

## Macintosh: Specifications on Network Voltages and DTR

Revised: 8/7/92 Security: Everyone

Macintosh: Specifications on Network Voltages and DTR

\_\_\_\_\_\_

Article Created: 1 May 1987

Article Last Reviewed: 19 June 1992

Article Last Updated:

Some networks, such as an Ungerman Bass Net One network, require approximately 12 volts for the DTR signal (pin 20). In some configurations, the Macintosh Plus only supplies 2.25 volts.

It is possible the application in the configration is not handling DTR properly. The removal of the +5 and +12 volt lines from the serial port on the Macintosh Plus means that a Macintosh application may have to control a peripheral's DTR line, which may be the problem. The program holding DTR low could contribute to this particular low voltage condition.

Consider also the more likely possibility that the IC that drives the handshake lines (a 9636 Line Driver) may not be able to source - or sink - enough current for the network. The IC will only supply or accept 150mA of current. If the existing hardware configuration of the network requires more than that, the IC will go into current limit, and the output voltage will drop to a level acceptable for the IC. This short circuit output voltage may very well be 2.5V. If this is the case, then a current booster of some sort may be necessary.

Copyright 1987 Apple Computer, Inc.

Tech Info Library Article Number:111