# INTERACT™
# Family Computer

Owner's
Guide
AS-1004

# Table of Contents

# The Family Computer



As the owner of an Interact Family Computer, you are about to discover the many benefits that a computer can bring to your home. The wide array of Interact applications will provide interactive entertainment and fulfill your educational and home management needs as well. As time passes, the continuously growing library of available Interact applications will keep your computer up to date, useful, and challenging.

Because the Interact is more than just a game, it is important for you to be comfortable and familiar with its operation and capabilities. Your knowledgable use of the computer will increase its versatility within your home.

This owner's guide provides the fundamental information you will need to install and use the computer system. It also contains suggestions and recommendations, in case you encounter any problems. However, the Owner's Guide does not include detailed instructions for the operation of individual applications. Because so many different applications are available, specific instructions on how to use each application are included with the cassette.

# Unpacking

Parts Check List

Before you begin to install your Interact Computer, be sure to check that each of the following parts is included,

1. Two joysticks.
2. One antenna switch box.
3. One computer console with attached AC adaptor and computer signal cable.
4. Warranty card.

Important, Save your Interact carton. Retain all of the packing materials for any future need to transport the Interact system.

Where to put your computer.

Before selecting the location for your Interact Family Computer, please read the following recommendations,

1. The computer console requires adequate air circulation to prevent overheating the internal components. Place the console on a rigid surface. Make sure that carpeting, bedding, draperies, and other materials do not block the air vents on the console. Also, avoid sources of direct heat, such as radiators, heat ducts, or windows with direct sunlight.
2. Avoid locations where excessive dust or moisture accumulates.
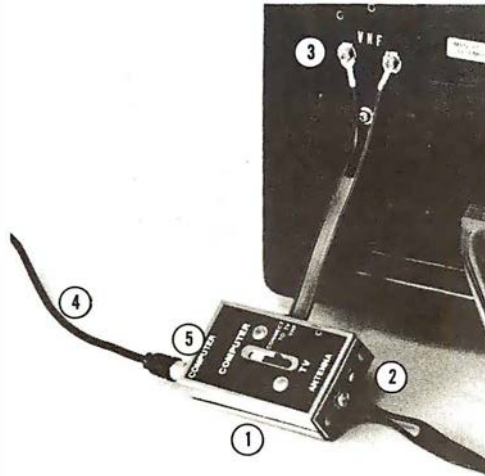3. Place the computer console two feet or more away from the television.

# Installation

How to connect your computer to TV set.

In order to operate the Interact System, you must attach the computer console to the VHF antenna screws on the back of your television. An antenna switch box permits you to alternate conveniently between viewing conventional programs and using the computer.

The procedure for connecting the computer console to your television depends upon the type of antenna wire you have. Begin by examining your antenna wire, and then follow the appropriate set of directions below. Only a flat screwdriver is necessary for this installation.
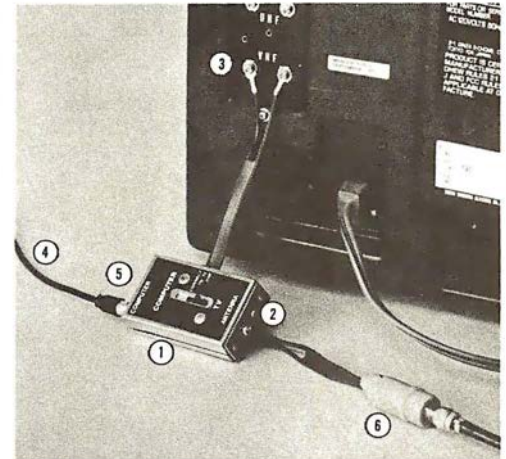
Note: Some TV sets have an internal/external antenna switch. Make sure the switch is in the "external" position when you connect the VHF lead-in wires to terminals.



## Twin Lead-In Wire (300 Ohm):

1. Disconnect the antenna wire from the two screws on the back of your television, and attach it to the antenna switch box (1) at the screws labelled ANTENNA (2).
2. Connect the lead-in wires from the antenna switch box to the VHF antenna terminals (3) on the television.

3. Unwrap the computer signal cable (4) from its keeper on the back of the console. Insert the end of this cable into the antenna switch box at the receptacle labelled COMPUTER (5).



