BROADCAST tools INC

Installation and Operation Manual

ROS-16
Utility Switch and LED panel

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NOTE: We recommend the use of Firefox or Safari for Windows as your browser.

Manual update: 10/31/2011
If you need a firmware upgrade, contact Broadcast Tools®

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INTRODUCTION

Thank you for your purchase of a Broadcast Tools® Rack-O-Switches 16, utility switch and LED panel (referred to as the ROS-16 throughout this manual). We're confident that this product will give you many years of dependable service. This manual is intended to give you all the information needed to install and operate the Broadcast Tools® ROS-16.

SAFETY INFORMATION

Only qualified technical personnel should install the ROS-16. Any attempt to install this device by a person who is not technically qualified could result in a hazardous condition to the installer or other personnel or damage to the ROS-16 or other equipment. Please ensure that proper safety precautions have been taken before installing this device. If you are unfamiliar with this type of equipment, please contact a properly qualified engineer to handle the installation and setup of the ROS-16.

Broadcast Tools, Inc., is unable to support NON-Broadcast Tools software, hardware or NON-Broadcast Tools computer/hardware/software problems. If you experience these problems, please research your hardware/software instruction manuals or contact the manufacturers technical support department.

WHO TO CONTACT FOR HELP

If you have any questions regarding your product or you need assistance, please contact your distributor from whom you purchased this equipment. If you would like more information about Broadcast Tools® products, you may reach us at:

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Internet Home Page: www.broadcasttools.com
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THANK YOU FOR CHOOSING BROADCAST TOOLS® BRAND PRODUCTS!

Broadcast Tools is a Veteran Owned Business

Designed, Assembled and Supported in WA State, USA

CAUTION!

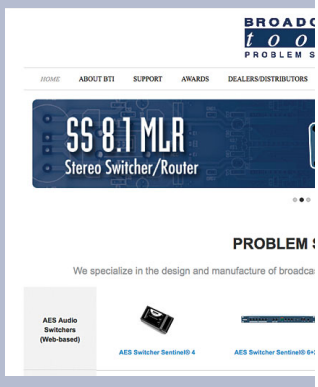
Broadcast Tools® Products, as with any electronic device, can fail without warning. Do not use this product in applications where a life threatening condition could result due to failure.

NOTE:

This manual should be read thoroughly before installation and operation.

WEBSITE:

Visit our web site for product updates and additional information.



Product Overview

The ROS-16 provides sixteen independent utility paddle switches and dual LED's in a 1-RU package. Each switch may be configured for toggle or momentary operation. Each switch contact, LED anode and cathode is available on an independent terminal via removable euroblock screw terminals. The switch commons and LED anodes may be commoned and brought out to a separate removable euroblock screw terminal. Each SPDT paddle switch can handle up to 28 volt DC at 500ma, while each LED operates between 5 and 24 volts DC. Other voltages may be used with the appropriate current limiting resistor. Complete schematics and jumper layouts are included in the appendix of this manual.

Inspection

Please examine your ROS-16 carefully for any damage that may have been sustained during shipping. If any damage is noted, please notify the shipper immediately and retain the packaging for inspection by the shipper. The package should contain the ROS-16, this manual and/or CD. Manuals may also be downloaded from our web site.

Installation

The ROS-16 interfaces to external equipment through removable euroblock screw terminals.

The terminals accommodate wire sizes from 16 - 28 AWG solid or stranded wire. Before installing a wire, remove the euroblock screw terminal plug and turn each capture screw fully counterclockwise. Strip each conductor to a length of 0.25" and insert the conductor fully into the terminal. Turn the capture screw fully clockwise to secure the conductor. Follow the schematics and configuration jumper diagrams provided in the appendix of this manual. When connecting to each LED, proper voltage polarity should be followed.

Operation

To operate the switch in toggle mode, set the switch to the center (OFF) position and move the switch UP for ON. To operate in momentary mode, press the switch down for the desired duration, then release. The switch will return to the center (OFF) position.

