Telebit WorldBlazer Quick Reference Card

You may enter a command line of up to 80 characters in upper or lower case with the first command in the line preceded by an "AT" or "at" and the last command followed by a carriage return.

The notation "(n)" in the descriptions represents a decimal numeric option, and "(x)" represents an assigned value. The parentheses should not be typed. If a command is typed without a value when one is expected, the modem will assume a value of 0. The option should immediately follow the command. For example, to turn off the result codes, type Q1 not Q=1.

You can repeat the last command issued by entering A/ or a/. Do not enter an AT prefix before entering A/ and do not press RETURN after entering A/. This command is useful for redialing a telephone number.

On this page:
- Result Codes
- AT Commands
- Registers

Result Codes

The following are the basic result codes returned when the Q command setting is Q0 or Q2 and you have originated a call.

<table>
<thead>
<tr>
<th>Number</th>
<th>Message and Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>OK--The command was successfully completed.</td>
</tr>
<tr>
<td>1</td>
<td>CONNECT</td>
</tr>
<tr>
<td>2</td>
<td>RING--An incoming ring has been detected.</td>
</tr>
<tr>
<td>3</td>
<td>NO CARRIER--Time to connect has expired, dial command aborted, or carrier lost.</td>
</tr>
<tr>
<td>4</td>
<td>ERROR--A command error has been encountered.</td>
</tr>
<tr>
<td>5</td>
<td>CONNECT 1200--Connected at 1200 bps (Bell 212A or V.22 Compatible).</td>
</tr>
<tr>
<td>6</td>
<td>NO DIALTONE--No dial tone was detected.</td>
</tr>
<tr>
<td>7</td>
<td>BUSY--Remote connection is busy.</td>
</tr>
<tr>
<td>8</td>
<td>NO ANSWER--Five seconds of silence was not detected within 30 seconds when an @ modifier was encountered in the dialing string.</td>
</tr>
<tr>
<td>10</td>
<td>CONNECT 2400</td>
</tr>
<tr>
<td>11</td>
<td>CONNECT 4800</td>
</tr>
<tr>
<td>12</td>
<td>CONNECT 9600</td>
</tr>
<tr>
<td>13</td>
<td>CONNECT 14400</td>
</tr>
<tr>
<td>14</td>
<td>CONNECT 19200</td>
</tr>
<tr>
<td>15</td>
<td>CONNECT 38400</td>
</tr>
<tr>
<td>16</td>
<td>CONNECT 57600</td>
</tr>
<tr>
<td>17</td>
<td>CONNECT 76800</td>
</tr>
<tr>
<td>18</td>
<td>CONNECT 115200</td>
</tr>
<tr>
<td>19</td>
<td>CONNECT 7512</td>
</tr>
<tr>
<td>20</td>
<td>CONNECT 1275</td>
</tr>
<tr>
<td>21</td>
<td>CONNECT 7200</td>
</tr>
<tr>
<td>22</td>
<td>CONNECT 12000</td>
</tr>
<tr>
<td>46</td>
<td>CONNECT 7512</td>
</tr>
<tr>
<td>47</td>
<td>CONNECT 1275</td>
</tr>
<tr>
<td>48</td>
<td>CONNECT 7200</td>
</tr>
<tr>
<td>49</td>
<td>CONNECT 12000</td>
</tr>
<tr>
<td>52</td>
<td>RRING--Remote connection is ringing.</td>
</tr>
<tr>
<td>53</td>
<td>DIALING</td>
</tr>
<tr>
<td>54</td>
<td>NO PROMPTTONE</td>
</tr>
<tr>
<td>50</td>
<td>CONNECT FAST</td>
</tr>
</tbody>
</table>

AT Commands

The following briefly describes the AT commands and shows each command's range and default.

