Basic Hayes AT command set

Below you find a list of basic Hayes commands. It is the basic AT command set supported on virtually any modem device. Click on a single command to read more information.

Command	Description
,	Pause
+++	Escape Sequence
A	Answer Mode
A/	Repeat Sequence
AT	Attention!
B0	Select Communication Protocol: ITU-T v.22 (300bps or 1200bps)
B1	Select Communication Protocol: Bell 212A (300bps or 1200bps)
B2	Select Communication Protocol: Enables v.23
C0	Transmit carrier disabled
C1	Transmit carrier enabled
D!	Enable "flash"
D"555-4NET"	D"555-4NET"
D,	Pause before dial
D@	Modem will wait for a quiet answer before dialing the rest of the dial string
DL	Redial the last dialed number
DP	Pulse dial
DR	Enable answer mode
DS=x	Dial the stored telephone number in x
DT	Tone dial
DW	Resume dialing after dial tone is detected
E0	Echo Disabled
E1	Echo Enabled
F0	Preset the line speed to: Auto mode
F1	Preset the line speed to: V.21 300bps
F10	Preset the line speed to: V.32bis 14,400bps
F2	Reserved
F3	Preset the line speed to: V.23 75Tx/1200Rx with AT%F1 / V.23 1200Tx/75Rx with AT%F2
F4	Preset the line speed to: V.22 1,200bps
F5	Preset the line speed to: V.22bis 2,400bps
F6	Preset the line speed to: V.32bis 4,800bps
F7	Preset the line speed to: V.32bis 7,200bps
F8	Preset the line speed to: V.32bis 9,600bps
F9	Preset the line speed to: V.32bis 12,000bps
H0	Hook Select: On-hook
H1	Hook Select: Off-hook
I0	Report Modem Information: Modem model and speed
I1	Report Modem Information: ROM checksum

Command	Description
I10	Report Modem Information:
I11	Report Modem Information:
I12	Report Modem Information:
I13	Report Modem Information:
I14	Report Modem Information:
I15	Report Modem Information:
I16	Report Modem Information:
I17	Report Modem Information:
I18	Report Modem Information:
I2	Report Modem Information: Tests ROM checksum THEN reports it
I3	Report Modem Information: Firmware revision level.
I4	Report Modem Information: Data connection info
I5	Report Modem Information: Regional Settings
I6	Report Modem Information: Data connection info
I7	Report Modem Information: Manufacturer and model info
I8	Report Modem Information:
I9	Report Modem Information:
L0	Set Speaker Volume: Mute
L1	Set Speaker Volume: Low volume
L2	Set Speaker Volume: Medium volume
L3	Set Speaker Volume: High volume
M0	Set Speaker Mode: Disable speaker
M1	Set Speaker Mode: Enable speaker until a carrier signal is detected
M2	Set Speaker Mode: Enable speaker
M3	Set Speaker Mode: Enable speaker after dialing but disable after a carrier signal is detected
N0	Automode selection/detection: Disable automode
N1	Automode selection/detection: Enable automode
N2	Automode selection/detection: Enable automode
N3	Automode selection/detection: Enable automode
N4	Automode selection/detection: Enable automode
N5	Automode selection/detection: Enable automode
O0	Retraining disabled in on-line command mode
O1	Retraining enabled in on-line command mode
P	Pulse Dialing
Q0	Enable result codes to DTE
Q1	Disable result codes to DTE
Sn	Status Registers
T	Tone Dialing
V0	Format of Result Code:
V1	Format of Result Code:
W0	Extended Result Codes: Enables the CONNECT result codes to report the DTE speed.

Command	Description
W1	Extended Result Codes: Enables the CONNECT result codes to report the DTE speed.
W2	Extended Result Codes: Enables the CONNECT result codes to report the DCE speed.
X0	Result Codes for Call Progress: Disable busy and dialtone detection. Result codes 0-4 enabled.
X1	Result Codes for Call Progress: Disable busy and dialtone detection. Result codes 0-5,10 enabled.
X2	Result Codes for Call Progress: Disable busy detection, enable dialtone detection. Result codes 0-6,10 enabled.
X3	Result Codes for Call Progress: Enable busy detection, disable dialtone detection. Result codes 0-5,7,10 enabled.
X4	Result Codes for Call Progress: Busy and dialtone detection enabled. Result codes 0-7,10 enabled.
Y0	Long Space Disconnect: Long space disconnect disabled
Y1	Long Space Disconnect: Long space disconnect enabled
Z0	Soft Reset and Restore: Restore setting 0
Z1	Soft Reset and Restore: Restore setting 1

