

In most instances, your communications software handles the task of sending commands to the faxmodem. If you need to do this yourself, you can do so from the terminal mode of your software, using the AT command set. Some AT commands tells the faxmodem to do something immediately, while others configure it so that it will act in a certain way later on. The table below lists the AT commands and their functions. THE DEFAULT SETTING IS LISTED FIRST.

AT MODEM COMMANDS	
COMMAND	FUNCTION
AT	Command line prefix. The attention command precedes all other commands listed below except for A/ and the escape code. For example, the command DT would be typed ATDT.
A/	Repeat the previous command (not to be preceded by AT). Should not be followed by <CR>.
A	The faxmodem is set to answer mode and goes off-hook immediately.
Bn	Selects V.22 or Bell 212A in the 1200 bps mode. n = 1, Bell 212A with 2225 Hz Answer Back Tone n = 2, CCITT V.22 with 2100 Hz Answer Back Tone
Dn	Dial the number immediately following this command, where n is the number to be dialed, or that number combined with other dial modifiers as shown below. Any combination of the dial modifiers listed below may be strung together to perform the desired dialing sequence. DIAL FUNCTION MODIFIER T Touch tone dialing. P Pulse dialing (default). R Reverse mode. Puts faxmodem in answer mode immediately after dialing. W Wait for a continuous tone before dialing the next number. The faxmodem waits for the number of seconds set by register S7 for the tone to occur. If the tone is not heard, BUSY or NO DIALTONE is issued. @ Wait for a "quiet answer" - one or more rings followed by 5 seconds of silence - for the length of time specified by S7. , Pause the length of time specified by S8 (default = 2 sec). Each comma equals the pause length specified. You may use as many commas as you like. ! Flash. Go temporarily on-hook in order to get a new dialtone. (Note: Some software uses ! as a carriage return). ; Remain in the command state after dialing. The semicolon can only be placed at the end of a dial command. S=n Dial stored number 0, 1, 2, or 3 that has been

	<p>previously stored in non-volatile memory using &Zn command.</p> <p>0-9 # * ABCD Characters that may be used in dialing. # * and ABCD are for tone dialing only.</p> <p>Dial example 1: AT DT1234567 This example tells the faxmodem to tone dial the number 123-4567. Blank spaces within a command are ignored.</p> <p>Dial example 2: ATDP9W411,,,,, This example tells the faxmodem to pulse dial 9, wait for a second dialtone, tone dial the number 411, and pause 10 seconds. Further dial modifiers (but not commands!) could be added on the same line.</p>
En	<p>Determines whether the faxmodem echoes the data received in the command mode back to the local computer.</p> <p>n = 1, Echo on. n = 0, Echo off.</p>
Hn	<p>Controls the faxmodem on/off hook relay.</p> <p>n = 1, On-hook (disconnected). n = 0, Off-hook.</p>
In	<p>Returns product ID/checksum.</p> <p>n = 0, Returns product ID. n = 1, Normally this performs a checksum, but on this faxmodem the datecode is returned. n = 2, Performs checksum, returns result code. n = 3, Returns ROM part # and revision level.</p>
Ln	<p>Speaker Volume</p> <p>n = 2, Medium n = 0, or 1 Low n = 3, High</p>
Mn	<p>Speaker Control</p> <p>n = 1, Speaker on until carrier detected. n = 0, Speaker off. n = 2, Speaker always on. n = 3, Speaker on after dialing until carrier detected.</p>
On	<p>Puts faxmodem in the on-line data mode.</p> <p>n = 0, On-line. n = 1, On-line with equalizer retrain sequence (2400 bps only). Issuing an 'On' command always takes faxmodem off-hook.</p>
Sr?	<p>Reads the contents of status register r.</p>
Sr=n	<p>This command may be used to modify an S Register of the faxmodem. It assigns a value n to the status register r. Registers may be reset to the default values by issuing an '&F' or 'Z' command. See "Modem S Registers Table" for a list of S registers.</p>