<table>
<thead>
<tr>
<th>Command</th>
<th>Parameter Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Answer</td>
<td></td>
</tr>
<tr>
<td>B(n)</td>
<td>Bell/CCITT Mode Select</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0 Use CCITT standard</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Use Bell standard</td>
<td></td>
</tr>
</tbody>
</table>
D(n) 0-9,A-D,*, Dial number Pulse
      S= Reference number in number directory dialing
      P= Pulse dialing
      T= Tone dialing
      != Initiate momentary on-hook flash
      @= Wait for quiet answer
      R= Switch to answer mode when remote modem answers
      ;= Remain in command mode after dialing
      $= Calling and billing prompt
      = Reference a number in number directory

E(n) 0 or 1 Echo Command ON/OFF 1
      0 Off
      1 On

H(n) 0 or 1 Hook Control 0
      0 Hang-up (on-hook)
      1 Pick up phone line (off-hook)

I(n) 0-5 Information
      0 Return product ID code
      1 Return diagnostic status
      2 Report CONNECT status
      3 Model and firmware revision
      4 Reserved
      5 Last number dialed

L(n) 0-3 Speaker Volume 2
      0 Low volume
      1 Low volume
      2 Medium volume
      3 High volume

M(n) 0-3 Speaker Mode 1
      0 Speaker OFF
      1 Speaker on while connecting
      2 Speaker always on
      3 Speaker on after dialing until carrier detected

O(n) 0-2 Return to Data State
      0 Modem switches to data state
      1 Retrain Equalizer
      2 Renegotiate DTE protocol

P Pulse Dialing

Q(n) 0-2 Quiet Mode Select 0
      0 Modem sends result codes
      1 No result codes are reported
      2 Sends result codes when originating, does not send result codes when answering

T Tone Dialing

V(n) 0 or 1 Result Code Format Select 1
      0 Return numeric responses. In V.25bis mode, result codes are unformatted
      1 Return word responses. In V.25bis mode, result codes are formatted

X(n) 0-2,4, Result Code Format 2
      0 0-4 result codes
      11-12 Adds modem speed to 0-5, 10-13, 46-50
      2 Same as X1, with 6-7, 52, 53
      4 Same as X11, with 6,7
      11 DTE speed, 05, 10-13, 48, 49
      12 Same as X11 with 6, 7, 52, 53

Y(n) 0 or 1 Long Space Disconnect 0
      0 Modem ignores long space
      1 Modem disconnects on long space

Z(n) 0-1 Reset
      0 Reset specified by S255
      1 Reset and recall profile B

&C(n) 0-6 DCD Control 0
      0 DCD signal is on
      1 DCD on after connect
1. DCD on after connect
2. DCD on/off specified by S47
3. DCD on when data is transmitted to DTE
4. Synchronous use only. DCD on when modem detects carrier.
   Modems sets received data to mark and drops DCD when
   V.13 pattern detected.
5. DCD on when data transmitted to DTE
6. DCD follows DTR when on hook

&D(n) 0 - 4  DTR Interpretation  0
   0  Modem ignores DTR
   1  DTR on/off to command mode
   2  DTR on/off disconnects
   3  Modem loads prestored configuration when
      DTR signal is
      off. DTR on/off disconnects
   4  If DTR off, modem is disabled

&R(n) 0-16,29,30 Load Factory Defaults
      (see appendix A)
      32-34

&G(n) 0 - 2  Guard Tone Selection  0
   0  No guard tone
   1  550 Hz guard tone
   2  1800 Hz guard tone

&J(n) 0 - 2  Jack Type Selection  0
   0  Aux telco leads disabled
   1  A/A1 control selected
   2  MI/MIC control selected

&L(n) 0 or 1  Line Type Selection  0
   0  Dial-up line
   1  Leased line

&M(n) 0 - 3  Asynchronous/Synchronous  0
   0  Equivalent to Q0
   1  Equivalent to Q1
   2  Equivalent to Q2
   3  Equivalent to Q3

&Q(n) 0 - 3, 6  Asynchronous/Synchronous Mode Select  0
   0  Asynchronous mode
   1  Synchronous mode 1
   2  Synchronous mode 2
   3  Synchronous mode 3
   6  Transparent sync mode

&R(n) 0 - 8  RTS and CTS Interpretation  3
   0  CTS on when modem is not connected. CTS
      follows RTS
      per S26
   1  CTS is on after CONNECT
   2  CTS follows RTS, fixed delay
   3  CTS is on if hardware flow control
      disabled
   4  CTS follows DTR when modem is not
      connected
   5  Same as &R0; sends V.13 pattern when RTS
      off
   6  Same as &R4; sends V.13 pattern when RTS
      off
   7  CTS follows RTS per S26
   8  CTS control for SDLC accelerator

