

Series Four

The Pace Series Four Command Set - An exercise in simplicity

Almost all of the features of the Pace Series Four range of modems can be operated using a set of simple commands which are based on those developed by the American Hayes Corp.

This simple command set which has become a recognised standard, uses single mnemonic letters to represent commands such as Dial, Echo etc which are entered at the terminal keyboard and passed to the modem in the normal manner.

Imagine that you have connected the modem to your terminal, loaded your terminal software and switched into Online mode. To instruct the modem to dial the number 0708-123456 now, all that is required is for you to type: ATD 0708 123456 [Enter]

The AT at the start of the line grabs the modems Attention, D stands for dial and the rest of the line contains the telephone number with spaces inserted to improve readability. If at the end of dialling the modem detects a valid carrier signal it will go on-line and display the message CONNECT to inform you that all is well. If no carrier is detected the Series Four modem will tell you so with the message NO CARRIER so that you may take the appropriate action.

Many other commands exist to control features such as speaker volume, duplex etc. and the table below provides a brief description of most of the commands.

Command Letter & Name	Description
A Answer	Causes the modem to 'answer' a call and wait for a carrier. Commonly used in conjunction with the D command to switch from an established voice link to a data link.
C Carrier control	Used to manually switch Carrier On or Off.
, Pause	The Comma is used to introduce a timing delay (the length of which can be varied) into dialling commands.
D Dial	Puts the modem into originate mode in preparation to dial a number. If the command is followed by a number that number will then be dialled.
E Echo	The E command is used to control local echo of characters typed at the Terminal when the modem is in Local command state.
F Full duplex	The F command determines whether or not the modem operates in full or half duplex mode.
H Off/On Hook	In the same way that a telephone is said to be On or Off the hook, the modem has the same two states which can be controlled manually using the H command.
I Identify	The I command requests the Series Four modem to identify itself by displaying its product code or a checksum of the master control ROM.
K Calendar/Clock control	The K command provides the means of setting and reading the real-time calendar clock module.
L Speaker loudness	Controls the volume of the internal audio monitor.
M Monitor control	Determines at which stages in the dialling procedure the internal audio monitor is active.
N Dial stored number	Used to dial a telephone number from the internal 64 number index.

N?	Display stored number	Displays either the entire contents of the internal number store or the specified number, at the terminal.
N=	Program stored number	Allows new numbers and names to be entered into the internal number store.
O	Online	The O command causes the modem to go into its Online state. It is often used to return to Online mode having used the Escape sequence to alter some other setting.
P	Pulse dial	Re-selects the Pulse method for auto-dialling (the default) having previously used Tone dialling.
Q	Quiet	The Q command is used to switch the command Result codes On or Off.
R	Reverse mode	Causes the modem to switch into Answer mode following dialling so that it is possible to dial Originate-only modems.
Sr=	Set S register	The S= command is used to set the value of one of the Special registers, r is the number of the register and the value following the = sign is the new value to be placed in the register.
S?	Read S register	This is used to display either the contents of all the S registers or the single specified register.
;	Semi-colon	A semicolon can be added at the end of a dial command in order to force the modem to return to local command state after dialling so that further commands can be entered.
T	Tone dialling	Is used to select the Tone (DTMF) mode for dialling.
U	Unattended mode	Allows Series Four to answer incoming calls, whilst unattended and to receive messages to be printed via the control port.
V	Verbose	The V command determines whether command result codes are returned in simple numeric form or in Verbose 'English' form eg 3 or NO CARRIER.
W	Secondary dial pause	Used in dialling commands to instruct Series Four to wait for a secondary dial tone.
X	Extended result codes	Selects the use of the extended result code set.
Z	Software reset	The Z command performs a software RESET of the modem.

In addition to these commands, the Series Four modem uses a number of Special 'S' registers to hold default and operating values for many of its configuration settings. For example, register S8 contains the length of the delay caused by the ';' in dialling commands. Similarly, S0 contains the number of times the telephone must ring before the modem will answer a call when it is in Auto-answer mode.

By now it will be apparent that the Pace Series Four provides a very high level of flexibility whilst being simple to operate for even the most inexperienced user.

