

Commands Reference

Introduction to the Commands

The modem functions in the phone are controlled using the same industry standard AT commands that are used to control landline modems. A knowledge of these commands is not required by most users of the phone, but they are provided here for reference.

The parameters set by the various AT commands in this appendix are remembered by the phone, and are transmitted to the modem at the carrier's site each time you make a call. In this way, your settings continue to be used until you power down the phone. The settings are lost on power-down.

It also gives you automatic support of all AT commands that are unknown to the phone but are supported by your cellular carrier. Since the carrier may charge you for the air time used for this connection, the phone's autoconnect ability is disabled by default. (Use the AT+CXT command to change this behavior.)

The phone has two operational states:

- Command state
- Online state

Initially, it is in the Command state where the phone accepts the industry-standard AT commands. When instructed to dial out or answer a data call, the phone is in the online state.

Modes of Operation

Asynchronous mode - used to transfer information between two computers.

Facsimile (fax) mode - used to transfer information between two Group 3 fax machines with digital interfaces (or computer applications that can emulate these machines).

Speeds

The serial port of the phone defaults to 19200 bps at power-up. The laptop serial port must therefore be configured at 19200 baud.

The band rate can be changed via the AT+IPR command, but it will return to 19200 after a power cycle.

Command Line Syntax

A command line consists of the Attention code, followed by one or more commands, followed by the end of line code. The Attention code is the character pair "AT" or "at."

By default, the end of line character is the ASCII CR character (decimal 13), unless it is changed by the S3 command (see the S-Registers Table). Spaces are ignored but may be included between commands, if desired.

The basic and S-register commands may follow each other on the command line without any separating delimiters. The extended format commands (those beginning with a "+" character) must be terminated by a ";" if they are followed by another command on the same line. A ";" is not required after the last command on the line.

Commands may be edited by using the backspace character. The backspace deletes the last character in the command line. The backspace will not delete the AT at the beginning of the line.

The A/ command repeats the last command line received by the modem. The A/ is used in place of the AT and is not followed by a carriage return.

Basic Sets of Commands

This section lists some basic commands for you to use with your phone.

ATDT5553232 connects to the number 555-3232. There will be a delay of up to 20 seconds before the phone actually connects. Successful connection is identified by a connect message on the computer. Your cellular carrier may support the *3282 prefix for modem pools. If they do, ask them how to use it in order to receive better AMPS data performance.

ATH hangs up the phone. There will be a delay before this happens.

ATSO=3 sets auto answer 15 seconds after first ring.

AT+CXT sets whether the phone will originate a call upon reception of an unknown AT command. AT+CXT=0 disables the unknown AT command origination.

Types of Commands

There are nine types of commands:

- Basic AT parameters
- S-registers
- Basic Action commands
- Extended Configuration commands
- Fax parameters
- Fax Action commands

- Cellular CDMA commands
- Cellular AT commands
- Cellular Identification commands

Result Codes

When in the command mode, eight possible result codes may be returned.

The digit code is returned when the verbose mode is OFF; the word code is returned when the verbose mode is ON. See the 'V' command in the Basic AT Parameters Table.

Extended result codes may also be returned. Extended result codes are listed in the following table.

Result Codes Table

Digit	Verbose	Description
0	OK	Command executed without errors.
1	CONNECT	Connected to remote modem
2	RING	Incoming Call.
3	NO CARRIER	Carrier from remote modem lost or never present.
4	ERROR	Error in the command line.
6	NO DIALTONE	No dial tone detected within time out period.
7	BUSY	Busy signal detected.
8	NOANSWER	Five seconds of silence not detected after ring back when @ dial modifier is used.

Basic AT Parameters

These commands control the basic configuration of the modem. The parameters can only be read back by the &V command when in command state. The following table shows the command format.

Basic AT Parameters Table

Parameter	Description
E0	Do not echo commands in command state or online command state.
E1	Echo commands in command state or online command state.

