



***SIX WAY RELAY BOX  
and  
TOWER MOUNTED SIX WAY RELAY BOX***

**Quick Start**

Mount your Six Way Relay Box in a convenient location. Connect 12 Vdc (nominal) to the point labeled "13.8" on the terminal strip. Ground terminal strip point 1 to connect J1 to the output connector J7. Likewise for the other ports.

**Contacting Top Ten**

- You may write to us at the following address:

Top Ten Devices, Inc.  
Camp Council Road  
Phoenixville, PA 19460

Telephone: (610) 935-2684

- We are also available on the Internet. With the proliferation of Internet Services Providers, e-mail addresses may be changed frequently. As of January, 2004, the following were in effect:

N3RD: n3rd@arrl.net  
W2VJN: w2vjn@arrl.net

Check our latest magazine ads for current e-mail addresses.

- You may also visit our World Wide Web site at the following URL:

<http://www.QTH.com/topten>



## Six Way Relay Box Instruction Manual

### General Description

The Six Way Relay Box is suitable for indoor use. The unit is enclosed in a gray painted aluminum box with holes for mounting to a flat surface, such as a wall or the back of the operating table.

SO-238 UHF-style connectors are provided for rf input and outputs, and a seven point terminal strip is provided for the control wiring. A terminal strip is provided for ease of connection, as well as to allow for easy "daisy chaining" to additional Six Way Boxes or other switched devices.

### Mounting the Six Way Relay Box

It is recommended that the box be fastened down securely. Four holes are provided in the cover to ease installation. Orientation of the box is not important. A typical location for the box would be near the point where the various feedlines to be switched enter the shack or house. From that location, a single coax feedline and the control cable can be routed to the operating position.

### Wiring the Six Way Relay Box

The terminal strip uses #6 screws, so terminal lugs for this size screw should be used on the control cable. A 13.8 Vdc (nominal) power supply is connected to the terminal so labeled. Grounding terminals 1 through 6 result in the input being connected to outputs 1 through 6 respectively.

The Six Way Relay Box is designed to be directly driven by our line of **Band Decoders**, which are available for Yaesu and Icom radios. Kenwood radios are accommodated by first interfacing the transceiver to the computer, then running software which provides band data on the computer's LPT port. The **Band Decoder** is then attached to the LPT port.

### Limited Warrantee

Top Ten Devices warrants this unit to be free from defects in parts and workmanship for a period of one year. The unit will be either repaired or replaced, at our discretion. The only cost will be the cost of return shipping. If repairs are required during the warrantee period for other than manufacturing or parts defects, an estimate of the repair cost will be provided prior to repair.

Top Ten Devices is not responsible for any consequential damages to other equipment or personnel injury as a result of using this product, or any of the suggested uses.

If the terms of the above Warrantee and Limitation of Liability are not acceptable, please return the unit to Top Ten Devices for a full refund.

### Specifications



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Power	1500 W SSB/CW to 30 MHz 1000 W RTTY to 30 MHz
VSWR	< 1.2 at 30 MHz
Load VSWR	< 1.5 at 30 MHz
Loss	<0.07 dB at 30 MHz
Isolation	> 40 dB to unselected port at 30 MHz
Operating voltage	13.8 Vdc nominal
Current requirements	45 mA (approximate) per relay

