

ODA ENTERPRISES

50 'Q' SWITCH BOX

General Description:

The ODA Enterprises 50 QSB is approximately 11" X 6" X 5", constructed of heavy duty polypropylene plastic. It has a 50 gauge aluminum faceplate with all controls on it.

Located on the faceplate are the following:

50 "cue switches"

"TEST/ARM" keylock switch

LED & buzzer for continuity testing

"ARM" LED

A 16 Amp. momentary "FIRE" switch

Five DB-25F connectors for output

Two 4-way binding posts for external power source

Nine volt battery holder for continuity test circuit.

More Specifically:

The 50 toggle switches are called "cue" switches because they are used to put on line the next circuit to be fired. **They are not to be used as fire switches - or will degrade quickly.** They are numbered A1 thru E10 corresponding to output DB25 connectors.

The "FIRE" switch is a heavy duty momentary rocker switch capable of handling high currents (16 Amps @ 0-50 Volts DC). It is a DPST switch wired in parallel for redundancy and increased life.

The LED and beeper provide a visual and audible indication for continuity.

The five DB-25F connectors are for outputs. The required 25-wire cables are readily and economically available from ODA Enterprises or your local computer warehouse outlets. Wiring convention as follows:

Pin 1 & 14	circuit #1	Pin 6 & 19	circuit #6
2 & 15	2	7 & 20	7
3 & 16	3	8 & 21	8
4 & 17	4	9 & 22	9
5 & 18	5	10 & 23	10

11,12,13,24,25 GND.

Operation:

1. The **ODA Enterprises 50QSB** uses a separate circuit and self-contained battery (9 volt alkaline battery) to test for continuity. A current limiting resistor reduces the test current to 9 mA max. It is recommended that the main power source (12 - 48 Volts) not be hooked up until 'showtime'. Therefore, all wiring and testing can and should be done with the main power source disconnected (think of it as another safety switch).

2. Continuity is performed by placing the key switch to the "TEST" position. Place the individual A1 - E10 cue switches to the 'up' position and depress the Fire switch, which will cause the LED to lite and buzzer to sound. Remember, this is only a continuity test, if there is a short across the lead wires (like an aluminum gun cutting thru the wires) continuity will test OK.

After testing, all cue switches should be in the down position (OFF).

3. Only after the operator has tested all circuits and is satisfied with circuit integrity (we recommend 10 -15 minutes before 'showtime') should the external main power source be attached to the 50QSB input terminals. We recommend the use of a 12 Volt auto/marine type battery as a minimum; it should be in good/charged condition.

4. At 'showtime', the key switch should be placed into the "ARM" position, which will also light the ARM LED. Select 'cue' switch A1-E10 and place into the 'up' position. By pressing the momentary "FIRE" rocker switch, that cued circuit will be energized and fired. **Cue switches are not intended to be used for firing - only the "FIRE" rocker switch should be used.**

email: octavioag@comcast.net

website: <http://www.electricalfiringsystems.com>