Extended AT command set

Command	Description
AT&A0	Originate/Answer Mode Selection: Enables answer mode
AT&A1	Originate/Answer Mode Selection: Disables answer mode
AT&B0	Auto-Retrain Detection: Disable auto-retrain (modem hangs up)
AT&B1	Auto-Retrain Detection: Enable auto-retrain
AT&B2	Auto-Retrain Detection: Enable auto-retrain
AT&C0	DCD Option: DCD always enabled
AT&C1	DCD Option: DCD enabled after a carrier signal is detected
AT&D0	Modem Response to DTR Option: DTR is assumed to be on
AT&D1	Modem Response to DTR Option: DTR drop causes the modem back to command mode, but does not drop
AT&D2	Modem Response to DTR Option: DTR drop causes modem to hang up
AT&D3	Modem Response to DTR Option: DTR drop causes the modem to be reinitialized
AT&F0	Active Profile/Factory Defaults: Default profile #1 (Works with many modems)
AT&F1	Active Profile/Factory Defaults: Default profile #2 (Works with many modems)
AT&F2	Active Profile/Factory Defaults: Default profile #3 (Works with many modems)
AT&F3	Active Profile/Factory Defaults: Default profile #4 (Works with many modems)
AT&G0	Guard Tone Option: Guard tone is disabled
AT&G1	Guard Tone Option: A 550 Hz guard tone is enabled
AT&G2	Guard Tone Option: A 1800 Hz guard tone is enabled
AT&J0	Jack Type Selection: Selects RJ-11, RJ-41s, or RJ45s
AT&J1	Jack Type Selection: Selects RJ-12 or RJ-13
AT&K0	Flow Control Selection: Flow control disabled
AT&K1	Flow Control Selection: Normally unused (deals with RTS/CTS)
AT&K2	Flow Control Selection: Normally unused (deals with XON/XOFF)
AT&K3	Flow Control Selection: Enable RTS/CTS flow control
AT&K4	Flow Control Selection: Enable XON/XOFF flow control
AT&K5	Flow Control Selection: Enable transparent XON/XOFF flow control
AT&K6	Flow Control Selection: Enable unidirectional XON/XOFF flow control
AT&L0	Line Type Selection: Selects public switched telephone network (normal dialup)
AT&L1	Line Type Selection: Selects leased line
AT&M0	Communication Mode Selection: Asynchronous
AT&M1	Communication Mode Selection: Synchronous connect mode, asynchronous offline command mode
AT&M2	Communication Mode Selection: Synchronous connect mode, asynchronous offline command mode (DTR set to high)
AT&M3	Communication Mode Selection: Synchronous connect mode
AT&P0	Make/Break Ratio for Pulse Dialing: North America: Selects 39%-61% make/break ratio at 10 pulses per second
AT&P1	Make/Break Ratio for Pulse Dialing: Europe: Selects 33%-67% make/break ratio at 10 pulses per second
AT&P2	Make/Break Ratio for Pulse Dialing: Selects 39%-61% make/break ratio at 20

Command	Description
	pulses per second
AT&P3	Make/Break Ratio for Pulse Dialing: Selects 33%-67% make/break ratio at 20 pulses per second
AT&Q0	Communications Mode Option Selection: Asynchronous mode, the serial port speed will follow the connection speed
AT&Q1	Communications Mode Option Selection: Asynchronous off-line command mode, synchronous connect mode
AT&Q2	Communications Mode Option Selection: Asynchronous off-line command mode, synchronous connect mode (this option will also have the modem the first number in its directory)
AT&Q3	Communications Mode Option Selection: Asynchronous off-line command mode (low DTR), synchronous connect mode (high DTR)
AT&Q4	Communications Mode Option Selection: Auto-synchronous mode
AT&Q5	Communications Mode Option Selection: Error correction mode
AT&Q6	Communications Mode Option Selection: Buffered asynchronous mode
AT&Q8	Communications Mode Option Selection: Enables Microcom Networking Protocol (MNP) error control mode.
AT&Q9	Communications Mode Option Selection: V.42 or MNP error control mode.
AT&R0	RTS/CTS Option Selection:
AT&R1	RTS/CTS Option Selection:
AT&S0	DSR Option Selection: Force DSR high
AT&S1	DSR Option Selection: Force DSR high during handshake and connection
AT&S2	DSR Option Selection: Force DSR high will connected
AT&T0	Test Option Selection: End test
AT&T1	Test Option Selection: Begin a local analog loopback test
AT&T3	Test Option Selection: Begin a local digital loopback test
AT&T4	Test Option Selection: Allow a remote digital loopback test
AT&T5	Test Option Selection: Disallow a remote digital loopback test
AT&T6	Test Option Selection: Request a remote digital loopback test
AT&T7	Test Option Selection: Request a remote digital loopback test and a self test
AT&T8	Test Option Selection: Start a local analog loopback and self test
AT&U0	Trellis code modulation
AT&U1	Trellis code modulation
AT&V0	Display Current configuration and profile
AT&V1	S Registers Display
AT&W0	Active Profile Write: Write active profile into stored profile 0
AT&W1	Active Profile Write: Write active profile into stored profile 1
AT&X0	DTE Transmit Clock Source: Modem
AT&X1	DTE Transmit Clock Source: DTE
AT&X2	DTE Transmit Clock Source: Modem generates the clock with regards to the receiving carrier signal
AT&Y0	Active Profile Read: Restore from stored profile 0
AT&Y1	Active Profile Read: Restore from stored profile 1
AT&Zn=x	Telephone Number Write

