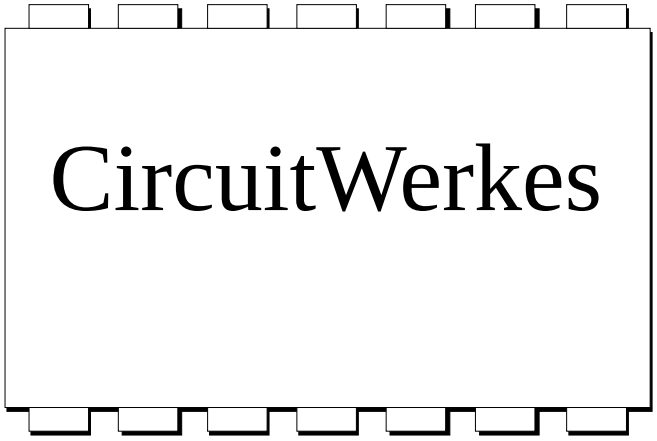
Telco-6

Incoming Telephone Ring Detector



Technical Manual

CircuitWerkes
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Description:

The CircuitWerkews Telco-6 is an interface that allows you to detect incoming telephone rings from standard telephone lines. The incoming rings are converted to dry relay closures for driving indicator lamps, audible alarms, etc. Connections are made to captive screw terminals on the rear face of the Telco-6. Each DPDT relay output is rated at 1 Amp @ 30Vdc. Appropriate derating should be used for higher Voltages. Please Note: The telco-6 is ***not*** intended to directly drive 120V AC devices. The screw terminals are exposed and would present a serious safety hazard if house current were passed through them.

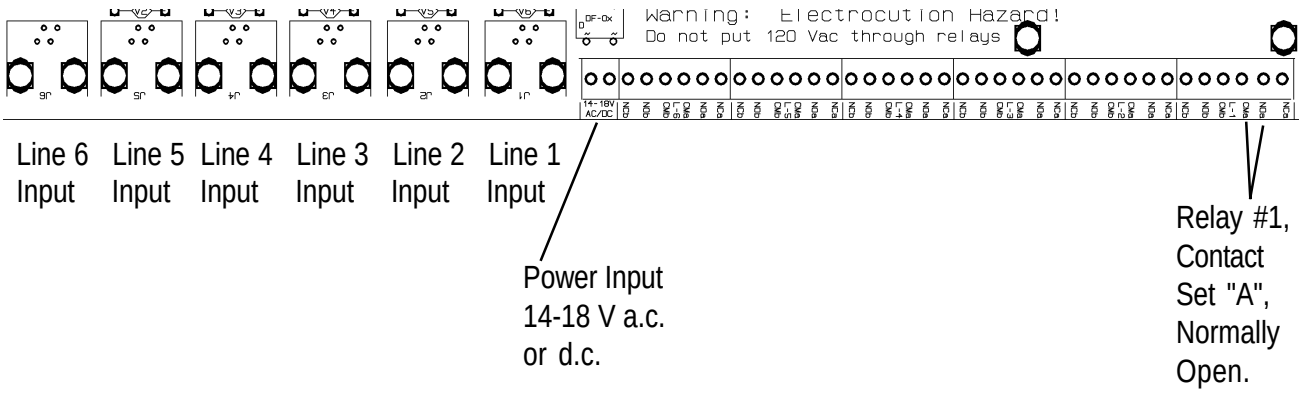
Installation:

Each Telco-6 is supplied with an ac adaptor to provide power for the device. If you wish to use you're own supply, the Telco-6 requires 14 to 18V ac or dc to operate. The power supply must be able to supply at least 300mA of current.
Power supply and user interface connections are made via standard captive screw terminals.