## Coaxial Antenna Cable (75 Ohm):

In this case, an impedance-matching transformer is necessary to complete the connection between the antenna cable

and the antenna switch box. This type of device - a balun - is commonly available at local television or hi-fi stores.

1. Disconnect the antenna cable from your television. Screw the cable into the end of the impedance-matching transformer (6). Connect the wires from the transformer to the ANTENNA connections (2) on the antenna switch box (1).
2. Connect the lead-in wires from the antenna switch box to the VHF antenna terminals (3) on the television.
3. Unwrap the computer signal cable (4) from its keeper on the back of the console. Insert the end of this cable into the antenna switch box at the receptacle labelled COMPUTER (5).



Getting ready to use the computer.

Once the antenna switch box is attached, proceed with the remainder of the assembly as follows:

4. Install the joysticks by plugging them into the front of the computer console. Be certain that you match the mating connectors correctly and that the connectors are firmly seated.
5. Plug the AC adaptor into a 110/ 120-volt outlet.

6. Turn the television channel selector to channel 3, and move the switch on the antenna switch box to the COMPUTER position. (In order to return to conventional television reception, just move the switch back to the TV position.)
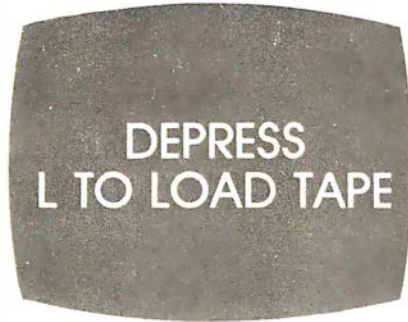7. Turn the computer console on by pressing the ON-OFF switch .

### Notice

FCC regulations prohibit:
1. Using any more flat twin lead-in wire between the antenna switch box and the television than is provided with the unit
2. Connecting flat twin lead-in wire between the TV connection on the antenna switch box and any television antenna or cable TV outlet
3. Attaching loose wires to your television antenna while the Interact computer is operating
4. Connecting the computer to more than one television at a time

Any of these actions could result in interference with other television sets in the area.

# Loading a Cassette

Once the computer is on the TV screen displays the standard system message,



DEPRESS
L TO LOAD TAPE

you may insert an application cassette and prepare the computer for use. Since the computer contains no programs except those that are obtained from application cassettes, the Interact Computer cannot operate until you have loaded a cassette. This requires inserting the cassette into the tape deck, starting the deck, and notifying the computer in the proper sequence that a new program is being loaded.

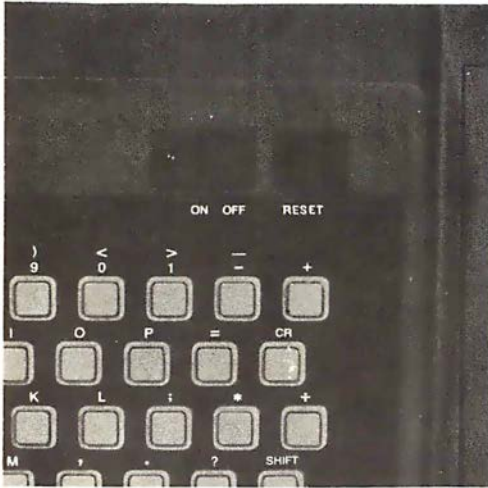

## How to Load Program Tapes

Insert and load an Interact application cassette by following these steps,

1. Firmly depress the STOP-EJECT button (3) in the set of cassette control buttons. The lid (2) of the cassette deck should spring open.
2. Hold the cassette with the exposed tape toward you and the label on top.
3. Slip the cassette into the holder (without forcing it) until it appears to be completely contained within the holder. Gently press the cover down until it snaps into place.

4. Press the letter "L" on the keyboard.
5. Ensure that the tape is at the beginning by depressing the cassette control button REWIND (1).
6. After tape is rewound, depress the) cassette control button READ (4). The cassette deck should begin to operate. The loading process generally lasts 30 to 45 seconds, during which a series of "bleeps" can be heard on the television.

During the loading period, a graphic title display gradually appears on the screen. Once the program has been loaded, this display disappears and the game field or application field takes its place. Note that the tape wheels on the cassette deck stop moving at this point. You no longer need the application cassette tape, so depress the STOP-EJECT cassette control button. You may now begin operating the computer program according to the appropriate application instructions.