L0	Low speaker volume.
L1	Low speaker volume.
L2	Med speaker volume.
L3	High speaker volume.
M0	Speaker off.
M1	Speaker on until carrier reported (support of this feature is optional).
M2	Speaker on (support of this feature is optional).
Q0	Return result codes.
Q1	Do not return result codes.
V0	Display result codes as numbers.
V1	Display result codes as words.
X1	Enable additional result code CONNECT <rate>. Disable dial tone and busy detection.1
X2	Enable additional result codes CONNECT <rate> and NO DIALTONE. Disable busy detection. Enable dial tone detection.1
X3	Enable additional result codes CONNECT <rate> and BUSY. Enable busy detection. Disable dial tone detection.1
X4	Enable additional result codes CONNECT <rate>, BUSY and NO DIALTONE. Enable busy and dial tone detection.1
Z0	Reset to default configuration.
&C0	Circuit 109 (CF) always ON.
&C1	Circuit 109 (CF) ON in accordance with the specified service.
&C2	Circuit 109 (CF) always on except wink on channel disconnect
&D0	Ignore circuit 108/2 (CD).
&D1	Enter online command state following ON-to-OFF transition of circuit 108/2.
&D2	Enter command state following On to Off transition of circuit 108/2.
T	Select tone dialing.
P	Select pulse dialing.
&F0	Effect is implementation dependent.

&FO Set to default configuration
 &V Dump configuration parameters

* Factory Default Settings

S-Registers

The value of an S-register may be set by using the syntax,

Sn=xxx

where n is the register number and xxx is a decimal value.

For instance, to set the register SO to 3, the command SO=3 would be used. r1b read register SO, the command SO? is used. The following table describes the S-registers.

S-Registers Table

Register	Value	Description
S0	0 [1 to 255]	Disable automatic answering. [Enable automatic answering after (Value - 1) ? 6 seconds.]
S3	13	Carriage Return character.
S4	10	Line Feed character.
S5	8	Backspace character.
S6	2 to 10 2	Pause before blind dialing.
S7	1 to 255 [50]	Number of seconds to establish end-to-end data connection.
S8	0 to 255 2	Number of seconds to pause when “,” is encountered in dial string.
[S9]	0 to 255 6	Carrier detect threshold in increments of 0.1 seconds.
S10	1 to 254 [14] [255]	Number of tenths of a second from carrier loss to disconnect. [Disable carrier detect.]
[S11]	50-255 95	DTMF tone duration and spacing in milliseconds.

Basic Action Commands

The following table describes the Basic Action commands.

Basic Action Commands Table

Command	Description
A	Go off hook. Answer any incoming call
D<dial string>	Dial. The dial string may contain the following characters: Digits 0 to 9, *, #, A, B, C, and D. The dial string may contain the following dial modifiers: T Tone dialing P Pulse dialing , Pause during dialing W Wait for dial tone @ Wait for quiet answer ! Hook flash \$ Wait for billing tone (for credit-card calls) ; After dialing, the phone remains in command state
HO	Disconnect and return to command state.
00	Return to online data state from

Extended Commands

The extended commands use the extended syntax. To set a value using an extended command, use the WRITE command:

+CMD=xxx

where CMD is the command, and xxx is the value.

Some extended commands take more than one value. For example, the WRITE command for two values becomes

+CMD=xxx,yyy

Some extended commands take character strings as values, instead of numbers. In that case, the syntax is

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+CMD="character string"
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Note that while spaces are ignored everywhere else, spaces are significant inside the quotation marks.

To read back a value, use the READ command:

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+CMD?
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To determine if a particular command is supported, along with the range of values it supports, use the TEST command:

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+CMD=?
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An extended command must be terminated with a semicolon if another command follows it on a single command line.

The following table describes the extended AT configuration commands.

