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***Lionel***  
***O-42 Remote-Control***  
***Switch***  
***Owner's Manual***

**C**ongratulations on your purchase of the Lionel O-42 Remote-Control Switch! This non-derailing switch features an illuminated controller and switch motor.

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## Using your 0-42 switch on your layout

**W**ith the addition of track switches, you can vary the route taken by your trains. For example, you can maneuver your train into a different loop or divert it to a siding. See Figure 1 for examples.

Keep in mind that most layouts use right- and left-hand switches together so that the trains can get back to the mainline without backing up. Refer to the first two layouts shown in Figure 1.

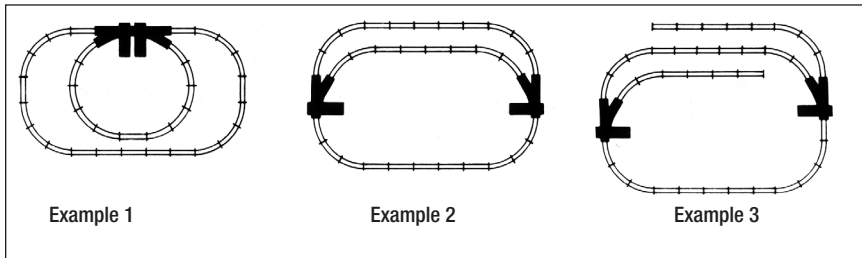


Figure 1. Layout examples

## Installing the switch

**J**oin the track sections together by inserting the track pins into the openings at the end of the switch rails. For good electrical contact, pins must be completely inserted so that the track joints are tightly fitted together.

If you find that the switch insulator pins interfere with the pins in the regular track sections, carefully remove the track pins with a pair of pliers. Leave the switch insulator pins in place.

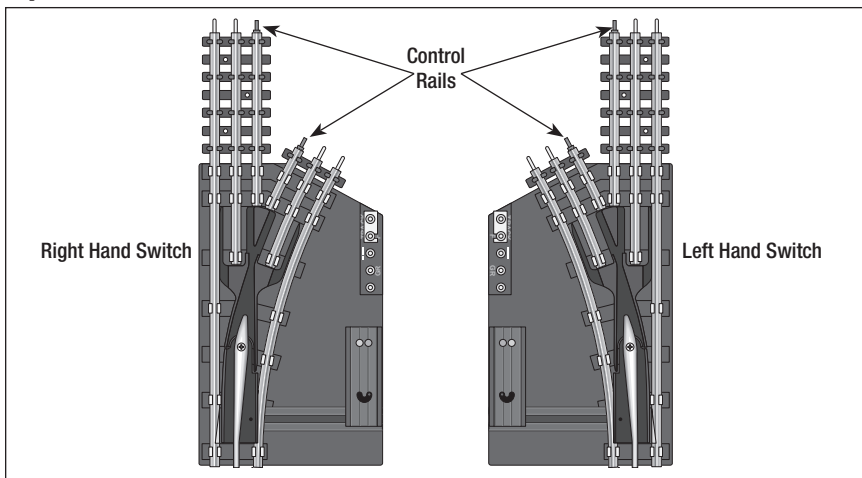


Figure 2. Location of steel and insulator pins

# Powering the switch

It is recommended that switches be operated via the voltage tap, although direct track voltage may also be used. You new switch can easily be charged from fixed to track voltage.

As shown in Figure 3, the switches may be operated via track voltage using the same connection for Right Hand and Left hand switches. Leaving the metal shorting bar (bridge) in place allows the switch to operate on the same voltage as the train. However, please remember that powering the switch with track voltage is the second recommended mode of operation (fixed voltage preferable).

Figure 4 illustrates the connection for fixed voltage operation. The shorting bar merely pivots away from the F terminal and is secured there while current is brought to the fixed voltage post. Connect a fixed voltage transformer tap (12 volts AC to 18 volts AC) to the F switch terminal; secure it well. Also, be certain that the fixed voltage tap you are using has the same ground reference as the running voltage for the train. If not, tie the two grounds together either at the transformer or at the track.