&S(n) 0 - 4  DSR Control  0
   0  DSR is always on
   1  DSR on after answer tone
   2  DSR on/off specified by S47
   3  DSR on/off as per DTR
   4  DSR on after connect

&T(n) 0, 1, 3-9  Test Modes  4
   0  Ends test in progress
   1  Checks path between modem and DTE
   3  Checks communication link and remote
      modem
   4  Enables acceptance of a test request from
      remote modem
   5  Denies test request from remote modem
   6  Checks modem operation, DTE, and
6. Checks modem operation, DTE, and telephone connection
7. Local modem sends self-test pattern to remote modem
8. Modem performs a local self test
9. Runs diagnostic tests

&V 0 View Active Configuration
   0 Displays active Ram configuration
&W(n) 0 or 1 Write Current Configuration
   0 Writes current settings per S255
   1 Writes current settings to Configuration

&X(n) 0 - 2 Select Clock Source 0
   0 Generates clock signal
   1 DTE generates clock signal
   2 Modem derives clock signal

-H(n) 0 - 9 Help
   Provides a brief description of all registers and commands

~L List Number Directory
~M(n) 0 or 1 Modify Stored Profile
   0 Modify profile A
   1 Modify profile B

~N Set Number Directory
~U Update Security Password
~V 0 or 1 View Nonvolatile Configurations
   0 Display nonvolatile profile A
   1 Display nonvolatile profile B
% Remote Modem Access
%~N Set Remote Number Directory
%~X Send Remote Access
%546 Change Remote Modem's System Password

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**Registers**

The following briefly describes the S registers and shows each register's range and default.

<table>
<thead>
<tr>
<th>Register</th>
<th>Range</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>S0</td>
<td>0 - 255</td>
<td>Answer on Ring Number</td>
<td>0</td>
</tr>
<tr>
<td>S1</td>
<td>0 - 255</td>
<td>Count of Rings (read only)</td>
<td></td>
</tr>
<tr>
<td>S2</td>
<td>0 - 255</td>
<td>Escape Character (ASCII)</td>
<td>43</td>
</tr>
<tr>
<td>S3</td>
<td>0 - 127</td>
<td>Command Line Terminator (ASCII)</td>
<td>13</td>
</tr>
<tr>
<td>S4</td>
<td>0 - 255</td>
<td>Line Feed Character (ASCII)</td>
<td>10</td>
</tr>
<tr>
<td>S5</td>
<td>0 - 255</td>
<td>Backspace Character</td>
<td>8</td>
</tr>
<tr>
<td>S6</td>
<td>2 - 255</td>
<td>Pause Before Dialing (sec)</td>
<td>2 sec</td>
</tr>
<tr>
<td>S7</td>
<td>1 - 255</td>
<td>Wait for Connection/Dial Tone Time (sec)</td>
<td>60 sec</td>
</tr>
<tr>
<td>S8</td>
<td>0 - 255</td>
<td>Pause Time for Comma (seconds)</td>
<td>2</td>
</tr>
<tr>
<td>S9</td>
<td>1 - 255</td>
<td>Carrier Redetect Time</td>
<td>6</td>
</tr>
<tr>
<td>S10</td>
<td>1 - 255</td>
<td>Carrier Loss to Disconnect Time</td>
<td>14</td>
</tr>
<tr>
<td>S11</td>
<td>50 - 255</td>
<td>Touch Tone Timing</td>
<td>70</td>
</tr>
<tr>
<td>S12</td>
<td>0 - 255</td>
<td>Delay for Prompt Message</td>
<td>50</td>
</tr>
<tr>
<td>S18</td>
<td>0 - 255</td>
<td>Test Termination Timer</td>
<td>0</td>
</tr>
<tr>
<td>S25</td>
<td>5 - 255</td>
<td>DTR Delay Timer</td>
<td>5</td>
</tr>
<tr>
<td>S26</td>
<td>0 - 255</td>
<td>RTS-to-CTS Delay Interval</td>
<td>1</td>
</tr>
<tr>
<td>S38</td>
<td>0 - 255</td>
<td>Delay Before Disconnecting</td>
<td>0</td>
</tr>
<tr>
<td>S41</td>
<td>0 - 255</td>
<td>Inactivity Time-Out</td>
<td>0</td>
</tr>
<tr>
<td>S45</td>
<td>0, 1, 255</td>
<td>Remote Access Enable</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disable remote access</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enables remote access with password security</td>
<td>255</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enables/negotiates remote access</td>
<td></td>
</tr>
<tr>
<td>S46</td>
<td>0 - 3</td>
<td>Call Security</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disable remote access</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Callback security disabled</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Callback security enabled</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Callback security enabled with password reverification</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pass through security enabled, no callback</td>
<td></td>
</tr>
<tr>
<td>S47</td>
<td>0 - 255</td>
<td>DSR/DCD Delay Time (50 ms)</td>
<td>4</td>
</tr>
<tr>
<td>S48</td>
<td>0 or 1</td>
<td>Control Character Mask</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Most significant bit is marked</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Compare all eight bits</td>
<td></td>
</tr>
</tbody>
</table>
S50 0-3, 5-7, Modulation Mode 0
   254, 255 0 Auto Speed Determination
   1 300 bps (Bell 103 or V.21)
   2 1200 bps (Bell 212A or V.22)
   3 2400 bps (V.22bis)
   5 1200/75 bps (V.23)
   6 9600 bps (V.32)
   7 14400 bps (V.32bis)

