

Line Filter

Catalog Number 26-1451



HARDWARE



Congratulations for selecting this Radio Shack Computer Product!

The Radio Shack Line Filter is designed specifically for use with the TRS-80 Model I Microcomputer System and its peripherals. The purpose of the Line Filter is to prevent power transients from affecting the Computer.

When an appliance such as a refrigerator, air conditioner, or hair dryer suddenly turns on, it may send a voltage spike through the power line. This can cause the Computer or its peripherals to operate abnormally (Computer "freezes up", contents of memory are changed, disk drives turn on, etc.).

By plugging your Computer system into the Line Filter instead of directly into a source of 120 VAC power, you will reduce the possibility of such occurrences.

The unit minimizes transients and noise generated by other electrical devices. It does not regulate voltage or current, nor can it protect the contents of memory against power failures or brownouts.

The unit actually consists of two independently filtered sections, one for the Computer and Expansion Interface, the other for your peripherals. This reduces the possibility of power-supply interactions between the Computer and peripherals.

The total current of devices connected to the **PERIPHERALS - 1, 2, 3, 4, 5** outlets must not exceed 2.75 amperes. Total current of the device connected to the **MONITOR** outlet must not exceed 0.5 amperes. Total current of devices connected to the **CPU/EI** outlets must not exceed 1.25 amperes. A typical configuration will be:

- 4 Floppy Disk Drives
- 1 Line Printer
- 1 Expansion Interface
- 1 TRS-80 Keyboard/Central Processing Unit
- 1 Monitor

Peripherals

(Outlets marked PERIPHERAL - 1, 2, 3, 4, 5)

These five outlets are for peripheral or auxiliary use. You may use these five sockets to insert the plugs for line printers, disk drives, cassette recorders or other computer equipment, such as the Radio Shack Voxbox or Voice Synthesizer.

Keyboard/CPU and Expansion Interface

(Outlets marked CPU and EI)

If you don't have an Expansion Interface to go along with your TRS-80, plug the cord from the Computer's power supply into the socket marked **CPU**. The socket marked **EI** will be left empty. Do not use it for any other purpose.

If you do have an Expansion Interface, notice that there are two line cords which exit from the rear of the Expansion Interface. Plug these two cords into the outlets marked **CPU** and **EI** (either plug may go into either socket).

Monitor

Plug your TRS-80 Video Display into the outlet marked **MONITOR**.

This outlet is unfiltered, due to special requirements of the Video Monitor circuitry.

Use

Plug the components in your system into the Line Filter, then plug the Line Filter into a grounded 120 VAC outlet.

Important Note: For effective operation, the Line Filter must be plugged into a grounded (3-wire) outlet. If one is not available, you can use a grounded adapter, although the unit's effectiveness will be diminished.

The **POWER** switch controls all of the outlets. A power indicator light glows when power is on.

To use the Line Filter **POWER** switch as a master control for your entire system, leave all components on. To power up the system, you then simply turn on the Line Filter **POWER** switch.

Caution

Be sure to remove diskettes from drives and cassette from cassette recorder before turning the system on or off.

Specifications

Power Requirements

PERIPHERALS - 1, 2, 3, 4, 5

MONITOR

CPU/EI

120 VAC, 60 Hz

Max. total current: 2.75 amperes

Max. total current: 0.5 amperes

Max. total current: 1.25 amperes

Filtering Characteristics

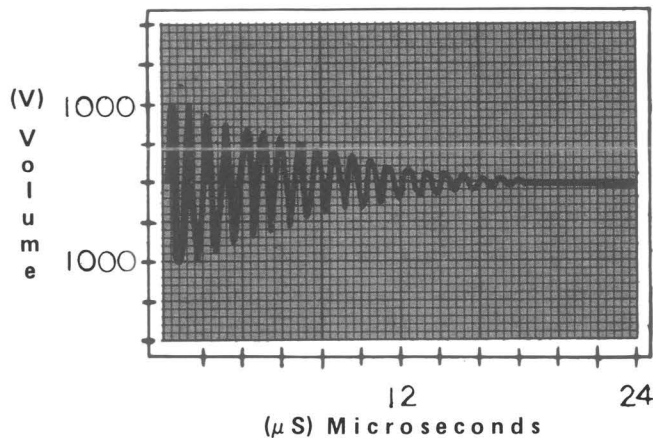
(See graphs below)

At least 60 dB attenuation of IEEE standard surge waveform under the following load:

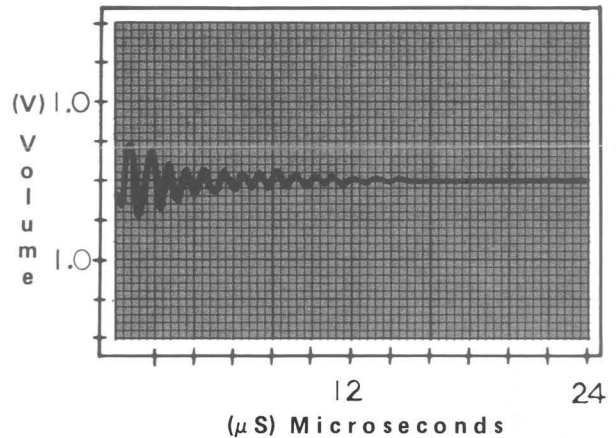
30 ohms (resistive), 4.0 amperes

Below is a graphic illustration of the action of the Line Filter on a standard transient surge waveform, showing input and output as measured on an oscilloscope.

INPUT (IEEE Surge Waveform Standard 472-1974)



OUTPUT (with load conditions stated above)



LIMITED WARRANTY

For a period of 90 days from the date of delivery, Radio Shack warrants to the original purchaser that the computer hardware described herein shall be free from defects in material and workmanship under normal use and service. This warranty is only applicable to purchases from Radio Shack company-owned retail outlets and through duly authorized franchisees and dealers. The warranty shall be void if this unit's case or cabinet is opened or if the unit is altered or modified. During this period, if a defect should occur, the product must be returned to a Radio Shack store or dealer for repair, and proof of purchase must be presented. Purchaser's sole and exclusive remedy in the event of defect is expressly limited to the correction of the defect by adjustment, repair or replacement at Radio Shack's election and sole expense, except there shall be no obligation to replace or repair items which by their nature are expendable. No representation or other affirmation of fact, including, but not limited to, statements regarding capacity, suitability for use, or performance of the equipment, shall be or be deemed to be a warranty or representation by Radio Shack, for any purpose, nor give rise to any liability or obligation of Radio Shack whatsoever.

EXCEPT AS SPECIFICALLY PROVIDED IN THIS AGREEMENT, THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND IN NO EVENT SHALL RADIO SHACK BE LIABLE FOR LOSS OF PROFITS OR BENEFITS, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER SIMILAR DAMAGES ARISING OUT OF ANY BREACH OF THIS WARRANTY OR OTHERWISE.

RADIO SHACK  A DIVISION OF TANDY CORPORATION

U.S.A.: FORT WORTH, TEXAS 76102

CANADA: BARRIE, ONTARIO L4M 4W5

TANDY CORPORATION

AUSTRALIA

280-316 VICTORIA ROAD
RYDALMERE, N.S.W. 2116

BELGIUM

PARC INDUSTRIEL DE NANINNE
5140 NANINNE

U.K.

BILSTON ROAD WEDNESBURY
WEST MIDLANDS WS10 7JN