

W E L C O M E T O

THE WALK-THROUGH COMPUTER™

This guide gives you a simple description of The Walk-Through Computer's parts. Panels in the exhibit offer more information. To help you find your way around the exhibit, match the numbers on the map to the numbers at the bottom of each exhibit panel.

1 FLOPPY DISK

Floppy disks carry information to and from the computer. In a space no larger than the palm of your hand, a floppy disk can store the words of a 350-page novel.

2 KEYBOARD

The keyboard is the most common way of communicating with the computer. You can type letters or numbers, just as you can on a typewriter. Special function keys let you send commands at a single keystroke.

3 TRACKBALL

The trackball is a tool for communicating with the computer. Rolling the ball moves the pointer on the screen. Pressing the button says you've made a choice you want the computer to act on.

4 POWER SUPPLY

The power supply unit takes the strong, uneven current from a household wall outlet and produces the low, steady stream of electricity the computer needs to power its delicate circuitry.

5 POWER PLUG

Just like a lamp in your living room, a desktop computer runs on standard household electricity, drawn from a wall outlet. Unlike a lamp, a computer uses ordinary electricity to do some extraordinary things.

6 MOTHERBOARD

The "motherboard" is a printed circuit board that holds the computer's essential electronic parts, supplies them with power, and provides the wiring they need to communicate with each other.

7 VIDEO BOARD

The video board controls the picture you see on the screen. The Central Processing Unit tells the video board what to show, and the video board tells the monitor which dots to turn on and off to create the picture.

8 KEYBOARD-TRACKBALL INTERFACE

When you type on the keyboard or move the cursor with the trackball, a message is collected and held by the keyboard-trackball interface until the Central Processing Unit (CPU) asks for it.

9 CLOCK

Like an orchestra conductor, the system clock beats a steady tempo that all the other parts of the computer can work to. This guarantees that when one component sends a signal, another is timed to receive it.

10 CENTRAL PROCESSING UNIT

The Central Processing Unit (CPU) is the heart of the information machine. An amazing feat of human engineering, the CPU packs more than one tiny million switches on a chip of silicon the size of a postage stamp.

11 SOFTWARE MEETS HARDWARE

The CPU carries out the instructions that make up the *World Traveler* computer program—controlling the flow of information throughout the computer and directing the work of all the other parts.

12 RANDOM ACCESS MEMORY (RAM)

RAM is where the computer puts the information it needs to access quickly. RAM usually contains a copy of the computer program and all the data the program is working with.

13 READ-ONLY MEMORY (ROM)

Since the computer's main memory (RAM) "forgets" everything when turned off, computers have a second, permanent memory called Read-Only Memory, or ROM. When the computer is first turned on, the information in ROM reminds it what to do.

14 MONITOR

The monitor is your visual link to the computer. It displays the information you put in, any questions the computer may ask you, and the results of the task you ask it to perform.

15 HARD DISK

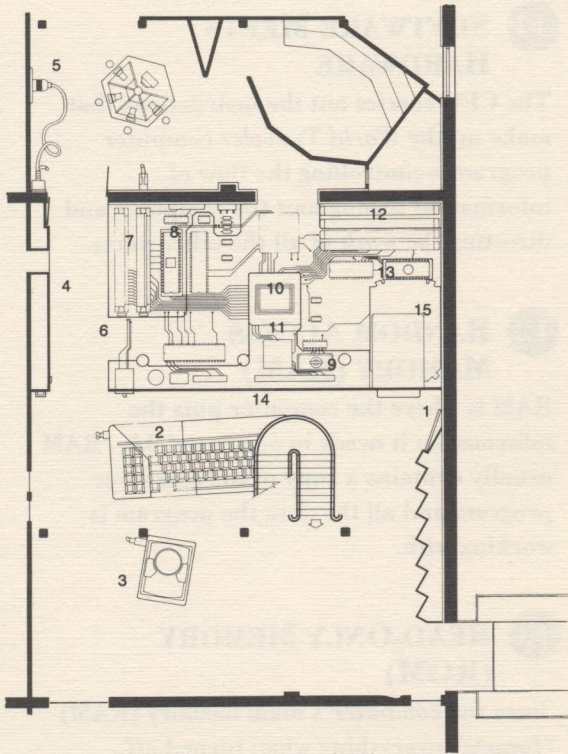
The computer uses the hard disk to store large amounts of information. It can store about as much as 500 floppy disks and can read and write at least 20 times faster.

THE INFORMATION MACHINE

We live in a world of information. Every picture you see, word you read, and sound you hear carries information.

The same information can be represented in many ways. For example, a piece of music can take the form of sound waves in air, magnetic patterns on a cassette tape, or microscopic pits on a compact disc.

Computers are machines that manipulate information, including text, numbers, pictures, or sounds. But first, the information has to be converted into a form that the computer can deal with. *The Information Machine* shows you how this is done.



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