Proprietary AT command set

This is a list of AT commands which are proprietary codes and work only on specific modems.

Command	Description
AT%A0	Disable auto-reliable fallback characters
AT%A1 through %A127	Selects an ASCII character for auto-reliable fallback
AT%C0	Data Compression: Disable data compression
AT%C1	Data Compression: MNP5
AT%C2	Data Compression: v.42bis
AT%C3	Data Compression: MNP5 and v.42bis
AT%E0	Auto-Retrain: Disable auto-retrain
AT%E1	Auto-Retrain: Enable auto-retrain
AT%E2	Auto-Retrain: Enable auto-fallback/fall-forward
AT%F0	v.23 Mode Select: Disable v.23
AT%F1	v.23 Mode Select: Split speed: 75bps upstream/1200bps downstream
AT%F2	v.23 Mode Select: Split speed: 1200bps upstream/75bps downstream
AT%F3	v.23 Mode Select: Half duplex: 1200bps upstream/1200bps downstream
AT%G0	Auto-Fallback/Fall-Forward: Disabled
AT%G1	Auto-Fallback/Fall-Forward: Enabled
AT%L	Line Signal Level Return
AT%Q	Line Signal Quality Return
AT%TTn	Test Mode
AT\A0	Max Transmit Block Size: 64 characters
AT\A1	Max Transmit Block Size: 128 characters
AT\A2	Max Transmit Block Size: 192 characters
AT\A3	Max Transmit Block Size: 256 characters
AT\Bn	Send Break
AT\C0	Auto-Reliable Time Buffer: Data is be discarded
AT\C1	Auto-Reliable Time Buffer: Data is to be buffered
AT\C2	Auto-Reliable Time Buffer: Data is to be discarded
AT\E0	Data Echo: Disabled
AT\E1	Data Echo: Enabled
AT\G0	Flow Control: Disabled
AT\G1	Flow Control: Enabled
AT\J0	Serial Port Operation: Serial port speed remains locked
AT\J1	Serial Port Operation: Serial port speed is to follow the connect speed
AT\K0	Break Type Select
AT\K1	
AT\K2	
AT\K3	
AT\K4	
AT\K5	

Command	Description
AT\L0	MNP Mode Select: Stream mode
AT\L1	MNP Mode Select: Block mode
AT\N0	Connection Type: Normal mode
AT\N1	Connection Type: Direct mode
AT\N2	Connection Type: MNP reliable mode
AT\N3	Connection Type: Auto-reliable or MNP auto-reliable mode
AT\N4	Connection Type: v.42 reliable mode
AT\N5	Connection Type: v.42 auto-reliable or MNP auto-reliable mode
AT\N6	Connection Type: Reliable mode
AT\N7	Connection Type: Auto-reliable mode
AT\O	Connection Type: MNP Reliable Mode Initiation
AT\Q0	Connection Type: Disable flow control
AT\Q1	Connection Type: Bi-directional XON/XOFF
AT\Q2	Connection Type: CTS flow control by DCE
AT\Q3	Connection Type: Bi-directional RTS/CTS
AT\Q4	Connection Type: Unidirectional XON/XOFF by DCE
AT\Q5	Connection Type: CTS forced low for pre-connection, then CTS by DCE control takes over, or unidirectional XON/XOFF by DTE will
AT\Q6	Connection Type: Bi-directional RTS/CTS or RTS by DTE after connection
AT\Tn	Inactivity Timer
AT\U	MNP Reliable Mode Acceptance
AT\V0	Set Extended Result Codes: Disabled
AT\V1	Set Extended Result Codes: Enabled
AT\W0	v.23 Split Speed Control: Disabled
AT\W1	v.23 Split Speed Control: Enabled
AT\X0	XON/XOFF Pass Through: Not Sent
AT\X1	XON/XOFF Pass Through: Sent
AT\Y	Reliable Mode Conversion
AT\Z	Normal Mode Activation

