



for the VDU card with the CMOS Junior

The VDU card published in Elektor number 101, September 1983, sometimes lets noise appear on the screen, such as when a program is being listed. This fault can easily be remedied by means of a few gates in the VDU card that are unused in the Junior Computer/VDU card combination.

The trick of the circuit consists of stopping the processor when it attempts to write to the video RAM during the display enable time. Only the 65C02 can be stopped during writing so this circuit operates exclusively with Junior Computers equipped with the CMOS Processor. This procedure causes a slight delay

in the output of a program but this is hardly noticeable in practice. In order to carry out the modification the following IC pins on the VDU card are bent out to the side so that

they are no longer in the IC sockets:  
 IC2 pins 7, 9, 11 and 13  
 IC4 pins 1, 8, 9 and 10  
 IC7 pins 1, 8, 9, 10, 11, 12, and 13  
 IC8 pin 8  
 IC17 pin 1.

These pins are then connected together as indicated by the heavy lines in the circuit diagram. Pin 1 of IC17 simply remains open, while pin 2 of IC7 is already connected to ground. Note that pin 1 of IC14 and pin 12 of IC17 must remain pushed into their respective sockets even after wires are soldered onto them. Another possible 'extra' for the VDU card is to show a frame on the monitor within which all the video data is displayed. All this requires is a single 1 k resistor connected between pin 5 of IC17 and the collector of T1.