Extended AT Configuration Commands Table

Command	Description
+DR	Data Compression Reporting. This extended-format numeric parameter controls whether or not the extended-format "+DR:" intermediate result code is transmitted from the IWF over the Um interface.
+DS	Data Compression. This extended-format compound parameter controls the V.42bis data compression function on the PSTN link if provided in the IWF.
+EB	Break Handling in Error Control Operation. This extended-format compound parameter is used to control the manner of V.42 operation on the PSTN link (if present in the IWF).
+EFCS	This extended-format numeric parameter controls the use of the 32-bit frame check sequence option in V.42 on the PSTN link (if present in the IWF).
+ER	Error Control Reporting. This extended-format numeric parameter controls whether or not the extended-format "+ER:" intermediate result code is transmitted from the IWF over the Um interface.
+ES	Error Control Selection. This extended-format compound parameter is used to control the manner of operation of the V.42 protocol on the PSTN link (if present in the IWF).
+ESR	This extended-format numeric parameter controls the use of the selective repeat (SREJ) option in V.42 on the PSTN link (if present in the IWF).

- +ETBM** This extended-format compound parameter controls the handling of data remaining in IWF buffers upon service termination.
- +GCAP** This extended-format command causes the MT2 to transmit one or more lines of information text in a specific format. The content is a list of additional capabilities command +<name>s, which is intended to permit the user of the MT2 to identify the minimum capabilities of the MT2.
- An MT2 conforming to this standard shall include the following items, as a minimum, in the result code for the +GCAP command
+CIS707, +MS, +ES, +DS, +FCLASS
- +GMI** This command causes the MT2 to transmit one or more lines of information text, determined by the manufacturer, which is intended to permit the user of the MT2 to identify the manufacturer. Typically, the text will consist of a single line containing the name of the manufacturer, but manufacturers may choose to provide more information if desired (e.g., address, telephone number for customer service, etc.)
- +GMM** This command causes the MT2 to transmit one or more lines of information text, determined by the manufacturer, which is intended to permit the user of the MT2 to identify the specific model of the device. Typically, the text will consist of a single line containing the name of the product, but manufacturers may choose to provide any information desired.
- +GMR** This command causes the MT2 to transmit one or more lines of information text, determined by the manufacturer, which is intended to permit the user of the MT2 to identify the version, revision level or date, or other pertinent information of the device. Typically, the text will consist of a single line containing the version of the product, but manufacturers may choose to provide any information desired.
- +GOI** This command causes the MT2 to transmit one or more lines of information text, determined by the manufacturer, which is intended to permit the user of the MT2 to identify the device, based on the ISO system for registering unique object identifiers. Typically, the text will consist of a single line containing numeric strings delimited by period characters.
- +GSN** This command causes the MT2 to transmit one or more lines of information text, determined by the manufacturer, which is intended to permit the user of the MT2 to identify the individual device. Typically, the text will consist of a single line containing a manufacturer determined alpha-numeric string, but manufacturers may choose to provide any information desired.

+ICF	TE2-MT2 Character Framing. This extended-format compound parameter is used to determine the local serial port start-stop (asynchronous) character framing that the MT2 shall use while accepting TE2 commands and while transmitting information text and result codes to the TE2, if this is not automatically determined (see +IPR).
+IFC	TE2-MT2 Local Flow Control. This extended-format compound parameter is used to control the operation of local flow control between the TE2 and MT2 [1].
+ILRR	TE2-MT2 Local Rate Reporting. This extended-format numeric parameter controls whether or not the extended-format +ILRR:<rate> information text is transmitted from the MT2 to the TE2.
+IPR	Fixed Rm Rate. This numeric extended-format parameter specifies the data rate at which the MT2 will accept commands, in addition to 1200 bit/s or 9600 bit/s (as required in EIA/TIA-602). It may be used to select operation at rates at which the MT2 is not capable of automatically detecting the data rate being used by the TE2.
+MA	Modulation Automode Control. This extended-format compound parameter is a list of modulations that the base station may use to connect with the remote DCE in Automode operation, for answering or originating data calls, as additional alternatives to the modulation specified in the +MS command.
+MR	Modulation Reporting Control. This extended-format numeric parameter controls whether or not the extended-format +MCR:<carrier> and +MRR:<rate> intermediate result codes are transmitted from the IWF to the mobile station.
+MS	Modulation Selection. This extended-format compound parameter is used to control the manner of operation of the modulation capabilities in the IWF.
+MV18R	V.18 Reporting Control. This extended-format numeric parameter controls whether or not the extended-format "+MV18R:" result code is transmitted from the IWF to the mobile station.
+MV18S	V.18 Selection. This extended-format compound parameter is used to control the manner of operation of the V.18 capabilities (if present in the IWF).