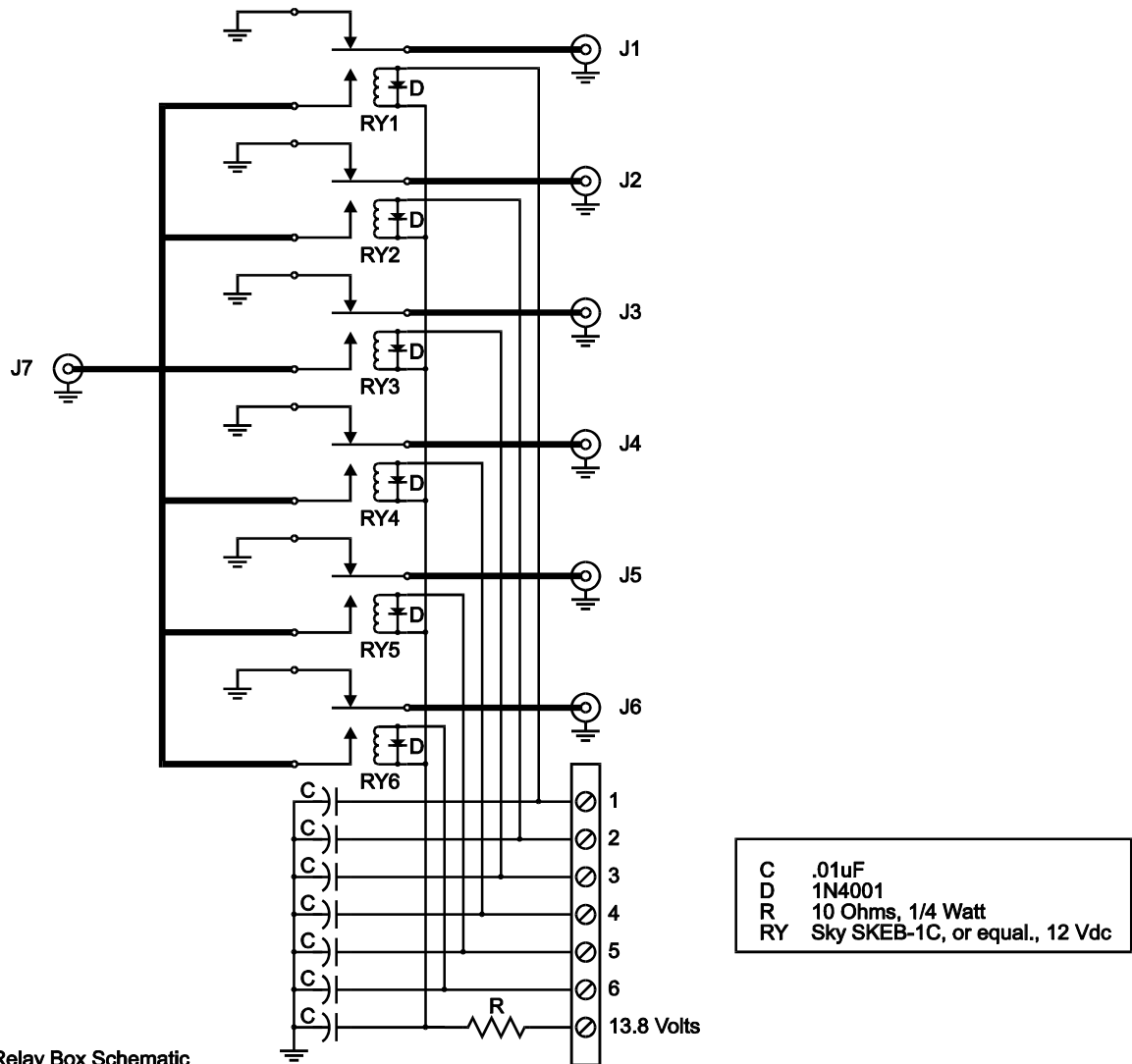
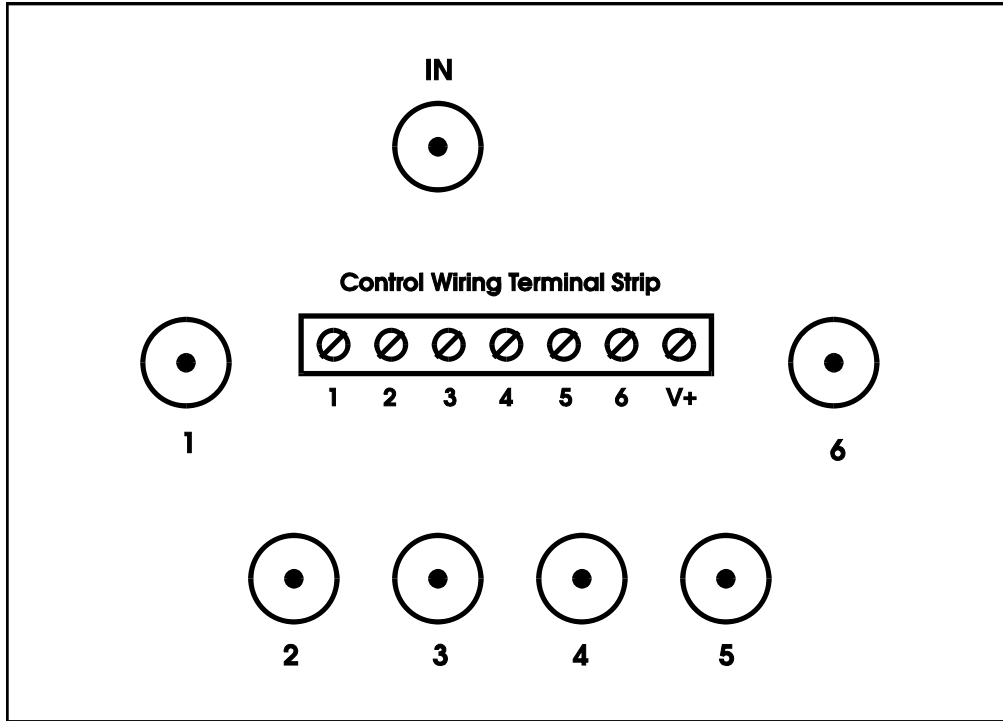


Figure 1 - Six Way Relay Box Schematic



**Connector Side View of the Tower Six Way Box**