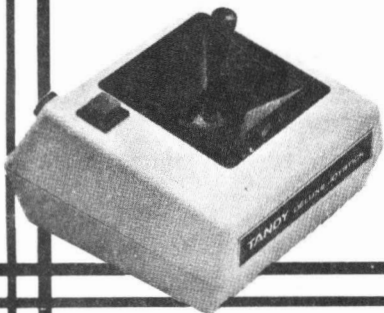


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TANDY®*
Color Computer
Deluxe Joystick
Owner's Manual



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TANDY Color Computer Deluxe Joystick Owner's Manual

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Introduction

Congratulations for purchasing the **TANDY Color Computer Deluxe Joystick** — the Joystick that is specifically designed to increase your screen positioning power while playing games and creating Color Computer graphics. Whether you are having a quiet, but back-stabbing match of Roman Checkers (26-3071), or defending your planet from a nerve-shattering alien blitz with Galactic Attack (26-3066), you'll find this Joystick to be a definite enhancement to your **TANDY** Color Computer system.

The **TANDY** Color Computer Deluxe Joystick features:

- Easy installation — just connect the 6-Pin connector to either JOYSTK Connector at the rear of the Color Computer. If you have two Deluxe Joysticks, connect both of them to the JOYSTK Connectors.
- Separate X and Y axis controls which give you precise screen positioning.
- Selectable “Free-floating” or “Spring Center Return” Control Stick adjustments which let you tailor the stick action to the software you are using.
- Convenient “Fire” button lets you execute game or program functions quickly and efficiently.

1. The first part of the document discusses the importance of mathematics in various fields, including science, engineering, and business. It highlights how mathematical concepts are applied in real-world scenarios to solve complex problems.

2. The second part of the document focuses on the role of mathematics in education. It emphasizes the need for a strong foundation in basic mathematical skills, such as arithmetic and algebra, to progress to more advanced topics like calculus and statistics.

3. The third part of the document explores the historical development of mathematics. It traces the roots of mathematical thought back to ancient civilizations, showing how mathematical principles have evolved over time and across different cultures.

4. The fourth part of the document discusses the current state of mathematics research. It highlights key areas of study, such as number theory, geometry, and topology, and mentions some of the most significant discoveries and breakthroughs in the field.

5. The fifth part of the document concludes by discussing the future of mathematics. It suggests that as technology continues to advance, the application of mathematical models and algorithms will become increasingly important in fields like artificial intelligence, data science, and space exploration.

1 / Description of the Color Computer Deluxe Joystick

Along with its attractive "high tech" appearance, this Joystick offers features not common to most Joysticks.

The following diagram shows the components of this amazing product.

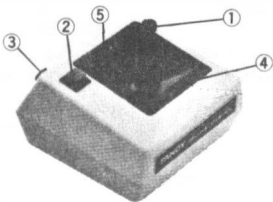


Figure 1. Top view of Deluxe Joystick with Directional Scheme.

- ① **Control Stick.** Move this lever in the direction of your choice. (See Figure 1.)
- ②③ **Fire Button.** Press this button to fire missiles or initiate a program function.
- ④ **X-Axis Adjustment Switch.** Move this switch to the left or right to adjust your horizontal position as close as possible to the screen's center.
- ⑤ **Y-Axis Adjustment Switch.** Move this switch up or down to adjust your vertical position as close as possible to the screen's center.

Control Stick Operating Modes

The Control Stick has two modes of operation — “Spring Center Return” and “Free-Floating.”

When you first connect your Deluxe Joystick, it will be in *Spring Center Return* mode — meaning that the Control Stick will automatically return to center position when you release the lever. Also, when you release the lever, the screen position will be at (or near) dead center.

You can make the Control Stick “Free-Floating” for the X, Y, or both Axes. *Free-Floating* means that the Control Stick will remain in its present position when you release the lever.