# Changing Applications



Once you have loaded an application program, it remains in the computer until you turn the computer off, or until you load another program in its place. To restart or change programs at any time, depress RESET. When this occurs, the computer suspends operation of the current application and this message appears on the screen.



DEPRESS
L TO LOAD TAPE
R TO RESTART

1. After you depress the RESET button, depress the "R" key to restart the program in the computer.

2. If you want to load a new application cassette, insert a new program tape and follow steps 4, 5 and 6 on page 6.

Interact Data Tapes

Several Interact applications are designed to store program information on tape. Interact supplies special Interact Data Tapes for this purpose. See individual program instructions for more details on Data Tape usage.

# Keyboard and Controls

Interact designed the Family Computer console to correspond with the functions you will perform on the system. There are three types of console controls: the keyboard, the special function keys, and the cassette control buttons.

Keyboard and Shift Controls
You can use the alphabetic/numeric keyboard to enter text or numeric information onto the screen or to respond to the computer's requests. Both the upper and lower case characters on each key of the top row of keys can be typed by use of the SHIFT and LOCK keys, just as on a typewriter keyboard. Most other keys produce only upper case characters, even when SHIFT or LOCK is not in use.

Special Keys
Special function keys like CONTROL, TAB and BACKSPACE issue special commands to the computer. Individual program instructions will tell you how to use these special keys for particular applications. In several programs, the CONTROL key acts like a third-level shift or "super-shift" control. You may hold down the CONTROL key and type the "T" key to rewind or fast forward a tape, for example.
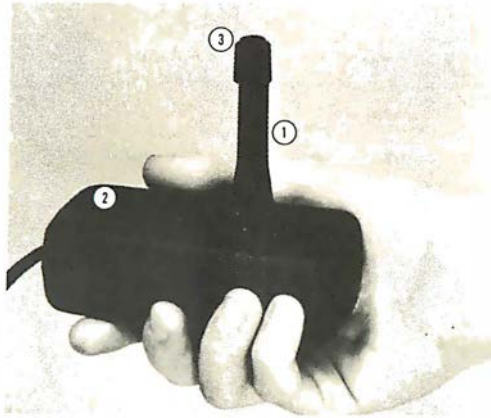
Tape Deck Controls
The cassette control buttons generally correspond to those on an ordinary cassette tape deck. REWIND and F.FWD (fast forward) perform precisely as their names indicate. STOP-REJECT fulfills a double function. When depressed lightly, it stops any movement of the tape. When depressed firmly, it ejects the tape from the holder. Depressing READ transfers the contents of the cassette which you have installed in the deck into the computer or onto the screen. Depressing both the READ button and the WRITE button does just the reverse, so that information can be stored on the cassette. The application instructions describe specific use of each of these cassette control buttons, as necessary.

Special Keyboard Overlays
Several Interact applications are supplied with special keyboard overlay guides. These overlays fit directly over the standard keyboard. Directions for the use of these special overlays are included with their program cassettes.

# Joysticks



## Joystick Components

The joysticks provide the operator with manual directional control of an object on the television screen. Each "joystick" unit actually consists of three separate controls: the joystick itself, the hit activate button, and the variable control knob. The functions of all three controls are dependent upon the application in use; instructions describing their usage are included in each application description.

## Joystick Operation

The joystick (1) can be moved in any of eight directions to move an object on the screen. Depending on the activities of the application which is in progress, the object generally moves "forward" when the operator pushes the stick away from himself, "backward" when he pulls it toward himself, and "right" or "left" when he moves it to his right or left, respectively. A "forward" motion generally indicates a movement toward the top of the television screen. Only a light pressure is necessary to maneuver the joystick–don't force it.
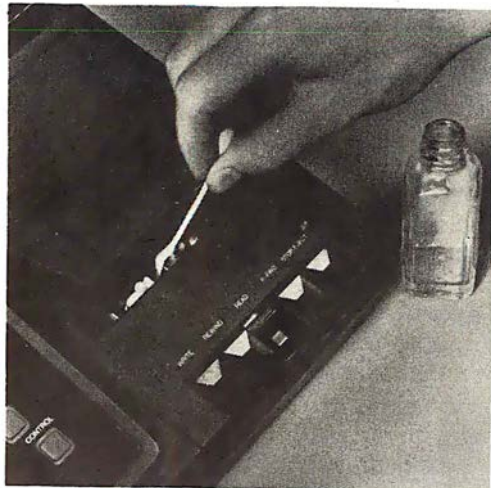
## Joystick Hit Button

The button (2) serves as a "trigger" mechanism which the operator uses to activate a function, such as to fire a game weapon. The result of its use depends, of course, on the application in use at the time.