   254 Attempts to connect at closest current non-PEP DTE speed
   255 Fast operation (TurboPEP or PEP mode)

S51 0-9, 35, DTE Interface Speed 252
   43, 0 300 bps
   46, 1 1200 bps
   252-255 3 4800 bps
   35 7200 bps
   43 12000 bps
   46 14400 bps
   5 19200 bps
   6 38400 bps
   7 57600 bps
   8 76800 bps
   9 115200 bps

   252 Autobaud
   253 One-time autobaud (38400 bps default)
   254 One-time autobaud (19200 bps default)
   255 One-time autobaud (9600 bps default)

S56 0-255 XON Character (ASCII) 17
S57 0-255 XOFF Character (ASCII) 19
S58 0-4 DTE Flow Control 3
   0 No flow control
   1 Use RTS/CTS flow control in half duplex mode
   2 Use RTS/CTS flow control in full duplex mode
   3 Use XON/XOFF flow control
   4 Use both XON/XOFF full duplex RTS/CTS flow control

S59 0-15 CONNECT Suffixes (ASCII) 0
S60 0-4 Data Format 0
   0 8 data bits, no parity
   1 8 data bits, odd parity
   2 8 data bits, even parity
   3 8 data bits, mark parity
   4 8 data bits, space parity

S61 0-1 Local Action of Break 1
   0 Break processed as set in S63
   1 Go into Command mode

S62 0-255 Break Length 15
S63 0-3 Link Layer Action on Break 0
   0 Break is in sequence with data
   1 Send break to remote DTE immediately
   2 Reserved
   3 Discard break signal

S64 0 or 1 Dial/Answer Sequence Abort 0
   0 If characters are sent to modem, abort dialing or answering
      sequence
   1 Ignore characters sent by DTE while dialing or answering
      a call

S68 0, 2-4, DCE Flow Control 255
   255 0 No flow control
   2 Full duplex RTS/CTS flow control
   3 XON/XOFF flow control
   4 Both XON/OFF and RTS/CTS flow control

S69 0-2 XON/XOFF Signal Handling 0
   0 XON/XOFF character processed
   1 Reserved
   2 Processed if necessary

