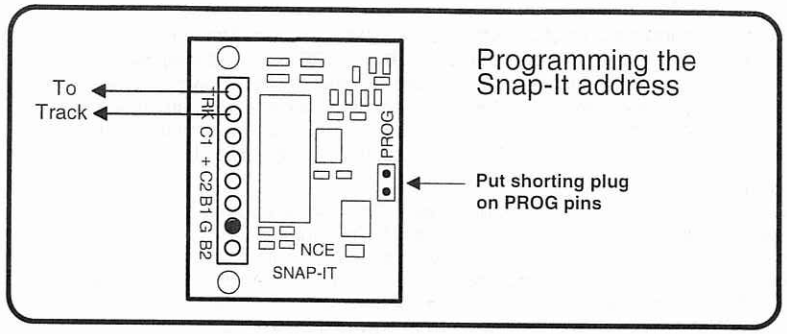
Programming information
The Switch-It **cannot** be programmed on your programming track. It is always programmed while connected to the mainline track. This decoder address can be programmed by all systems that support accessory control using the procedure below.

To program the Snap-It to a new address:

1) DCC track power to the Snap-It **TRK** connections.
2) Place the supplied shorting plug on the PROG connector as shown below.



3) Use your DCC system to throw the accessory (switch) number you want the Snap-It to use as its **new** address.

To throw a switch using the NCE system:
Press "SEL ACCY"
Type in the accessory number followed by "ENTER"
Push "1" to throw the switch.

To throw a switch using a Digitrax system:
Press "SWCH"
Type in the accessory number
Push "OPTN" to throw the switch.

To throw a switch using a Lenz system:
Press "F"
Press "5"
Type in the accessory number followed by "ENTER"
Push "+"

To throw a switch using the MRC system:
Press "SEL ACCY"
Type in the accessory number followed by "ENTER"
Push "1" to throw the switch.

4) Remove the shorting jumper.

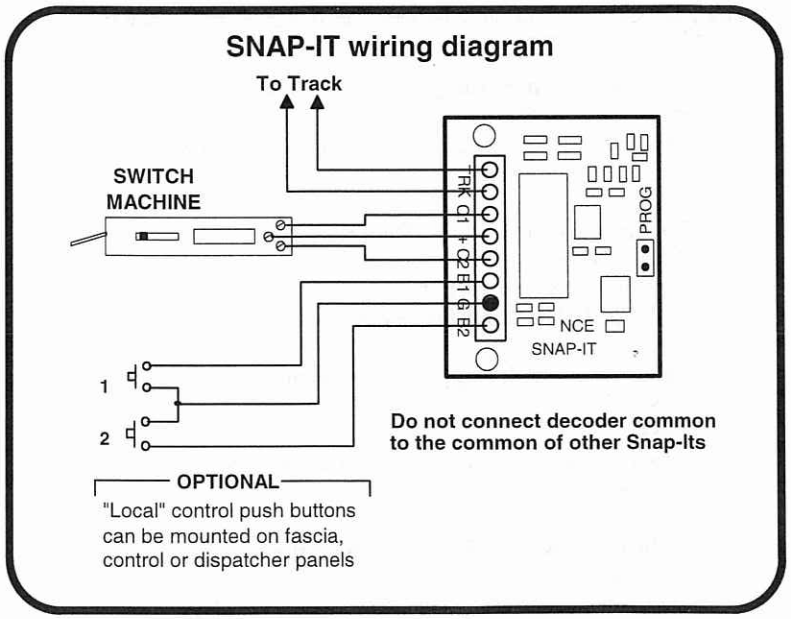
Do *not* leave the jumper in place after programming or you won't be able to control the switch.

Installation Notes:

This decoder is designed to control one "twin coil" type switch machine. The output is driven by a voltage doubled capacitive discharge supply. A capacitive discharge supply draws a small amount of current over a period of time and stores this energy in capacitors. When it comes time to throw a switch the stored energy in the capacitor is released all at once to the switch machine. This provides the large amount of power needed by twin coil machines without drawing a large amount of power from the track.