*Factory Default Settings

Fax Parameters

The Fax parameters follow the same syntax rules as the extended commands, except that the numeric values are in hexadecimal, instead of decimal. The following table describes the Fax parameters.

These commands are used between Fax applications and the modem and are listed for reference only.

Fax Parameters Table

Command	Description
+FAA	Adaptive-answer parameter. See +FCLASS.
+FAP	Addressing and Polling capabilities parameter
+FBO	Phase-C data-bit-order parameter
+FBS	Buffer size. Read-only parameter.
+FBU	HDLC-frame-reporting parameter
+FCC	DCE-capabilities parameters VC - Vertical-resolution subparameter [BR] - Bit-rate subparameter <ul style="list-style-type: none"> • 2400 bits/s • 4800 bits/s • 7200 bits/s • 9600 bits/s WD - Page-width subparameter [LN] - Page-length subparameter [DF] - Data-compression-format subparameter [EC] - Error-correction subparameter BF - Binary-file-transfer subparameter ST - Scan-time-per-line subparameter
[+FCLASS]	Service-class selection parameter <ul style="list-style-type: none"> • Class-0 • [Class-1 support unavailable] • Class-2.0 fax service (EIA/TIA-592)
+FCQ	Copy-quality-checking parameter
[+FCR]	Capability-to-receive parameter
+FCS	Current-session results parameters
+FCT	DTE Phase-C timeout parameter

+FEA	Phase-C received EOL-alignment parameter
+FFC	Format-conversion parameter
+FHS	Call-termination-status parameter
+FIE	Procedure-interrupt-enable parameter
+FIS	Current-session negotiation parameters
[+FLI]	Local-ID-string parameter (TSI or CSI)
+FLO	Flow-control-select parameter
+FLP	Indicate-document-to-poll parameter
+FMI	Request DCE manufacturer identification
+FMM	Request DCE model
+FMR	Request DCE revision
[+FMS]	Minimum-Phase-C-speed parameter
+FNR	Negotiation-message-reporting control parameters
+FNS	Nonstandard-frame FIF parameter
+FPA	Selective Polling Address Parameter
[+FPI]	Local-polling-ID-string parameter
+FPR	Serial-port-rate-control parameter
[+FPS]	Page-status parameter
+FPW	Password parameter (Sending or Polling)
[+FRQ]	Receive-quality-threshold parameters
+FRY	ECM-retry-value parameter
+FSA	Subaddress Parameter
[+FSP]	Request-to-poll parameter

Fax Action Commands

These commands do not have arguments. The following table describes the Fax Action commands.

Fax Action Commands Table

Command	Description
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+FDR	Receive Phase-C data.
+FDT	Transmit Phase-C data.
+FIP	Initialize facsimile parameters.
+FKS	Terminate session.

Cellular CDMA Commands

The cellular CDMA commands use the same syntax as the other extended commands. Numeric values are decimal. The following table describes the Cellular CDMA commands.

CDMA AT Parameter Commands Table

Command	Description
+CXT=<value>	Cellular Extension. 0 Do not pass unrecognized commands to the IWF. 1 When detecting an unrecognized AT command, open transport layer connection and pass unrecognized command to the IWF.
+CFG="<string>"	Configuration String. The string (up to and including the termination character) will be stored by the MT2 and sent to the base station prior to dialing. Each transmission of an AT+CFG command from the TE2 replaces the contents of the previous string. The string may be up to 248 characters.
+CAD?	Query Analog or Digital Service. Returns: 0 if no service is available 1 if CDMA Digital service available 2 if TDMA Digital service available 3 if Analog service is available (values 4-255 reserved)
+CDR	Um Interface Data Compression Reporting. This extended-format numeric parameter controls whether or not the extended-format "+CDR:" intermediate result code is transmitted by the MT2. The result code is the same as for the TIA/EIA/IS-131 +DR: result code.

