



MPX-50 FIRMWARE UPGRADE

Necessary Tools

- * Firmware Disk
- * PC with MS-DOS
- * Parallel Interface Cable

Please read through this document before starting. It contains description of the equipments configuration and the procedures for firmware upgrade.

Contents:

- Operating environment
- Upgrading from Windows
- Upgrading from MS-DOS

The upgrade program can run under the following operating environments.

- MS-DOS version 3.1 or later
- MS-DOS prompt under Windows 3.1 or Windows 95/98

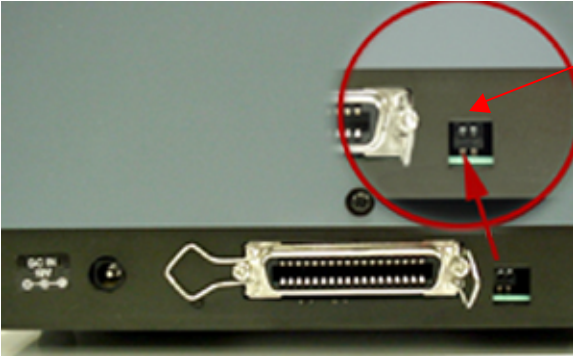
UPGRADING FROM WINDOWS

If Windows is set up on your computer, use the following procedure to upgrade the firmware. The upgrade procedure uses an MS-DOS prompt under Windows. If only MS-DOS is set up on your computer, see the section "Upgrading from MS-DOS" after this one.

* The following explanation assumes that the floppy disk drive is drive **A:**

If the floppy disk drive on your computer is not drive **A:** use the drive of the appropriate drive name.

- 1) Connect the computer and the MPX-50 using a parallel cable. Before connecting the cable, switch off the power to the computer and the MPX-50.
- 2) Switch on the power to the computer and start Windows.
- 3) Start [MS-DOS Prompt].
- 4) On the MPX-50, pull out AC adapter. Set DIP-SWITCH #1 on and then reconnect the AC adapter.



This will activate the firmware upgrade mode.

When MPX-50 enters into the correct mode, FWE LED light, POWER LED blinks and light out.

MPX-50 stays in 'waiting' status.

Note: To cancel upgrading, pull out AC adapter, Set DIP-SWITCH off.

- 5) Insert the MPX-50 FIRMWARE DISK in the floppy disk drive.
- 6) At the MS-DOS prompt, type in the following: **A:**

Then press the **[Enter]** key.

- 7) Type in the following: **DOWNLOAD**

Press the **[Enter]** key again.

Data is now sent from the computer to the MPX-50, and the Upgrade will start. Do not interrupt the upgrade while it is in progress. Interrupting the upgrade before it finishes may render the MPX-50 inoperable.

- 8) When upgrading finishes, POWER LED blinks slowly.
- 9) Pull out AC adapter. Set **DIP-SWITCH #1** to off.

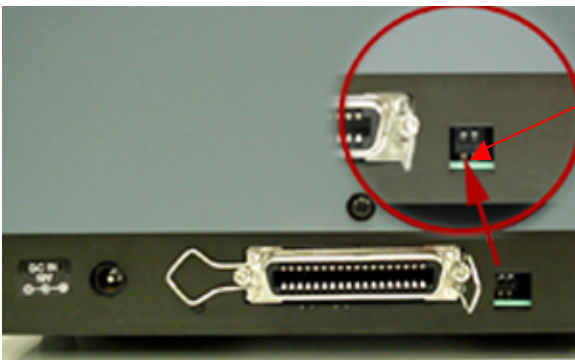
When you turn ON the MPX-50 next time, new firmware is activated.

UPGRADING FROM MS-DOS

If your computer is set up only for MS-DOS, use the following procedure to upgrade the firmware. If Windows is set up on your computer, then instead of this procedure, follow the steps under "Upgrading from Windows" in the section above.

* The following explanation assumes that the floppy disk drive is drive A. If the floppy disk drive on your computer is not drive A, use the drive of the appropriate drive name.

- 1) Connect the computer in the MPX-50 using a parallel cable. Before connecting the cable, switch off the power to the computer and the MPX-50.
- 2) Switch on the power to the computer and start MS-DOS. After MS-DOS finishes booting, the MS-DOS prompt is displayed.
- 3) On the MPX-50, pull out AC adapter. Set DIP-SWITCH #1 on and then reconnect the AC adapter.



This will activate the firmware upgrade mode.

When MPX-50 enters into the correct mode, FWE LED light, POWER LED blinks and light out. MPX-50 stays in 'waiting' status.

- 4) Insert the MPX-50 FIRMWARE DISK in the floppy disk drive.
- 5) At the MS-DOS prompt, type in the following: **A:**

Then press the **[Enter]** key.

- 6) Type in the following: **DOWNLOAD**

Then press the [Enter] key.

Data is sent from the computer to the MPX-50, and the upgrade starts. Do not interrupt the upgrade while it is in progress. Interrupting the upgrade before it finishes may render the MPX-50 inoperable.

- 7) When upgrading finishes, POWER LED blinks slowly.

8) Pull out AC adapter. Set DIP-SWITCH #1 off.

When you turn ON the MPX-50 next time, new firmware is activated.

IF THERE IS A PROBLEM WHEN UPGRADING:

DOWNLOAD.BAT, the batch file that for downloading the firmware upgrade data to the MPX-50, is executed normally when the following conditions are satisfied:

- The device name for the printer port is LPT1
- If a printer driver must be installed under MS-DOS, the line for installing the appropriate printer driver is present in CONFIG.SYS.
- No printer control codes are added to the data sent by the printer driver.

DOWNLOAD.BAT cannot be used on a computer which assigns a device name other than LPT1 to the printer port or which requires a printer driver to be installed under MS-DOS. If you are using such a computer, you need to modify DOWNLOAD.BAT to use the same device name as the printer port on your computer.

Also, some printer drivers may prefix printer-control codes to data that is sent. Data to which printer-control codes have been added will generate an error when received by the MPX-50.