

ARDWARE PRO-TEST: MODEM

DEVIL'S ADVOCATE

The Demon is a devil of a modern, offering the sort of facilities you'd expect to pay a lot more for, says Kenn Garroch.

There has been an awful lot of talk and rumour about what was originally known as the Unicom modem. At last it has arrived, under the name of the Demon. At £57.44, the little devil has controlling software, available for the BBC Micro only so far. That is an extra £23, bringing the total to £80.44. This means the Demon has more facilities than many devices costing twice the price.

First impressions

The review version was set up to work

with the BBC Micro, but since it operates through the RS432 port there is no reason why it could not be operated with other systems, with the appropriate software.

Most of the features are software selectable with only three buttons on the front to select originate/answer, baud rate scan auto/manual, and whether Bellor CCITT frequencies are to be used. The latter is probably the reason why this amazing gizmo still doesn't have the necessary little green sticker from the RART

Commands preceded with *

Communant	is proceduca with
ANSWER ON	
OFF	on or off
BAUD n	Sets the baud rates
	between 1200/75, 300/
	300 answer, 75/1200,
	and 300/300 originate
CARRIER	Waits 20 seconds for a
	carrier to appear;
	returns an error if it
	doesn't
CHAT	Enables a simple
	terminal mode
CLOSE	Closes all currently open
	files (eg CLOSE £0 from
	Basic).
DETECT ON/	Enables the auto baud
OFF	rate detect and select
	system; also controlled
•	by switch on the front of
	the modem
DIAL number	Auto dials the specified
	telephone number
DLOAD name	Downloads a file from
	the modem and files it
	on the current filing
	system
FLOW ON/OFF	
GET	This resembles DLOAD
	but specifies the file type
	in the command ie
	GETCPM fnm
HOPPIT	Remove the Zromm from
	the operating system to
	prevent clashes with
	other software
HOST	Gives the calling system
11001	total control over the
*	BBC, ie similar to *FX
	2,1 and *FX 3,1. The
	difference is that the
	muctence is mar me

Beeb retains its use of

the keyboard as well-

	a powerful command `
NOVEC	Disables all Zromm
110120	interrupts
OFF	Takes the modem off
011	line
ON	Puts the modem on line
PRESTEL	Starts up the built-in
PRESIEL	Prestel software
PRETZEL	Dials 618 for connection
TREIZEL	to the London Prestel
	service
PSS	Auto dials the PSS
F33	
	computer in Slough,
	then puts the system
CEND	into terminal mode
SEND	Resembles ULOAD
	closely except the format
	is specified in the
	command, ie SENDASC
	fname
STATUS	Returns the current
-	status of the modem,
	whether on line, baud
	rate etc
TERMINAL No	· . · · · · · · · · · · · · · · · · · ·
	(No) and puts the Beeb
	into terminal mode. This
	is similar to CHAT mode
	but with a lot more
	facilities
TIMEOUT mins	Sets the amount of time
	before the modem
	automatically hangs up.
	Can be set between 0
	and 255 mips
ULOAD name	Used to send a file to
	someone else. Three
	types of protocol are
	available; normal ASCII

text, ASCII-HEX data and XMODEM binary

data

in use

The Demon has three wires coming out of the back: one for connection to a telephone socket; one to a 5-pin domino for the Beeb's RS432 socket; and the third is the power supply lead which connects to the mains supply via a \$9V transformer. Demon seems to have saved its money on plugs and sockets. As none of these leads are detachable from the modem, moving it around can result in a tangle of trailing wires.

Connecting up was easy apart from getting the RS432 plug into the BBC the right way round (due to the plug's dumb design). After inserting the ROM and turning everything on, a boot message tells us that the lucky old Beeb now has a Demon Zromm V.1.0. Sadly, *HELP Demon Zromm V.1.0 displays nothing about the star commands available.

One of the nice things about the system, as it stands, is the number of bits and pieces hidden inside the system for would-be hackers to find.

Work on the obvious sort of project such as a Basic program to phone bulletin boards until it gets through—or, in fact, most others is easy. The facilities are instantly available with the star commands (see box).

Documentation

The review system came with the customary photocopied manual that appeared to be incomplete. Not included were *HOST and *GET but Demon says these will be in the final version.

The manual has three sections: a simple overview of how to get started; a complete breakdown of the commands with examples for most; and a set of technical notes on control of the modem. This involves pulsing the RTS line of the RS232 port to control the baud rates and autodialling. There is also a section showing how to program the system from machine code.

Verdict

The Demon modem is an excellent buy for the BBC. Versions for the Commodore 64, the Spectrum, and the Amstrad should be available soon.

The only problems I had were generally caused by entering confusing commands which, perhaps, mucked up the timing. Fortunately, the system is flexible enough to get around almost any comms problem you might have.

Features	00000
Documentation	900
Performance	0000
Overall value	0000
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