Lisa and Macintosh XL: Restoring Corrupted Parameter Memory

In the Lisa 2, Lisa 2/5, and Macintosh XL (Lisa 2/10), parameter memory
settings are stored in two locations:

  parameter RAM on the I/O board, and
  the hard disk used for system boot.

In all Lisas and Macintosh XLs, parameter memory in the RAM is held by
standby power as long as the machine is plugged in. Only the Lisa 2s
and 2/5s have batteries to maintain parameter memory when the unit is
unplugged.

The state of parameter memory at any one time depends on which of the
following five configurations is true:

  1. Configuration:

       Neither the system disk nor the RAM has valid settings, such as
       when the system comes out of the box.

    State of Parameter Memory:

       The parameter memory will be set when the software is loaded.

  2. Configuration:

       The RAM does not have valid settings but the disk has, such as
       after the system is unplugged.

    State of Parameter Memory:

       The settings on the disk will be copied to RAM during startup.

  3. Configuration:

       RAM has valid settings but the disk does not, such as when loading
       software from an old system to a new disk.

    State of Parameter Memory:

       The settings in RAM will be copied to disk during startup.

  4. Configuration:

RAM and the disk have dissimilar valid settings.

State of Parameter Memory:

The settings in RAM overwrite the settings saved on disk.

5. Configuration:

RAM and the disk have identical valid settings.

State of Parameter Memory:

Nothing happens to parameter memory during startup.

Understanding these five possible configurations will help you track
down certain problems that may occur with Preferences. For example,
if you make the mistake of installing the unofficial Revision C of
MacWorks (configuration 1), Preferences somehow gets corrupted in RAM.
Under configurations 2 and 3, this corrupted information is copied to
the disk. When another disk is started up (configuration 4), the corrupted
RAM information is copied onto this disk as well. As a result, there
may be no uncorrupted copy of Preferences on any of your disks by the
time you notice the problem.

Workaround 1:

1. Unplug the system with the corrupted RAM.

2. Start up MacWorks XL Revision D.

Parameter settings will be copied from MacWorks XL Revision D to RAM,
as in Configuration 2 above.

Workaround 2:

1. Unplug the system with the corrupted RAM.

On a Lisa 2 or 2/5:

a. Leave the system unplugged overnight, or
b. Take the I/O board out of the system, turn the battery switch
   to off, and leave the system for several hours.

2. Find a Profile with a working Lisa OS (Office System or Workshop).

3. Install a 2-port parallel card in one of the expansion slots.

4. Plug the system back in and start up from the Profile.

5. Select Preferences and make the appropriate changes.

6. Turn the system off.

7. Without unplugging the system (VERY IMPORTANT - just disconnect the
        Profile from the parallel card), start up the system from the disk
        with the copy of the corrupted RAM. This copies the parameter memory
        from RAM onto the disk, restoring the disk copy of RAM.
<None>

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