S70 Transmit Modulation Rate (read only)
S70                  Transmit Modulation Rate (read only)
S71                  Transmit Bits Per Channel (read only)
S72                  Receive Modulation Rate (read only)
S73                  Receive Bits Per Channel (read only)
S74                  Link Protocol Packets Statistics (read only)
S78                  Line Quality (read only)
S90       0 or 1     DSRS Behavior                                 0
0  Disable DTE/DSRS input
1  Enable DTE/DSRS input
S92       0 or 1     Answer Sequence Selection                     0
0  Issue PEP answer tones at start of search sequence
1  Issue PEP answer tones at end of search sequence
S93       3 - 255    V.32bis/V.32 AC Transmit Time                 8
S94       0 - 3      Modulation Speed Negotiation                  1
0  Negotiation disabled
1  Allows a connection
2  Fallback within a specified modulation scheme
3  Use only appropriate fallback
S100      0 or 1     Answer in Originate Mode                       0
0  Normal mode
1  Reverse mode
S104      0 - 1, 3, 4 Automatic Dialing                             0
4          0  Disable automatic dialing
1  DTR dialing
3  Press T/D switch to dial a pre-stored number
4  DTR dialing/answering
S105      0 - 2      T/D Switch Enable                             1
0  Disable T/D switch
1  Enable T/D switch
2  Enable T/D switch when on-hook
S111      0,10-14, 20, 30,40, 50, 255  File Transfer Protocol  255
20, 0                  No protocol support                      0
30,40 10                Kermit protocol, no parity              11
-43, 11                 Kermit protocol, odd parity            12
50, 255 12              Kermit protocol, even parity            13
 Kermit protocol, mark parity
14 Kermit protocol, space parity
20 Xmodem/Ymodem protocol
30 UUCP-g protocol
40 ENQ/ACK protocol, host
41 ENQ/ACK protocol, terminal
42 ENQ/ACK host, not negotiated
43 ENQ/ACK terminal, not negotiated
50 SDLC accelerator
255 Remote modem protocol
S112      0 - 255    Kermit Mark Character (ASCII)                 1
1 1 2255 Kermit Mark Character (ASCII)
S114      0 or 1     Calling Tone Enable                           0
0  Calling tone disabled
1  Calling tone enabled
S115      0 or 1     Answer Tone Detection                         0
0  Answer tone detection not required
1  Answer tone detection required
S151      0-5, 35, 43, 46 Synchronous Clock Speed                  1
43 0 300 bps
46 1 1200 bps
2 2400 bps
3 4800 bps
35 7200 bps
4 9600 bps
43 12,000 bps
46 14,400 bps
5 19,200 bps
S155      0 or 1     NRZ/NRZI Data Encoding                        0
0  NRZ encoding used
1  NRZI encoding used
S180      0 - 3      Error Control Request                         2
0  Error control disabled
1  V.42 without detection phase
2  V.42 with detection
3  MNP error control
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3</strong></td>
<td>MNP error control</td>
<td></td>
</tr>
<tr>
<td><strong>S181</strong></td>
<td>0 - 2</td>
<td>Error Control Fallback</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>If no error control, direct</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>If not error control, buffer</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Error control required</td>
</tr>
<tr>
<td><strong>S183</strong></td>
<td>8 - 255</td>
<td>Error Control detection Timer</td>
</tr>
<tr>
<td><strong>S190</strong></td>
<td>0 or 1</td>
<td>Data Compression Enable</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>Disabled in both directions</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Enabled in both directions</td>
</tr>
<tr>
<td><strong>S191</strong></td>
<td>6 or 7</td>
<td>Data Compression Negotiation</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Disables Telebit LZ</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Enables Telebit LZ</td>
</tr>
<tr>
<td><strong>S253</strong></td>
<td>0, 10, 20, 22, 32</td>
<td>Command Set Selection</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>No command set</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>AT synchronous</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>V.25bis asynchronous</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>V.25bis sit synchronous</td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>LPDA bit synchronous</td>
</tr>
<tr>
<td><strong>S254</strong></td>
<td>0, 1, 255</td>
<td>&amp;F0 Configuration Select</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>Load profile A</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Load profile B</td>
</tr>
<tr>
<td></td>
<td>255</td>
<td>Load factory defaults</td>
</tr>
<tr>
<td><strong>S255</strong></td>
<td>0, 1, 255</td>
<td>Configuration Select</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>Load profile A</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Load profile B</td>
</tr>
<tr>
<td></td>
<td>255</td>
<td>Recall profile A/B switch</td>
</tr>
</tbody>
</table>

Posted by: Beth Bartel - Thu, Jan 15, 2009 at 11:06 PM. This article has been viewed 5191 times.