

TRS-80® RS-232 Interface Selector

**Catalog Number
26-1499**



Congratulations for selecting this Radio Shack Computer product!

The **TRS-80® RS-232 Interface Selector** can be used with any TRS-80 device or TRS-80 compatible device which has serial interface capabilities. This includes the TRS-80:

- Model I
- Model II
- Model III
- Model 16
- Color Computer

and devices such as the DT-1, serial printers, modems, plotters, etc.

Important Note!

Printers with serial inputs should be connected to the TRS-80® Color Computer *only!*

Other TRS-80 computers *must* use the parallel printer connection.

Typical uses of the RS-232 Selector Interface include:

- A single Model 16 that needs to use a DT-1 and a modem.
- A Model III connected to a modem, a plotter, and another Model III.
- A Color Computer that needs to use a serial printer, a modem, and a plotter.

In each of these instances, there is no need to swap cables when changing from one device to another — *just flip the Selector Switch instead!* (**Note:** Only one device may be used at a time.)

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Description of the RS-232 Interface Selector

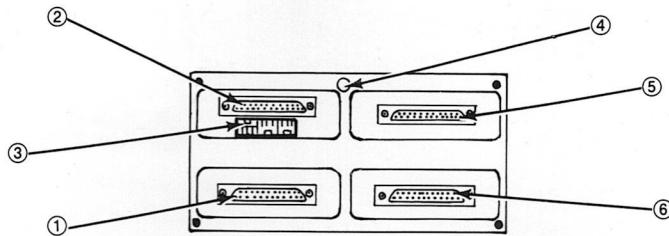


Figure 1. RS-232 Interface Selector (Rear View)

- ① **COMPUTER Connector.** Connect a TRS-80 computer here using the appropriate cable. (See Table 3.)
- ② **INPUT 3 Connector.** Connect a second computer or peripheral device here.
- ③ **Configuration Switches.** These three switches allow you to "configure" INPUT 3 to the needs of the particular device.
 - Switch #1 controls the Data lines.
 - Switch #2 controls the Data Set Ready and Data Terminal Ready lines.
 - Switch #3 controls Request to Send and Clear to Send lines.

The use of these switches is described in "Setting the INPUT 3 Switches."
- ④ **AC Power Supply Connector.** Connect the Power Supply included with this package to this connector. *Use this Power Supply only.*
- ⑤ **INPUT 2 Connector.** Connect any TRS-80 compatible device to this connector.
- ⑥ **INPUT 1 Connector.** Connect any TRS-80 compatible device to this connector.

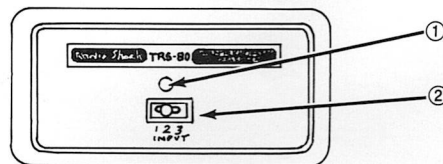


Figure 2. RS-232C Interface Selector (Front View)

- ① **POWER On Indicator.** When the Power Supply is properly connected, this Indicator will illuminate.
- ② **Selector Switch.** When this switch is set to 1, the device connected to INPUT 1 can be used. When this switch is set to 2, the device connected to INPUT 2 is enabled and when set to 3, INPUT 3 can be used.

Setting the INPUT 3 Switches

The main purpose of INPUT 3 is to allow another TRS-80 computer or data terminal to be linked to a Computer (which is connected to COMPUTER) *without having to use a Null Modem Adapter* (26-1496). Nevertheless, other peripheral devices can be connected to INPUT 3.

The switches on the INPUT 3 connector make this possible by "swapping" the pin locations of three pairs of RS-232 signals.

Switch 1 (see Table 1) swaps the Transmit Data signal (output from host) and Receive Data signal (input to host). When this switch is down (normal setting), Transmit Data is connected to pin 2 and Receive Data is connected to pin 3 of INPUT 3. When this switch is up, the signals are reversed — Receive Data is connected to pin 2 and Transmit Data to pin 3.

Table 1 lists the three signal pairs and their pin connections in relation to the switch positions. Table 2 below lists the switch positions needed for the connected devices. **These switch settings are for TRS-80 computers and peripherals only.**

Switch	Position	Signal	Connects Pins:
1	Down	Transmit Data (TD)	2
		Receive Data (RD)	3
	Up	Receive Data (RD)	2
		Transmit Data (TD)	3
2	Down	Request to Send (RTS)	4
		Clear to Send (CTS)	5
	Up	Clear to Send (CTS)	4
		Request to Send (RTS)	5
3	Down	Data Set Ready (DSR)	6
		Data Terminal Ready (DTR)	20
	Up	Data Terminal Ready (DTR)	6
		Data Set Ready (DSR)	20

Table 1. INPUT 3 Signals

Switch	Computer	Serial Device
1	Up	Down
2	Up	Down
3	Up	Down

Table 2. INPUT 3 Switch Positions

For instance, if COMPUTER has a TRS-80 Model II connected to it, and INPUT 3 also has a Model II connected to it, set all three switches to the "up" position.

Or if a Model III is connected to COMPUTER and a Modem II (26-1173) is connected to INPUT 3, set all three switches to the "down" position.

Connecting the RS-232 Selector System

To use the RS-232 Interface Selector, you'll need the proper cables.

Computer-to-Selector	Cable Catalog #
Model I	26-1145*
Model III	26-1408
Model II/16	26-4403
Color Computer	26-3014
DT-1	26-1408

Table 3. TRS-80 Cables

*This cable is supplied with the **Model I RS-232-C Kit** (26-1145).

You can also use any of the **Molded RS-232 Cables** (26-1490/93) which come in lengths of 10', 25', 50', and 100'. (**Note:** The TRS-80® Model III requires a **Model III Extender** — 26-1497 — before it can be used with a Molded Cable.)

Before making any connections to the Selector, be sure all System components are OFF:

1. Connect the TRS-80 computer to the Selector's COMPUTER connector.
2. Connect the Peripherals to the Selector's INPUT 1, INPUT 2, or INPUT 3 connector.
3. Connect the Power Supply to the Selector and plug it into a wall-outlet or approved power strip such as the **Plug-In Power Strip** (61-2619) or the **Automatic Power Controller** (26-1429).

The Power-On Indicator (on the Front Panel) will then light up.

Specifications

Power Requirements

15VAC at 600mA

Physical Dimensions

Size 4¾"(H) x 7½"(L) x 3¾"(D)

12cm(H) x 19cm(L) x 9.5cm(D)

Environmentals

Temperature 55 to 110 F (13 to 43 C)

Humidity 10% to 80% relative, non-condensing

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