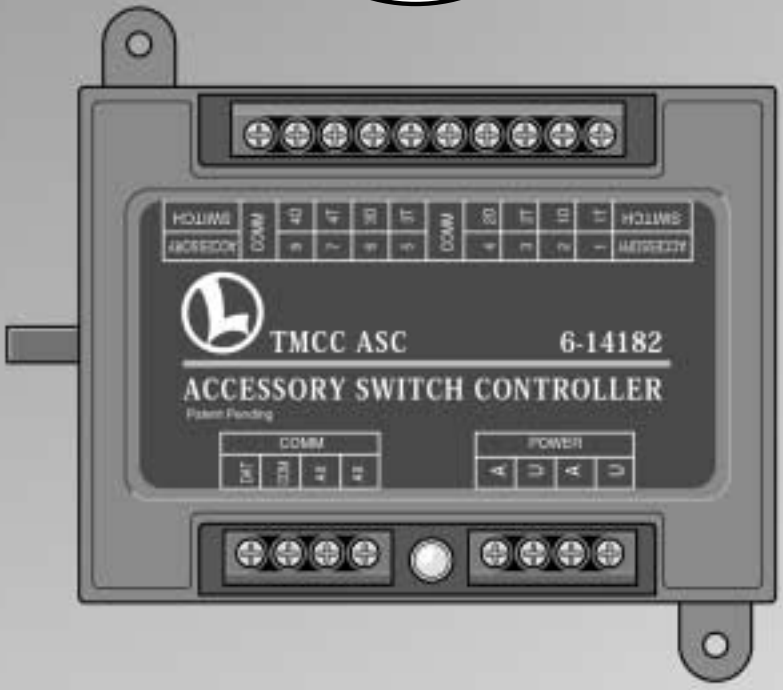
71-4182-250
12/02



TMCC Accessory Switch Controller (ASC)

Congratulations

Congratulations on your purchase of the TMCC Accessory Switch Controller (ASC)! The incredible ASC unit replaces the switch and accessory ON/OFF toggle switches, controlling up to eight accessories or four track switches. Responding to commands from your CAB-1 Remote Controller, the ASC eliminates the need for separate control buttons to activate your switches or accessories. Experience the superiority of the Lionel TrainMaster Command Control system!

Note! Use your ASC as a switch controller **OR** an accessory controller. The ASC will not control switches and accessories at the same time.

Table of Contents

Wiring Your Accessory Switch Controller

Powering the Accessory Switch Controller

Use a separate accessory power supply to power your ASC and be sure to set the transformer to 12-18 volts (AC). Figure 1 illustrates the location of the POWER terminals. Follow these steps and refer to Figure 1 as you connect your power supply to your ASC unit.

Note! Keep in mind that the ASC does not supply power to the accessories; this device simply acts as an ON/OFF switch.

Hint! Color code all of the A and U power wires throughout your layout.

1. **Attach one wire to the Common/Ground/U terminal of your transformer and connect it to the POWER U terminal on the ASC unit.**

Note! Do not connect this terminal to the outside rail.

2. **Attach another wire to the Power/A terminal of your transformer and connect it to the POWER A terminal on the ASC unit.**

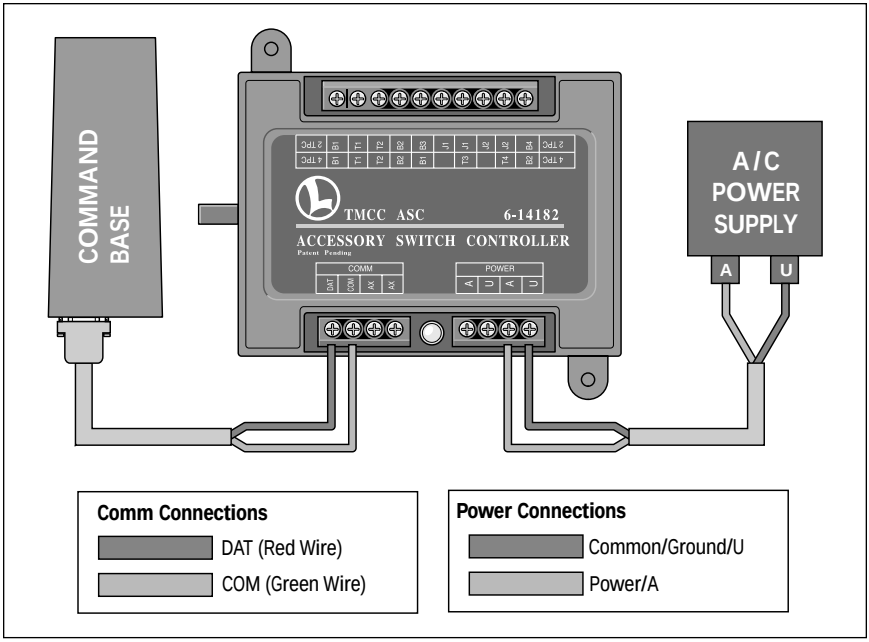


Figure 1. Power and COMM connections

Wiring Your Accessory Switch Controller

Connecting the COMM wires

To receive your commands, the ASC will need to communicate with the Command Base. Messages from the Command Base are sent through the Command Base Cable (available separately, 6-14191 for a 6' cable or 6-14195 for a 20' cable). Follow these steps and refer to Figure 1 on page 3 to connect your ASC unit to the Command Base with the cable.

Note! Your ASC is equipped with two additional COM terminals, AX + and AX-. These are intended for future capabilities. At this time, leave these terminals empty. Do not connect DAT and COMM wires to the AX+ and AX- terminals.

1. **Connect the DB9 Connector at the end of the Command Base Cable (the end that looks like a computer cable) to the COMPUTER terminal on the Command Base.**
2. **Connect the red wire at the other end of the Command Base Cable to the DAT terminal on the ASC.**
3. **Connect the green wire to the COM terminal on the ASC.**

Connecting additional TMCC products in a "daisy chain"

You may choose to power additional TMCC products using the same power supply and Command Base by creating a "daisy chain," or a series of TMCC units wired in succession. In fact, you may choose to connect up to 13 ASC units, bringing up to 100 accessories or 100 switches under your command! Refer to Figure 2 on page 5 and follow these steps to connect the ASC to the next TMCC product.

LED When in a daisy chain, the L.E.D. on the ASC will flash for a tenth of a second to indicate that the ASC is receiving commands for another TMCC product. The L.E.D. will stay on for half of a second to indicate that the ASC has received a command with an address it controls.

Wiring Your Accessory Switch Controller

Connecting additional TMCC products in a "daisy chain" (continued)

Power connections for additional units

1. **Attach a white wire to the additional Power U terminal on the ASC unit and connect it to the Power U terminal on another product.**
2. **Attach a black wire to the additional Power A terminal on the ASC unit and connect it to the Power A unit on another product.**
3. **Add additional products in the same manner, connecting the Power U terminals and the Power A terminals.**

COMM connections for additional units

1. **Attach the red wire to the DAT terminal of the ASC unit and connect it to the DAT terminal of the next TMCC product.**
2. **Attach the green wire to the COM terminal of your ASC unit and connect it to the COM terminal of the next product.**
3. **Add additional products in the same manner, connecting the DAT terminals and the COM terminals.**

