



Le Stik

Fire Button

The fire button is ideally placed for fast games action

Handgrip

This is one of the few available joysticks with a contoured handgrip suitable for both left- and right-handed users

Pause Button

The pause button, fitted into the handgrip, allows the player to take a break from the action between alien attacks, simply by squeezing the grip

had closed. Moving the handgrip back to a vertical position allows the mercury to flow back into the tubes, thus breaking the contact. The response of the system is considerably better than that of previous joysticks. Indeed it is often too sensitive, especially if the game being played is written for use with the conventional types of joystick.

The latest method of converting hand movements into signals that a computer can understand is used by East London Robotics' Trickstick. This joystick is unique in the electrical effect it employs: it uses the human body as an aerial to pick up mains hum (the harmless electromagnetic radiation emitted by the ring main in any room). Trickstick consists of a sealed tube in a plastic casing, which is held vertically in both hands. There are three pairs of touchpads set into the surface of the tube: one pair controls the forward and backward motion; another pair controls the up and down movement; and the remaining pair are the fire buttons.

The mains hum that the human body picks up is transmitted through these touchpads to sensitive circuitry, where the pulses are converted into signals that provide the computer with directional information. The signals can also be analysed to show how far the movement should be taken. The harder one presses a pad, the stronger the signal and the more rapid the output to the computer. In this way, the Trickstick combines the proportional control of the analogue joystick with the fast direct digital control of a switch-based unit. Because different people will affect the circuits in different ways, the Trickstick has to be adjusted for individual sensitivity. This is done by means of a knob mounted in one end of the device.

The idea is certainly intriguing, and the manufacturers have applied for a patent on the technique. However, the reliability and performance of the device have yet to be proven.

Mercury Switches

Each mercury switch consists of a sealed tube containing a blob of mercury that closes an electrical circuit when tilted. Mercury is used because of its density, and because the blob will tend to stick together rather than break up into smaller blobs

Connecting Lead

The connecting lead is fitted with a standard Atari-type plug that is compatible with a wide range of home computers

