## UltraTerm Addendum

Modification to allow the UltraTerm to operate with the new enhanced Apple //e

In February 1985, Apple Computer released an enhancement for the Apple //e. This change replaces four chips in the Apple //e to give the computer more advanced capabilities. With this enhancement, the Apple //e now supports the use of video display cards in slot 3. The UltraTerm is no longer required to overide Apple's slot select routines. However, the new chip set does require a change in the UltraTerm.

The UltraTerm has been modified in order to accommodate both versions of Apple //e. This modification adds a jumper connector below U6 on the UltraTerm [please see figure 1].

- If the UltraTerm is to be used in an older Apple //e then the jumper block should be placed across the two upright pins of it's connector and the J1 jumper block should be across the upper pins of it's connector.
- If the UltraTerm is to be used in an Apple II, II+, or an enhanced Apple //e
  then the jumper block should be removed from it's connector and the JI
  jumper block should be across the lower pins of it's connector.

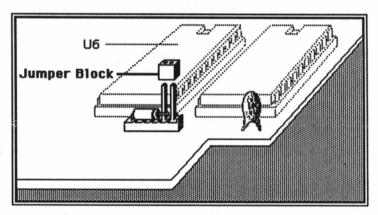


Figure 1: Position of diode jumper block and connector on the UltraTerm.

## How To Tell If You Have The New Apple //e

To determine if you have an enhanced Apple //e you will need to look at the CPU chip, located just below slot 3, and read the numbers from it. A new or modified Apple //'s CPU will read in part either "65C02" or "65SC02". The important thing to look for is the "C" designation between the numbers. This is what determines whether or not you have an enhanced Apple //e.

March 12, 1985 ULT-DOC-000



March 27, 1985

Dear UltraTerm owner:

The enclosed PAL chip is for use with the UltraTerm in the Enhanced Apple //e. The Enhanced Apple //e can be identified by the chip in the socket just below slot 3. A letter "C" in the number on the chip means the computer is an Enhanced Apple //e. To install the 251C, look to Figure 1.1 in your Ultraterm manual. Socket U4, along the top edge of the block diagram, is the socket in which the IC will be installed. Using the screwdriver, remove the present IC from U4 and replace it with the 251C. Be sure the pins are not bent and the small notch on the IC is on the top of the board like the other IC's. Keep the old IC in a convenient place in case you need it in the future.

Thank you for your patience and cooperation in updating the UltraTerm.

Sincerely,

Videx, Inc.



## Dear UltraTerm Owner:

With the introduction of new ROMs for the Apple //e, Videx has updated the UltraTerm to insure compatibility. The enclosed firmware EPROM will be available to all of our customers using the new //e ROMs. There is also a small modification that has to be made to the UltraTerm when this firmware is used. The diode near the edge connector (shown just below U6 in the picture on page 1.3 in the UltraTerm manual) should be removed and the jumper on pins J1 should be on the lower two pins (Apple II+ position). Please call me if you have questions about this change.

The enclosed character set has been developed for implementation of the UltraTerm with Mouse-text. If there are plans to implement the mouse with your software product, you should be interested in examining this character set on the UltraTerm.

Thank you for your time and consideration in this matter.

Videx, Inc.