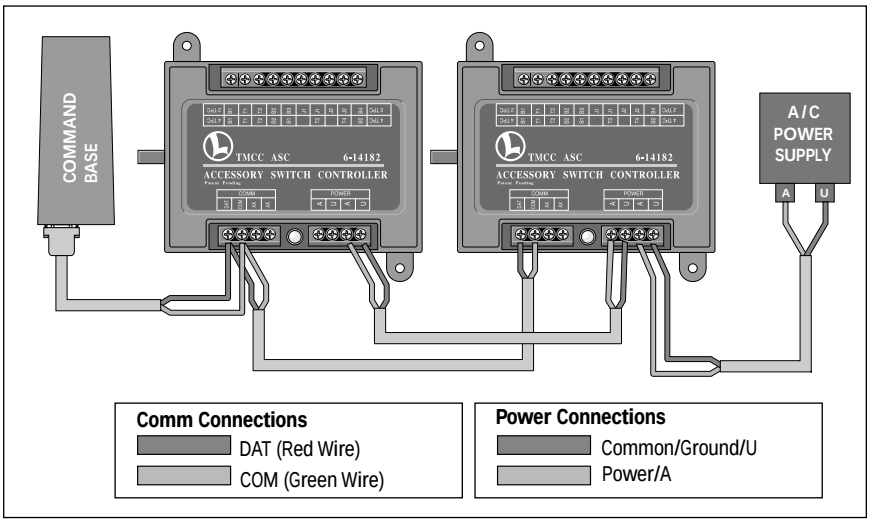


Figure 2. Connecting additional TMCC products in a "daisy chain"

Using Your Accessory Switch Controller To Operate Accessories

Connecting your accessories to the ASC unit

The Accessory Switch Controller is capable of controlling up to eight accessories at a time. Wire the accessories to the terminals on the back of the ASC unit. Refer to Figure 3 and follow these steps as you connect your accessories.

Note! Keep in mind that the ASC does not supply power to the accessories; this device simply acts as an ON/OFF switch.

1. **Attach one wire to the Power/A terminal on your power supply and connect it to the COMM terminal of the ASC.**
2. **Attach another wire to the Common/Ground/U terminal on the power supply and connect to an accessory power terminal.**
3. **Attach a final wire to the remaining accessory power terminal and connect it to a numbered terminal on the ASC.**
   In Figure 3, the accessory is wired to the #3 terminal.

Note! Step 3 is not necessary when wiring Uncoupling or Operating Track.

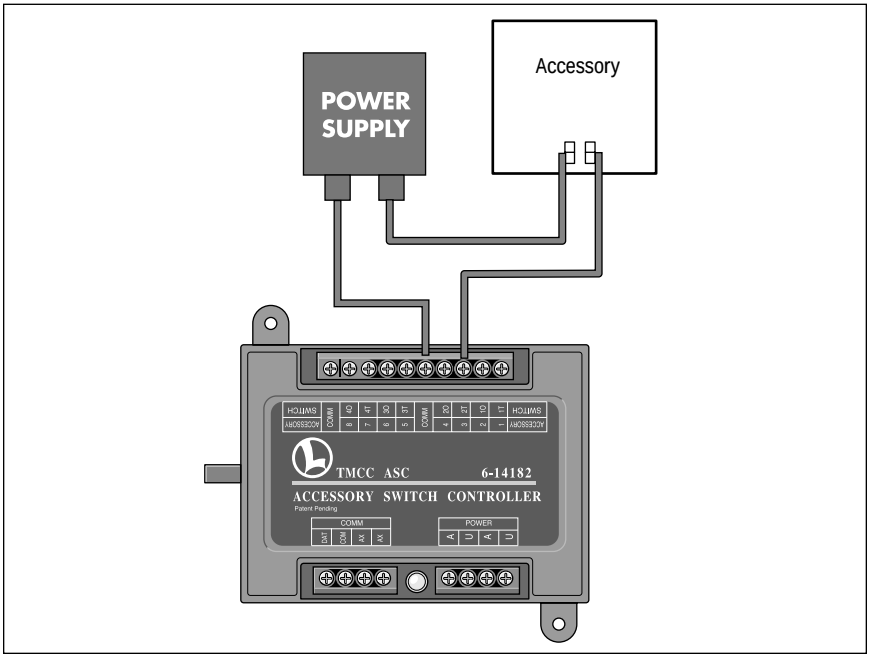


Figure 3. Example of accessory wiring

Using Your Accessory Switch Controller To Operate Accessories

Wiring multiple motors or lights on the same accessory

It is possible to use the ASC unit to operate more than one function on a single accessory. For example, you could operate two motors independently of each other. Follow these steps and refer to Figure 4.

Note! The ASC will control accessory motors that operate in one direction only.

1. **Attach one wire to the first motor and connect it to a numbered accessory terminal.**
2. **Attach another wire to the second motor and connect it to a numbered accessory terminal.**
3. **Connect the remaining accessory wire to the Common/Ground/U terminal of the transformer.**
4. **Attach a final wire to the Power/A terminal of the transformer and connect it to the COMM terminal on the ASC unit.**

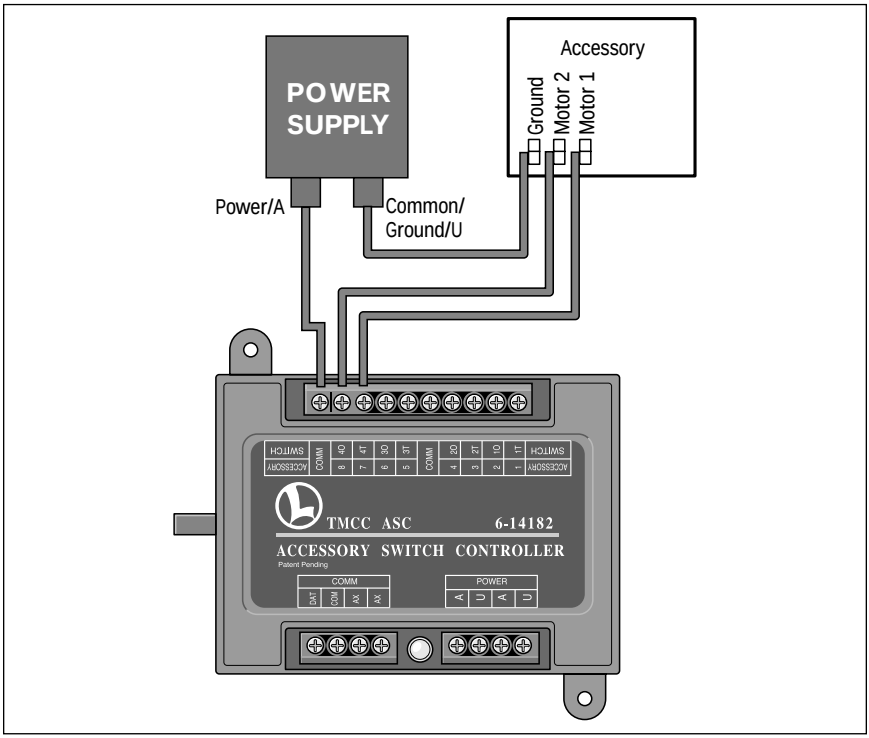


Figure 4. General wiring for accessories with multiple motors or lights

Using Your Accessory Switch Controller To Operate Accessories

Setting the accessory ID#'s

Your ASC unit will automatically assign a consecutive block of eight ID#s to the accessory outputs. The ID# blocks are 1-8, 9-16, 17-24, 25-32, and so on. Choosing any number in a block of ID#s will cause the ASC to begin with the first number in that particular ID# block.

Examples:

- If you enter ID# 11, the eight accessory ID#s will automatically be 9 through 16.
- If you enter ID# 25, the eight accessory ID#s will automatically be 25 through 32.

Note! The accessories do not have to be wired to the ASC unit to assign numbers to the terminals.

If you have multiple ASC units to control more accessories, assign the first unit ID# 1-8, the second unit 9-16, and so on.

1. **Remove the RUN/PROGRAM JUMPER on the side of the ASC unit.**
   Pull the small black connector from the terminal at the side of the ASC unit. Refer to Figure 5 for the location of the jumper.
2. **Press the ACC button on your CAB-1 Remote Controller.**
3. **Enter the ID# (1, 9, 17, etc.) on the CAB-1 Remote Controller numeric keypad.**
   Keep in mind that you are essentially assigning only the first ID# of the eight accessories wired to the ASC. If you set ID# 1, you have set the eight terminals as numbers 1 through 8.
4. **Press SET on your CAB-1 Remote Controller.**

LED The L.E.D. illuminates for one second.

5. **Replace the RUN/PROGRAM JUMPER at the side of the ASC unit.**

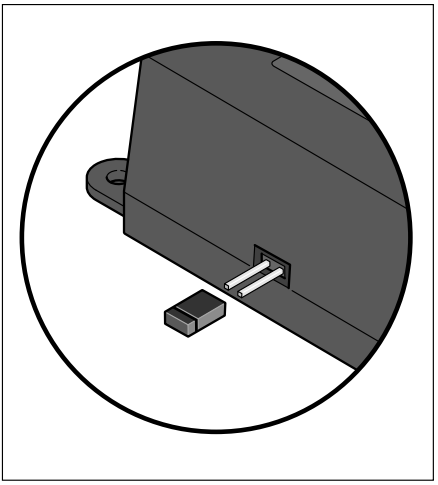


Figure 5. Jumper location

Using Your Accessory Switch Controller To Operate Accessories

Controlling the accessories wired to the ASC unit

To address your accessory, press ACC and the ID# on the CAB-1 Remote Controller. Be sure to enter the specific ID# of the ASC terminal that the accessory was wired to. For example, if you would like to operate the accessory wired to the third accessory terminal of an ASC unit that was set as ID# 1, you need the address ID# 3, which was automatically assigned. Refer to Figure 6 on page 10 for an example.

To momentarily trigger the accessory, press AUX1. Press and hold AUX1 to keep the accessory on. The accessory is turned off when you release the AUX1 button.

To toggle the accessory on to supply continuous power (like holding the trigger button down), press AUX2 on the CAB-1 Remote Controller. To turn off the accessory, press AUX2 again.

LED The L.E.D. illuminates for one half of a second to indicate that the ASC has received a command.

Note! Pushing the HALT button (the red triangle) on your CAB-1 Remote Controller will immediately turn off all outputs on the ASC. Each output can be turned on again after the HALT button has been released. Use the HALT button only in *emergency* situations.

Using Your Accessory Switch Controller To Operate Accessories

Accessory examples

Wiring and operating the Floodlight Tower

Refer to Figure 6 below to wire the Floodlight Tower (available separately) to output number 3.

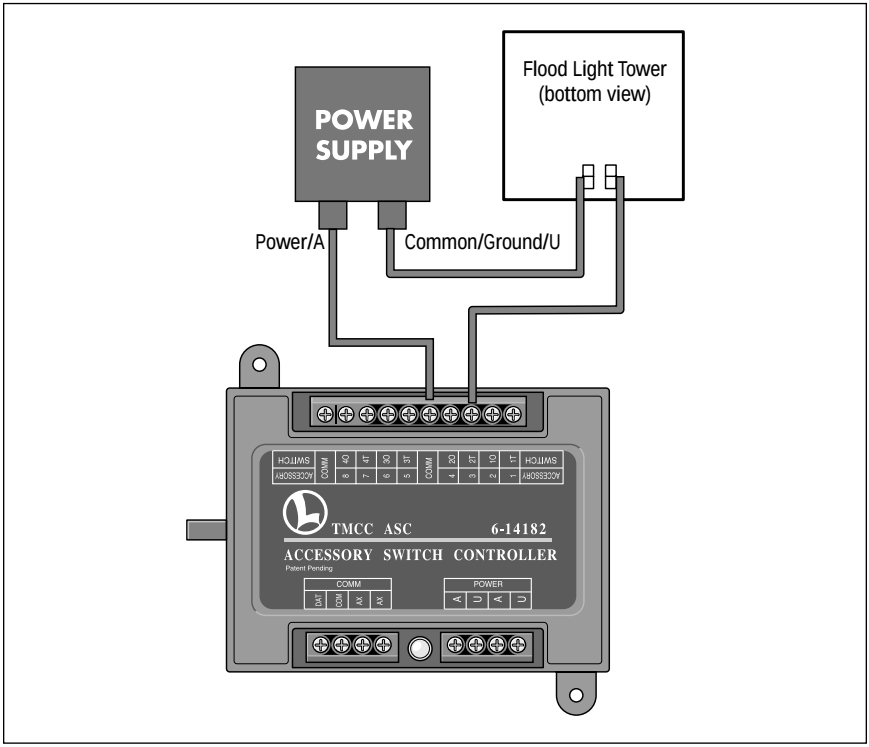


Figure 6. Floodlight Tower wiring

Follow these steps to operate the Search Lamp.

1. **Press ACC on the CAB-1 Remote Controller.**
2. **Press 3 on the CAB-1 to address the accessory.**
3. **Press AUX2 to turn on the lamps.**
4. **Press AUX2 again to turn them off.**

Using Your Accessory Switch Controller To Operate Accessories

Accessory examples (continued)

Wiring and operating the Sawmill

Refer to Figure 7 below to wire the Sawmill (available separately) as accessory number 2.

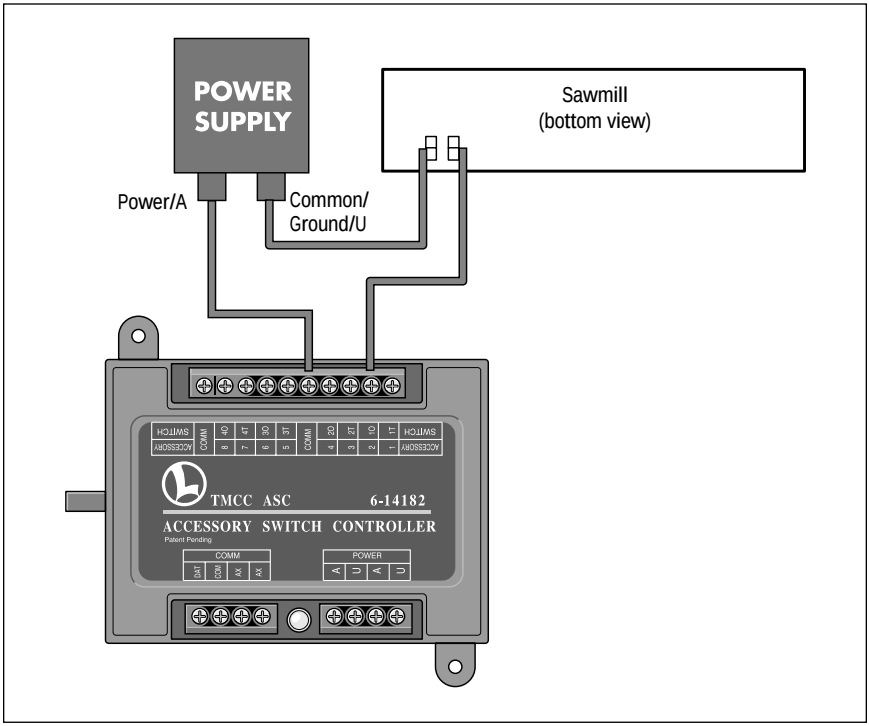


Figure 7. Sawmill wiring

Follow these steps to operate the Sawmill.

1. **Press ACC on the CAB-1 Remote Controller.**
2. **Press 2 on the CAB-1 to address the accessory.**
3. **Press and hold AUX1 on the CAB-1 to turn on the Sawmill. Release the button to turn off the sawmill.**

Using Your Accessory Switch Controller To Operate Accessories

Accessory examples (continued)

Wiring and operating Uncoupling Tracks using track power

Refer to Figure 8 below to wire an Uncoupling Track section (available separately, part no. 6-65530) as accessory number 2.

Caution! To prevent damage to your Uncoupling Track, do not use AUX2 or hold AUX1 for more than a few seconds at a time.

Note! The Operating Track Controller is perfect for controlling Uncoupling Track.

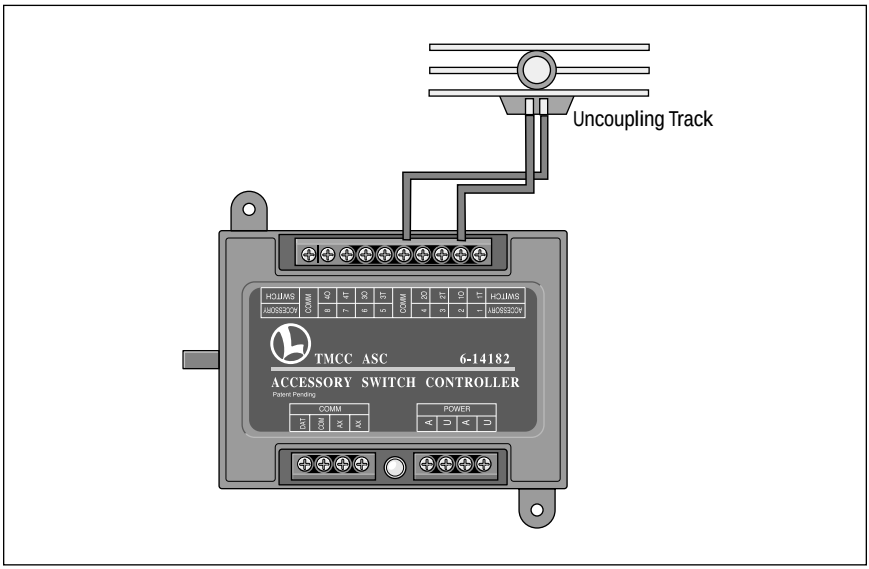


Figure 8. Uncoupling Track wiring

Follow these steps to operate the Uncoupling Track section.

1. **Press ACC on the CAB-1 Remote Controller.**
2. **Press 2 on the CAB-1 to address the accessory.**
3. **Press and hold AUX1 to activate the magnetic uncoupling disk. Release the AUX1 button once you have uncoupled the rolling stock.**

Caution! Holding AUX1 for too long could overheat and melt the Uncoupling Track.

Using Your Accessory Switch Controller To Operate Accessories

Accessory examples (continued)

Wiring and operating Uncoupling Tracks using fixed voltage

Refer to Figure 9 below to wire an Uncoupling Track section (available separately, part no. 6-65530) as accessory number 2.

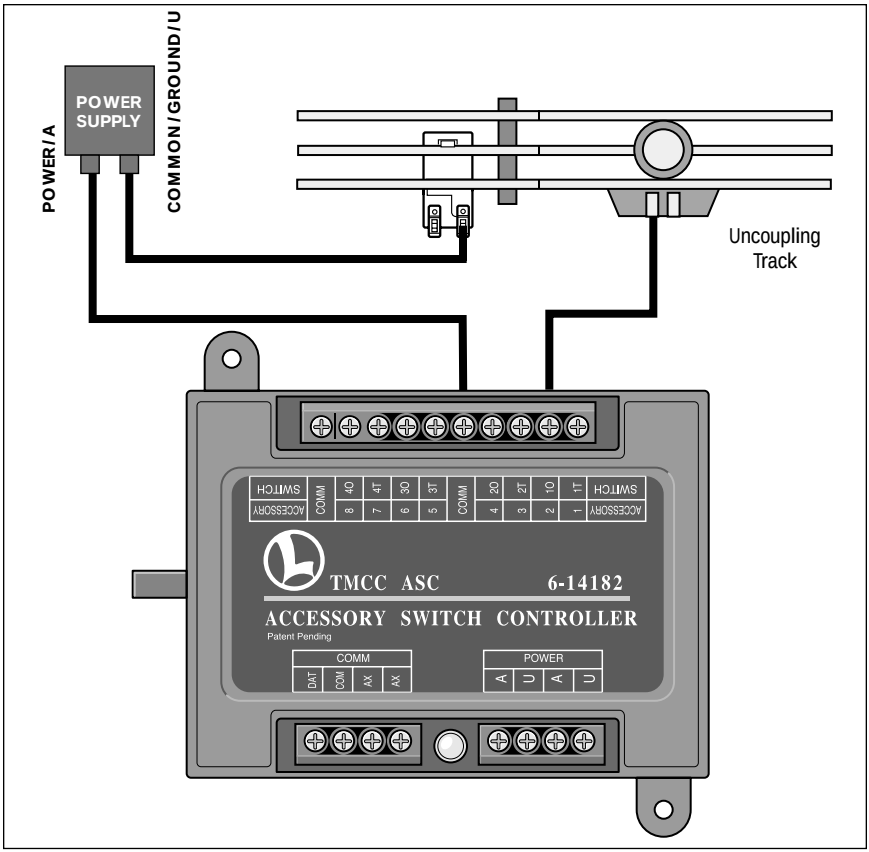


Figure 9. Uncoupling Track wiring using fixed voltage

Follow these steps to operate the Uncoupling Track section.

1. **Press ACC on the CAB-1 Remote Controller.**
2. **Press 2 on the CAB-1 to address the accessory.**
3. **Press and hold AUX1 to activate the magnetic uncoupling disk. Release the AUX1 button once you have uncoupled the rolling stock.**

Using Your Accessory Switch Controller To Operate Accessories

Accessory examples (continued)

Wiring and operating the Diesel Fueling Station

The Diesel Fueling Station requires two ASC outputs and accessory ID#s. Refer to Figure 10 below to wire the Diesel Fueling Station (available separately) to output numbers 7 and 8.

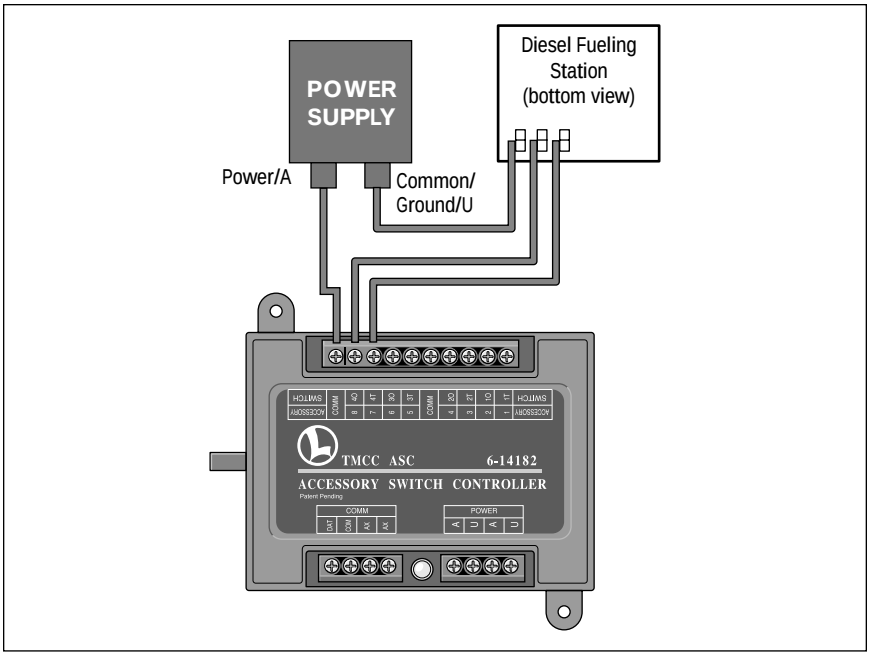


Figure 10. Diesel Fueling Station wiring

Follow these steps to operate the Diesel Fueling Station.

