## Packet TNC Commands Summary:

The TNC responds to three types of command:

1. Direct commands. These require no additional information. Denoted in the form XY where X and Y are two characters.
2. Alphnumeric Entry Commands. These require the user to enter numbers or text after entry. Denoted in the form XY(n) or XY(abcdef) where (n) is a number and (abcdef) are characters or control characters.
3. Mode setting commands. These are followed by either E for enable or D for disable. Denoted in the form XY(E/D). Comments below indicate the “Enabled” state.

### 1. Setup Commands:

| | |
|---|---|
| S(Return) | Display system status. |
| SB(D/E) | Enable Carrier Backoff |
| SC(callsign) | Set TNC Callsign |
| SD(callsign) | Set Destination Callsign |
| SE(D/E) | Enable Console Echo |
| SF(n) | Set preamble to n flags |
| SG(D/E) | Enable "garbage" mode |
| SH(n) | Set highest number of frames per packet to n |
| SI | Re-Initialise the system |
| SJ(n) | Set Link Baud Rate |
| SK(n) | Set Transparent Mode time value to n/50 seconds. |
| SL(n) | Set maximum Packet length to n |
| SM(n) | Allocate n 256-byte memory blocks to transmit buffer |
| SN(n) | Set number of re-tries to n |
| SQ(n) | Set value for T2 (connection timer) |
| SR(B/D/H or O) | Set number system radix to binary/decimal/hex or octal |
| SS(n) | Set CW identification speed to n WPM |
| ST(n) | Set re-try time delay to nominal n/10 seconds |
| SU(D/E) | Convert all output to upper case |
| SV(callsign) | Enter repeater callsign |
| SY(abcdefghikl) | Set Control characters for Insert and Chat modes. |
| SZ(E/D) | Enable Leading zeros |

### Manual Operations:

| | |
|---|---|
| MA(n) | Set address field value to n |
| MC(n) | Set control field address to n |
| MD | Manually disconnect link from this end |
| ME(n) | Set transparent mode exit character |
| MF(D/E) | Output automatic linefeeds after each Return |
| MI | Send CW indentification |
| MK(D/E) | Allow "-- Ack --" Message in chat mode |
| ML(D/E) | Allow automatic entry into chat or transparrent modes on connect. |
| MM | Display number of 256-byte memory blocks available |
| MR(D/E) | Enable AX25 repeater operation (default) |
| MS | Manually enter chat or transparent modes |
| MT | Transmit a custom packet using information in the buffer |
| MU(D/E) | Set unconnected mode |
| MV(D/E) | Enable eavesdropping on repeated packets |
| MX(D/E) | Enable transparent as opposed to chat mode |

### Automatic operation commands:

| | |
|---|---|
| AA | Send +Info Acknowledge+ packet. Used after AW |
| AC | Initiate automatic connect request to another station |
| AD | Initiate automatic disconnect request |
| AH | Halt. Stop repeating unacknowledged packet |
| AI | Send unnumbered info packet (AX25) |
| AR | Resume sending. Used after AH |
| AS(D/E) | Set standby mode. No Tx/Rx |
| AT | Transmit current Packet until acknowledged |
| AW | Send a +Wait Acknowledge+ to stop further transmission from the other station. See AA |
| AX | Abort current transmission |

### Debugging Commands:

| | |
|---|---|
| DD(n) | Display 1 line of HEX bytes in memory at n |
| DH | Transmit the modem hi tone |
| DL | Transmit the modem lo tone |
| DO | Stop tone transmissions |

| | |
|---|---|
| DS(n)(n) | Used to set individual bytes of memory as required |
| DT(n) | Display 1 block of memory at n in Ascii |

Input/Output Commands:

| | |
|---|---|
| I(ab)(data) | Enter ab bytes of data in block mode. ab is an unsigned 16 bit number |
| I(data) | Enter all bytes following until ©D or ESC into the message buffer (normal mode) ©D will revert to display mode remaining in chat mode while ESC will exit chat and insert modes |
| K | Kill buffer contents |
| T | Type Buffer contents |
| OA(callsign) | Recieve only packets recieved from (callsign) (AX25) |
| OB(D/E) | Enable Block mode |
| OD(D/E) | Enable non-info data display |
| OF | Output one frame from the queue. Use with OQ enabled |
| OH(D/E) | Enable header display |
| OI(n) | Set value of Chat mode timer |
| OL(D/E) | Enable auto linefeed after Return (Transmitted data) |
| OM(D/E) | Enable RTTY motor control (if using a baudot teleprinter) |
| ON(n) | Insert n nulls after each Return. (gives some mechanical printers time to recover from the heady task of returning the carriage!) |
| OO(D/E) | Enable connect only mode |
| OP(n) | Set PID value to n |
| OQ(E/D) | Enable Queue mode (while your computer is doing other things...) |
| OU(D/E) | Enable status update displays |
| OW(n) | Limit the displayed page width to n characters |

Beacon commands:

| | |
|---|---|
| BC | Copy beacon callsigns into active use |
| BD(callsign) | Set Beacon destination callsign |
| BK | Kill beacon message |
| BR | Recall beacon message |
| BS | Store message in buffer into beacon buffer |
| BT | Set time value for repetition of beacon message |
| BV(callsigns) | Set beacon repeater callsigns |