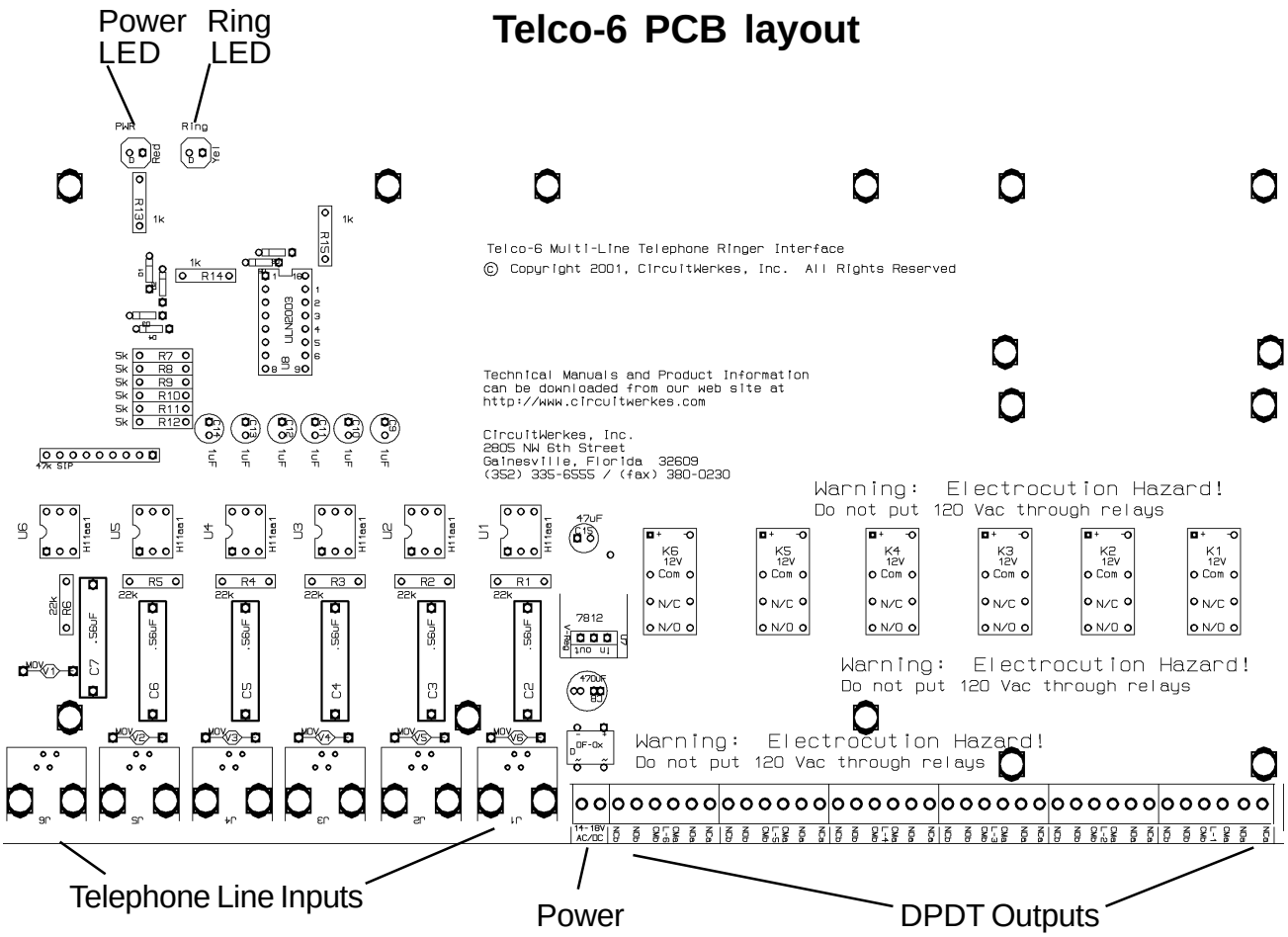
The power supply should be connected to the terminals marked 14-18V. The Telco-6 uses an internal bridge rectifier so the input power can be either AC or DC. Further, if the input is DC, the polarity isnot critical.

