DSchmidt Technologies D16-RLY Single Digit DTMF Decoder

Overview

The D16-RLY is a single digit DTMF activated relay. The onboard relay will activate and remain activated for as long as the tone you have chosen is heard. Choosing your tone is as simple as installing a jumper. A red TONE LED illuminates when ANY tones are heard. A green MATCH LED illuminates when the tone you have chosen is heard and the relay is activated. Multiple tones may be chosen by using a diode (ex: 1N4148) or LED as a jumper instead of the supplied shunt.

Features

- Assembled and tested.
- Decodes all 16 DTMF tones (0 1 2 3 4 5 6 7 8 9 A B C D # *)
- Choose your tone by installing a single jumper. Multiple tones may be selected by using a diode or LED (not supplied)
- LED status indicator lights when any tones are detected
- LED status indicator lights when your chosen tone is heard and the relay is activated
- RCA Audio input jack accepts line level audio input directly
- Central office quality DTMF decoder IC
- Sealed SPDT relay with 5A contacts
- DC power requirements 7 to 24 VDC filtered, 90mA
- Comes with terminal blocks for easy power and relay hookup. No soldering required
- Assembled and tested. No case supplied.

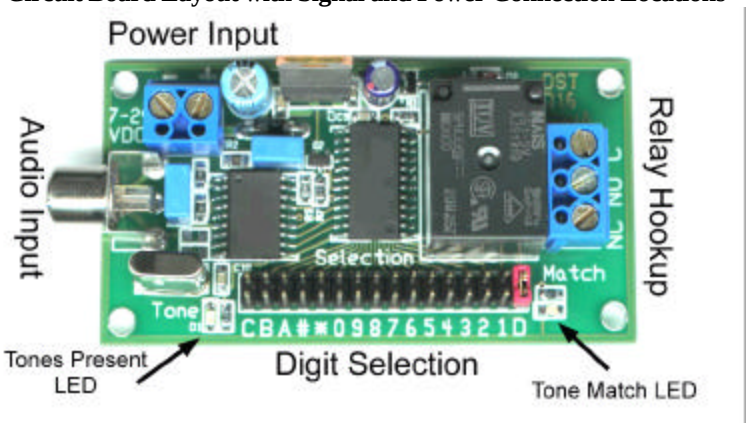
Hookup

Hookup your **filtered** DC power supply to the power connections – note polarity on PC board. The D16-RLY will accept voltage inputs ranging from 7 to 24 VDC.

The user must hook up the audio input to the desired source. The on-board phono jack accepts line level audio input (10mV to 5V range). Connect this jack directly to your audio source. DO NOT CONNECT A TELEPHONE LINE DIRECTLY TO THIS JACK! The voltage levels from a telephone line are too great to be used directly. If you wish to hook this product to your phone line, you will need to do so using a 1:1 isolation transformer (also known as a 600:600 phone transformer). This will electrically isolate the D16-RLY. See schematic for a sample circuit.

