TRS-80® MULTI-PAK INTERFACE OWNERS MANUAL
FOR COLOR COMPUTER

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Be sure your Color Computer and the Multi-Pak Interface are both turned OFF before you connect or disconnect the two units. Also be sure all power is OFF before inserting or removing any Program Paks. Damage to the Color Computer, the Multi-Pak Interface, or Program Pak may occur if the power is ON.
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Introduction

The TRS-80® Color Computer *Multi-Pak Interface* is a welcome addition to the Color Computer family. With it, you can connect up to four Color Computer Program Paks™ or Interface Controllers to your Computer at once. Then, when you’re ready to change from one Program Pak to another, simply select another “slot.”

Frequently used Program Paks will no longer have to be removed and reinserted for use. You can use them over and over without having to change the setup or continually change cartridges.

Note that Slot Selection on the Multi-Pak Interface can be performed via “hardware” (actually moving the switch) or “software” (by “POKEing” a memory location from BASIC).

This manual will:

- Show you how to connect the Multi-Pak Interface to your Color Computer.
- Suggest applications that will help you use the Multi-Pak Interface most efficiently.

To use the Color Computer Multi-Pak Interface, you’ll need:

- Any TRS-80 Color Computer
- A Television Set
- Any TRS-80 Color Computer Program Pak
1/Description of the Multi-Pak Interface

You should become familiar with the Multi-Pak Interface before you begin using it.

![Diagram of the Multi-Pak Interface]

Figure 1. The Color Computer Multi-Pak Interface

1. **Color Computer Connector**  Insert this connector into the Program Pak Slot on your Color Computer.

2. **Program Pak Slots (4)**  Insert your Program Paks into these slots. Note that Slot #1 is towards the front, Slot #4 is to the rear.

3. **Power Switch**  Press in on this switch to turn the power ON. Never insert a Program Pak into the Multi-Pak Interface when the power is ON. *Be sure both the power for the Multi-Pak and Color Computer are turned OFF when connecting or disconnecting the Multi-Pak to the Color Computer.*

4. **Program Pak Selector Switch**  When you want to use a Program Pak that is in a specific slot, set this switch to the appropriate number.

5. **AC Power Cord**  Connect this cord to a grounded, 3-wire 120 VAC outlet or an approved power strip such as the *Plug-In Power Strip* (61-2619) or *Line Filter* (26-1451).
Before making any connections to the Color Computer or the Multi-Pak Interface, be sure the power to all units is OFF!

**Connecting the Multi-Pak Interface**

1. Be sure all equipment is turned OFF.

2. Locate the Program Pak cartridge slot on the right side of the Color Computer. Carefully align the Multi-Pak Interface's Computer Connector with the cartridge slot. Gently slide the Multi-Pak Interface's connector into the Color Computer's recessed cartridge receptacle.

![Figure 2. Color Computer to Multi-Pak Interface Connections](image)

3. Plug the power cords (Color Computer and Multi-Pak Interface) into an AC outlet or power strip.

Do not turn the Color Computer or Multi-Pak Interface's power on yet!

The Multi-Pak Interface System is now ready for use.

When you need to disconnect the Multi-Pak Interface from the Color Computer, turn the equipment OFF. Then gently separate the two units.
3/Using the Multi-Pak Interface

The Color Computer Multi-Pak Interface has four slots reserved for Program Paks. It doesn't matter into which slot you insert a particular Program Pak. If you wish to use Disk Exended Color BASIC we suggest that you insert the Disk Controller into Slot #4 of the Multi-Pak Interface before powering-up. Just be sure that the system is turned OFF before you insert a Program Pak.

This means, for instance, that a Color Computer Disk System, a Model GT-116 X-Pad, a Deluxe RS-232-C Program Pak, and a game cartridge can be connected to the Color Computer system at once. However, you'll only be able to use one device or cartridge at a time.

The cartridge should slide smoothly into the receptacle which is recessed into the Color Computer Multi-Pak Interface case. If you have difficulty inserting the cartridge, it may be backward. Do not force a Program Pak into a slot.

Do not insert any foreign objects (such as your fingers) into a Program Pak slot.

*To Power Up the Multi-Pak System...*

If your Program Pak uses a printer, turn the printer on first. If the cartridge does not use a printer, be sure the printer power is off.

1. Turn all peripherals (disk drive, etc.) ON.
2. Turn the Multi-Pak ON.
3. Turn the Computer ON.

Reverse the procedure when turning the power off.
Selecting a Program Pak Slot via Hardware...