1. **Press ACC on the CAB-1 Remote Controller.**
2. **Press 7 on the CAB-1 to address the accessory.**
3. **Press AUX2 to turn on the lamps.**
4. **Press AUX2 again to turn them off.**
5. **Press ACC on the CAB-1.**
6. **Press 8 on the CAB-1.**
7. **Press and hold AUX1 and the attendant will come out for as long as you hold the button down.**

Using Your Accessory Switch Controller To Operate Accessories

Accessory examples (continued)

Wiring and operating individual blocks of track

Each block of track is given an accessory ID#. Refer to Figure 11 below to wire the blocks to output numbers 1-4.

Note! The Block Power Controller (available separately, part no. 6-14184) is perfect for controlling and routing track power.

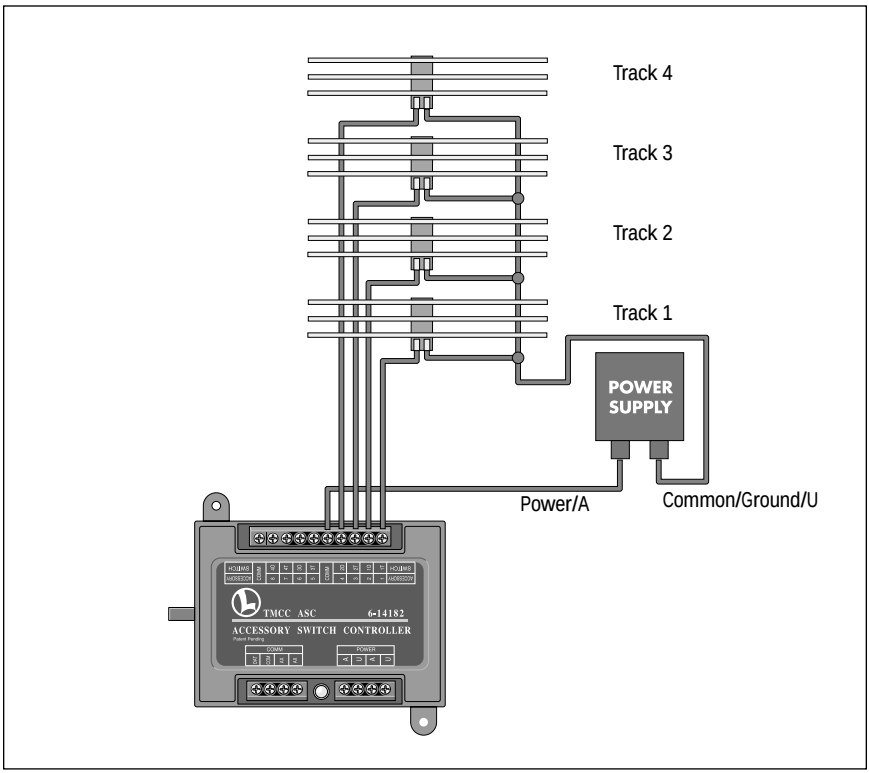


Figure 11. Wiring blocks of track in conventional mode

Follow these steps to activate the blocks of track.

1. **Press ACC on the CAB-1 Remote Controller.**
2. **Press track ID# on the CAB-1 to address the block of track.**
3. **Press AUX2 to turn on the block of track.**
4. **Press AUX2 to turn off the block of track.**

Using Your Accessory Switch Controller To Operate Switches

Connecting your switches to the ASC unit

The Accessory Switch Controller is capable of controlling up to four remote switches at a time. Note that the ASC unit does not supply power to the switches; it simply opens or closes them.

Note! Track power must be ON when operating O-27 switches, or refer to the following section to connect the switch to a fixed voltage power supply.

Wire the switches to the terminals on the back of the ASC unit. Each switch requires three connections: THROUGH, OUT, and COMMON. The switch terminals at the top of the ASC unit will accommodate each of these connections. The first switch is connected to the terminals labeled 1 T (THROUGH), 1 O (OUT), and COMM; the second switch is connected to the terminals labeled 2 T (THROUGH), 2 O (OUT), COMM; and so on. Refer to Figure 12 on page 17.

Note! THROUGH indicates that the train will travel straight. OUT indicates that the train will follow the curved section in the switch.

1. **Attach a wire to the THROUGH (straight path) terminal on the first switch and connect it to the 1 T terminal on the ASC unit.**
2. **Attach another wire to the OUT (curved path) terminal on the first switch and connect it to the 1 O terminal on the ASC unit.**
3. **Attach the final wire to the COMMON terminal on the first switch and connect it to the COMM terminal to the right of the 1T and 1O terminals on the ASC unit. Refer to Table 1 when locating the common terminals**

LTI O gauge switches #3010 and #3011:	#2 terminal on the side
Postwar 022 and MPC O gauge #5132 and #5133:	center terminal
Super O switches:	single post closest to the motor
027 and 042 #1122, #1122e, #5121, and #5122:	terminal closest to the motor

Table 1. Common terminal locations

4. **Repeat this process for any additional switches, filling the empty switch terminals on the ASC in the same way.**

Note! Refer to page 23 and set the ASC to supply momentary power. Constant power will damage the switches.

Using Your Accessory Switch Controller To Operate Switches

Connecting your switches to the ASC unit (continued)

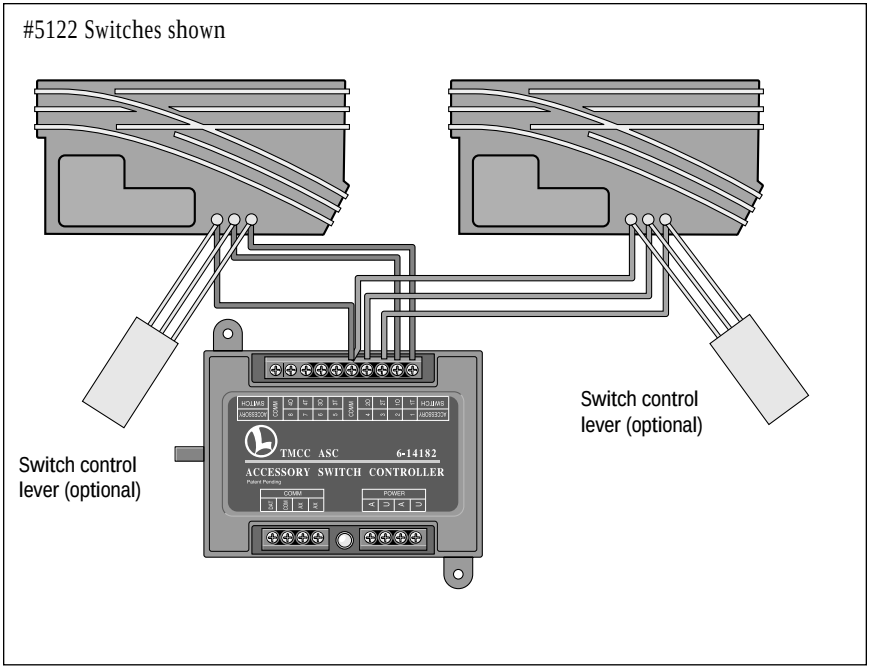


Figure 12. Example of coil switch wiring

Using Your Accessory Switch Controller To Operate Switches

Connecting your switches to the ASC unit (continued)

Modifying O-27 switches for use with a fixed voltage power supply

O -27 type switches receive their power from variable track voltage. In order to operate this type of switch with a fixed voltage power sources, you need to make the following modifications.

