

□ Power Supply Options

When the Apple power supply was originally designed, it was capable of providing more than adequate power for the memory and accessory cards available at the time. Newer expansion cards with more memory and more features consume more power, possibly taxing the Apple power supply to its limit.

If most of the slots in your computer contain expansion cards or the system has a large amount of RAM, you may overload the original power supply. The power supply has an internal protection circuit which turns the power supply off for a second and then turns it back on to check for the presence of the overload condition. If your computer mysteriously reboots itself intermittently or the power indicator light inside the computer flashes, your system may require more power.

Applied Engineering offers two solutions to the power users:

Solution 1: RamCharger

RamCharger is an Auxiliary Power and Battery Back Up device for the RamFactor. This solution provides constant, uninterruptable power to RamFactor, independent from the Apple power supply. This way, information stored in RamFactor is protected in the event of a power failure. RamCharger also decreases the burden on the Apple power supply. More details on the RamCharger option are given in Appendix C.

Solution 2: Applied Engineering High Output power supply.

The Apple power supply is capable of a maximum output of 35 Watts at 2.5 Amps. The High Output supply, which installs in place of the original supply, has an output rating of 77 Watts at 6 Amps.

Install It!

Installing RamFactor in an Apple or Franklin Ace 1000 series Computer :

1. TURN OFF THE COMPUTER'S POWER SWITCH.

Never install or remove a card while the computer is on. However, you need to leave the computer plugged in throughout the installation to allow the power supply to discharge static electricity from your body.

\$478+slot	\$4F8+slot
\$578+slot	\$5F8+slot
\$678+slot	\$6F8+slot
\$778+slot	\$7F8+slot

RamFactor puts the current data for the partition size in two of the screen holes:

\$678+slot:	# pages (hi-byte)
\$6F8+slot:	# pages (lo-byte)

The number of pages divided by two is the number of blocks.

Another screen hole is set up with the size of the entire card. Location \$478+slot holds the number of blocks divided by 256 of the entire card. Thus a value of 2 indicates there are 512 blocks, or 256K bytes.

The screen holes are only valid after accessing a partition. The meaning of the other screen holes is as follows:

\$4F8+slot:	index to partition data
\$578+slot:	partition base address (hi-byte)
\$5F8+slot:	partition base address (mid-byte)
\$778+slot:	operating system code
\$7F8+slot:	operating system check code

Finding Size via RamFactor Memory

The information on card size and partition size is also stored in the RamFactor memory in addresses 000000 through 0000FF. Valid data in the first four bytes indicates the RamFactor memory has been partitioned. The first eight bytes are used for general information. The next nine groups of 24 bytes each are used to describe the partitions.