There are 122 commands in a Kantronics KPC-3, but to get started you only need a few. If you have a different model there may be additional parameters to set.

To get started you need the TNC, a computer, and an interconnection. The interconnection will vary depending on the ports on the TNC and computer.

Next you need a communications program on your computer. There are many available, but in our EOCs we use Outpost PMM [Outpost Downloads (outpostpm.org)] It is free and easy to use.

When you have installed the program, start the IPSerial program. Open settings and make sure it is set to Max speed 9600, 8 bits, No parity and 1 stop bit. Flow control is usually NONE. A comm port should be displayed. If not, your computer likely has not recognized the comm port.

Assuming all is well, turn on your TNC and select CONNECT in the program.

If the TNC initially came back with the cmd: prompt, it was previously set up. If you are unsure about the correctness of the settings, you can type RESTORE D to reset all parameters, and then start the setup as shown below. I find this is easier than trying to find a bad entry.

If this is the first time the TNC has been used or you just restored it to factory settings, you will see strange characters and then PRESS * to connect.

Press the * key and the TNC should return ENTER YOUR CALLSIGN=>. Do that.

The program should return cmd: .

Now is when you will enter a few basic commands.

Type INTERFACE TERMINAL The TNC will return: INTERFACE was NEWUSER
Type CD SOFTWARE The TNC will return: CD was INTERNAL

Your TNC is now fully functional.

Set the clock with the command DAYTIME YYMMDDHHMMSS Date and time must be in this format.

If you want to advertise your station type BEACON EVERY 59

When your TNC and radio is transmitting, listen on another radio and adjust as needed to make it sound like other stations. The KPC-3 has a small trimmer pot, unlike the KPC-3+ that is adjusted via software.

There are many other parameters you can change, and now that you know how to clear everything out, experiment with the commands below.