First, take the top cover off of the switch by removing the screw. This will expose the double coils. Next, find the two wires that are located at the center of the two coils. These wires are contained inside one piece of insulation. Gently pull on the insulation to expose the wires. Now, clip the two wires about 1/2″ from the coils. Using electrical tape, wrap the wire ends that come up from the bottom of the switch. Use the heat from your soldering iron to remove 1/4″ of the varnish insulation from the remaining wires, then twist the wires together. Using your soldering iron, put a small amount of solder on the ends of these wires and solder a jumper wire to them. Wrap this connection with electrical tape to keep it from coming in contact with the coil housing.

Before you replace the switch cover, you may need to cut a notch (using a hobby knife) for the wire to come through. You may also route the wire through the holes used to vent any heat generated by the coils on top of the cover. Replace the cover on the switch, then attach the jumper wire to a fixed voltage power source.

You will need to attach a ground wire from this separate power source to the outside rail of your track, or you can attach this ground wire to the "U" post on the power supply. Connect the switch as discussed in the previous section.

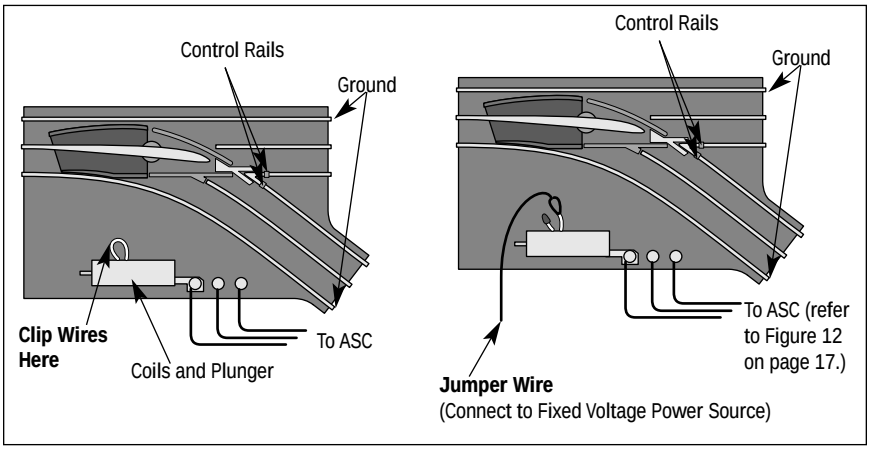


Figure 13. Wiring Lionel O-27 gauge switches

Using Your Accessory Switch Controller To Operate Switches

Connecting your switches to the ASC unit (continued)

Tortoise switch machines

The ASC is also capable of controlling Tortoise Switch Machines. Because this type of switch is powered by DC voltage, you must control the direction of the motor by using two diodes (available from Radio Shack, Diode 1N4001 #276-1101). Refer to Figure 14 as you wire your Tortoise Switch Machines.

Note! Refer to page 23 and set the ASC to supply constant power.

Note! If the switch operates in the opposite direction, simply reverse the 1O and 1T wires at the ASC.

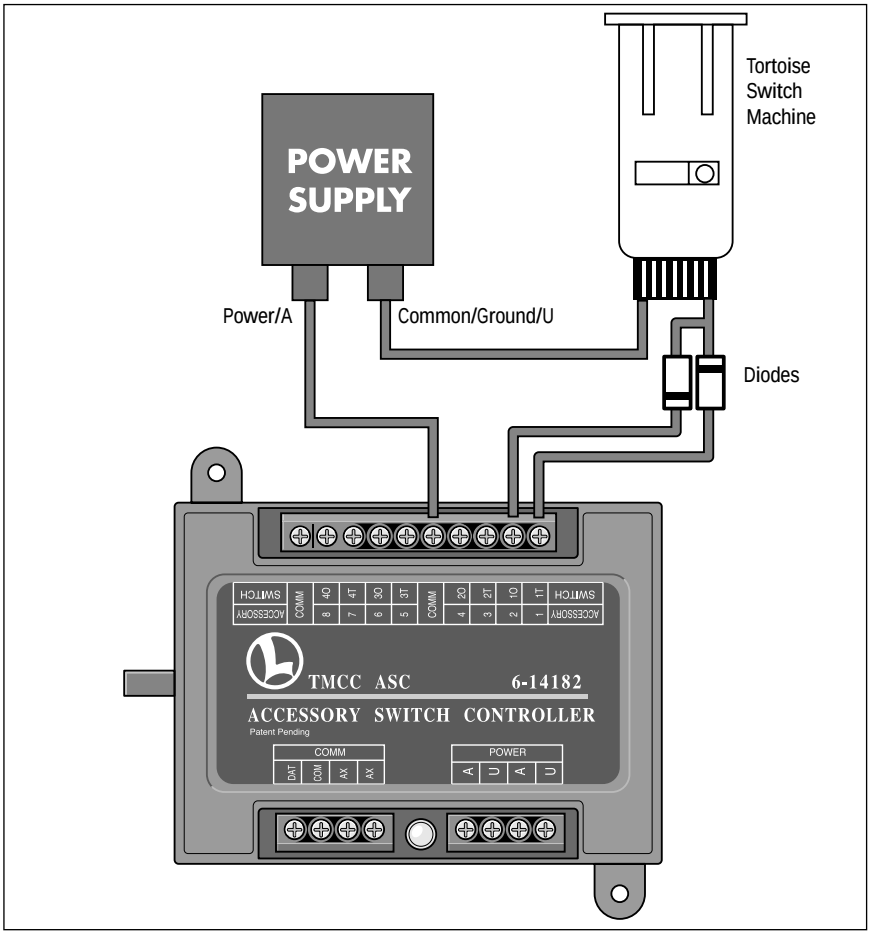


Figure 14. Tortoise switch wiring

Using Your Accessory Switch Controller To Operate Switches

Connecting your switches to the ASC unit (continued)

NJ Twin Coil Switch Machines

The ASC is cable of controlling NJ Twin Coil, Atlas, and other non-derailing switches. Simply connect both switch machine outputs to the ASC as illustrated in Figures 15 and 16. Note that the outside terminals are the THROUGH and OUT terminals. The COMM terminal is the middle terminal.

Note! Refer to page 23 and set the ASC to supply momentary power. Constant power will damage the switch.

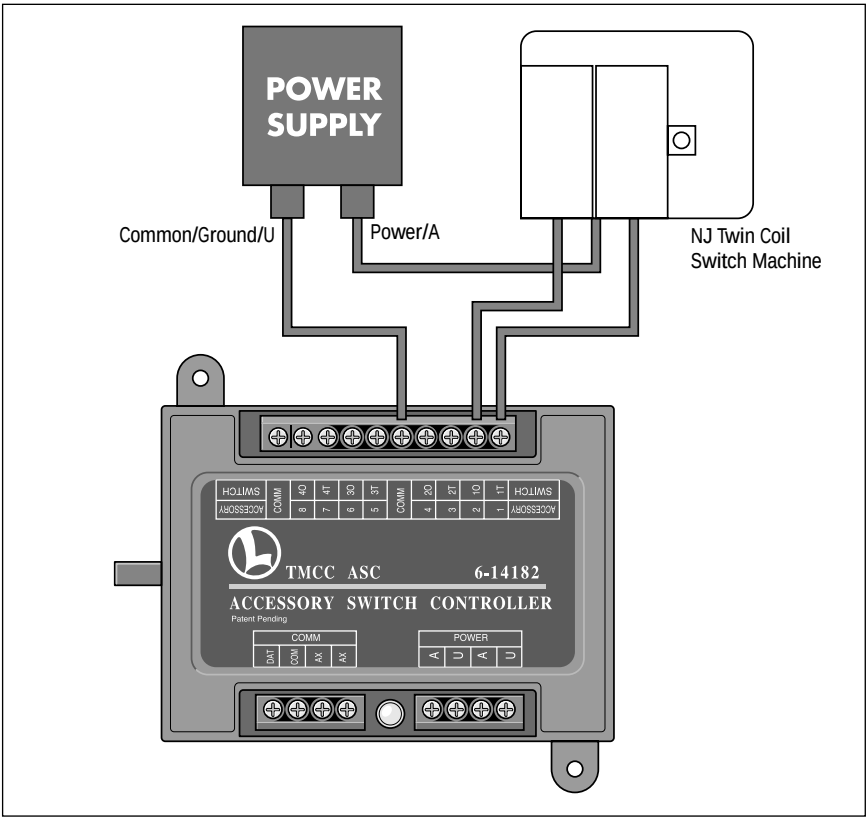


Figure 15. NJ Twin Coil Switch wiring

Using Your Accessory Switch Controller To Operate Switches

Connecting your switches to the ASC unit (continued)