## Joystick Control Knob

The variable control knob (3), located on the end of the joystick, provides an auxiliary adjustment for factors such as game speed. The operator uses it by rotating it clockwise or counter-clockwise. This knob has an operational effect in only some of the available applications. See the application instructions for details on its use.

# Care of the Interact



Normal dusting and occasional cleaning should be sufficient to keep your Interact console looking attractive. Use a soft cloth and mild spray cleaner to clean off fingerprints and smudges; spray the cleaner only on the cloth, not directly on the console.

Be careful to prevent any liquid or solid substance from falling down into the keyboard, vents, or cassette holder.

The program cassettes should be kept from extremes of temperature. Especially avoid placing a cassette tape near any magnetic source, for this can destroy the contents of that tape. The cassettes may be stored in the package or in the tray provided on the computer console.

Since the most common cause of tape deck failure is lack of proper cleaning, observance of this simple procedure will extend the life of the unit:
1. Depress the READ button to make the heads more accessible.
2. Moisten a soft cloth or cotton swab with denatured alcohol.
3. Wipe the record/playback head, eraser head, pressure roller and capstan thoroughly with the cloth or swab.

Be sure to read your warranty card carefully for applications and violations of the warranty.

For any information which is not included in this guide or in the application instructions, please contact your Interact dealer for assistance.

11

# Trouble-Shooting

Because of the complexity of the Interact computer's internal components, you should not attempt any repair of your Interact System. However, you can follow a few simple steps to determine if your computer is malfunctioning.   Proceed through the steps below, one at a time, until the symptom disappears. If no solution to the problem becomes apparent, contact your Interact dealer.

| Symptom | Procedure |
|---------|-----------|
| No display | • Verify that both the television and the console are plugged in and that the wall outlet is on<br>• Make certain that the television is turned on<br>• Confirm that the computer console ON-OFF switch is in the ON position and that the adjacent light is illuminated<br>• The television channel selector should be on channel 3<br>• Check all the connections on the antenna switch box<br>• Verify that the switch on the antenna switch box is in the COMPUTER position<br>• Depress the RESET button on the computer console several times<br>• Adjust the television fine-tuning control<br>• Check the television brightness adjustment to be sure it is not turned all the way down<br>• Set the switch on the antenna switch box to the TV position and determine whether conventional television program reception is possible |
| No sound | • Turn up the television volume control<br>• Adjust the television fine-tuning with AFC (automatic frequency control) turned off<br>• Determine from the application instructions whether the program in use includes sound |

| Symptom | Procedure |
|---|---|
| Poor-quality television display or sound | • Adjust the television fine-tuning control with AFC turned off. See TV owner's manual for complete tuning details.<br>• Check all of the connections on the antenna switch box<br>• Attempt to improve the quality of conventional television program reception. Remember, the Interact display will only be as good as your normal TV quality |
| Display breaks up or jitters | • Adjust the television fine-tuning control<br>• Eliminate any nearby source of interference, such as vacuum cleaners or other electric appliances |
| Loading process does not produce typical "loading" sound | • Turn up volume control on television<br>• Stop the tape, rewind it to the beginning, and start the loading process again, carefully following the loading instructions in Loading a Cassette. If after several attempts the problem still persists, advance the program tape. Each program tape is encoded with several copies of the same program. If these programs won't load, see your Interact dealer for assistance. |
| During loading, cassette deck keeps reading indefinitely or the "Load" message returns to the screen, and no program field appears | • Depress the "Reset" button repeatedly<br>• Be sure that you have placed the console at least two feet from the television screen during cassette loading<br>• Stop the tape, rewind it to the beginning, and start the loading process again, carefully following the loading instructions under Loading a Cassette. If after several attempts the problem still persists, advance the program tape. Each program tape is encoded with several copies of the same program. If these programs won't load, see your Interact dealer for assistance. |

**PROTECTO**
ENTERPRIZES

BOX 502, FRANKLIN PARK, ILL. 60131
Phone 312/382-5244

**INTERACT™ ELECTRONICS INC.**