



Flexible Link
Allows the coupler to be fitted to most of the commonly available telephone handsets

Speaker
An acoustic coupler is really the reverse of a telephone handset. This speaker gives out the data as an audible tone

Microswitch
This ensures that the device will only function when the telephone handset is pushed fully into the cup

Earpiece Cup
This cup holds the earpiece end of the telephone handset. A central foam insert prevents external noise intruding on the computer's conversation

Mode Selector
This switch determines whether the coupler will originate the call or answer it

Circuit Board
These electronic components not only govern the interface with the microcomputer, but convert the 1s and 0s into two different frequencies

Mouthpiece Cup
The telephone handset's mouthpiece end is pushed into this cup

In business a computer terminal and acoustic coupler allow instant access to a wide range of information services and computer bureaux. The ordering of supplies in one chain of chemist's shops is now completely computerised, with the staff entering stock items and quantities and then transmitting it to the main warehouse computer system. At home the acoustic coupler has the significant advantage over a conventional modem that it doesn't need to be permanently attached to the telephone lines. An executive working at home on a personal computer can contact his office to send or receive information without having the telephone line permanently tied up.

In the home computer market the acoustic coupler is providing a low-cost and convenient alternative to the conventional modem in allowing access to public databases such as Prestel and Micronet 800. They are also a much more reliable way of sending programs to friends than entrusting a cassette to the post. Electronic mail, using services like British Telecom's 'Telecom Gold', offers the home computer user an acoustic coupler with an instant communications facility of a kind that formerly only the largest companies had access to.

It is not possible, however, for a European acoustic coupler to speak to an American one. The American computing industry uses a system called Bell 103 and Europe uses a system called CCITT V21. Needless to say, they are incompatible.

A further complication is that the new generation of telephones currently being introduced don't seem to fit the cups (see illustration) on many acoustic couplers. Because the system works by transmitting sound, it is important to avoid the possibility of external noise getting into the telephone handset. If the telephone doesn't fit properly or there is a great deal of external noise, the data you send may very well be scrambled.

TRFVOR HILL