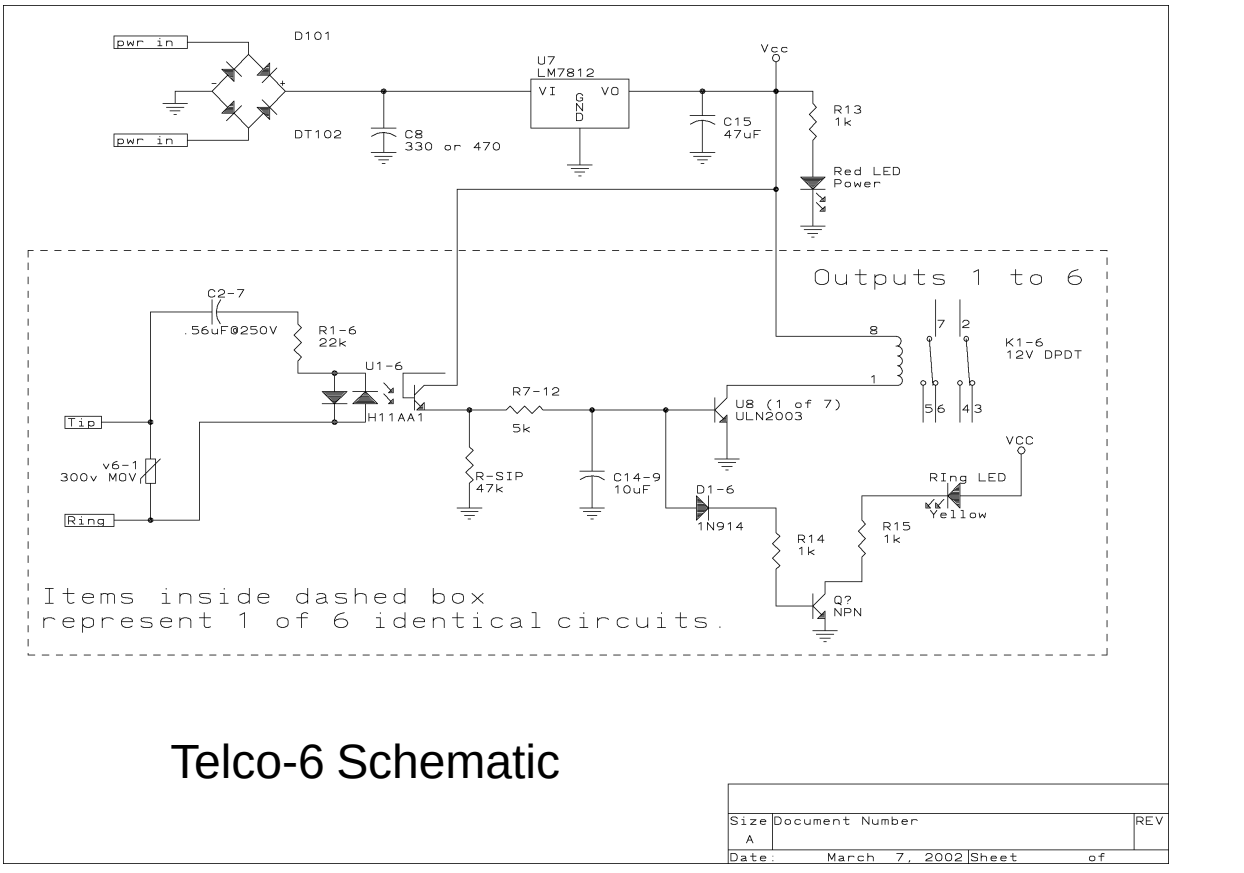
Telephone line inpus are made to the each of the six RJ-11 jacks on the board. The input jack closest to the power supply is line #1 while the jack closest to the left edge of the board is line 6.

The user interface (output) connections follow the same pattern as the telephone lines. That is the set on the right are line one and the outputs furthest left are Line 6. Each set of inputs are numbered L-1 through L-6. Each set of outputs consists of aDPDT set of contacts which are called 'A' and 'B'. Each set of contacts has a normally open (NO), normally closed (NC), and a common (CM). For instance, line one hasNCa, NOa and CMa on one set of terminals and NCb, NOb and CMb on another other group of terminals. The Common (CM) terminal is connected to the Normally Closed terminal when no call is being received. When a call comes in, the Normally Closed terminal opens and Common terminal connects to the Normally Open terminal. Once the ring signal is ended, the Common terminal is again connected only to the Normally Closed terminal. Note that the relays close for each incoming ring siganl, not each incoming call. If the phone line rings 10 times before someone answers it, the Telco-6 contacts will close 10 times as well.



Telco-6 PCB layout





Telco-6 Schematic

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REPAIR OR SERVICE INFORMATION

In the event of the need for service or repair, call CircuitWerkes at (352) 335-6555 for a Return Merchandise Authorization number (RMA). Then carefully package the unit along with a note of the problem and send it to the address below. Be sure to include your address (not a PO box), telephone number and best time to call.

CircuitWerkes
ATTN: CUSTOMER SERVICE DEPT.
2805 NW 6th Street
GAINESVILLE, FL 32609

CircuitWerkes Limited Warranty

This product is warranted against defects for two years from date of purchase from CircuitWerkes and CircuitWerkes authorized distributors. Within this period, we will repair it without charge for parts and labor. Proof of purchase-date required. **Warranty does not cover transportation costs, or a product subjected to misuse, accidental damage, alteration (except as authorized by CircuitWerkes), improper installation, or consequential damages.**

Except as provided herein, CircuitWerkes makes no warranties, express or implied, including warranties of merchantability and fitness for a particular purpose. Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Note: Although every effort is made to make our technical materials complete and accurate, manuals are frequently updated in order to improve them. All specifcations and information contained herein is subject to change without notice. The latest version of this manual is available online at the CircuitWerkes internet web site. The address is: http://www.circuitwerkes.com/. E-mail may be sent to info@circuitwerkes.com.