Labeling switches

To add labels to the ROS-16, produce each label and cut to a size adequate to attach to the area below each switch/LED section.

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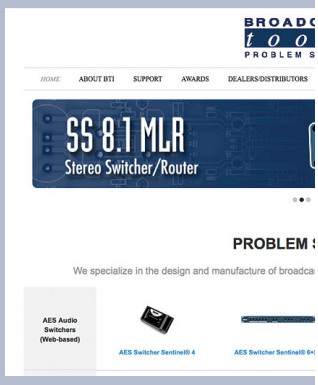

e-mail: support@broadcasttools.com **voice:** 360.854.9559 **fax:** 866.783.1742

Specifications

Switches:	16 - SPDT toggle or momentary. Maximum of 28 volt DC at 500ma.
LED's:	16 - Green T1 LED's and 16 - Red T1 LED's. 1.5 K ohm current limiting resistors are installed for voltage ranging from 5 to 24 volts DC. Other appropriate values may be used for other voltages.
Connectors:	Removable euroblock screw terminals. Plugs are supplied
Dimensions:	19.00"W x 1.50"D x 1.75"H.
Weight:	2.0 lb.

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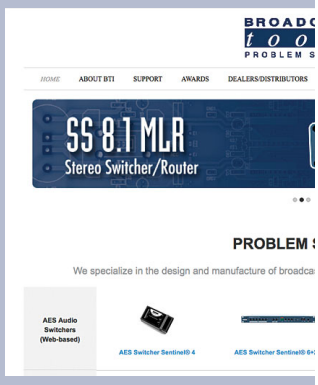

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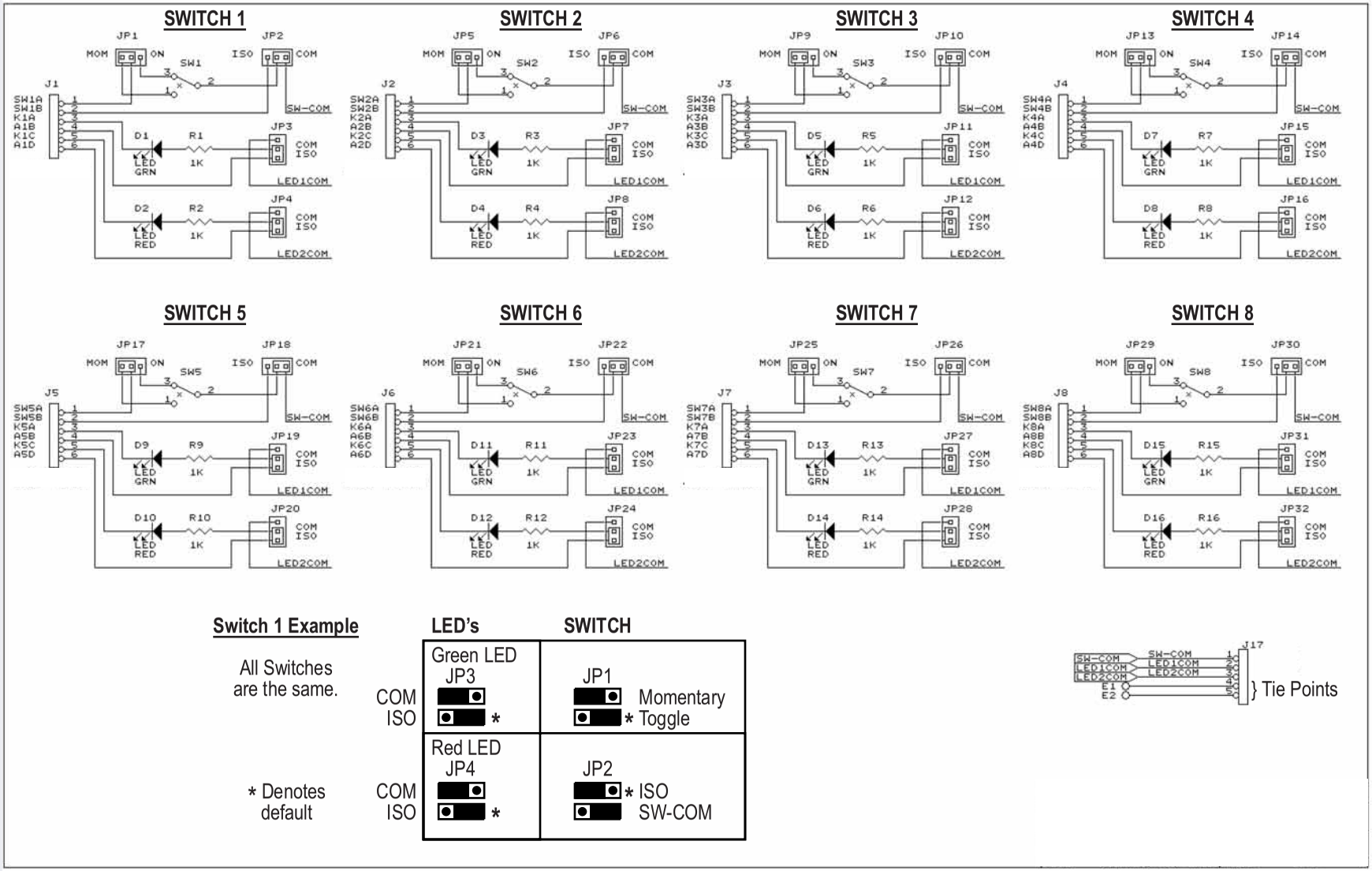
ROS-16 SCHEMATIC & JUMPER LAYOUT