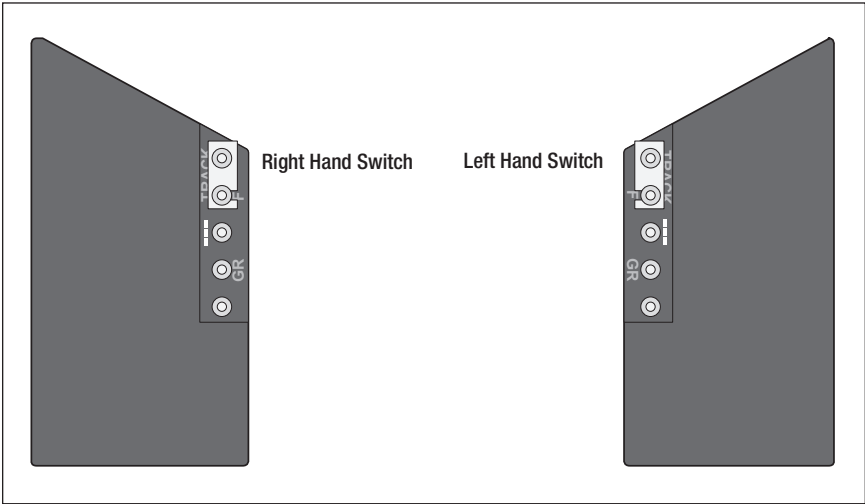


Figure 3. Shorting bar position for track voltage operation

## Powering the switch (continued)

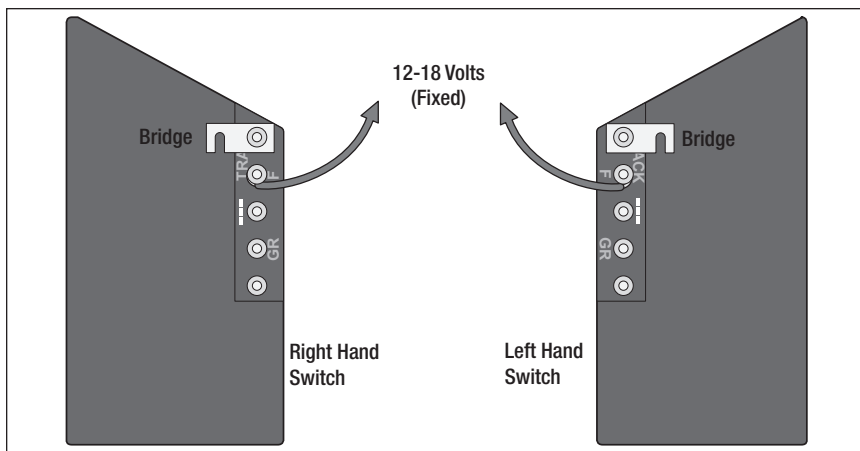


Figure 4. Transformer connection for fixed voltage operation

**Note!** The forward terminal of each switch can be used to deliver power to the layout as it is connected directly to the center rail of the switch. If the shorting bar/bridge is secured to both terminals and voltage is brought from the transformer to terminal F, the switch and the track will be powered simultaneously. This method of wiring, therefore, can provide an additional track lockon.

## Installing the controller

Your switch is thrown by a controller. Three wires connect the controller to the switch. To attach the controller, simply connect the wire with the dashed lines to posts with the dashed lines. Connect the remaining two wires to the next two posts, and turn on the power. See Figure 5.

Once the controller is attached, you will need to be certain that the indicator lights on the controller illuminate properly. Power up the track or turn on the power supply, and throw the switch lever on the controller.

- If the train will travel in a straight path, the green light should illuminate.
- If the train will travel on the curved path, the red light should illuminate.

If the lights do not operate in this manner, swap the position of the outside controller wires at the switch. When properly adjusted, the lights on the controller will indicate the position of the switch and the direction that the train will take.

**Note!** Switch controllers are not interchangeable. The bottom of each switch controller is marked either RH or LH and must be paired with the correct RH or LH switch to ensure proper operation.

