The S Register default values are set to function reliably under most circumstances. However, you may want to change the default values in some cases. For example, it may take an especially long time to get a dialtone in your office, so you may want to set S6 for a longer wait time.

The command ATSn? displays the current value of an S Register, where n is the S Register number. For example, the command ATS0?S7? will display the values of S0 and S7.

To change an S register value, type ATSr=n, where r= the register number and n= the desired value.

The S Registers Table is shown following:

MODEMS REGISTERS TABLE

* Indicates that the S Register is stored to the faxmodem's non-volatile memory upon receipt of the &W command. This ensures that the contents of these registers will not be lost if the faxmodem loses power.

Register	Range	Units	Default	Description
S0 *	0-255	RINGS	0	Number of rings before faxmodem answers.
S1	0-255	RINGS	0	Count rings
S2	0-127	ASCII	43(+)	Escape code character
S3	0-127	ASCII	13 (CR)	Carriage return character
S4	0-127	ASCII	10 (LF)	Linefeed character
S5	032,127	ASCII	08	Backspace character
S6	2-255	SECONDS	2	Wait for dialtone
S7	1-255	SECONDS	30	Wait time for carrier after dialing
S8	0-255	SECONDS	2	Pause time for comma
S9	1-255	1/10 SEC.	6	Carrier detect response time
S10	1-255	1/10 SEC.	14	Carrier loss to hangup delay If "Call Waiting" service from your phone company is breaking your connection, increasing the value of S10 may solve the problem, but you must increase the value of S10 for BOTH modems
S11	50-255	MSEC.	95	DTMF dialing speed
S12	0-255	1/50 SEC.	50	Escape code guard time
S13				Reserved

S14 *	Bit-mapped	NONE	AA hex	Records command settings
S15				Reserved
S16	Bit-mapped	NONE	00	Faxmodem test options (See &T for more information.) For all bits, 0 = corresponding test disabled. Bit 0=1 &T1 enabled Bit 1 Reserved Bit 2=1 &T3 enabled Bit 3=1 &T6 enabled Bit 4=1 Faxmodem is in Remote Digital Loopback initiated by remote modem Bit 5=1 &T7 enabled Bit 6=1 &T8 enabled Bit 7=1 Reserved notes: 1. Only one test may be performed at a time. 2. The &T0 command terminates any test in progress and sets S16 to 00.
S17				Reserved
S18 *	0-255	SECONDS	0	Test duration timer. See &T for details on diagnostics. Note: 0=disable timer. Test will run until explicitly terminated.
S19				Reserved
S20				Reserved
S21 *	Bit-mapped	NONE	00	Records command settings
S22 *	Bit-mapped	NONE	76 hex	Records command settings
S23 *	Bit-mapped	NONE	07 hex	Records command setting
S24				Reserved.
S25 *	0-255	0.01 or 1 SECONDS	5	Detect DTR change If &Q1 is selected, S25 is the delay in seconds after a connection has been made, but before the faxmodem examines the DTR lead. If in the on-line or on-line command state, changes that last less than the time specified by S25 in 0.01 increments, are ignored by the faxmodem.
S26 *	0-255	0.01 SEC.	1	RTS to CTS delay intervals. Reserved

S27 *	Bit-mapped	NONE	40 hex	Records command settings
S28 *	Bit-mapped	NONE	00	Records command settings

There's a good chance that you will never encounter fax result codes, since your software most likely intercepts them. However, you probably will see data mode result codes.

Result codes are the verifications that commands have been executed. Result codes may be selected as English words or numeric digits, or they may be disabled entirely (see "AT Modem Commands"). For screen display purposes, word result codes are followed by a carriage return/line feed sequence; numeric result codes are followed by a carriage return only. The following table lists the data mode result codes.

DATA MODE RESULT CODE TABLE

Digit Code	Word Code	Meaning of Code
0	OK	Command line executed without errors
1	CONNECT	Connection established at 300 bps
2	RING	Local ringing signal detected
3	NO CARRIER	Carrier lost or never detected
4	ERROR	Error in the command line
5	CONNECT 1200	Connection established at 1200 bps
6	NO DIALTONE	No dial tone detected
7	BUSY	Busy signal detected
8	NO ANSWER	No silence detected when dialing a system not providing a dial tone
10	CONNECT 2400	Connection established at 2400 bps

(smc-01/10/94)