Rack-O-Switches 16



Switch 1 Example

All Switches are the same.

* Denotes default

	LED's	SWITCH
COM / ISO	Green LED JP3 — COM, ISO *	JP1 — Momentary, * Toggle
COM / ISO	Red LED JP4 — COM, ISO *	JP2 — * ISO, SW-COM

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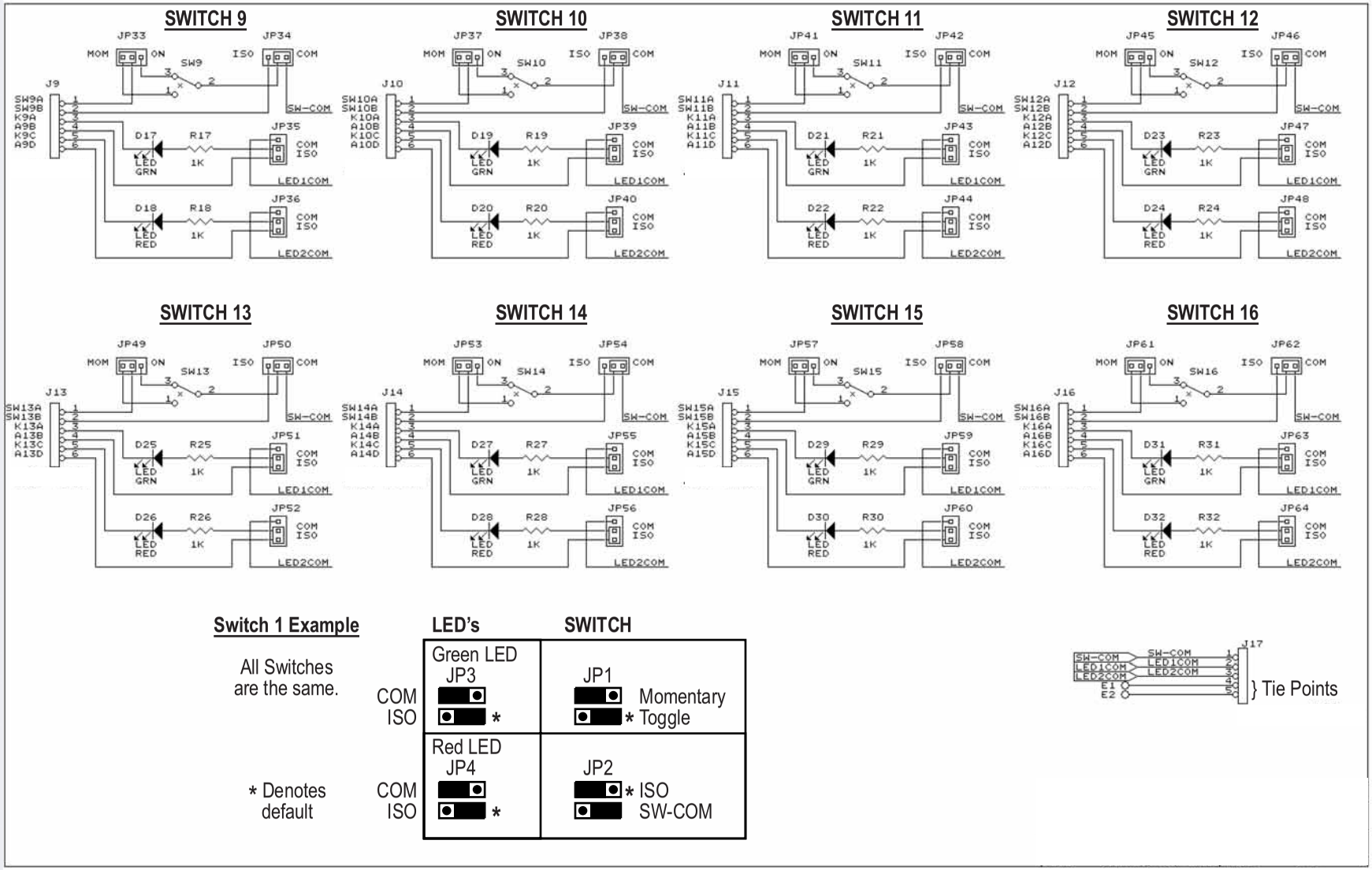