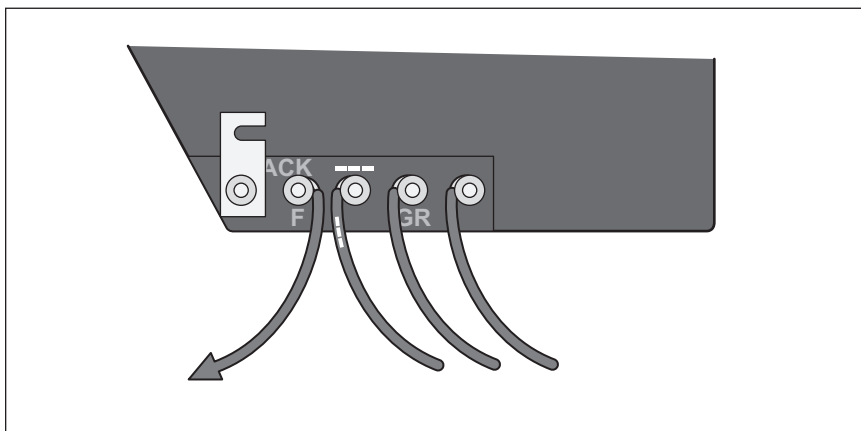


Figure 5. Connecting the switch to controllers

## **Passing through a switch in the wrong direction**

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**Y**our switch is equipped with a “non-derailing” feature. When a train enters the “closed” branch of the switch, the wheels and axles complete an electrical circuit that causes the control arm to swing open. This feature allows your trains to pass through without a problem.

**Note!** Be sure to keep the insulating pins in the switch rails for this feature to function properly.

## Limited Warranty/Lionel Service

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**T**his Lionel product, including all mechanical and electrical components, moving parts, motors and structural components, except for light bulbs, is warranted to the original consumer-purchaser, for **one year** against original defects in materials or workmanship when purchased through an authorized Lionel merchant.

This warranty does NOT cover normal wear and tear, light bulbs, defects appearing in the course of commercial use, or damage resulting from abuse or misuse of the product by the purchaser. Transfer of this product by the original consumer-purchaser to another person voids this warranty. Modification of this product voids this warranty.

Any warranted product which is defective in original materials or workmanship and is delivered by the original consumer-purchaser to Lionel L.L.C. or an authorized Lionel L.L.C. Service Center, together with proof of original purchase will, at the option of Lionel L.L.C., be repaired or replaced, without charge for parts or labor. In the event the defective product cannot be repaired, and a replacement is not available, a refund of the original purchase price will be granted. Any products on which warranty service is sought must be sent freight or postage prepaid, as transportation and shipping charges are not covered by the warranty.

### **In no event shall Lionel L.L.C. be liable for incidental or consequential damages.**

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you.

This limited warranty gives you specific legal rights, and you may have other rights which vary from state to state.

### **Instructions for Obtaining Service**

If service for this Lionel L.L.C. product is required, bring the item, along with your dated sales receipt and completed warranty information to the nearest Authorized Lionel Service Center. Your nearest Lionel Service Center can be found by calling 1-800-4-Lionel, or by accessing our Website at [www.lionel.com](http://www.lionel.com).

If you prefer to send your product back to Lionel L.L.C. for repair in Michigan, you must first call 586-949-4100 or FAX 586-949-5429, or write to Customer Service, P.O. Box 748, New Baltimore, MI 48047-0748, stating what the item is, when it was purchased and what seems to be the problem. You will be sent a return authorization letter and label to ensure your merchandise will be properly handled upon receipt.

Once you have received your return authorization and label, make sure that the item is packed to prevent damage during shipping and handling. We suggest that you use the product's original packaging. This shipment must be prepaid and we recommend that it be insured.

Please make sure you have followed all of the above instructions carefully before returning any merchandise for service. You may choose to have your product repaired by one of our Authorized Lionel Service Centers after its warranty has expired. A reasonable service fee will be charged.

### **Warranty Information**

Please complete the information below and keep it, along with your dated sales receipt. You must present this and your dated sales receipt when requesting warranty service.

Name \_\_\_\_\_

Address \_\_\_\_\_

Place of Purchase \_\_\_\_\_

Date of Purchase \_\_\_\_\_

Product Number \_\_\_\_\_



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