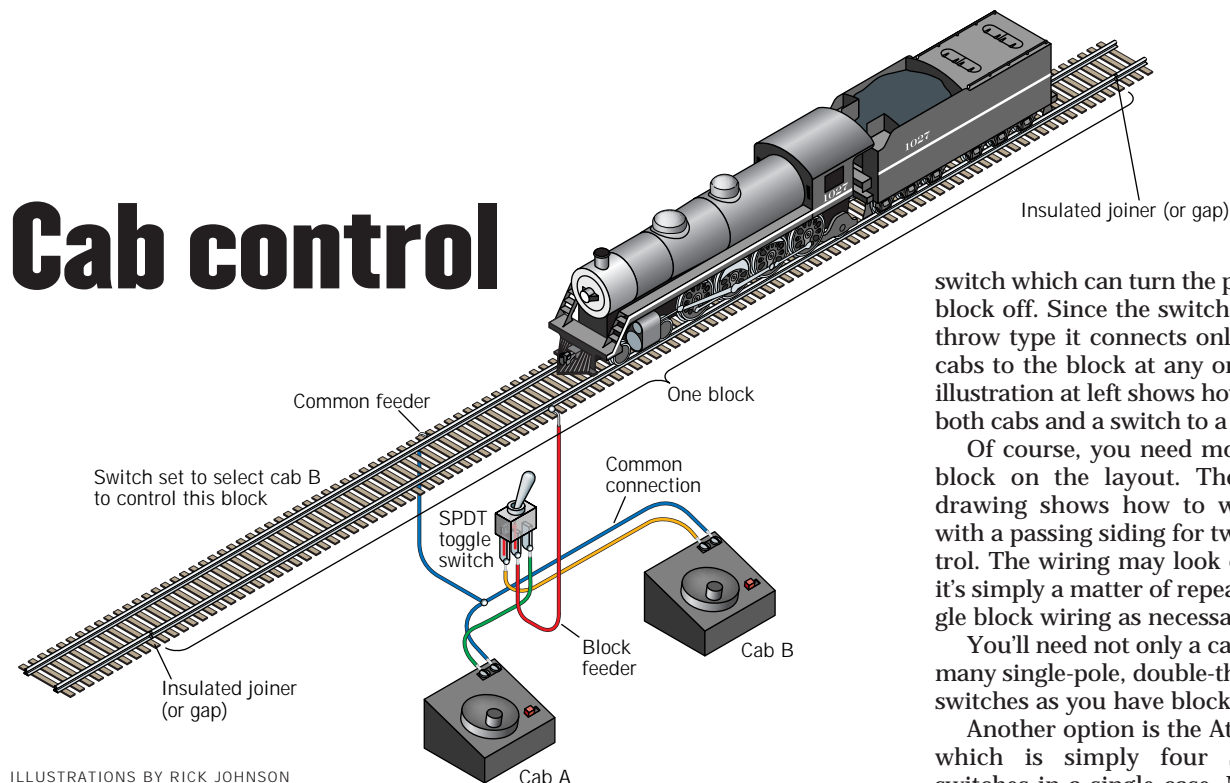
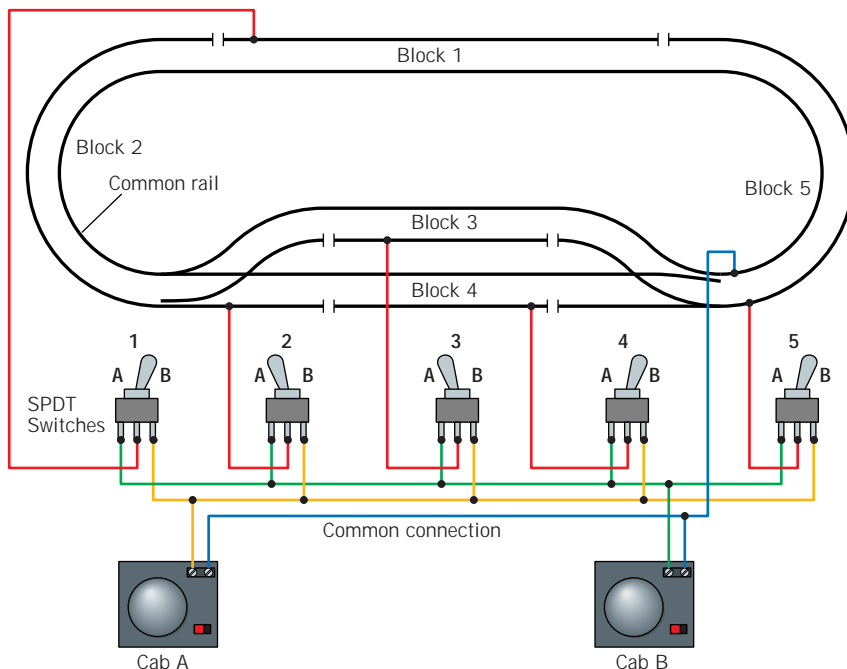


Cab control



ILLUSTRATIONS BY RICK JOHNSON



The only thing better than running one train is running two at the same time. Getting a single train to run around the layout is usually a matter of simply running a pair of wires between the power pack and the track. But simply placing a second locomotive on the track will mean both trains run in the same direction at the same relative speed, so getting independent control of two trains will require some additional wiring, what we commonly call cab control.

Layout wiring

Cab control works by dividing the layout into electrically isolated sections of track, called "blocks." You can do this using plastic insulating rail joiners or by cutting a gap in the rails and filling it with a non-conductive material like styrene. Since you can isolate the track sections by gapping only one rail, the other rail is called the common and is wired to both cabs.

Power wires, or feeders, from each block are connected to an electrical

switch which can turn the power to that block off. Since the switch is a double-throw type it connects only one of the cabs to the block at any one time. The illustration at left shows how to connect both cabs and a switch to a single block.

Of course, you need more than one block on the layout. The schematic drawing shows how to wire an oval with a passing siding for two-train control. The wiring may look complex but it's simply a matter of repeating the single block wiring as necessary.

You'll need not only a cab but also as many single-pole, double-throw (SPDT) switches as you have blocks.

Another option is the Atlas Selector, which is simply four SPDT slide switches in a single case. Most modelers, though, prefer to have the switch controlling a particular block mounted on the control panel schematic, making it easier to tell at a glance which block a switch controls.

It's a good idea to test each block as you wire it up as crossed wires are the biggest problem with cab control. And be sure you color code your wiring as it makes the initial wiring and any future alterations or troubleshooting a whole lot easier.

How it works

Once your wiring is complete place one locomotive in block 1 and flip the toggle for that block to cab A. Then place a second locomotive in a different block and flip that toggle to cab B. You should be able to control the two locomotives independently within the individual blocks.

As the trains work their way around the layout turn the next block to the appropriate cab. Turn off the block after you leave it or the next train entering the block will be controlled by the "wrong" cab, leading to that familiar cry of "Someone's got my train!"

While command control (another topic for a later time) takes care of that problem, cab control is still a viable option. For more details on layout wiring see *Easy Model Railroad Wiring* by Andy Sperandio (Kalmbach Publishing Co.), which includes a detailed explanation of cab control and the associated wiring. ☛