

## TECHNICAL MEMO

May 11, 1979

SUBJECT: POWER LINE FILTER FOR THE TRS-80

The TRS-80 has proven to be quite sensitive to power line noise. While not a cure-all of TRS-80 problems, a simple power line filter may be constructed which will eliminate most of the sensitivity of the TRS-80 to power line noise. The filter to be described also reduces some of the television interference created by the TRS-80.

## LIST OF MATERIALS:

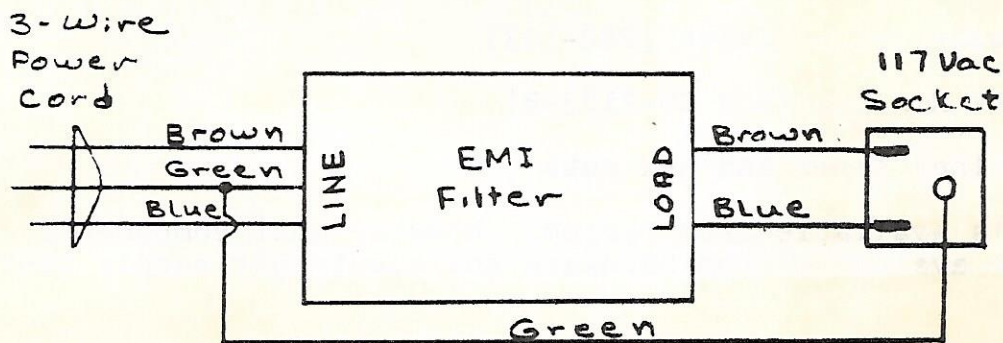
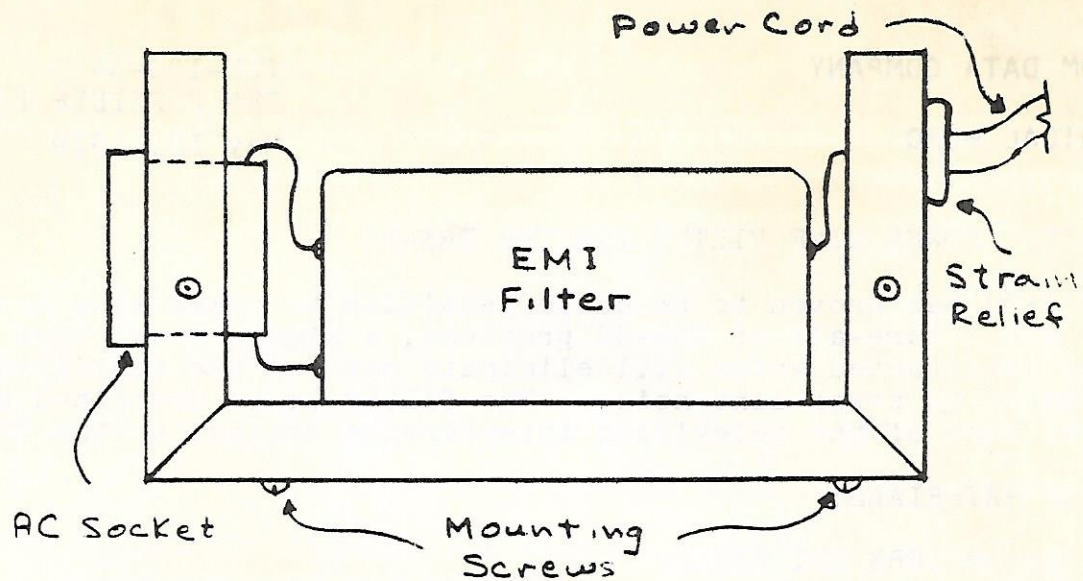
Corcom 10R3 EMI Filter  
3-wire power cord (Belden# 17237B)  
Power cord strain relief (H.H. Smith #939)  
117VAC Socket (H.H. Smith 1280-103)  
4"x2 $\frac{1}{4}$ "x2 $\frac{1}{4}$ " Minibox (Bud CU-2103-B)  
6-32 machines screw and hex nuts

All material is available from Percom. However most components except the filter are available from hardware and electronic supply stores.

## PROCEDURE:

1. Drill a  $\frac{1}{2}$ " hole in one end of the Minibox and install the power cord using the strain relief.
2. Cut a square hole in the opposite end of the Minibox sufficiently large to accept the 117VAC socket. This is most easily done by first drilling a hole then using a nibbling tool to cut the hole to size and shape. Install the 117VAC socket in the hole.
3. Temporarily position the EMI filter in the bottom of the Minibox. Position the filter so there is maximum clearance between the 117VAC socket and power cord. Mark the mounting hole locations and drill the holes with a 5/32 drill. Install the filter with 6-32 Hardware.
4. Connect all wires as shown in the schematic. Solder all connections and insulate with electrical tape.

This filter will handle 10 amps. Plug a multi-outlet power distribution strip into the 117VAC socket to power the TRS-80 components.



### Parts List:

- 1 Minibox 4"x2 1/4"x2 1/4" (Bud CU-2103-B)
- 1 117Vac Socket (H.H. Smith 1280-103)
- 1 3-wire Power Cord
- 1 Strain Relief (H.H. Smith 939)
- 1 EMI Filter (Concom 10R3)
- 2 6-32 x 3/8 machine Screws
- 2 6-32 Hex Nuts

Power Line Filter  
Percom Data Co.  
HM 5-10-79