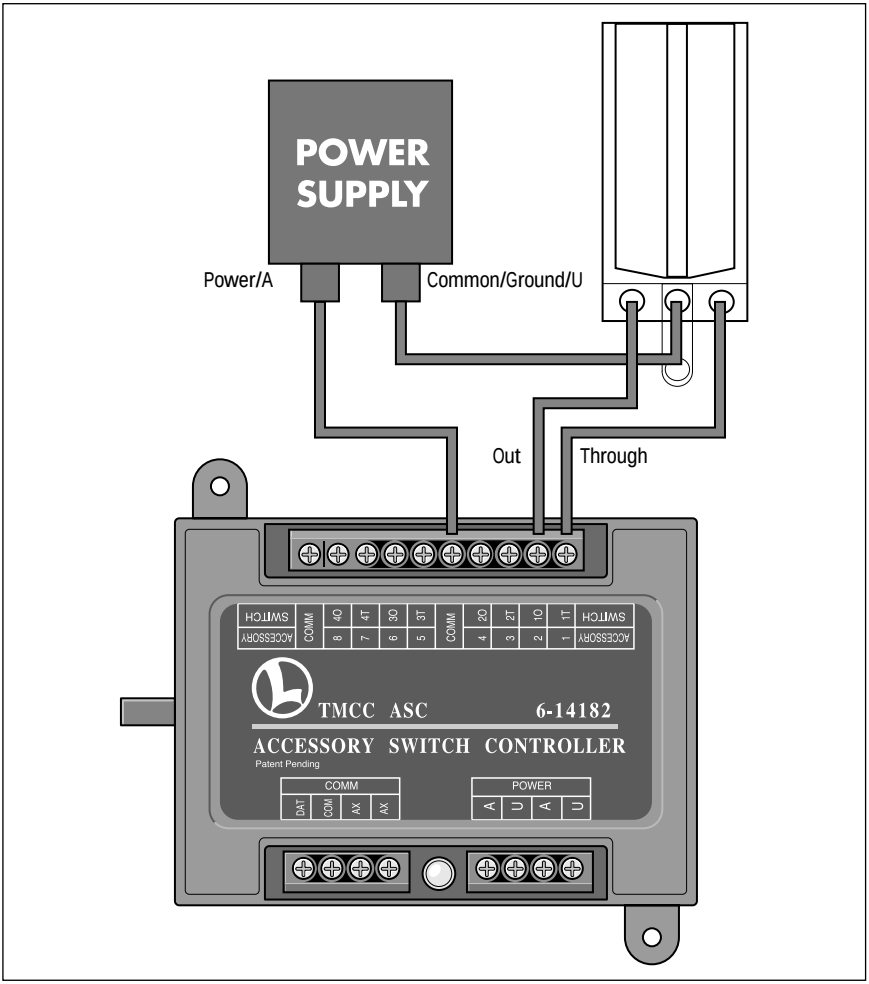


Figure 16. Atlas Switch wiring

Using Your Accessory Switch Controller To Operate Switches

Connecting your switches to the ASC unit (continued)

Use the ASC to control DZ-1000 switches. As illustrated in Figure 17, wire the switch and the switch controller to the outputs of the ASC. The THROUGH and OUT terminals are shared by both the switch and the switch controller.

Note! Refer to page 23 and set the switch to supply momentary power. Constant power will damage the switch.

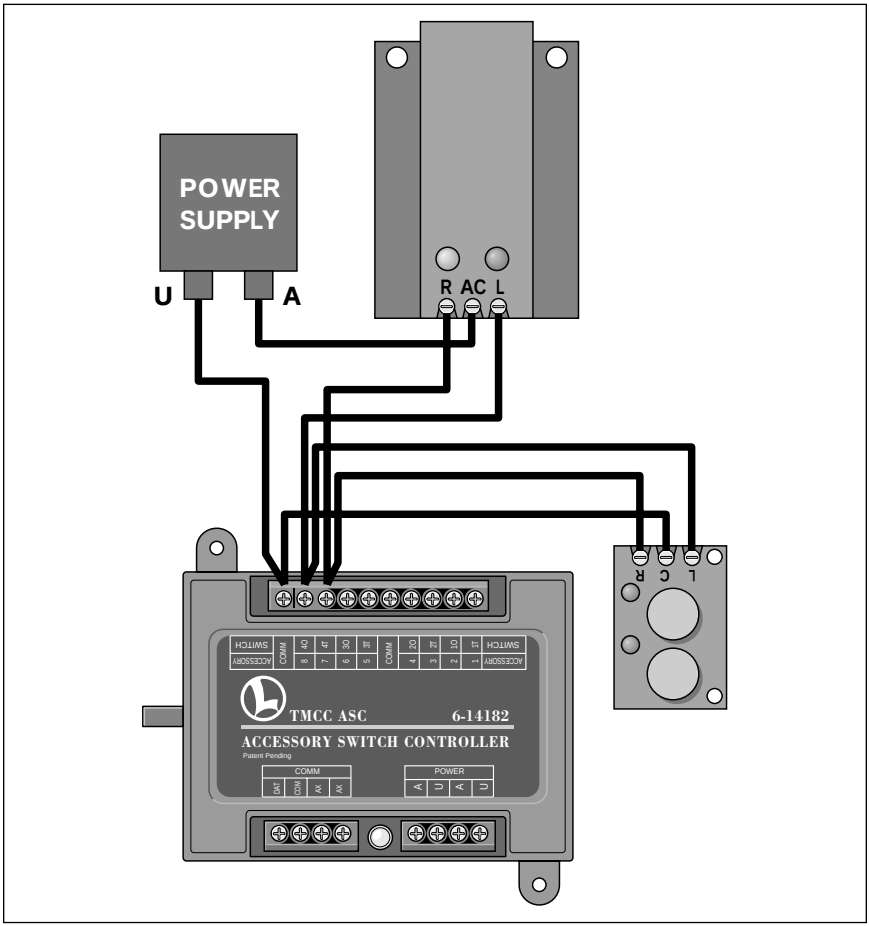


Figure 17. DZ-1000 Switch wiring

Using Your Accessory Switch Controller To Operate Switches

Setting the switch output type

The ASC is capable of supplying power to the switch momentarily or constantly. Momentary power is supplied for as long as you hold down the AUX1 or AUX2 buttons. Use this setting with all Lionel, Atlas, or NJ Twin Coil type switches.

Constant power is beneficial only to those who are controlling Tortoise switches or signal-controlled lighting where it is necessary for power to be on continuously.

To set the ASC to supply momentary power:

1. **Remove the jumper from the side of the ASC.**
   Refer to Figure 5 on page 9 for the location of the jumper.
2. **Press SW on the CAB-1.**
3. **Enter 98 into the numeric keypad.**
4. **Press SET on the CAB-1.**

LED The L.E.D. will illuminate for one second.

