

Pin 5 of IC11 should be bent out from the socket and the connections made with an insulated "soldercon" socket. Increase the potentiometer value until the flash just disappears.

We don't guarantee the results, but we've tried it and it seems to work!

Cassette Loading

Due to an artwork error, pin 35 of the UART (parity inhibit) has been left floating. It should be tied to +5V, and this can be done by adding a small link on the solder side of the board between pins 34 and 35.

In practice we have found that the absence of a connection to this pin generally makes no difference, but it can occasionally cause intermittent cassette loading or incompatibility between systems. In certain circumstances it may be possible to increase the data transfer rate of the cassette load and dump. This can be done by increasing the frequency to pins 17 and 40 of the UART (1C29). The standard frequency at this point is 3.9 KHz, which is taken from 1C2 pin 11. The transfer rate may be doubled by taking the UART clock from 1C2 pin 12 (7.8 KHz) or quadrupled by taking the UART clock from 1C2 pin 13 (15.625).

With each increase of speed, however, the record replay levels and the quality of the tape and recorder used, and variations between records become much more critical. Using a £40 portable cassette recorder and good quality tapes we have been achieving a 100% load rate at 4 times the standard speed.

If fitting this modification the option of selecting between the normal and fast speeds should be available. This could be done by feeding the higher frequency into Pin 1 on the Nascom (marked EXT SERIAL CLOCK) and then selecting between speeds by means of a switch at link 4.

It is recommended that cassette interchange between users should always be done with cassettes recorded at the standard speed. The higher transfer rate should only be used for loading and dumping the users own programs.

Missing Characters

We have found that the tolerance of some manufacturers components can lead to problems with the timing of IC18 (74LS123). The problem manifests itself when a character with bit 6 set (e.g. any capital letter) is followed by a character with bit 6 clear (e.g. any number). If these are displayed on the screen, the first character will disappear!

The problem can usually be alleviated by (i) interchanging I.C.s 7 & 18 (ii) cutting off either leg 5 or 12 of I.C.18 and then putting a link across the solder side of the board between pins 5 & 12. (iii) changing the device for that of another manufacturer.

Teletype Interfacing

We have had a number of enquiries about interfacing teletypes and other terminals to the Nascom 1. Both 20 mA loop and V24/RS232 serial interfaces are brought to Sk2. We suggest you make up a cable bringing these signals to a Cannon D type socket with the following pin allocations so that it is easy to change terminals or swap between systems.