ADDITIONAL NOTES ON THE K-1008-6 PET GRAPHIC INTERFACE BOARD

1 - Writing the VIDEO and ENABLE CONTROL REGISTERS

The addresses for the VIDEO and ENABLE CONTROL REGISTERS are only partially decoded. Thus, the VIDEO CONTROL REGISTER may be written by writing to any address in the range 48896 to 49151 (BF00 to BFFF). The ENABLE CONTROL REGISTER may be written by writing to any address in the range 48640 to 48895 (BE00 to BEFF). Also, it should be possible to put a ROM in the B000 - BFFF address space on the K-1008-6, since reading from ROM won't affect the control registers.

2 - THE LIGHT PEN JUMPER (U31-4 to U31-13)

When the LIGHT PEN REGISTER IC's are not installed on the K-1008-6, the LIGHT PEN JUMPER should also not be installed. Presence of the LIGHT PEN JUMPER in this case would prevent reading data from the video memory. If you install the LIGHT PEN REGISTER IC's, you must also install the LIGHT PEN JUMPER for proper operation of the board.

3 - THE SEMI-RANDOM DOT PATTERN ON POWER UP

On some K-1008-6 boards, vertical bars instead of a semi-random dot pattern will be seen when the video memory is displayed after power up.

4 - USING 2716'S (Single 5 Volt Type)

The slight differences in pin assignmemts between the 2716 and 2332 normally don't cause a problem. However, because the K-1008-6 must use the first half of certain machine cycles to fetch display data, these differences do cause a problem. To use a 2716, the following must be accomplished:

1. PHASE 2 must be removed from pin 21 of the 2716 and pin 21 tied to +5 volts.
2. CHIP ENABLE must be removed from pin 20 and INVERTED PHASE 2 attached to pin 20 instead.
3. ADDR 11 must be removed from pin 18 and CHIP ENABLE attached to pin 18 instead.

The recommended way of accomplishing this is to build an adapter using a 24 pin header and 24 pin socket. Mount the socket directly above the header by soldering all the pins on the header to the corresponding pins on the socket, except for pins 18, 20, and 21. Then solder pin 24 on the header to pin 21 of the socket. Next, solder pin 20 on the header to pin 18 on the socket. Now connect INVERTED PHASE 2 to pin 20 of the socket by one of the following two ways. You can solder a MICRO-CLIP to pin 20 of the socket, and clip the other end to pin 8 of U19. Or, you can solder a wire from pin 20 of the socket to the platted-through hole shown in the diagram below. This adapter will allow the 2716 to occupy the first 2K of the address space of the socket in which it is plugged.

INVERTED PHASE 2