To set the ASC to supply constant power:

Caution! Do not use this setting for Lionel, Atlas, or NJ Twin Coil Switches. Constant power will cause damage to these coil-type switches.

1. **Remove the jumper from the side of the ASC.**
2. **Press SW on the CAB-1.**
3. **Enter 99 into the numeric keypad.**
4. **Press SET on the CAB-1.**

LED The L.E.D. will illuminate for one second.

Using Your Accessory Switch Controller To Operate Switches

Setting the switch ID#s

Your ASC unit will automatically assign a consecutive block of four ID#s to the accessory outputs. The ID# blocks are 1-4, 5-8, 9-12, 13-16, and so on. Choosing any number in a block of ID#s will cause the ASC to begin with the first number in that particular ID# block.

Examples:

- If you enter ID# 7, the eight accessory ID#s will automatically be 4 through 8.
- If you enter ID# 13, the eight accessory ID#s will automatically be 13 through 16.

Note! The terminals of the ASC unit were factory-assigned ID#s 1-4. You only need to change the ID#s if you do not want to address the switches by these ID#s.

If you have connected multiple ASC units to control more switches, assign the first unit ID#s 1-4, the second ASC unit ID#s 5-8, the third the ID# of 9-12, and so on.

Note! The switches do not have to be wired to the ASC unit to assign numbers to the terminals.

1. **Remove the RUN/PROGRAM JUMPER on the side of the ASC unit.**
   Pull the small black connector from the terminal at the side of the ASC unit. Refer to Figure 5 on page 9 for the location of the jumper.
2. **Press the SW button on your CAB-1 Remote Controller.**
3. **Enter the first ID# (1, 5, 9, etc.) for that unit and enter it with the CAB-1 Remote Controller numeric keypad.**

Again, keep in mind that you are essentially assigning only the first ID# of the four switches wired to the ASC. If you set a ID# of 1, you have set the four terminal groups as ID#s 1-4.

4. **Press SET on your CAB-1 Remote Controller.**

LED The L.E.D. illuminates for one second.

5. **Replace the RUN/PROGRAM JUMPER at the side of the ASC unit.**

Using Your Accessory Switch Controller To Operate Switches

Controlling the switches wired to the ASC unit

To address your switch, press SW and the ID# of the switch on the CAB-1 Remote Controller. Be sure to enter the specific ID# of the ASC terminals that the switch was wired to. For example, if you would like to operate the switch wired to the third group of terminals of an ASC unit (3T, 3O, and COMM), you need to press SW, 3 on your CAB-1 Remote Controller.

To set the switch to allow the train to continue on the straight path, press the THROUGH, or AUX1, button on your CAB-1 Remote Controller.

To set the switch to allow the train to turn on the curved path, press the OUT, or AUX2, button on your CAB-1 Remote Controller.

LED The L.E.D. illuminates for one half of a second to indicate that the ASC has received a command.

Note! Pushing the HALT button (the red triangle) on your CAB-1 Remote Controller will immediately turn off all outputs on the ASC. Each output can be turned on again after the HALT button has been released. Use the HALT button only in *emergency situations*.

Using Your Accessory Switch Controller To Operate Switches

Building Routes with the ASC unit

It is sometimes useful to develop set paths for your trains to travel on. For example, on many layouts, trains will travel over a series of switches when passing through a switching yard. A group of switches assigned to a route can be controlled at the press of a button. Activate a certain route, and all of the switches will be thrown automatically.

Clearing routes

You must clear all of the switches that were assigned to an old route ID# before building a new one with the same ID#.

1. **Press RTE on the CAB-1 Remote Controller.**
2. **Enter the old route ID# (0-9) that you need to clear.**
3. **Repeat steps 1-2 to be sure that the Route was properly addressed.**
4. **Press the SET button on the CAB-1 Remote Controller.**

The L.E.D. on the ASC unit will blink for one second. At this point, the old route has been cleared.

Building a route

When you build a route, you are defining which switches are in the route and how they are set. Switches can be set to allow the trains to go THROUGH (continue on a straight path) or to go OUT (turn onto the curve). Before you begin to assign switches to your route, we recommend that you list each switch, indicating whether it is a THROUGH or OUT switch.

1. **Press RTE on the CAB-1 Remote Controller.**
2. **Select an ID# (0-9) and enter it with the numeric keys on the CAB-1 Remote Controller.**

Note! Allow two seconds for the route to complete.

3. **Repeat steps 1-2 to be sure that the Route was properly addressed.**
4. **Enter the ID# of the first switch, then press AUX1 for THROUGH or AUX2 for OUT.**
5. **Press SET on the CAB-1 Remote Controller.**

The L.E.D. on the ASC unit will flash for one second.

6. **Repeat steps 1-5 to add switches to the route, addressing an additional switch each time you perform step 4.**

Using a route

Activating a route will cause your track switches to switch to the appropriate positions, allowing your trains to travel straight or to follow the right or left curve.

To activate the route, press the RTE button and enter the ID# (0-9) on the CAB-1 Remote Controller.

Specifications of the Accessory Switch Controller

Physical Ratings

- Size: 3.7” x 2.7” x 1.2”
- Mounting: Two #4 pan head sheet metal screws

Electrical Ratings

- Input voltage: 9 volts to 20 volts (AC)
- Input supply current: 50 mA
- COMM input signal: +/- 12 volts
- Maximum output voltage: 24 volts (AC or DC)
- Maximum output current: 20 amps

Template

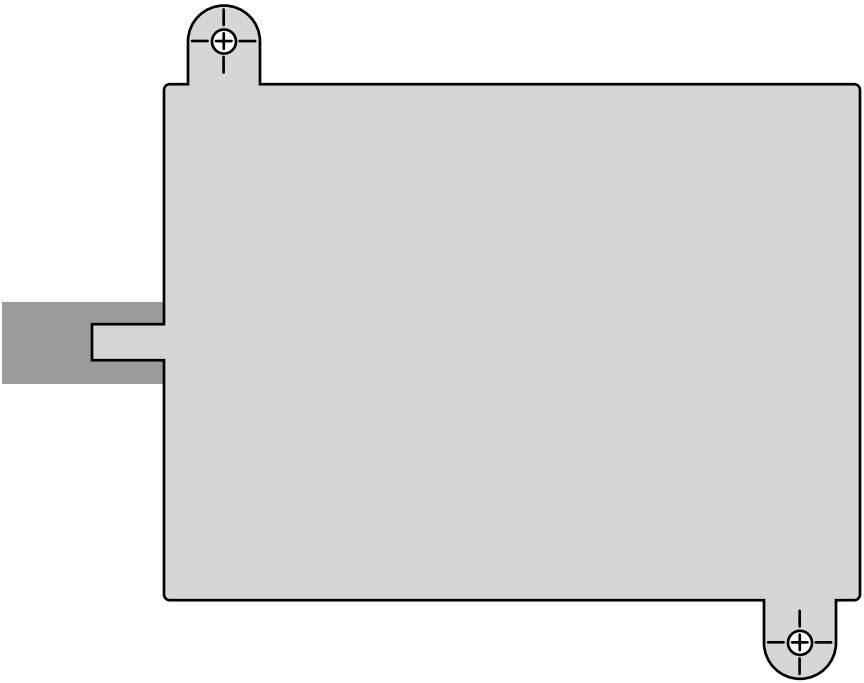


Figure 18. Controller mount template

Caution! Your service and warranty information is on the other side. Be sure to photocopy this page or the warranty.

Limited Warranty/Lionel Service

This 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.

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 _____

Product Description _____

_____