

## Input devices

**Input devices allow us to enter raw *data* into a computer. The computer processes the data and then produces *outputs* that we can understand using an output device. Input devices can be manual or automatic.**

**The processing is mainly handled by the Central Processing Unit (CPU).**

### Manual input devices

The most common **manual** input devices are the keyboard and mouse. Other manual input devices include:

#### Concept keyboard

Each button on a concept keyboard relates to a particular item or function. Buttons can be labeled with text or a picture. Fast food restaurants often use concept keyboards because very little training is needed to operate them and they're efficient - a single button can order an entire meal.

#### Trackball



Used as an alternative to a mouse. To operate it the user rotates the ball which moves the pointer on screen. They are particularly easy to use for those with limited movement in their hands and are often used in Computer Aided Design (CAD) for their increased precision over a mouse.

#### Joystick

Joysticks used to be popular with gamers but have slowly been replaced by other types of game controller. In construction, joysticks are used to control machinery such as cranes.

#### Digital camera

A digital camera takes pictures and can usually record video too. The pictures it takes and the videos it records are stored in files. These files can be copied to a computer and later edited.

#### Microphone



Microphones are used to input sound. In computing they can be used with voice recognition *software* and a word processing *application* to enter text. Webcams commonly have microphones built-in too.

### **Touch screen**

A touch sensitive visual display unit (VDU) or screen has a grid of light beams or fine wires criss-crossing the screen that is used to detect touch. Many mobile phones use touch screens and do away with the keypad entirely. They're often used on cash machines and in shopping centres too. Touch screens are robust, easy to operate and easy to reprogram.

### **Video digitiser**

A video digitiser takes an image from a video camera or television and digitises it so it can be read by, and stored on, a computer. Video sequences captured using a video digitiser is often used in *multimedia presentations*.

### **Scanner**



A scanner can be used to digitise images. They're similar to a photocopier but they make a *digital* copy instead of a physical copy. They can also be used with optical character recognition (OCR) software to scan in text that is then editable.

### **Graphics tablet**

A graphics tablet consists of a flat pad (the tablet) on which the user draws with a special pen. As the user draws on the pad the image is created on the screen. Using a graphics tablet a designer can produce very accurate on-screen drawings as if they were drawing on paper.