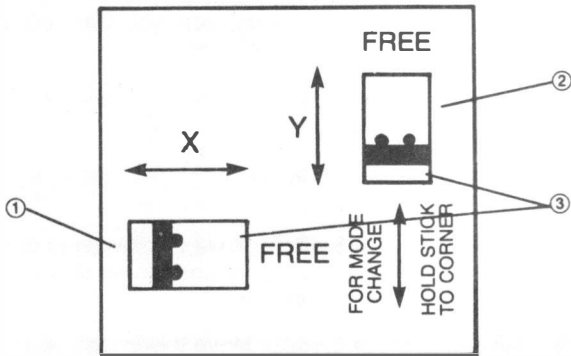


Figure 2. Deluxe Joystick Mode Switches

- ① **X-Axis Mode Switch.** To change the X-Axis mode from *Spring Center Return* to *Free-Floating*, hold the Control Stick at any of the corners. Then, set the switch to **FREE**.

Caution: Do not move the switches to the **FREE** position with the stick in its erect position. Doing so will virtually freeze the lever motion in the straight-up position.

- ② **Y-Axis Mode Switch.** To change the Y-Axis mode from *Spring Center Return* to *Free-Floating*, hold the Control Stick at any extreme corner. Then, set the switch to **FREE**.
- ③ **Changing both Axes.** To change both Axes from *Spring Center Return* to *Free-Floating*, hold the Control Stick at a corner position. Then make sure that both mode switches are set to **FREE**.

To re-engage either or both Axes to Spring Center position, move the mode switch(es) away from the **FREE** position.

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2/Connecting the TANDY Color Computer Deluxe Joystick

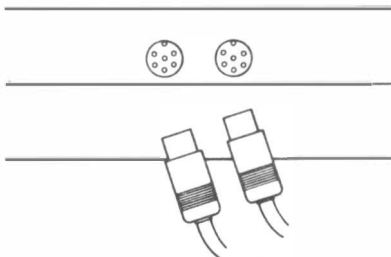


Figure 3. Connecting the Joystick

1. Make sure that your Color Computer and any other connected peripherals are **OFF**.
2. Connect the Joystick's 6-Pin connector to either JOYSTK Connector at the rear of the Color Computer. (Your Program Pak manual will specify either the **RIGHT** or **LEFT JOYSTK** Connector.)
3. Turn the system **ON**.

Adjusting the Electrical Center

The two levers on the control stick housing (one located below and one to the left of the control stick) allow fine adjustments to the electrical center of your Joystick. Each lever controls a separate axis (X or Y).

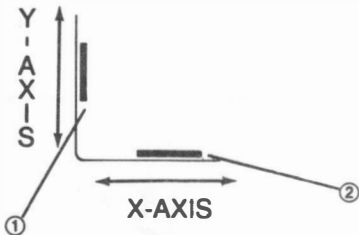


Figure 4. Electrical Center Directions

1. Move this switch up or down to adjust the screen position *vertically*.
2. Move this switch left or right to adjust the screen position *horizontally*.

The Fire Button

Frequently, a program or action game will require that you use a "fire button." Press the red Fire Button to fire a missile or to start a new game.

Note: The black button does not function with the colour computer or the colour computer 2.

3/ Specifications

Dimensions 4" Long × 3.25" High × 4" Deep
(10.16 × 8.25 × 10.16 cms.)

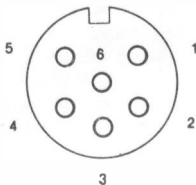
Weight 8 ounces (226.8 grams)

Temperature and Humidity Range
Operating 41°F-104°F (5°C-40°C)
40%-80% Humidity

Storage - 40°F-160°F (- 40°C-71°C)
20%-90% Humidity

Cable Length 5 feet (1.52 Meters)

Joystick Controller Jack Pinouts



1. Comparator Input (Right-Left)
2. Comparator Input (Up-Down)
3. Ground
4. Fire button 1 (High when open, Low when closed)
5. Vcc, current-limited, + 5VDC
6. Fire button 2 (High when open, Low when closed)

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