The Snap-It draws the most current when the layout power is first turned on to charge the capacitors. It will never draw more than 60mA (.060 Amps) during this time. After the capacitors are charged the current drops to about 2mA (.002 Amp). This means that 30 Snap-Its will draw about 2 Amps when the layout is first turned on, then the current will drop to about 60mA which is about the amount of current drawn by 1 locomotive headlight. Most DCC systems can easily supply twice this much power.

Wiring:
See the diagram below for wiring particulars. The Snap-It only needs two wires to the track and three wires to the switch machine. Make sure to keep the wires to the switch machine short to prevent voltage drop while the switch is throwing. We suggest 22 AWG wires to the switch machine for runs of less than 3 feet. If you need longer runs 18 AWG is more appropriate. Wire from the track to the Snap-It can be small (22, 24 or 26 AWG are OK) as there is little current draw from the track.



Optional push buttons:
Push buttons may be added for local control of the switches. Use momentary contact switches for local control. **Do not use a toggle switch** (unless it is momentary), its continuous connection will prevent DCC control of the turnout. You can have multiple buttons wired in parallel for operation of the machine from more than one control panel. You can also program the Snap-It to "toggle" the outputs with each push of the local control pushbuttons.

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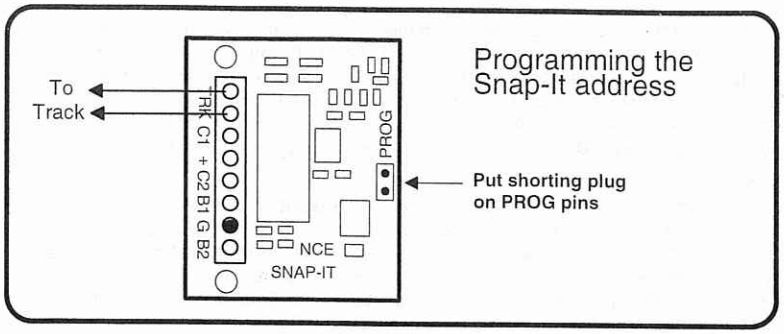

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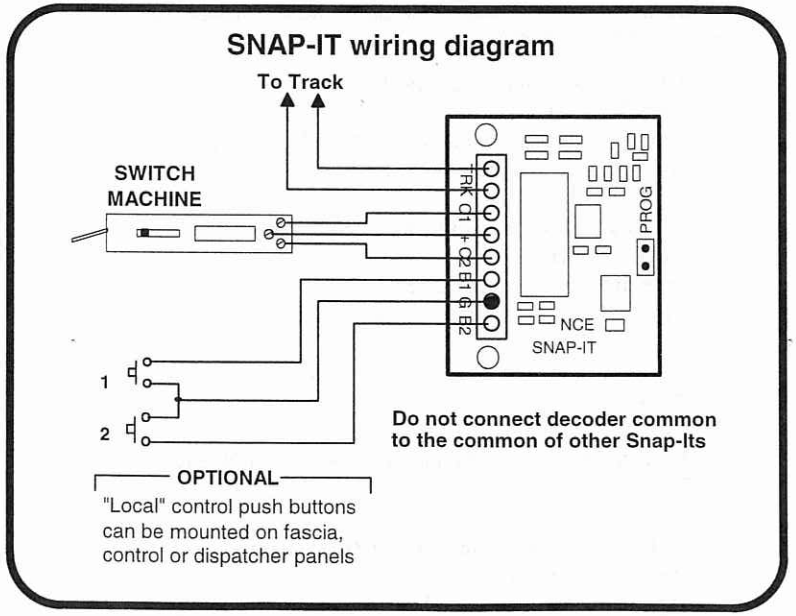

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