

## Description:

Adapted from the venerable K6XX design the circuit converts Icom voltage level band data to decoded active-low signals (output of LM3914/NTE1508). These are optoisolated and inverted (active high drive) by PS2501-4 and fed to the KK1L 2x6 Antenna Switch Control Board by plugging this card into the empty CD4028 socket on the control board.

The 1k resistor at pin 7 of the LM3415 sets the LED drive current to 12mA. The 10k resistor at pin 5 biases the level shifter and can be any value from 10k to 50k.

The diode at the base of the PNP can be any silicon switching type diode (even a 1n4001 will do). The inductors and caps on the inputs are for RF suppression and the values are not critical.

The voltage divider on the BAND input was added after production of the boards to scale the BAND voltage correctly. The 1k Ohm resistor may need to be adjusted so all the bands decode correctly. It SHOULD work well as is, but the output of each rig can be different (this is an Icom issue...sorry!).

Band	Voltage
10m	2V-3V
15m	3V-4V
20m	4V-5V
30m	0 V 0
40m	5V-6V
80m	6V-7V
160m	7V-8V

Rev	ID
2.2 Opto-Isolated	IcomDecode
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