Vn	Sets result code format. n = 1, Words. n = 0, Numeric.
Xn	Sets dialing mode, result code format for dial command. The Vn command determines if the result code is sent as words or digit (See "FaxModem Result Codes" for a complete listing of codes.) n = 4, Dialtone and busy signal detected. Result codes 0-7 and 10 enabled. n = 0, Dialtone and busy signal not recognized (blind dialing). Result codes 0-4 enabled. n = 1, Dialtone and busy signal not recognized (blind dialing). Result codes 0-5 and 10 enabled. n = 2, Dialtone detected. Busy signal not detected. Result codes 0-6 and 10 enabled. n = 3, Busy signal detected. Dialtone not detected. Result codes 0-5, 7 and 10 enabled.
Yn	Long Space Disconnect Option n = 0, Disabled n = 1, Enabled
Zn	Causes a software reset, with registers set to configuration stored in non-volatile memory. Commands following this on the same line are not executed. n = 0, Recall profile 0 (stored using &W0 command) n = 1, Recall profile 1 (stored using &W1 command)
&Dn	Data Terminal Ready Option. DTR on/off time as specified by S25. n = 0, Faxmodem ignores DTR n = 1, Switches to command mode when DTR goes off n = 2, Same as n = 1. Also hangs up, disables auto answer. n = 3, Initializes faxmodem when DTR goes off.
&F	Sets values for S Registers and Commands to factory default.
&Gn	Guard Tone (used only when in CCITT modes). n = 0, No guard tone n = 1, Reserved n = 2, 1800 Hz This command need never be used when communicating over U.S. phone lines. Outside the U.S., the faxmodem may need to generate an additional tone, along with its carrier, to disable echo suppressors in the central office. This guard tone varies by country.
&Mn	Communications Mode. n = 0, Asynchronous n = 1, Reserved n = 2, Reserved n = 3, Reserved
&Pn	Pulse dial make/break ratio. n = 0, 39/61 @ 10 pps (for U.S. and Canada) n = 1, 33/67 @ 10 pps (for UK/HK)

	n = 2, 39/61 @ 20 pps n = 3, 33/67 @ 20 pps		
&Qn	Communications Mode Option		
		Idle State	On-Line State
	n = 0	Normal	Asynchronous
	n = 1,2,3	Reserved	Reserved
&Sn	Data Set Ready option. DSR ON indicates that the faxmodem is connected to a communication channel and is ready. n = 0, DSR is always on. n = 1, DSR turned on at start of handshaking, off in test mode, idle state, or when carrier is lost.		
&Tn	Controls Diagnostic Tests. Note: These tests are tricky and very rarely reveal problems with a faxmodem. Use this command only if you understand how modem diagnostics work. See Register S18 for further details. n = 0, Ends current test and returns to command mode. Does not affect value of test timer S18. n = 1,* Initiate local analog loopback. n = 3,** Initiate local digital loopback. n = 4, Grant request from remote modem for remote digital loopback. n = 5, Deny request from remote modem for remote digital loopback. n = 6,*,** Initiate remote digital loopback. n = 7,** Initiate remote digital loopback w/ self-test. n = 8, Initiate local analog loopback w/self-test. * Test requires you to type characters. To end test type escape sequence before &T0. ** Establish connection with remote modem, then use escape code and then issue command.		
&V	Displays active configuration profile and contents of non-volatile memory (S register settings, commands, and telephone numbers). Inputs from the DTE are ignored while this information is being sent.		
&Wn	Store Active Profile. Sends and stores acceptable values for certain commands and S Registers to non-volatile RAM. The following may be stored: Commands: Bn, En, Ln, Mn, Qn, Vn, Yn, Xn, &Cn, &Dn, &Gn, &Jn, &Ln, &Pn, &Qn, &Rn, &Sn, &Xn, &Yn Registers: S0, S14, S18, S21, S22, S23, X25, S26, S27, S28 The last DTE speed and parity are also stored. Stored values are used on power-up or hard reset. n = 0, Store active profile in location 0. n = 1, Store active profile in location 1.		
&Xn	Asynchronous Data Transmission Clock Source.		

	<p>n = 0, Internal Clock n = 1,2 Error</p>
&Yn	<p>Select Stored Profile on Power Up Option n = 0, Select profile 0 on power up or hard reset. n = 1, Select profile 1 on power up or hard reset. See the &Wn command for particular commands and S registers stored.</p>
&Zn=x	<p>Store Telephone Number. Stores up to four dialing strings in non-volatile memory for later recall using DS (dial stored number) command.</p> <p>Command format: &Z <up to 36 characters> <CR> &Z= <up to 36 characters> <CR> &Zn <up to 36 characters> <CR> where n=0 to 3</p> <p>If the delimiter (=) is not present, the characters following the &Z are treated as phone numbers and/or modifiers and are stored in location 0. If the delimiter is present, the characters following it are stored in the location specified by the character preceding the delimiter (0 to 3). If not specified, by the 0 will be the used.</p> <p>Allowable characters: 0 1 2 3 4 5 6 7 8 9 A B C D # * T P R W @ , ! ;</p>
%Dn	<p>DTMF attenuation n = 0, 0 dB attenuation For n = 1 to 7, attenuation = 2*n dB</p>
%J	<p>Secondary Defaults. Resets all S registers and commands to the &F defaults with the following exceptions: S6 3 seconds; range 3-255 S11 95 ms; range: 60-255 %Ln 6 dB (%L3) %Dn 2 dB (%D1)</p>
%Ln	<p>Transmit attenuation n = 0, 0 dB attenuation For n = 1 to 7, attenuation = 2*n dB</p>

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