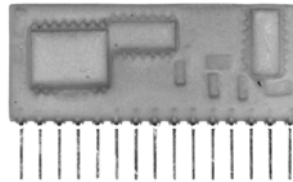


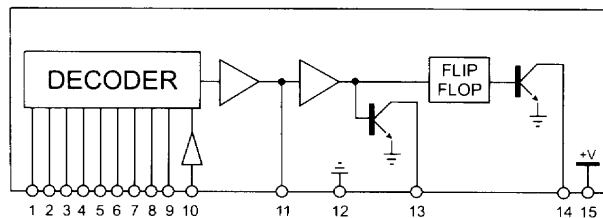
D1MB One Channel Data Decoder Module

The D1MB single channel decoder module, with monostable and bistable outputs, provides an ideal complement to an RF link using a pair of compatible AM or FM transmitter and receiver modules and employing an MC145026 data encoder IC at the transmitter end. The D1MB is ideal for applications where a single channel monostable and/or bistable output is required. The two outputs are open collector. The monostable output time delay is configured by an external RC network.



Technical Specification

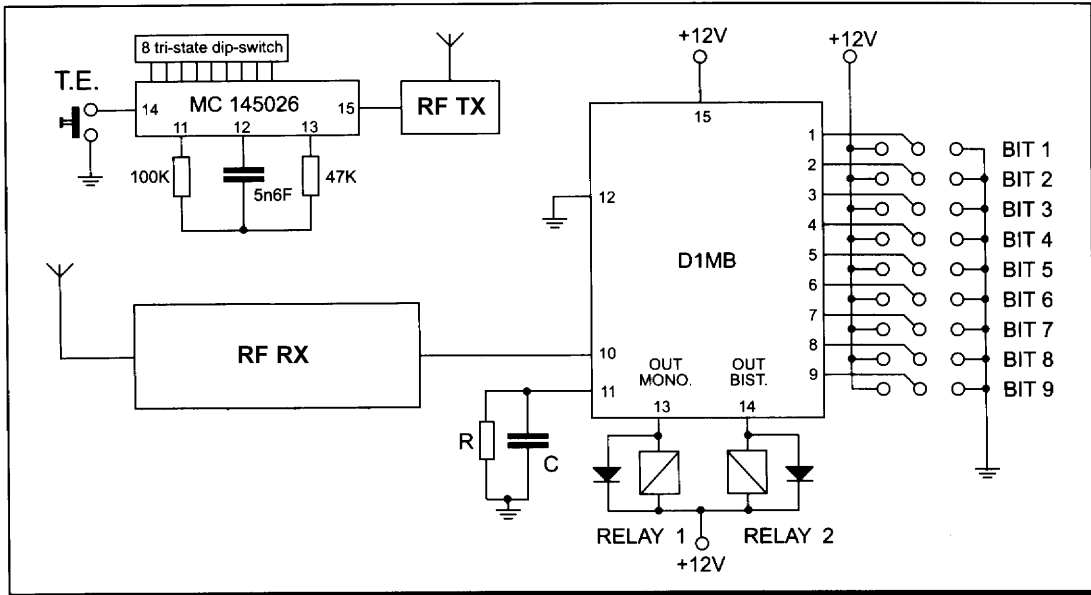
- High-miniaturization SIL thick-film hybrid circuit
- Decoder : MC145028 ; (Motorola)
- Encoder clock frequency : 1.7KHz
- Parallel programming with 9 bits giving more than 13,000 possible codes
- Ability to set monostable low output time after end of valid coded signal
- Consumption : 1mA quiescent
- Monostable output : open collector, 50 mA max
- Bistable output : open collector, 50 mA max
- Dipped in resin



Pin Out

- 1-9) Address 1-9
- 10) Data input (from receiver)
- 11) RC network
- 12) Ground
- 13) Monostable output
- 14) Bistable output
- 15) Supply: +5V to 15V

Application Schematic



Address inputs 1 to 8 are tri-state, input 9 is two-state with an internal pull-up.

The RC network on pin 11 determines the time the monostable output remains low after the end of a valid coded signal. As the monostable output triggers the bistable output, this network confers an extra degree of noise immunity on both outputs.

Time delay is approx. $R \times C$. Typical values are $82K\Omega$ and $4.7\mu F$. Setting $C=0$, minimum response time is obtained. This equals the MC145028 decoding time. Both outputs are open-collector. On power-up the bistable output is reset to the 'OFF' state.

Timing Diagram