+CDS	Um Interface Data Compression. This extended-format compound parameter controls the V.42bis data compression function on the Um interface. The command format is the same as for the TIA/EIA/IS-131 +DS command.
+CRM=<value>	<p>Set Rm interface protocol.</p> <p>0 Asynchronous Data or Fax</p> <p>1 Packet data service, Relay Layer Rm interface</p> <p>2 Packet data service, Network Layer Rm interface, PPP</p> <p>3 Packet data service, Network Layer Rm interface, SLIP</p> <p>4 STU-III Service</p> <p>5-127 Reserved for future use</p> <p>128-255 Reserved for manufacturer specific use</p> <p>Note: The default value for the +CRM parameter shall be 0 if this value is supported by the MT2. If 0 is not supported, the default +CRM value shall be manufacturer specific.</p>
+CBC?	<p>Battery Charge.</p> <p>Read-only. Returns <BCS>,<BCL></p> <p>BCS:</p> <p>0 MT2 powered by battery, BCL = status</p> <p>1 MT2 connected to external power</p> <p>2 Battery status not available</p> <p>3 Recognized power fault. Calls inhibited.</p> <p>BCL:</p> <p>0-100 Remaining battery capacity is 0-100%.</p>
+CDS	Um Interface Data Compression. This extended-format compound parameter controls the V.42bis data compression function on the Um interface. The command format is the same as for the TIA/EIA/IS-131 +DS command.

+CRM=<value>	<p>Set Rm interface protocol.</p> <p>0 Asynchronous Data or Fax</p> <p>1 Packet data service, Relay Layer Rm interface</p> <p>2 Packet data service, Network Layer Rm interface, PPP</p> <p>3 Packet data service, Network Layer Rm interface, SLIP</p> <p>4 STU-III Service</p> <p>5-127 Reserved for future use</p> <p>128-255 Reserved for manufacturer specific use</p> <p>Note: The default value for the +CRM parameter shall be 0 if this value is supported by the MT2. If 0 is not supported, the default +CRM value shall be manufacturer specific.</p>
+CBC?	<p>Battery Charge.</p> <p>Read-only. Returns <BCS>,<BCL></p> <p>BCS:</p> <p>0 MT2 powered by battery, BCL = status</p> <p>1 MT2 connected to external power</p> <p>2 Battery status not available</p> <p>3 Recognized power fault. Calls inhibited.</p> <p>BCL:</p> <p>0-100 Remaining battery capacity is 0-100%.</p>
+CQD=<value>	<p>Command State Inactivity Timer (see 3.9.1.3).</p> <p>0 Ignored</p> <p>1-255 Release call after 5x<value> seconds have elapsed without activity. The default <value> shall be 10, corresponding to 50 seconds.</p>
+CRC=<value>	<p>Cellular Result Codes (see Table 7.4.2-1).</p> <p>0 Disable Cellular Result Codes</p> <p>1 Enable Cellular Result Codes</p>
+CMIP?	<p>Mobile Station IP Address.</p> <p>Read-only. Returns the mobile station's temporary IP address.</p>

+CBIP?	<p>Base Station IP Address.</p> <p>Read-only. Returns the base station's IP address.</p>
+CSS?	<p>Serving System.</p> <p>Read-only. Returns <AB>,<SID></p> <p>AB:</p> <p>A The mobile station is registered with an A-band system.</p> <p>B The mobile station is registered with a B-band system.</p> <p>Z The mobile station is not registered.</p> <p>SID:</p> <p>0-16383 The mobile station is registered with the system indicated.</p> <p>99999 The mobile station is not registered.</p>
+CSQ?	<p>Query Received Signal Quality.</p> <p>Returns the Signal Quality Measure <SQM> and the Frame Error Rate <FER> as follows:</p> <p>Signal Quality Measure <SQM></p> <p>0-31 Signal Quality Measurement (see Note 1).</p> <p>99 SQM is not known or is not detectable.</p> <p>All other values are reserved.</p> <p>Frame Error Rate <FER></p> <p>0<0.01%</p> <p>10.01% to less than 0.1%</p> <p>20.1% to less than 0.5%</p> <p>30.5% to less than 1.0%</p> <p>41.0% to less than 2.0%</p> <p>52.0% to less than 4.0%</p> <p>64.0% to less than 8.0%</p> <p>7?8.0%</p> <p>99 <FER> is not known or is not detectable.</p> <p>All other values are reserved.</p>
+CFC=<value>	<p>Um Interface Fax Compression.</p> <p>0 No compression.</p> <p>1 V.42bis compression with parameters as set by the +CDS command.</p> <p>2 Modified Read compression.</p>

