuse.

☐ Use long-nose pliers to carefully pull the voltage circuit board out of the fuse housing. To select the proper operating voltage, position the circuit board so that the desired voltage displays on the top left side of the board. Push the board firmly into the slot.

☐ Do not re-insert the fuse you removed if you have chosen a different voltage setting from the one you received with the drive. Select the correct slow blow fuse using the following table:

Disk Drives:
100 or 120 volt   2.0 amp
220 or 240 volt   1.0 amp

☐ To return the fuse to its receptacle, push the fuse-pull lever to the right and insert a fuse into the holder. Slide the clear plastic cover door to the right to expose the AC power cord connector.

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5. Connect the 34-pin flat cable to the disk drive port labelled PROCESSOR on the rear bezel. The cable must exit downward, with the red stripe on the right, as you look directly at the rear of the drive. (Note that this cable must not be coiled because coiling increases signal distortion.)

6. Remove the cover from the Xerox 820 computer by taking out the two screws in the top cover.

7. Locate the 40-pin connector labeled J8 on the Xerox 820's main circuit board. Attach the 40-pin flat cable to the J8 connector. The cable exits toward the rear of the computer with the colored stripe to the right as viewed from the rear. Use caution to insure that the pins on the main circuit board line up with all the holes on the connector.
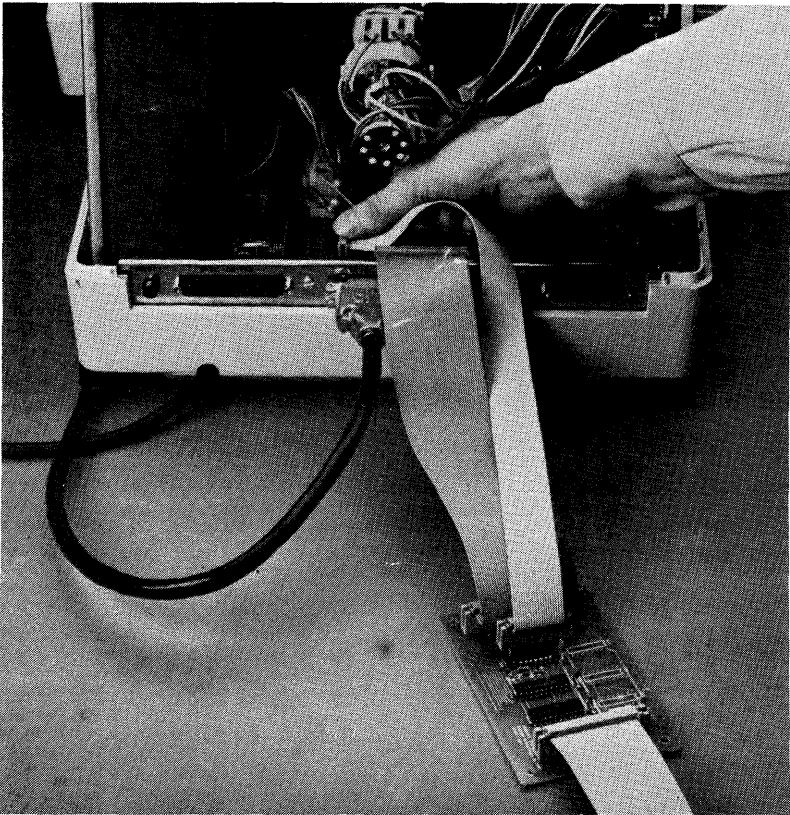
Two Corvus Interface Cables
Connected to Xerox 820 Computer

8. Locate the 20-pin connector labeled J11 on the Xerox 820's main circuit board. Attach the 20-pin flat cable to the J11 connector. At the connection, the colored stripe of the 20-pin cable faces toward the front of the computer. Use caution to insure that the pins on the main circuit board line up with all the holes on the connector. The cable is then folded back to exit toward the back of the computer.

9. Replace the cover to your Xerox 820 computer.

10. Turn on the computer. (Whenever the computer and drive are connected, the computer should be turned on first, then the Corvus disk drive.)

11. Connect the AC power cord to the disk unit and to a power receptacle. Turn on the drive.

   After approximately 40 seconds, the READY light should be on, the BUSY and FAULT lights should be off, indicating that the disk system is ready.

   The power switch is located in the lower right hand corner of the back panel.

   If the disk system does not become ready after one minute, then flip the RESET switch, which is the rightmost switch on the front of the drive cabinet.

12. If the drive is not ready after you have flipped the RESET switch, see the "Troubleshooting" section of the CORVUS SYSTEMS' USER GUIDE FOR CP/M COMPUTERS.