ETSI AT command set

The ETSI GSM specifies AT style commands for managing the SMS feature of GSM.

Feature	Designator
Technical enhancement and improvement: New AT-commands	$(AT R97)$
Technical enhancement and improvement: New AT-commands	$(AT R98)$
Support of Multiplexer according to GSM 07.10	$(MUX MS-TE)$

Command	Description
AT+BINP	Bluetooth input
AT+BLDN	Bluetooth last dialled number
AT+BRSF	Bluetooth retrieve supported
AT+BSIR	Bluetooth setting of in-band ring tone indication
AT+BVRA	Bluetooth voice recognition activation
AT+CACM	Accumulated call meter
AT+CACM (AT R97)	Accumulated call meter
AT+CALA	Alarm
AT+CALD	Alarm delete
AT+CALM (AT R97)	Alert sound mode
AT+CALV	Alarm event
AT+CAMM	Accumulated call meter maximum
AT+CAMM (AT R97)	Accumulated call meter maximum
AT+CAOC	Advice of Charge
AT+CAPD	Postpone or dismiss an alarm (ver. 2)
AT+CBC	Battery charge
AT+CBM	Received cell broadcast
AT+CBST	Select bearer service type
AT+CCCM	Advice of charge call meter notification
AT+CCFC	Call forwarding number and conditions
AT+CCLK	Clock
AT+CCUG	Closed user group
AT+CCWA	Call waiting
AT+CCWE (AT R98)	Call Meter maximum event
AT+CDIP	Called line identification presentation
AT+CDIS	Display control
AT+CDS	SMS status report
AT+CEER	Extended error report
AT+CFUN	Set phone functionality
AT+CGACT	PDP context activate or deactivate
AT+CGANS	Manual response to a network request for PDP context activation
AT+CGATT	GPRS attach or detach
AT+CGAUTO	Automatic response to a network request for PDP context activation
AT+CGCLASS	GPRS mobile station class

Command	Description
AT+CGCLOSP	Configure local Octet Stream PAD parameters
AT+CGCLPAD	Configure local triple-X PAD parameters
AT+CGCMOD	PDP context modify
AT+CGDATA	Enter data state
AT+CGDCONT	Define PDP Context
AT+CGDSCONT	Define secondary PDP context
AT+CGEQMIN	3G quality of service profile (minimum acceptable)
AT+CGEQNEG	3G quality of service profile (negotiated)
AT+CGEQREQ	3G quality of service profile (requested)
AT+CGEREP	GPRS event reporting
AT+CGEV	GPRS event reporting
AT+CGMI	Request manufacturer identification
AT+CGMM	Request model identification
AT+CGMR	Request revision identification
AT+CGPADDR	Show PDP address
AT+CGQMIN	Quality of Service Profile (Minimum acceptable)
AT+CGQREQ	Quality of Service Profile (Requested)
AT+CGREG	GPRS network registration status
AT+CGSMS	Select service for MO SMS messages
AT+CGSN	Request product serial number identification
AT+CGTFT	Traffic flow template
AT+CHLD	Call related supplementary services
AT+CHSC	HSCSD current call parameters
AT+CHSD	HSCSD device parameters
AT+CHSN	HSCSD non-transparent call configuration
AT+CHSR	HSCSD parameters report
AT+CHSR (AT R98)	HSCSD parameters report
AT+CHST	HSCSD transparent call configuration
AT+CHSU	HSCSD automatic user initiated upgrading
AT+CHSU (AT R98)	HSCSD automatic user initiated upgrading
AT+CHUP	Hangup call
AT+CIEV	Indicator event
AT+CIMI	Request international mobile subscriber identity
AT+CIND	Indicator control
AT+CKEV	Keypad event
AT+CKPD	Keypad control
AT+CLAC	List all available AT commands
AT+CLAC (AT R98)	List all available AT commands
AT+CLAE (AT R98)	Language Event
AT+CLAN	Set Language
AT+CLAN (AT R98)	Set Language
AT+CLCC	List current calls

