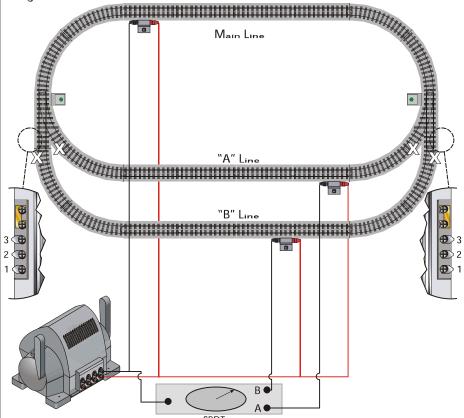
Multiple Train Operation (Powered/Unpowered Siding)

The following layout wiring diagram illustrates the use of two switches wired for simultaneous operation, identical throw. With this wiring arrangement, you will be able to operate two trains on your layout without collision (provided that no part of either consist obstructs the "Main Line" portion of the layout).

Figure 14:



Layout Instructions:

Note: this layout requires a Single Pole, Double Throw switch (minimum 3A rating) available at a hardware or electrical store.

- 1) To assemble a RiteTrax layout for Powered, Unpowered Siding Operation, you will have to isolate the outside rail of the "A" Line and the outside rail of the "B" Line. To do this, bend back and remove the brass connector under one end of the rail that is to be isolated (marked with an "X" on the layout in figure 14).
- 2) Assemble the layout as shown.

Wiring Instructions:

- 1) Connect the Powered (Red) transformer output to the Powered (Red, center rail) terminals of the Main Line, "A" Line and "B" Line lock ons.
- 2) Connect the Common (Black) transformer output to the Common (Black, outside rail) terminal of the Main Line lock on.
- 3) Connect the Common (Black) transformer output to the input side of a Single-Pole, Double Throw (SPDT) switch (purchased separately).
- 4) Connect one output terminal of the SPDT switch to the Common (Black, outside rail) terminal of "A" Line. Connect the other output terminal of the SPDT switch to the Common (Black, outside rail) terminal of "B" Line.
- 5) Connect the RiteTrax Switches as shown in figure 7 for track power operation or as shown in figure 11 for auxiliary power operation.
 - *RiteTrax layout created with RR-Track™ available from R&S Enterprises

Troubleshooting

Symptom	Remedy
Switch will not operate at all. Switch Block Lantern is not illuminated.	If using track power to operate the switch, check that the jumper between the Track AC Out Screw terminal and the Auxiliary AC Power In Screw Terminal is installed.
Switch will not operate. Switch Block Lantern is illuminated	If using Aux Power, check connection. If using auxiliary power to operate the switch, check that the jumper between the Track AC Out Screw Terminal and the Auxiliary AC Power In Screw Terminal is removed.
	f using track power, check connection.
Switch Points do no align completely into either the "straight" or "curved" position	Check that the operating voltage (track or auxiliary) is at least 10V,
	If operating your consist at $< 10V$, use auxiliary power for your switch(es).
Screw Terminal Cover will not fully attach to the roadbed gap	Realign Remote Switch spade connectors to be perpendicular to the edge of the roadbed.
	If multiple wires under Screw Terminals, use female spade type connectors like those found on the ends of the Remote Switch wires.