Bowl-Tronics Enterprises Incorporated

Solid-State Relay Manual (BTSSR-DTDM)
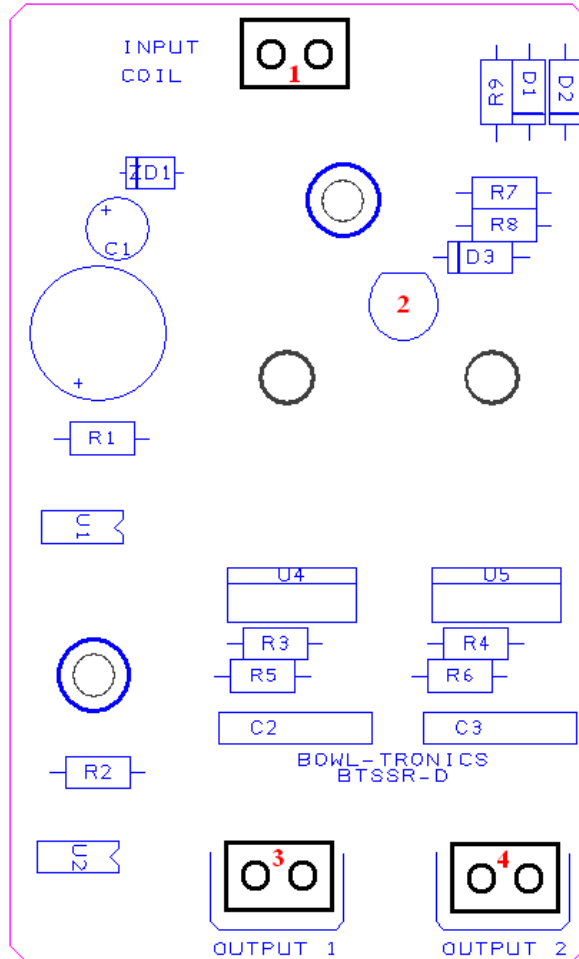
PC Board Layout Description Table:

1. **24 VAC input coil terminal connector**
2. **24 VAC Diagnostic LED (When lit 24 VAC has been applied)**
3. **Output number 1 terminal connector (Relay points)**
4. **Output number 2 terminal connector (Relay points)**

Solid-State Relay Theory

The solid-state relay works just like conventional contact closure relay but with out the actual mechanical movement and arching of relay points. A device called a TRIAC performs the contact closure for the solid-state relay and a device called an optocoupler resembles the coil of the relay.

Installation Instructions (BTSSR-D)

Remember to remove power before performing any installation!!

The (BTSSR-D) has many uses; it's a double pole relay that can handle up to a 1 AMP switching current @ 220 VAC per relay.
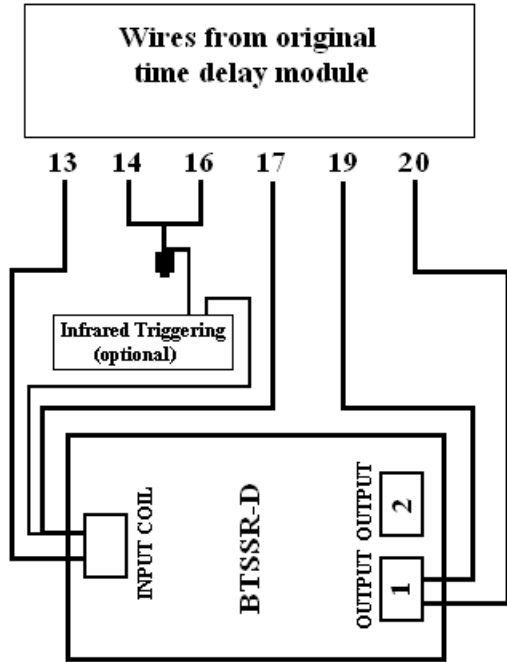
Installation Instructions "A-2" Machine (Replacing the Time Delay Module)

On an "A-2" machine the TDM consists of 7 terminal connections ranging from 13-20. You will be utilizing all terminals except 15 and 18. Be sure to mark or keep track of each wire and what terminal they came from. 13 and 14 is your 24 VAC, 16 and 17 are your resets and 19 and 20 is your cycle solenoid. First, start by connecting 13's wire to one side of terminal connector 1 on the BTSSR-D. Next connect 17's wire to the other remaining side of terminal connector 1 on the BTSSR-D. Wires 14 and 16 you will twist together and use a closed end crimp cap (supplied). *Note if using electronic triggering twist 1 wire of the triggering to 14 and 16 and use the crimp connector and the other wire from the triggering will twist together with 17's wire and hook to one side of terminal connector 1 on the BTSSR-D.* Finally, connect wire 19 to one side of output 1 and wire 20 to the other side of output 1. Output 2 is not utilized but can be used if output 1 is damaged. You can use it as a back up if output 1 malfunction's. It wires the same as output 1. *(See example circuit on next page)*

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Wires from original time delay module

13 14 16 17 19 20

Infrared Triggering
(optional)

INPUT COIL

BTSSR-D

OUTPUT OUTPUT

2

1

Replacing the Time Delay Module with the BTSSR-D

For repair visit: www.bowl-tronics.com/service

Fill out our service request form and ship to the address that is shown.

Notes: