

BASIC SETTING FOR KANTRONICS KPC-3 (not KPC-3+)

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 \(outpostpm.org\)](http://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: `INTFACE 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

COMMAND	DEFAULT	EXPLANATION
cmd:display		{ASYNC CHAR ID LINK MONITOR PBBS TIMING}
8BITCONV	ON	If on, 8th bit used in CONVERS mode
AX25L2V2	ON	If on, AX25 version 2 protocol used
ABAUD	9600	RS232 terminal baud rate
AUTOLF	ON	LF sent to terminal after CR
AXDELAY	0	Time added to TXDELAY for repeaters (10 msec)
AXHANG	0	Hang time of repeater to inhibit AXDELAY (10 msec)
BEACON EVERY	0 (disabled)	[{EVERY AFTER}] time (1 min)
BKONDEL	ON	If on, DELETE will backspace; else \
BTEXT		Text sent to BEACON in UI packet
BUDLIST	OFF	{OFF TO FROM BOTH} If on, only monitor stations in BUDCALLS
BUDCALLS	NONE	Callsigns of stations to be monitored
A Link state is:	DISCONNECTED	Show status of streams
CANLINE	\$18 (CTRL-X)	Char used to cancel a partial line
CANPAC	\$19 (CTRL-Y)	Toggle char use to send output from TNC to bit bucket
CD	INTERNAL	{INTERNAL EXTERNAL SOFTWARE} carrier detect
CHECK	0 (disabled)	No activity time before protocol checks on link (10 sec)
CMDTIME	1 (1 sec)	Timing spec to get out of transparent mode (sec)
CMSG	OFF	{ON OFF DISC PBBS}
COMMAND	\$03 (CTRL-C)	Char used to return to command mode
CONLIST	OFF	If on, only responds to stations in BUDCALLS
CONMODE	CONVERS	{CONVERS TRANS}
CONOK	ON	Enables connections to MYCALL
CPACTIME	OFF	Enables PACTIME use in conversational mode
CR	ON	SENDPAC char appended to packets formed by SENDPAC
CRSUP	OFF	If on, removes every other consecutive CR received
CSTAMP	OFF	Time stamp connects and disconnects
CTEXT		Text sent first to someone else connecting to MYCALL
CWID	EVERY 0 (disabled)	[{EVERY AFTER}] time (1 min)
CWIDTEXT	DE N0CALL	Text sent during CW IDs
DAYTIME	00/00/00 00:00:33	yymmddhhmmss
DAYTWEAK	8	Fine tune software 24hr clk
DAYSTR	mm/dd/yy hh:mm:ss	time format
DBLDISC	OFF	Forces a true disconnect sequence after DISC while awaiting connect
DELETE	\$08 (CTRL-H)	Char used to delete last char in line
DIGIPEAT	ON	Allows digipeating through MYCALL
DWAIT	0	Time to allow digipeaters first acces to channel (10 msec)
ECHO	ON	Characters from terminal are echoed back
ESCAPE	OFF	If on, received ESCAPE characters printed as \$
FLOW	ON	TNC will not send data to terminal until input line complete
FILTER	OFF	If on, removes most control codes from received packets

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
PACLEN	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
PBPERSON	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 persistence 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