# CHAPTER 1 UNPACKING AND SETTING UP

- Unpacking your Commodore Plus/4
- Getting to know the switches and sockets
- Setting up your Commodore Plus/4
- Troubleshooting chart
- Peripherals



### UNPACKING YOUR COMMODORE PLUS/4

Now that you've opened the box containing your new Plus/4 and found this manual, the first thing that you should do is check to make sure that you have all the items on this list. You should have:



1. Your Commodore Plus/4



2. The power supply One end plugs into a wall outlet, the other plugs into the right side of the computer.



3. The TV switchbox

This connects to the antenna jack on the back of your TV. You don't need the switchbox if you plan to connect your Plus/4 to a monitor.



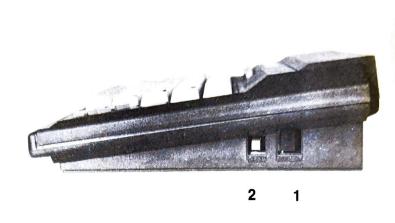
- 4. The RF cable This connects the TV switchbox to the RF output jack on the left side of the Plus/4. You don't need this cable to connect your Plus/4 to a monitor.
- 5. The user manual
- 6. Other assorted literature Warranty card Commodore Magazines subscription card

7. The Plus/4 Built-in Integrated Software Manual

If you don't find all these items in the box, check with your dealer immediately for replacements.

Before you connect anything, you should look over these drawings of your computer. These drawings identify all the outlets so you can set up your computer system quickly and easily. GETTING TO KNOW THE SWITCHES AND SOCKETS The Right Side of Your PLUS/4

1



#### The On/Off Switch

Your Plus/4 should be turned OFF when you install or remove cartridges or any peripheral device such as a printer or disk drive. There is a red power light located below the keyboard on the left, so you can be sure whether power is off.

#### 2 The Reset Button

There are two ways to use the RESET button:

1. You can use the RESET button to reset your computer as if you'd just turned it on. Just press the reset button once. Remember: when you press the reset button, you lose any BASIC program currently in memory.\*

2. If you want to reset your Plus/4 and keep your BASIC program, hold down the RUN/STOP key and then press the RESET button. When you do this, your Plus/4 goes to the built-in machine language monitor. Type an X and press the RETURN key to get back to BASIC. Your program remains intact in the Plus/4 memory. Just type LIST to display the program on your screen.

\*When you press RESET, the Plus/4 automatically issues the NEW command, which clears the screen. This can be reversed. See the Plus/4 Programmer's Reference Guide for information on UNNEWing your program if you've pressed the reset button by accident.



The socket and the switch on the left side of the Plus/4 are both used for TV connections. Neither is used if you're connecting your Plus/4 to a monitor.

### 3 The RF Jack

The Left Side Of

Your PLUS/4

This is where you plug in one end of the RF cable (the thin black cable). You can plug either end into this jack and the other end into the TV switchbox.

#### 4 The High/Low Switch

This switch controls which channel is used for Plus/4 video output. Set the H/L switch to L for output on channel 3. Set the H/L switch to H for video on channel 4.

You can use either channel 3 or 4 on your TV to display the video picture from your computer. If you have a channel 3 TV station in your area, select channel 4, and vice versa. Experiment to see which setting gives you the best picture.

## The Back of Your Computer 5 6 7 8 9 10 11

The sockets on the back of your computer connect a variety of accessories to your Plus/4. Each connector is different. Be sure you plug each accessory into the correct socket.

#### 5 The Power Socket

The end of the power supply cable fits here. Plug the other end into a standard wall socket for three-prong plugs.

#### 6 The Serial Bus

You can plug a disk drive or a printer into this socket. If you want to plug in both, first plug the disk drive into this opening, then plug the printer cable into the back of the disk drive.

#### 7 The Cassette Port

The Commodore 1531 Datassette<sup>™</sup> tape recorder plugs in here.

## 8 The RS-232 Port

Accessories such as a modem or an RS-232 adapter plug in here. An RS-232 adapter makes it possible to hook up accessories not accommodated by standard Commodore equipment ports.

#### g The Memory Expansion Port

Plus/4 software cartridges and the Plus/4 disk drive plug in here. Before you install or remove cartridges, make sure your Plus/4 is OFF.

#### **10** Joy 1 and Joy 2: The Game Ports

You can plug joysticks into these sockets. The Plus/4 uses specially designed joysticks available from your Commodore dealer.

#### 11 The Video Socket

This is where you plug in the cable that connects a monitor to your Plus/4. Although this socket is an 8-pin connector, you can use a 5-pin cable in this socket as well. Commodore color monitors come with an 8-pin cable for use with the Plus/4.