Note 1. The exact meaning of the Signal Quality Measure shall be manufacturer defined. The lowest quality reported by SQM shall be defined as value 00. The highest quality reported by SQM shall be defined as value 31.

*Factory Default Settings

Cellular AT Commands

These commands allow the data terminal to be used as an automatic dialer for voice calls. The format of these commands is shown in the following table.

Cellular AT Command Extensions in Support of Voice Services Table

Command	Description
+CHV<value>	Hangup Voice 0 Hangup voice call 1-255 Reserved
+CDV<dial string>	Dial command for voice calls. The format of <dial string> is identical to that for the ATD command. This command does not cause the MT2 to change to the online state.
+CGCAP	This extended-format command causes the IWF to transmit one or more lines of information text in a specific format. The content is a list of additional capabilities command +<name>s, which is intended to permit the user of the IWF to identify the minimum capabilities of the IWF. IWFs conforming to this standard shall include the following items, as a minimum, in the result code for the +CGCAP command: +CIS707, +MS, +ES, +DS, +FCLASS
+CGMI	This command causes the IWF to transmit one or more lines of information text, determined by the manufacturer, which is intended to permit the user of the IWF to identify the manufacturer. Typically, the text will consist of a single line containing the name of the manufacturer, but manufacturers may choose to provide more information if desired (e.g., address, telephone number for customer service, etc.)

- +CGMM** This command causes the IWF to transmit one or more lines of information text, determined by the manufacturer, which is intended to permit the user of the IWF to identify the specific model of the device. Typically, the text will consist of a single line containing the name of the product, but manufacturers may choose to provide any information desired.
- +CGMR** This command causes the IWF to transmit one or more lines of information text, determined by the manufacturer, which is intended to permit the user of the IWF to identify the version, revision level or date, or other pertinent information of the device. Typically, the text will consist of a single line containing the version of the product, but manufacturers may choose to provide any information desired.
- +CGOI** This command causes the IWF to transmit one or more lines of information text, determined by the manufacturer, which is intended to permit the user of the IWF to identify the device, based on the ISO system for registering unique object identifiers. Typically, the text will consist of a single line containing numeric strings delimited by period characters.
- +CGSN** This command causes the IWF to transmit one or more lines of information text, determined by the manufacturer, which is intended to permit the user of the IWF to identify the individual device. Typically, the text will consist of a single line containing a manufacturer determined alpha-numeric string, but manufacturers may choose to provide any information desired.

Cellular Identification AT Command Extensions Table

Command	Description
+CGCAP	<p>This extended-format command causes the IWF to transmit one or more lines of information text in a specific format. The content is a list of additional capabilities command +<name>s, which is intended to permit the user of the IWF to identify the minimum capabilities of the IWF.</p> <p>IWFs conforming to this standard shall include the following items, as a minimum, in the result code for the +CGCAP command: +CIS707, +MS, +ES, +DS, +FCLASS</p>

Cellular AT Commands for Packet Data Services Table

Command	Description
+CTA=<value>	<p>Set/Read/Test Um packet data inactivity timer.</p> <p>0 Traffic Channel not released during inactivity periods.</p> <p>1-255 Release the Traffic Channel after <value> 1-second intervals have elapsed since last sending or receiving RLP data frames on the Um interface.</p> <p>20 (default)</p>
+CPTC=<value>	<p>Controls Traffic Channel state without affecting the IWF Link Layer connection.</p> <p>0 Release Traffic Channel 1 Originate Traffic Channel</p>

Cellular Result Codes Table

Result Code	Description
+CERROR: INIT FAILED <failed command>	Initialization string failed
+CPROG: ANSWER	Indicates remote DCE has answered.
+CPROG: BONGTONE	Billing Tone was detected.
+CPROG: DIALING <number>	Indicates PSTN Dialing.
+CPROG: DIALTONE	Dalton was detected.

