

PK-88 INTERFACE to IC28

18 February 1992

This modification will allow your BBS to directly key in a frequency into the IC28 by using IO commands. The PK88 will send the 8 bit word (only 5 bits used) to the radio. These commands will be decoded by the eprom and simulate pressing the key board of the radio.

All that is required to have your TNC (PK-88) change your radio channels of an IC28 is to complete the upgrade of the PK88 and install the attached Eprom into the radio.

At this time it is not known if this form of interface will be successful due to the de-bounce of the key board and the scanning method used by the microprocessor within the radio. It is envisaged that five data lines will need to be interfaced to from the IC28 to the PK-88.

Once this upgrade is complete now try these commands,

```
ADD $0C
  IO $FF
```

The keyboard should be able to be addressed as per normal so test every key available and verify normal operation. If any problems then remove the eprom and verify all OK. If problem still exists then you the problem has been introduced so check your cabling.

Dial up any frequency other than 144.850. ie 147.600. Then using the following TNC commands;

```
IO $0C
IO $04
IO $08
IO $05
IO $00
IO $FF          (any hex value greater than 80)
```

The display should now indicate a frequency of 144.850.

All of the key board functions are programmed into the eprom so try a few variations. Select from the chart below.

IO	function
00	0
01	1
02	2
03	3
04	4
05	5
06	6
07	7
08	8
09	9
0A	Memory
0B	Scan
0C	Clear
0D	Simplex
0E	Negative offset
0F	Positive offset

NB:Your last IO command should be 'IO \$FF' or any number greater than \$80. This will give control back to the keyboard and prevent unwanted conditions or destruction of the eprom.

Steve,
Please install this eprom, wire as per the attached schematic and advise me accordingly. If you require an IC socket (28 pin) let me know. All relevant info included.

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