Hook your switched load to the relay contacts on the board

Circuit Board Layout with Signal and Power Connection Locations



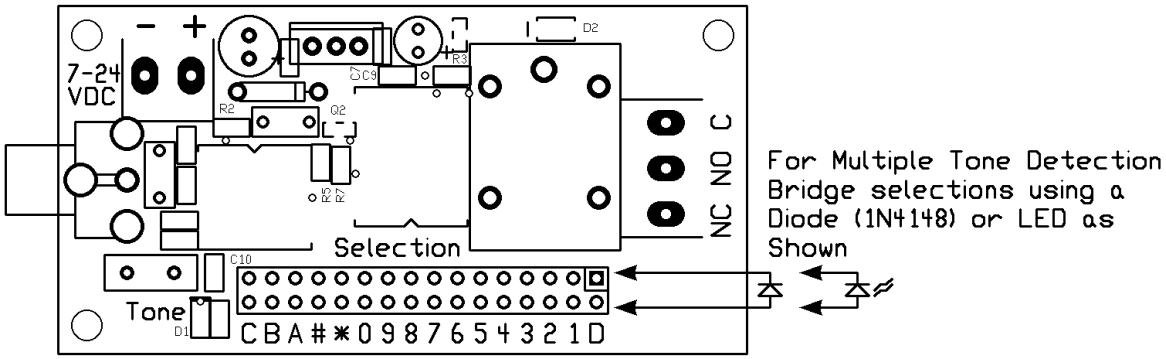
Choosing your tone

The unit ships with a jumper preinstalled in the 'D' position. If left there, the onboard relay would activate and remain activated when the DTMF tone 'D' was heard. To choose a different tone, remove the jumper and reinstall it in the position corresponding to the tone you wish to decode.

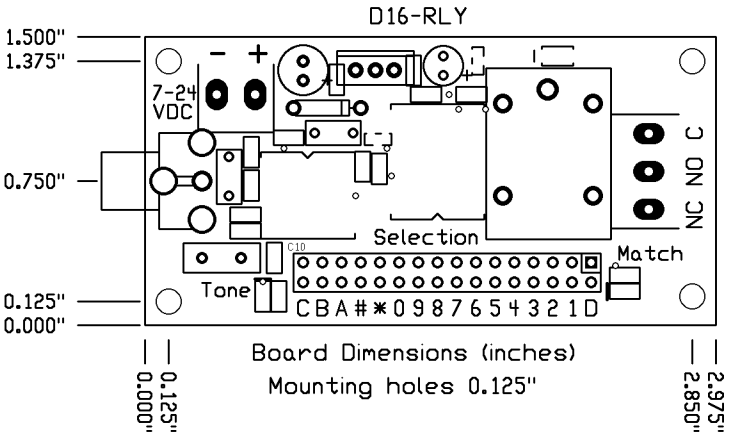
If you wish to select more than one tone as 'valid' for relay activation, you can do so by bridging your selection using a diode or LED instead. Multiple tone selection MUST use a diode or LED – you CANNOT use multiple shunts or risk of damage to the D16-RLY may result! A suitable diode for multiple tone decoding is a 1N4148 and may be soldered to the header pins directly.

DSchmidt Technologies 147 Alpine Ave Ventura CA 93004 (805) 628-2407 Voice, (888) 742-7816 Fax

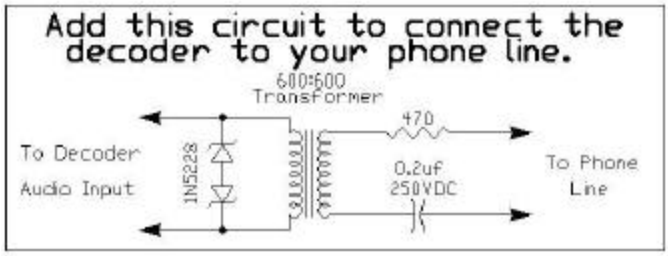
Multiple Tone Selection



Board Dimensions



Telephone Interface



Assembled/Tested Products: WARRANTY

DSchmidt Technologies expressly warrants that it will either repair or replace the D16-RLY if it proves to be defective in design, material, or workmanship within ninety (90) days from the buyer's date of purchase.

For warranty repair or replacement, the defective D16-RLY must be returned within ninety (90) days to DSchmidt Technologies by insured mail and accompanied by proof of purchase. A repaired or replacement D16-RLY shall be warranted as above for the balance of the original product Warranty Period or thirty (30) days, whichever is longest.

DSchmidt Technologies shall have no obligation with respect to any Product which has been modified or altered. In no event shall DSchmidt Technologies be liable for consequential damages, losses, or expenses arising out of this transaction. The return of the purchase price or the repair or replacement of the product shall be the buyer's sole remedy hereunder.

This limited warranty is DSchmidt Technologies sole warranty. DSchmidt Technologies makes no other warranty of any kind whatsoever, express or implied. All implied warranties of merchantability and/or fitness for a particular purpose are hereby disclaimed by DSchmidt Technologies.

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