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INSTALLATION & USER GUIDE SUPPLEMENT FOR MODELS

TD812-TD813

DUAL-INPUT TRANSMITTER

Description

The battery-powered Isaacs TD812 (Standard Power) or TD813 (Enhanced Power) transmitter monitors two sets of dry contacts and transmits the state of the contacts (open or closed) in uniquely coded radio signals to its mated Isaacs receiver(s). The mated receiver(s) detects the signal and uses it to control its relay output(s). In addition to change-of-state signals, the transmitter sends periodic status signals to allow full system supervision.

Specifications TD812 and TD813

- Power Requirement:** One each, 3 volt lithium battery, type 2/3A (Panasonic CR123A , Duracell 123, or equivalent)
- Operation:** 902 – 928 MHz frequency-hopping, spread spectrum.
- Transmitter input:** Connect separate sets of dry contacts to two input cables. Max. allowable total cable lengths: 60 feet (18.4 m).
- Effective range (open line-of-sight to receiver):** TD812: 2+ miles (3+ km) / TD813: 5+ miles (8+ km)
- Physical:** Weatherproof, polyurethane coated PVC, 4.8 in. diameter x 10.6 in. height (122mm x 269 mm) with 1" FNPT mount fitting
- Weight:** 2.2 lb. (1.0 kg)

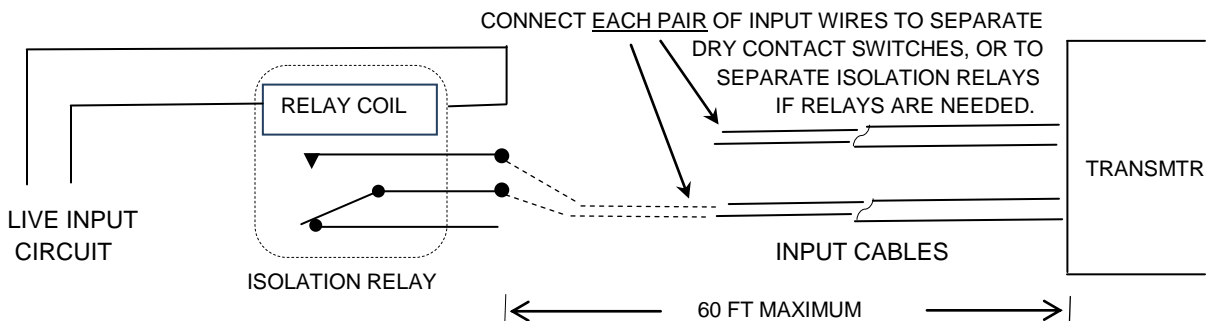
Installation

For site and installation information, refer to the Receiver Installation & Operation Guide for this system.

Connection

The transmitter connections are the red and black wires in the two gray-jacketed input cables. The cables are tagged as Input #1 and Input #2. The wires provide the transmitter “on-off” input and are for “dry” (not powered) contacts only. **NEVER CONNECT THE WIRES TO ANY POWER, NOT EVEN TO OHMMETER TEST LEADS.** Do not cross-connect the wire pairs. If the only available input connection is an electrically live circuit, connect the transmitter wires through separate isolation relays. (See diagram below).

Each standard 15 foot input cable may be extended as necessary to a maximum total length of 60 feet. Due to the sensitive nature of the input circuit, extending beyond 60 feet will result in an unresponsive transmitter. If necessary to extend beyond 60 feet, add powered isolation relay circuits as shown, one for each input circuit. Use care in wire splicing, as poorly made splices are a common source of operational problems.



Operation and Maintenance

When the transmitter is properly installed and connected, and the companion receiver(s) powered, the wireless control system operation is automatic and continuous.

The only maintenance required is periodic transmitter battery replacement. Battery life will vary depending on the amount of transmitter input activity, but normal battery life is 3-5 years (TD812) or 1-2 years (TD813). A new battery carries 3.2 volts. Replace any battery that measures less than 2.8 volts during transmission (contacts opening or closing).

Battery replacement

Isaacs transmitters require one (1) each of a type CR123 non-rechargeable lithium battery. Isaacs recommends only the Panasonic CR123A and Duracell 123.

To replace the battery, turn the screw out with a 1/16" Allen wrench, (about 12 turns) until the plastic cap can be removed. Then pull down gently on the battery holder assembly. Remove the battery by lifting up at the battery positive end (near the red wire loop).



RED WIRE LOOP

CAUTION !
VERIFY BATTERY POLARITY
REVERSED POLARITY MAY DAMAGE
TRANSMITTER CIRCUITRY
NOTE THAT THE POSITIVE END HAS
A RAISED CONTACT. THIS END GOES
TOWARD THE RED WIRE LOOP.

Place the negative end in first then press on the positive end until the battery "clicks" in place. Slide the battery holder assembly carefully back into the tube and replace the cap and screw.

Limited Warranty and Disclaimer

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