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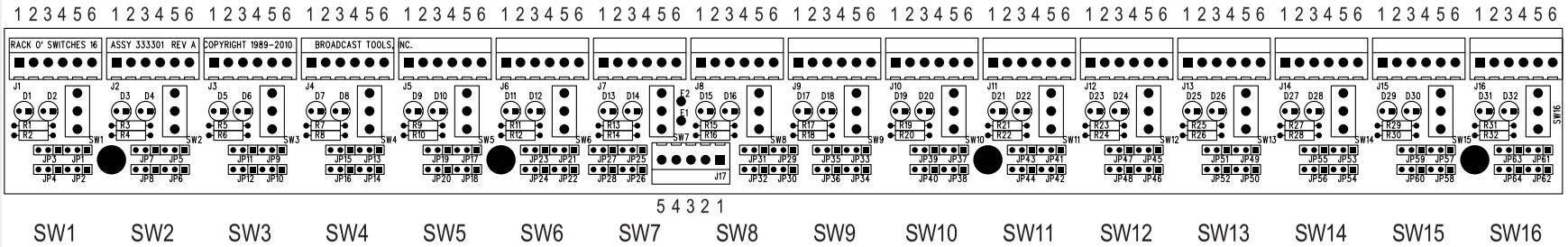
ROS-16 JUMPER LAYOUT

Rack-O-Switches 16



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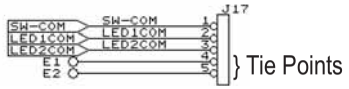

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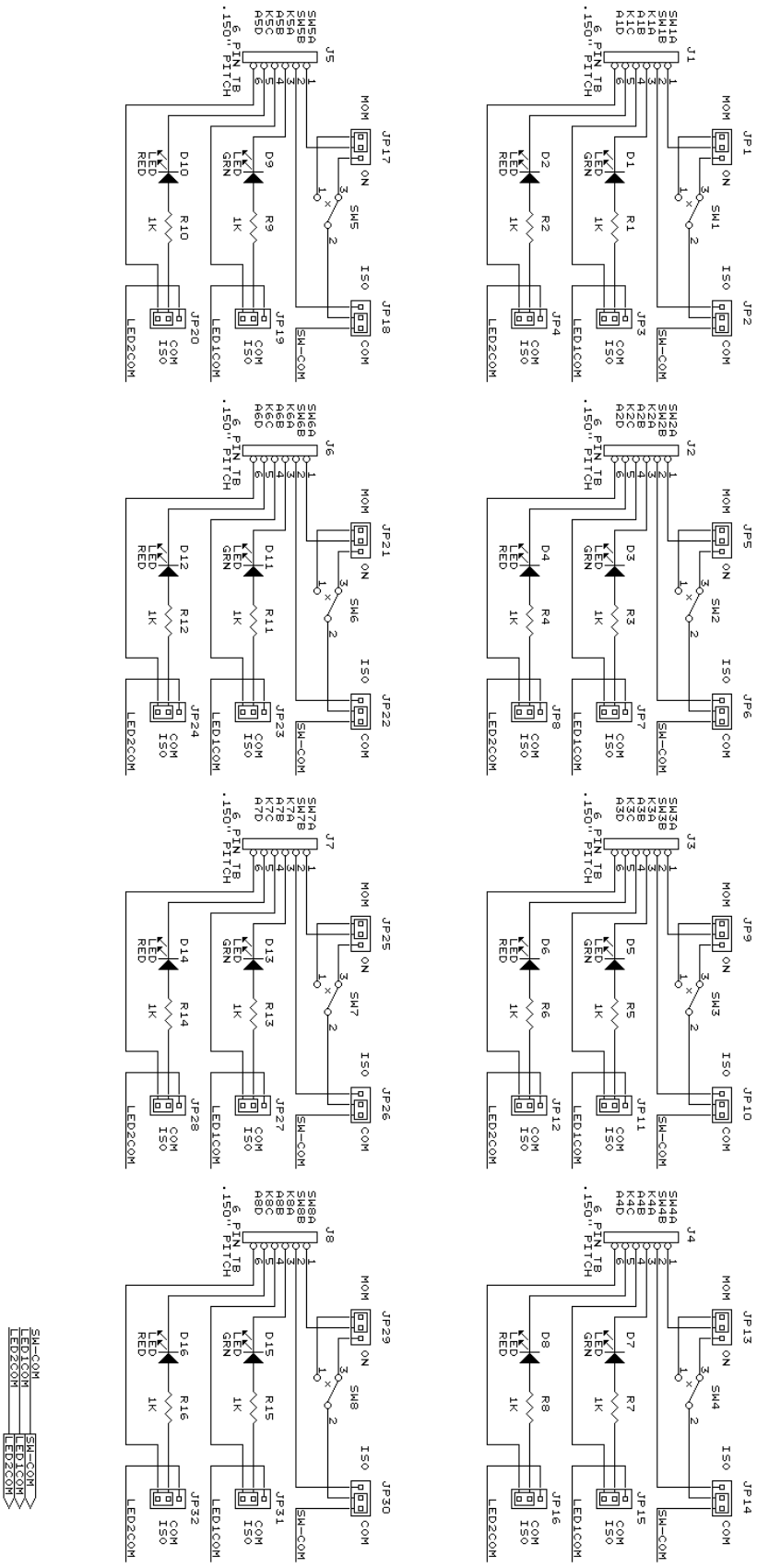