INITIALIZATION
FOR CP/M

This procedure will create CP/M areas on the Corvus drive. The floppy drives use volumes A: and B:, volumes from C: on are on the hard drive.

After initialization is completed it will be necessary to run the CLINK program each time the computer is turned on. The CLINK program you run depends upon the model drive being used.

For the Model 6 run CLINK2FV
For the Model 11 run CLINK2TN
For the Model 20 run CLINK2TW

Before initializing your Corvus disk, copies of the Corvus Xerox Utility diskettes should be made, using the PIP command.

1. Turn on your computer after hardware setup.

The screen displays:

```
        ...XEROX 820 VER. 1.0...
          A—BOOT SYSTEM
          T—TYPEWRITER

    ☆__
```
---

2. Place the CP/M Ver 2.2 diskette in the diskette drive.

3. Type A [RETURN]

The screen displays:

```
    COPYRIGHT® 1981, XEROX CORPORATION
    CP/M REG. TM 2.2 SY 1.1 2-294 BS0050379
    A>__
```
---

4. Insert the diskette labeled CORVUS XR-H UTILITIES VOL. 1 OF 4 into floppy drive B: and close the door.

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5. **Type** B: [RETURN]

The screen displays:

B> _

6. **Type** PUTGET [RETURN]

The screen displays:

---CORVUS PUT/GET ROUTINE---
(VERSION 1.4XR)

PUT, GET, OR FILL (P/G/F)

7. **Press** F

The screen displays:

DRIVE#(1-4)? _

8. **Press** 1

The screen displays:

HEX BYTE TO FILL DISC WITH? _

9. **Type** E5 [RETURN]

The screen displays:

STARTING DISC ADDRESS? _

10. **Type** 2320 [RETURN]

The screen displays:

NUMBER OF SECTORS? _

11. **Type** 64 [RETURN]

The screen displays:

PUT, GET, OR FILL (P/G/F)

12. **Press** F

The screen displays:

DRIVE #(1-4)? _

13. Press 1

The screen displays:

HEX BYTE TO FILL DISC WITH? __

14. Type E5 [RETURN]

The screen displays:

STARTING DISC ADDRESS? __

15. The starting address of the directory for drive D: varies
with the model of the Corvus hard disk.

For a Model   6   Type 24272 [RETURN]
For a Model 11   Type 48592 [RETURN]
For a Model 20   Type 49380 [RETURN]

The screen displays:

NUMBER OF SECTORS? __

16. Type 64 [RETURN]

The screen displays:

PUT, GET, OR FILL (P/G/F)

17. If a Model 6 or a Model 11 drive is being initialized, skip to
Step 22. If a Model 20 drive is being initialized, drive E:
must be initialized.

Press F

The screen displays:

DRIVE#(1-4)? __

18. Press 1

The screen displays:

HEX BYTE TO FILL DISC WITH? __

19. Type E5 [RETURN]

The screen displays:

STARTING DISC ADDRESS? __

20. Type 96440 [RETURN]

The screen displays:

NUMBER OF SECTORS? __

21. Type 64 [RETURN]

The screen displays:

PUT, GET, OR FILL (P/G/F)

22. Exit the PUTGET program by holding down the <CTRL> key and **pressing** C.

The screen displays:

B> __

23. The disk is now initialized. The Corvus link may now be installed. The link is installed by running a program. The name of the program depends on the model drive being linked.

    For the Model 6   **type** CLINK2FV [RETURN]
    For the Model 11   **type** CLINK2TN [RETURN]
    For the Model 20   **type** CLINK2TW [RETURN]

The screen displays:

--- CORVUS LINK INSTALLED ---

B> __

The software setup has now been completed. The Corvus hard disk is now initialized for use with a Xerox 820 computer and the Corvus link has been installed.

Testing the Drive

The procedure described below is a simple test of the Corvus drive. Note that all standard CP/M commands can be used with the Corvus drive.

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1. Type A:PIP C:=B: *.DOC [RETURN]

The screen displays:

```
COPYING—
INDEX.DOC
CERROR.DOC
CDIAGNOS.DOC


B>__
```

2. Type C: [RETURN]

The screen displays:

```
C>__
```

3. Type DIR [RETURN]

The screen displays:

```
C: INDEX DOC: CERROR DOC: CDIAGNOS DOC
C>__
```

4. Type ERA *.* [RETURN]

The screen displays:

```
ALL [Y/N]?__
```

5. Type Y [RETURN]

The screen displays:

```
C>__
```

The drive is now ready to use. The hardware has been set up and the drive initialized. The Corvus link has been installed. The hardware and software has been quickly tested by transfer of files from a floppy to the Corvus hard disk. Files may now be copied to the hard disk from floppies using the PIP program.

Remember, the appropriate CLINK2 program must be run each time the computer is powered on.