

DTMF decoder Mk3 datasheet.

The Mk3 DTMF decoder is 58.5x29x5mm PCB built using SMT components. All components are on the upper side of the PCB allowing easy mounting inside equipment using double sided tape.

8 x open collector outputs each able to sink up to 500mA are provided.

A user programmable 4 digit PIN is configured using an RS232 terminal program such as Hyperterminal or Putty.

DTMF commands are in the format XXXXYZ, where XXXX is the 4 digit pin comprised of numbers 0 to 9 and letters A to D, Y is the required output number 1 to 8 and Z is the command, 0 to switch low, 1 to switch high and 2 to pulse for 1 second.

Outputs may also be switched from the RS232 port using exactly the same command structure.

All DTMF digits decoded are passed to the RS232 port.

Referring to the PCB overlay connections are as follows.

Vcc	Connect a positive supply of 6 to 15 Volts at up to 50mA
TXD	RS232 level serial data output.
RXD	RS232 level serial data input
AF	Connect the DTMF signal of at least 50mV p-p
Gnd	Supply -ve connection and system ground

1 thru 8	Open collector outputs 1 to 8. Rated as per ULN2803 datasheet
+	Common point for output protection diodes, connect to output supply
-	Supply -ve connection and system ground.

To program your DTMF decoder configure your terminal for 9600bps 8,N,1
And connect as below (9 pin D connector).

1, 4 and 6	Short together
2	TXD from PCB
3	RXD to PCB
5	Gnd
7 and 8	Short together
9	NC

As the PCB is powered up it will invite a Ctrl-C to enter program mode, press Ctrl-C and follow the instructions to program your PIN code.