## SETTING UP Your Plus/4

- To set up your Plus/4, you'll need at least two wall plugs: one for your Plus/4 and one for your TV or monitor.
- If you're installing a disk drive and a printer, you'll need additional wall plugs.
- Your Plus/4 should be placed a comfortable distance from your TV.
- Make sure that your computer is OFF before you start the setup. Check that the POWER LIGHT on the front left is not lit.

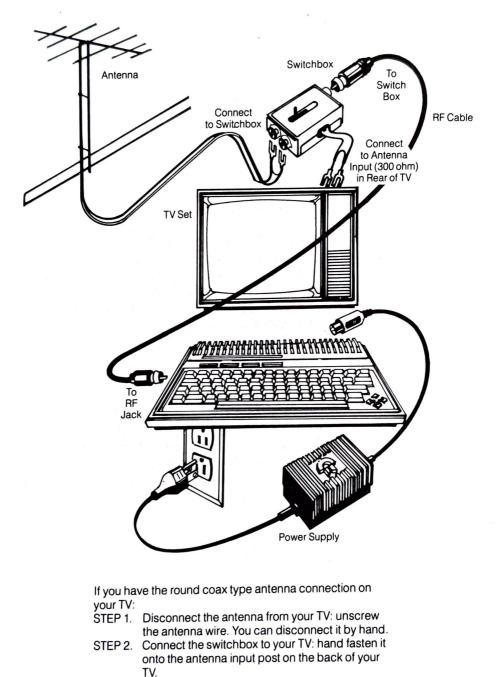
If you are connecting the Plus/4 to a television set, you'll need a small screwdriver to attach the TV switchbox. The way you connect the switchbox depends on what type of antenna connection your TV set has.

IMPORTANT: If your antenna is connected to your TV by a single round-ended cable (the 75-ohm co-ax type), you will need either the 300 ohm to 75 ohm adapter, which came with your TV, or you must get a replacement 75 ohm to 75 ohm switchbox. The adapter is a small plastic part with a co-ax connector on one side and two screws on the other. If you do not have one, you can buy one at most electronics stores. Once you attach the adapter to the co-ax connector on your set, you can follow the rest of these instructions. A 75-ohm switchbox allows you to hook the antenna lead into the switchbox, which is connected to the TV, so that you only have to move the switch on the switchbox to watch TV.

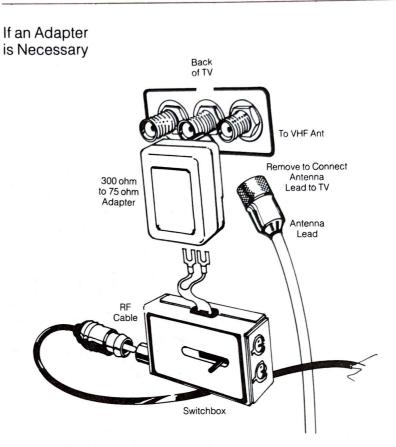
You need only connect the switchbox once. When you want to use your computer, just move the switch to the COMPUTER position. When you want to watch TV, move the switch to TV. The switchbox will not interfere with your TV reception.

If your television is "computer-ready," follow the instructions for connection in the television owner's manual.

- STEP 1. Disconnect the antenna from your TV: use a screwdriver to loosen the screws on the TV. Remove the two antenna leads.
- STEP 2. Connect the TV switchbox to the TV where the antenna leads were: attach the leads on the box to the antenna input on your TV.
- STEP 3. Connect the antenna to the switchbox: attach the leads from the antenna to the screws on the side of the switchbox.



STEP 3. (For the 75-ohm switchbox) Connect the antenna to the switchbox, hand-turning the antenna cable into the switchbox.



Once the switchbox is in place, get the RF cable (the thin cable with connectors on both ends) that came with your Plus/4. Plug one end into the socket on the side of the switchbox. Connect the other end into the socket marked RF on the left side of your computer.

NOTE: If you're using the 300- to 75-ohm adaptor and you want to watch TV, you must disconnect the switchbox and plug the antenna lead back in. This is easily done by hand, and may be done as often as you like, with no damage to your TV, computer, or antenna.

## Selecting A Channel On Your TV

As we explained earlier, your TV should be set on either channel 3 or 4 when you are using your computer. Don't choose a channel that broadcasts in your area. If you use channel 3, set the H/L switch on the side of the computer to L. If you use channel 4, set this switch to H.

## Connecting Your Commodore PLUS/4 to a Monitor

If you're connecting your computer to a monitor instead of a TV, follow the instructions in the manual that is included with the monitor. Hooking up a monitor, like the Commodore 1702 Color Monitor, is simple. It requires only one cable that connects directly from your monitor to the VIDEO socket in the back of your computer.