Command	Description
AT+CLCK	Facility lock
AT+CLIP	Calling line identification presentation
AT+CLIR	Calling line identification restriction
AT+CLVL	Loudspeaker volume level
AT+CLVL (AT R97)	Loudspeaker volume level
AT+CMAR	Master Reset
AT+CMAR (AT R98)	Master Reset
AT+CME	Mobile equipment error result
AT+CMEC	Mobile Equipment control mode
AT+CMEE	Report Mobile Equipment error
AT+CMER	Mobile Equipment event reporting
AT+CMGC	Send command (ver. 1)
AT+CMGD	Delete message
AT+CMGF	Selecting the Operating Mode
AT+CMGL	List Messages
AT+CMGR	Read Message
AT+CMGS	Send message (ver. 2)
AT+CMGW	Write message to memory (ver. 2)
AT+CMMS	More messages to send
AT+CMOD	Call mode
AT+CMSS	Send from storage (ver. 2)
AT+CMT	Received message
AT+CMTI	New message indication
AT+CMUT	Mute control
AT+CMUT (AT R97)	Mute control
AT+CMUX	Multiplexing mode
AT+CMUX (MUX MS-TE)	Multiplexing mode
AT+CNMI	New messages indication to TE (ver. 4)
AT+CNUM	Subscriber number
AT+COLP	Connected line identification presentation
AT+COPN	Read operator names
AT+COPN (AT R97)	Read operator names
AT+COPS	Operator selection
AT+CPAS	Phone activity status
AT+CPBF	Find phonebook entries
AT+CPBR	Read phonebook entries
AT+CPBS	Select phonebook memory storage
AT+CPBW	Write phonebook entry
AT+CPIN	Enter PIN
AT+CPMS	Preferred Message Storage
AT+CPOL	Preferred operator list
AT+CPOL (AT R97)	Preferred operator list

Command	Description
AT+CPUC (AT R97)	Price per unit and currency table
AT+CPWC (AT R98)	Power class
AT+CPWD	Change password
AT+CR	Service reporting control
AT+CRC	Cellular result codes
AT+CREG	Network registration
AT+CRES	Restore settings
AT+CRING	Call mode indication
AT+CRLP	Radio link protocol
AT+CRMP	Ring Melody Playback
AT+CRMP (AT R98)	Ring Melody Playback
AT+CRSL	Ringer sound level
AT+CRSL (AT R97)	Ringer sound level
AT+CRSM	Restricted SIM access
AT+CSAS	Save settings
AT+CSCA	Setting or Reading the Service Center Address / SMSC Address
AT+CSCC	Secure control command
AT+CSCS	Select TE character set
AT+CSGT (AT R98)	Set Greeting Text
AT+CSIL	Silence Command
AT+CSIM	Generic SIM access
AT+CSMS	Select message service (ver.2)
AT+CSNS	Single numbering scheme
AT+CSQ	Signal quality
AT+CSSI	Supplementary service notification
AT+CSSN	Supplementary service notifications
AT+CSSU	Supplementary service notification
AT+CSTA	Select type of address
AT+CSVM (AT R98)	Set Voice Mail Number
AT+CTFR	Call deflection
AT+CUSD	Unstructured supplementary service data
AT+CV120	V.120 rate adaption protocol
AT+CVHU	Voice Hangup Control
AT+CVHU (AT R97)	Voice Hangup Control
AT+CVIB (AT R97)	Vibrator mode
AT+DR	V.42BIS DATA COMPRESSION REPORTING CONTROL
AT+DS	V.42BIS DATA COMPRESSION CONTROL
AT+GCAP	Request modem capabilities list
AT+GCLIP	Graphical caller ID presentation
AT+GMI	Request manufacturer information
AT+GMM	Request model identification
AT+GMR	Request revision identification

Command	Description
AT+ICF	Cable interface character format (ver. 2)
AT+IFC	Cable interface DTE-DCE local flow control
AT+ILRR	Cable interface local rate reporting
AT+IPR	Cable interface port rate
AT+NREC	Noise reduction and echo cancelling
AT+VGM	Gain of microphone
AT+VGS	Gain of speaker
AT+VTS	DTMF and tone generation
AT+WS46	PCCA STD-101 [17] select wireless network