

AUTOMATIC BACK-N-FORTH / DC

Item 708

for use with DC track power, consists of 1-#369 (12VPS), 1-#366 (TRAK-DTL).

Overview: Automate those nasty reverse loops with the TRAK-DTL, this is useful in both conventional DC operation or carrier control. Use the TRAK-DTL to automate the reverse polarity function required to operate an automatic back-n-forth. You can also use the TRAK-DTL to automate the control of polarity reverse type switch machines. You might also want to sequence things in a certain manner, i.e. automate station stops so that every other train must stop at the station. Whatever you want to operate on an every other occurrence the TRAK-DTL will do it for you!

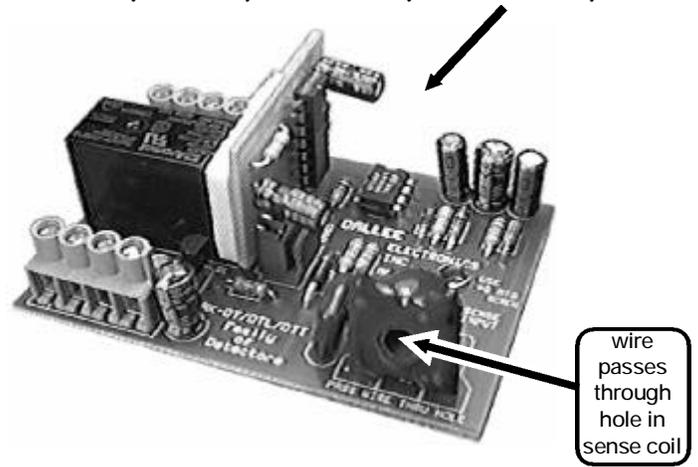
The TRAK-DTL is a variation of our current detection (TRAK-DT) that includes a latching circuit to hold the relay position. As a result of this latching circuit, each time current flow is sensed by the detection coil, the TRAK-DTL changes the state of its relay. When current ceases to flow for a few seconds, the TRAK-DTL is then ready for the next sense of current flow to change the state of its relay. This event is repeated again after a few seconds of no current flow occurs.

Since the relay has double pole, double throw (DPDT) contacts it can be wired as a polarity reversing switch. This allows the TRAK-DTL to be used to automate reversing loops or to provide a continuous "back and forth" operation on a single track such as for a trolley car or on a work bench, utilizing DC track power. When using carrier control you would reverse the track power of the reverse loop by setting up a section of track, say 1/3 of the loop, to pass through the sense coil. This way when the engine enters the "sensed section" the loops power would immediately reverse but the TRAK-DTL will continue to sense current flow until the entire engine clears the section of track. The reason for 1/3 the loop is so that if the caboose has lights, and no other cars, you want the caboose to enter the "sensed section" before the engine leaves. This way you would not re-trigger the TRAK-DTL causing a double reverse.

The TRAK-DTL can also be used to set up sequential functions by having the relay enable other devices when activated and disable these devices when relaxed. A typical way of forcing block or timed stops is to merely turn on a ballast lamp while passing the lamp power through the other detectors sense coils. All kinds of automation and wiring can be done with the TRAK-DT family with simple wiring of the logic you want your trains to do!

In order for the electronics to function properly it is essential that a "regulated" power supply of 12 VDC be employed. This 12 VDC power is only for the electronics and has absolutely nothing to do with track power. Failure to use a "regulated" 12 VDC can cause erratic functioning or actual destruction of the TRAK-DTL.

The wiring diagram shows installation of the 12VPS (369) and TRAK-DTL (366). NO SOLDERING is required to these units. Strip wires 1/4" back, place in appropriate hole, run screw down to clamp in place. When routing the sense wire (the wire that connects to each end after the GAP) through the sense coil DO NOT strip the insulation! The ac power feeding the 12VPS can be anywhere from 14 to 20 volts AC with at least 4VA. If you would like to add timed stops at the ends you need to purchase the TRAK-DTT (Item #565) and a ballast lamp assembly (Item #538). Various wiring diagrams utilizing DALLEE ELECTRONICS components are shown in our MODEL RAILROADERS WIRING GUIDE. If you would like to do a multitude of things this is a good wiring reference booklet to have.



DALLEE
ELECTRONICS, Inc.

246 W. Main St.
Leola, PA 17540
(717) 661-7041