## Final Steps

- 1. Attach the power supply cable from the power box to your Plus/4. Plug the square end of the cable into the POWER socket on the back of the computer; plug the power supply into the wall socket.
- If you are using a TV, make sure that the setting on the H/L modulator and the channel on your TV are in agreement. (If your computer is set at L, the TV must be on channel 3; the TV should be tuned to channel 4 with your computer at H.) Make sure that the switchbox is set to the COMPUTER setting.

If you are using a Commodore color monitor, use the rear jacks, and check that the back/front switch is set to back.

3. Turn on your computer. (The switch is on the right side as you face the Plus/4.)

If all is well, this message appears on your screen:

#### COMMODORE BASIC 3.5 60671 BYTES FREE

#### READY.

The flashing cursor under the READY message tells you that the Plus/4 is waiting for you to start typing. The back-ground color is white, while the letters are printed in black, with a light purple border around the screen.

 Check the troubleshooting chart if you have problems. You may need to adjust your TV set to get a sharper picture.

# TROUBLESHOOTING CHART

Symptom	Cause	Remedy
Indicator light not 'ON'	Computer not turned ON	Make sure power switch is in ON position
	Power cable not plugged in	Check power socket for loose or discon- nected power cable
	Power supply not plugged in	Check connection with wall outlet
	Bad fuse in computer	Take system to au- thorized dealer for replacement of fuse
No picture	TV on wrong channel	Check other channel for picture (3 or 4)
	Incorrect hookup	Computer hooks up to VHF antenna terminals
χ.	Video cable not plugged in	Check TV output cable connection
	Computer set for wrong channel	Set computer for same channel as TV
	Switchbox not set to computer	Check that switch- box is in 'computer' position
	TV is not on	Turn TV on
Random pattern on TV with cartridge in place	Cartridge not properly inserted	Reinsert cartridge after turning OFF power
Picture without color	Poorly tuned TV	Retune TV
	TV not connected	Check connections properly
Picture OK, but no sound	TV volume too low	Adjust volume of TV
	Poorly tuned TV	Retune TV
	Auxiliary output not properly connected	Check connection as shown on diagram on page 14-15

IMPORTANT: Some TV sets cannot display the entire Plus/4 screen. Instead, their picture cuts off the far left and far right column of the Plus/4 screen display. We recommend using a different TV set or a monitor such as the Commodore 1702 or 1802/1803 color monitor.

If this is not possible, you can deal with the problem by pressing the ESCape key, followed by the 'R' key. This reduces the computer screen display size so the entire picture can fit onscreen. You must repeat this each time you power up or reset your Plus/4.

## PERIPHERALS

Peripherals are the accessories that you can add to your Plus/4 system. These accessories are available at your Commodore dealer, and allow you to use the Plus/4 to the fullest. Peripherals give your Plus/4 system the capability to store and save data, print hard copy (in black and white or color), use disk and cassette-based software, and access the information and services available through telecommunications.

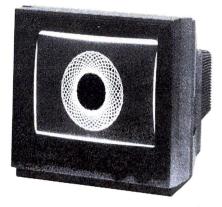


To save or recall programs, you'll need a device that stores data. Data can be stored on and retrieved from both diskettes and cassette tapes. To use diskettes, you'll need a DISK DRIVE. Disk drives are typically fast and efficient to use. Disk drives that are compatible with your Plus/4 are the Commodore models 1541 and 1551. For cassette-based storage and retrieval, the Commodore 1531 DATASSETTE tape recorder fills the bill.





When using a wordprocessing program or a graphics package on the Plus/4, a printer will reproduce what is on the screen on paper. There are several models of Commodore printers available that work with the Plus/4. These include the MPS-801, MPS-802, MPS-803 (with optional tractorfeed) and DPS-1101 (letter quality). Different printers specialize in different types of print-outs. Ask your dealer which best suits your needs.



Your television may not give you as clear a picture as you'd like for your computer. Commodore color monitors are specially designed to give you the sharpest, brightest picture for your Plus/4 screen output. There are several Commodore monitor models available, including the 1702, and 1802/1803.



There are networks that you can reach over the phone whose purpose is to provide information, programs, news, stock market reports, entertainment, and almost anything else you could think of to computerists by using the phone lines. To gain access to the tremendous range of services, software, and information available, you must be equipped with a MODEM.

The Commodore Plus/4MODEM connects your Plus/4 to these information services over telephone lines. With one of these modems, you can have access to computer services such as CompuServe and The Source. Commodore supports its own service called the Commodore Information Network, which is available through CompuServe. The Commodore Information Network (CIN) specializes in information for the Commodore owner, including current dealer lists, Commodore hardware and software tips, and a direct line to Commodore Customer Support. A wide assortment of programs is available on the Commodore User Database segment of CIN, including graphics, music, educational programs, utilities and games.