Note that the call you entered will be displayed instead of N0CALL as shown

Have fun

W6RH
<table>
<thead>
<tr>
<th>COMMAND</th>
<th>DEFAULT</th>
<th>EXPLANATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>cmd:display</td>
<td>{ASYNC</td>
<td>CHAR</td>
</tr>
<tr>
<td>BBITCONV</td>
<td>ON</td>
<td>If on, 8th bit used in CONVERS mode</td>
</tr>
<tr>
<td>AX25L2V2</td>
<td>ON</td>
<td>If on, AX25 version 2 protocol used</td>
</tr>
<tr>
<td>ABAUD</td>
<td>9600</td>
<td>RS232 terminal baud rate</td>
</tr>
<tr>
<td>AUTOLF</td>
<td>ON</td>
<td>LF sent to terminal after CR</td>
</tr>
<tr>
<td>AXDELAY</td>
<td>0</td>
<td>Time added to TXDELAY for repeaters (10 msec)</td>
</tr>
<tr>
<td>AXHANG</td>
<td>0</td>
<td>Hang time of repeater to inhibit AXDELAY (10 msec)</td>
</tr>
<tr>
<td>BEACON EVERY</td>
<td>θ (disabled)</td>
<td>[{EVERY</td>
</tr>
<tr>
<td>BKONDEL</td>
<td>ON</td>
<td>If on, DELETE will backspace; else \</td>
</tr>
<tr>
<td>BTEXT</td>
<td>Text sent to BEACON in UI packet</td>
<td></td>
</tr>
<tr>
<td>BUDLIST</td>
<td>OFF</td>
<td>{OFF</td>
</tr>
<tr>
<td>BUDCALLS</td>
<td>NONE</td>
<td>Callsigns of stations to be monitored</td>
</tr>
<tr>
<td>A Link state is:</td>
<td>DISCONNECTED</td>
<td>Show status of streams</td>
</tr>
<tr>
<td>CANLINE</td>
<td>$18 (CTRL-X)</td>
<td>Char used to cancel a partial line</td>
</tr>
<tr>
<td>CANPAC</td>
<td>$19 (CTRL-Y)</td>
<td>Toggle char used to send output from TNC to bit bucket</td>
</tr>
<tr>
<td>CD</td>
<td>INTERNAL</td>
<td>{INTERNAL</td>
</tr>
<tr>
<td>CHECK</td>
<td>0 (disabled)</td>
<td>No activity time before protocol checks on link (10 sec)</td>
</tr>
<tr>
<td>CMDTIME</td>
<td>1 (1 sec)</td>
<td>Timing spec to get out of transparent mode (sec)</td>
</tr>
<tr>
<td>CMSG</td>
<td>OFF</td>
<td>{ON</td>
</tr>
<tr>
<td>COMMAND</td>
<td>$03 (CTRL-C)</td>
<td>Char used to return to command mode</td>
</tr>
<tr>
<td>CONLIST</td>
<td>OFF</td>
<td>If on, only responds to stations in BUDCALLS</td>
</tr>
<tr>
<td>CONMODE</td>
<td>CONVERS</td>
<td>{CONVERS</td>
</tr>
<tr>
<td>CONOK</td>
<td>ON</td>
<td>Enables connections to MYCALL</td>
</tr>
<tr>
<td>CPACTIME</td>
<td>OFF</td>
<td>Enables PACTIME use in conversational mode</td>
</tr>
<tr>
<td>CR</td>
<td>ON</td>
<td>SENDPAC char appended to packets formed by SENDPAC</td>
</tr>
<tr>
<td>CRSUP</td>
<td>OFF</td>
<td>If on, removes every other consecutive CR received</td>
</tr>
<tr>
<td>CSTAMP</td>
<td>OFF</td>
<td>Time stamp connects and disconnects</td>
</tr>
<tr>
<td>CTEXT</td>
<td>Text sent first to someone else connecting to MYCALL</td>
<td></td>
</tr>
<tr>
<td>CWID</td>
<td>EVERY 0 (disabled)</td>
<td>[{EVERY</td>
</tr>
<tr>
<td>CWIDTEXT</td>
<td>DE NOCALL</td>
<td>Text sent during CW IDs</td>
</tr>
<tr>
<td>DAYTIME</td>
<td>00/00/00 00:00:33</td>
<td>ymmddhhmmss</td>
</tr>
<tr>
<td>DAYTWEAK</td>
<td>8</td>
<td>Fine tune software 24hr clk</td>
</tr>
<tr>
<td>DAYSTR</td>
<td>mm/dd/yy hh:mm:ss</td>
<td>time format</td>
</tr>
<tr>
<td>DBLDISC</td>
<td>OFF</td>
<td>Forces a true disconnect sequence after DISC while awaiting connect</td>
</tr>
<tr>
<td>DELETE</td>
<td>$08 (CTRL-H)</td>
<td>Char used to delete last char in line</td>
</tr>
<tr>
<td>DIGIPEAT</td>
<td>ON</td>
<td>Allows digipeating through MYCALL</td>
</tr>
<tr>
<td>DWAIT</td>
<td>0</td>
<td>Time to allow digipeaters first acces to channel (10 msec)</td>
</tr>
<tr>
<td>ECHO</td>
<td>ON</td>
<td>Characters from terminal are echoed back</td>
</tr>
<tr>
<td>ESCAPE</td>
<td>OFF</td>
<td>If on, received ESCAPE characters printed as $</td>
</tr>
<tr>
<td>FLOW</td>
<td>ON</td>
<td>TNC will not send data to terminal until input line complete</td>
</tr>
<tr>
<td>FILTER</td>
<td>OFF</td>
<td>If on, removes most control codes from received packets</td>
</tr>
</tbody>
</table>
FRACK  4 (4 sec)  Time to wait for ack to packets (FRACK*(2*d+1) sec)
FULLDUP  OFF  Allows transmitting while receiving
HBAUD  1200  {300 | 400 | 600 | 1200} baud using Bell 202 tones
HEADERLN  ON  If on, prints a CR between monitored header and data
HID  ON  Auto ID every 9.5 min if TNC is digipeating
HTEXT  Hier info
INTERFACE  NEWUSER  {TERMINAL | NEWUSER | BBS | KISS | HOST}
KNTIMER  15 min  KNODE idle timer (1 min)
LEDS  ON  Enables front panel LEDs
LCOK  ON  If on, allows lower case characters to be sent to terminal
LCSTREAM  ON  If on, allows lower case characters to be used in stream switching
LFADD  OFF  LF char added to each CR char sent in packet
LFSUP  OFF  If on, received LFs are not printed
LLIST  OFF  If on, stations listed in SUPCALLS are completely ignored
MONITOR  ON  Master switch for monitoring packets
MALL  ON  If on, allows monitoring of connected data between other stations
MAXFRAME  4  Maximum number of unacknowledged I frames outstanding
MAXUSERS  10  Maximum number of connections allowed
MBEACON  ON  If on, monitors packets addressed to BEACON and ID
MCON  OFF  If on, allows monitoring to continue while connected
MCOM  ON  If on, monitors SABM (<C>), DISC, DM, and UA frames
MRESP  ON  If on, monitors RR, RNR, REJ frames
MRPT  ON  If on, digipeater paths are displayed in header
MSTAMP  OFF  If on, monitored packets are time stamped
MXMIT  ON  If on, transmitted packets are monitored
MYCALL  N0CALL  This station's callsign {call[-n]}
MYALIAS  Allows digipeating with alias callsign
MYNODE  N0CALL-7  Callsign used for KA-NODES
MYPBBS  N0CALL-1  Callsign used for access to personal mail box
MYREMOTE  Callsign allows access to remote control
NDWILD  OFF  Allows connection to any ssid of MYNODE
NEWMODE  ON  If on, returns to command mode when DISC received on current stream
NOMODE  OFF  If on, does not automatically change modes between CONV, TRANS, or CMD
NTEXT  Text sent to someone connecting to KA-NODE
NUCR  0  Number of nulls sent to terminal after CR
NULF  0  Number of nulls sent to terminal after LF
NUMNODES  0  Number of KA-NODE channels
PACLLEN  128  Maximum size of data in I frame
PACTIME  AFTER 10 (1000 msec)  [{EVERY | AFTER}] time (.1 sec) when to form packets in trans mode
PARITY  NONE  Function of 8th data bit between terminal and TNC
PASS  $16 (CTRL-V)  Char used to pass special characters as data
PASSALL  OFF  Allows packets with incorrect CRCs to be processed
PBBS
100 Amount of memory (1K increments) set aside for PBBS messages
PBFORWRD
NONE EVERY 0 (disabled) [bbscall [vias]] [[EVERY|AFTER] n] starts auto forwarding
PBHEADER
ON Saves routing information in messages
PBHOLD
ON Incoming messages to PBBS are marked HOLD
PBKILLFW
OFF Kill Personal and Traffic msgs after forwarding
PBLO
NEW VARIABLE [[OLD | NEW]] [[FIXED | VARIABLE]] PBBS listing order
PBPERSO
OFF Restricts PBBS messages addressed to MYCALL and MYPBBS
PBREVERS
ON Accepts messages after AutoForwarding
PERSIST
63 (25%) Probability of transmitting during slot time (0-255)
PID
OFF If on, allows monitoring of all packets regardless of PID
PTEXT
Initial text sent when someone connects to PBBS
REDISPLA
$12 (CTRL-R) Char used to redisplay partial line
RELINK
OFF Version 2 will try to reconnect after retrying out
RESPTIME
5 (500 msec) Time to wait before acking data packets (100 msec)
RETRY
10 Number of retries before aborting
RING
ON 3 bells sent to terminal upon incoming connect
RNRTIME
0 (disabled) TNC will disconnect after receiving RNRS for specified time (x10 sec)
RTEXT
Text string used for remote authorization
SCREENL
0 CR printed if none received after n characters
SENDPAC
$0D (CTRL-M) Char used to form packets in convers mode
SLOTTIME
10 (100 msec) Time between successive tries of persistance algorithm (10 msec)
START
$11 (CTRL-Q) Char to restart output from TNC to terminal
STATSHRT
ON If on, STATUS command only lists connected and current streams
STOP
$13 (CTRL-S) Char to stop output from TNC to terminal
STREAMSW
$7C (|) Char used to change streams
STREAMCA
OFF Show callsigns with stream switch
STREAMEV
OFF Show stream switch with every packet
SUPLIST
OFF {OFF | TO | FROM | BOTH} If on, stations in SUPCALLS are not monitored
SUPCALLS
NONE Callsigns of stations for use with SUPLIST and LLIST
SWP
17,17,108 Allows fine tuning of SOFTWARE CD
TRACE
OFF Dump out received packets in hex
TRFLOW
OFF If on, allows software flow control in TRANS receive mode
TRIES
10 Number of retries on current packet
TXDELAY
30 (300 msec) Time delay between PTT and radio data out (10 msec)
TXFLOW
OFF If on, allows software flow control in TRANS transmit mode
UNPROTO
CQ {call [via calls]} path for UI data frames
USERS
1 Specifies streams to be used by incoming connects
XFLOW
ON Master switch for software flow control
XMITOK
ON If on, allows TNC to key transmitter
XOFF
$13 (CTRL-S) Char to stop input from terminal to TNC
XON
$11 (CTRL-Q) Char to restart input from terminal to TNC