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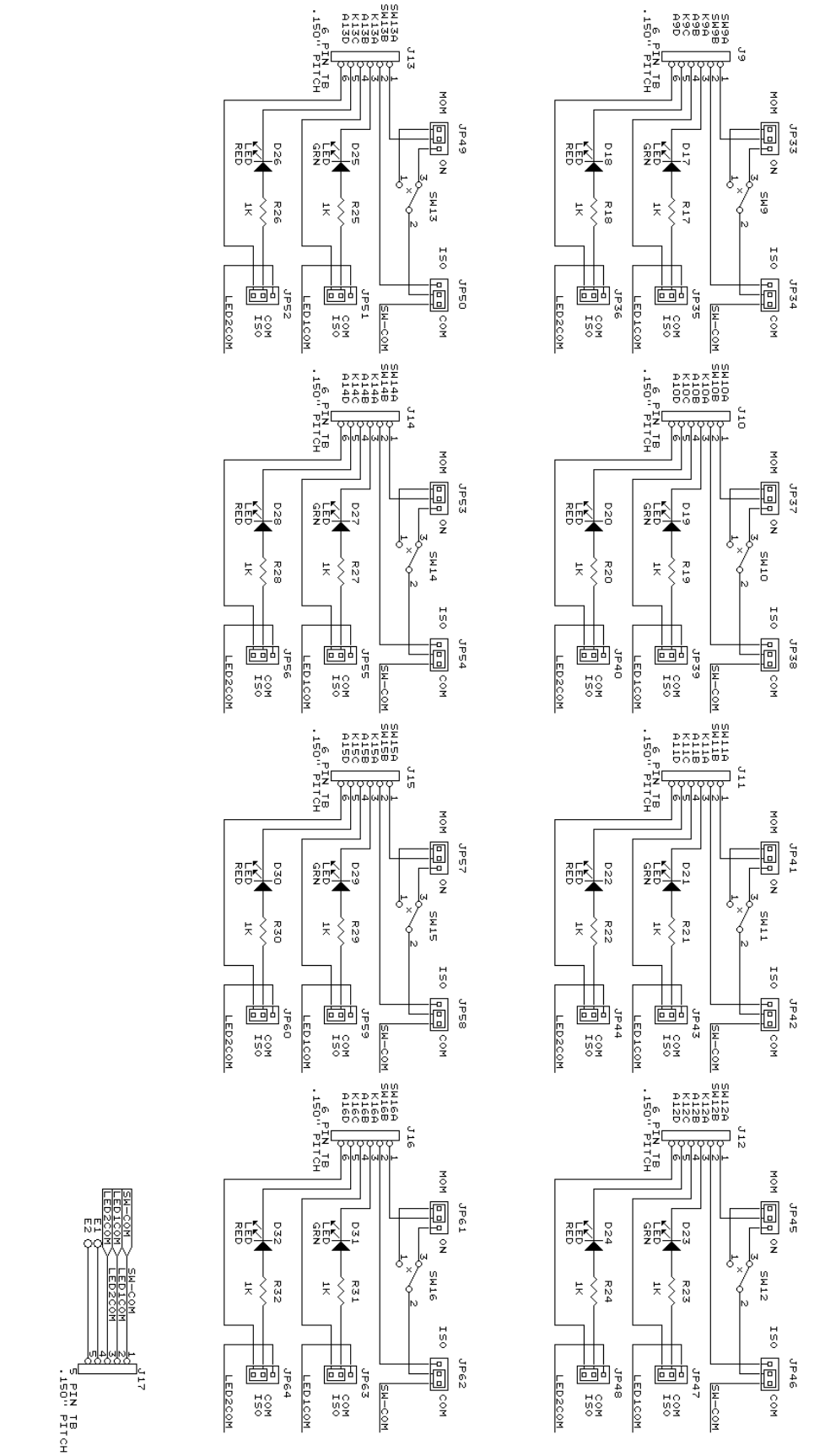

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