To select a particular Program Pak Slot, set the Program Pak Selector Switch to the number (1, 2, 3, or 4) which corresponds to the appropriate slot.

If your slot selection does not switch immediately, press the RESET button at the back of your Color Computer.

You do not need to turn the system OFF to change from one Program Pak to another — just move the Selector Switch (and press the Color Computer's RESET button if necessary. You must always press RESET when selecting the Disk Interface Pak which must be in slot #4).

Selecting a Program Pak Slot via Software...

You can select a particular slot using your Color Computer via software. To do this, you'll need to use the POKE command. (See Getting Started With Color BASIC for details.)
Slot selection is controlled by memory location 65407 (&HFF7F in Hex).
The value to be “poked” can be determined from the following:

<table>
<thead>
<tr>
<th>POKE</th>
<th>Address</th>
<th>Value</th>
<th>For Slot #</th>
</tr>
</thead>
<tbody>
<tr>
<td>65407</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>65407</td>
<td>17</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>64507</td>
<td>34</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>65407</td>
<td>51</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

For example:

POKE 65407,34

will select Slot #3.

Remember that you must be in BASIC before using POKE. To enter BASIC
on power-up, simply set the Slot Selector Switch to a number which speci-
fies an empty slot before turning the power on or pressing RESET.

Once a slot has been select through BASIC, the Slot Selector Switch will
have no effect on slot selection unless the RESET button is pressed.

Some Program Paks are designed to auto-start. If after selecting a slot via a
software POKE, the Program Pak does not auto-start, you must type:

EXEC &HC000 (ENTER)
or
EXEC 49152 (ENTER)

If you power-up under Disk BASIC and wish to move to Extended Color
BASIC (via a vacant slot), you must power-down the Computer and
manually select that slot.

Graphic displays created while using the X-Pad (26-1196) can be saved on
disk. Insert the X-Pad Controller into a slot other than the Disk Controller
slot. You must make sure that you power-up under Disk Extended Color
BASIC.

Read the three corresponding values per the X-Pad manual to load the
display. Once completed, the finished display can be saved using the
SAVEM command. Note that you remain under Disk BASIC. It is not
necessary to select the slot into which the X-Pad Controller is plugged.
Your Multi-Pak Interface should provide you with years of reliable service. However, if you do have or suspect problems with the unit, check the following "Symptom and Cure" table. If you can't find a solution, take the Multi-Pak Interface to your nearest Radio Shack Computer Center or store for prompt service.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cure</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Program Pak does not work.</td>
<td>The Program Pak itself is defective. Try another Program Pak in the same slot to find out if it is the Multi-Pak Interface or the Program Pak that is causing the trouble.</td>
</tr>
<tr>
<td>None of the Program Paks work.</td>
<td>The power cord may be improperly connected or the power has not been turned on. Check that the cord is properly connected and that the power is ON.</td>
</tr>
<tr>
<td>The wrong program is run after you've inserted a Program Pak.</td>
<td>Selector Switch is not set to the appropriate position.</td>
</tr>
</tbody>
</table>
Specifications

Power Requirements
120 VAC

Physicals

<table>
<thead>
<tr>
<th>Physical</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>7.75 lbs. (3.51 Kg)</td>
</tr>
<tr>
<td>Height</td>
<td>3.5” (8.75 cm)</td>
</tr>
<tr>
<td>Width</td>
<td>8.25” (20.95 cm)</td>
</tr>
<tr>
<td>Length</td>
<td>12” (30.48 cm)</td>
</tr>
</tbody>
</table>

Environmentals

Ambient Temperature

<table>
<thead>
<tr>
<th>Type</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage</td>
<td>14 to 122 F. (−10 to 50 C.)</td>
</tr>
<tr>
<td>Operating</td>
<td>41 to 104 F. (5 to 40 C.)</td>
</tr>
</tbody>
</table>

Humidity (non-condensing)

<table>
<thead>
<tr>
<th>Type</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage</td>
<td>20% to 90%</td>
</tr>
<tr>
<td>Operating</td>
<td>40% to 80%</td>
</tr>
</tbody>
</table>
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Radio Shack’s nationwide network of service facilities provides quick, convenient, and reliable repair services for all of its computer products, in most instances. Warranty service will be performed in accordance with Radio Shack’s Limited Warranty. Non-warranty service will be provided at reasonable parts and labor costs.

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3. The cost for the labor and parts required to return the Radio Shack computer equipment to original manufacturer’s specifications will be charged to the customer in addition to the normal repair charge.