+CPROG: QUIET ANSWER	Indicates Quiet Answer.
+CPROG: RINGING	Indicates PSTN Ringing.
+CPROG: VOICE	Voice detected on the PSTN connection.
RING <service option>	Specifies active service option. The <service option> shall be "ASYNC", "FAX" or "STU-III."

QUALCOMM Proprietary Commands Table

Command	Description
\$QCQNC=<value>	Packet call behavior 0 - Enable IS-707 packet data. 1 - Enable Quick Net Connect packet data.
\$QCPKND=<value>	Packet Auto Detect Behavior 0 - Do not bring up packet calls unless preceded by ATDT #7777 1 - Bring up packet calls upon detection of a PPP packet.
\$QCCAV	Instructs phone to answer current call in voice mode.
\$QCVAD=<value>	Pre-Arrangement Setting 0 - No effect 1 - Instructs phone to answer next incoming call in Fax mode. 2 - Instructs phone to answer all subsequent calls in Fax mode. 3 - Instructs phone to answer next incoming call in asynchronous mode. 4 - Instructs phone to answer all subsequent calls in asynchronous mode.

Glossary

call forwarding. A feature that permits you to reroute incoming calls to a different telephone number, either all the time or only when your phone number is busy or doesn't answer.

call history. A list of the last 99 calls you have sent or received.

call waiting. When you're currently engaged in a call, a signal notifying you that another call has arrived.

carrier features. Options available from your telephone service provider. Since these options vary, you must contact your service provider for detailed information.

command. An instruction that causes a device (such as a phone or a computer) to perform an action.

data transmission. The technology of transmitting and receiving information over communication channels.

dialog box. A temporary box or window of information that prompts you to enter and/or select information that is necessary for a task to continue.

DNS. Domain Name System, a mechanism on the Internet for translating the domain names of host computers (such as server.company.com) into IP addresses.

DTMF. Dual Tone Multi-Frequency, a method of using tones to communicate commands and responses to and from a master controlling unit. These are the tones you hear when you dial a telephone.

e-mail. Electronic mail, a store-and-forward service for text and graphical messages from one computer to another. The information is stored for you until you log into the system to retrieve the messages.

field. A location where you enter data. A field is often displayed as a line where you can write information.

handset. Another name for any ordinary telephone; may refer to the part of the telephone containing the mouthpiece and receiver.

hard reset. A reset of your phone that erases all data.

IAP. Internet Access Provider, a service that provides companies and individuals with a link to the Internet.

idle timeout. The amount of time the phone waits before dropping a connection with your ISP or dial-in server after a network application closes.

Internet. The set of interconnected networks that share the same network address scheme and use the TCP/IP protocol.

IP Address. Internet Protocol Address, the address that identifies the network to which each computer on a TCP/IP network is attached as well as the computer's unique identification.

ISP. Internet Service Provider, a vendor who provides direct access to the Internet.

point-to-point. A term used to describe a data channel which connects two—and only two—computers.

prefix. The number you dial before the telephone number to reach an outside line.

protocol. A set of rules followed by two computers when they communicate with one another.

roaming. Using telephone services outside of the area covered by your home service provider

script. A file used by some communications programs to automate logging onto communication services such as e-mail

scroll bar. A bar at the right border of a window whose contents are not completely visible. Each scroll bar contains two scroll arrows and a scroll box that you can tap to move through the contents of the window.

serial port. An input/output port used to connect serial devices, such as a mouse, external modem, or the QUALCOMM wireless phone to a computer

TCP/IP. Transmission Control Protocol/Internet Protocol, the standard rules used for data transmission over the Internet