#### Factory reset:

- 1) Disconnect track power to the Snap-It.
- 2) Install the shorting plug on the PROG pins.
- 3) Reconnect track power to the Snap-It
- 4) Remove the shorting plug.
- 5) The Snap-It is reset to address 1, a recharge time of 1.5 seconds, no output toggle, activation time of .125 seconds, legacy OPS mode programming enabled and pushbuttons enabled

## Factory default values for decoder

The Snap-It is factory programmed to accessory address 1 (decoder addr 1, output 1)

CV548 is set to 0 (normal dual pushbutton operation)

CV550 is set to 15 (1.5 second capacitor recharge time)

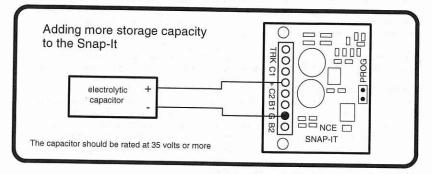
CV552 is set to 125 (the output is activated for .125 seconds when a command is received)

CV554 is set to 0 (legacy OPs programming mode enabled)

CV556 is set to 0 (pushbutton lockout not engaged)

The warranty is void if the decoder is miswired, or connected to more than 18 volts DCC or DC.

The Snap-it is designed to power Atlas Snap switch machines or other twin coil switch machines from Lifelike, Bachmann, Rix. If you wish to power multiple switch machines you will likely need to add more energy storing capacity. This can be done by connecting an external capacitor to the Snap-It. The diagram below illustrates the addition of an external capacitor. We suggest an electrolytic capacitor of 470 to 2200UF with a rating of 35 volts or more. Most Radio Shack stores stock electrolytic capacitors



# There is no provision for adding an external power supply to the Snap-It.

#### Warranty

This decoder is fully factory tested and warranted against manufacturing defects for a period of 1 year. As the circumstances under which this decoder is installed can not be controlled, failure of the decoder due to installation problems can not be warranted. This includes misuse, miswiring, operation under loads beyond the design range of the decoder or short circuits in the locomotive manufacturer's factory wiring. If the decoder fails for non-warranted reasons NCE will replace the decoder, no questions asked, for \$10 US plus \$2 shipping. For warranty or non-warranty replacement send the decoder (an any payment, if required) to:

NCE Warranty Center 82 Main Street Webster, New York 14580



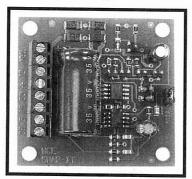
The terms Silent Running, Powerhouse Pro, Power Pro, ProCab, Power Cab, the NCE logo with "Power of DCC" slogan and and the distinctive shape of the ProCab with thumbwheel and LCD are trademarks of NCE Corporation. Digitrax is a trademark of Digitrax Inc.

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# **Snap-It**



\$19.95

For use with most twin coil switch machines such as: Atlas, LifeLike, Peco, Bachmann, NJ, Rix, Kemtron and others Dimensions: 1.80" x 1.50" (46 x 38 mm)

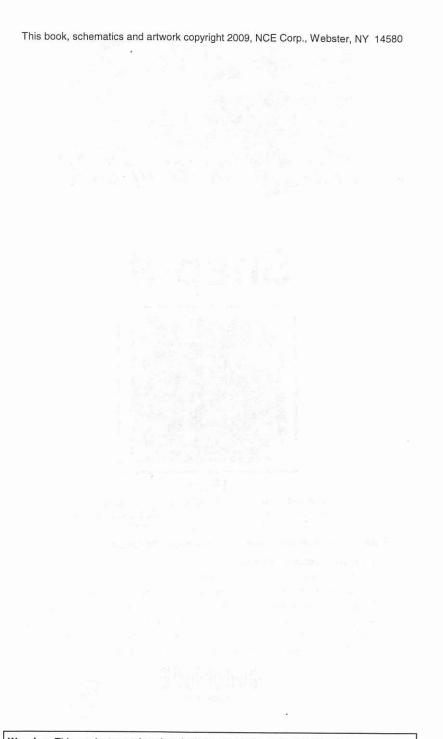
# This is an accessory (switch machine) decoder

- √ Now with voltage doubler for more power
- √ Control for one twin coil switch machine
- Capacitive discharge for very low current draw of track power
- √ Snap-It supports the full range of DCC accessory addresses (1-2044).
- / Easy address programming, no need to connect it to programming track
- ✓ Simple hook up, 2 wires to the track, 3 wires to switch machine
- √ Includes optional connections for "local" control push buttons



05240115





Warning: This product contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

## Programming the different options and features of the Snap-it:

NOTE: The Snap-It comes already set to the most popular CV settings. Entry level DCC systems (Lenz, MRC, etc.) usually do not have the "Program Accessories on the Main" (OPS mode programming of accessories) feature necessary for programming accessory decoder CVs while wired into the layout. You will not be able to change CVs if you have one of these systems. Your DCC system manufacturer may have an upgrade available to allow your system to program accessories.

#### Procedure for programming accessory CVs with a Power Pro or Power Cab system:

- Press the "Prog/Esc" button on your cab followed by the "7" key to go to the Program Accessories menu. (Alternatively you can press Prog/Esc 7 times)
- 2) Press "Enter" to access the menu
- 3) Enter the address of the accessory you wish to program followed by "Enter"
- 4) Type in the CV number you want to program followed by "Enter"
- 5) Put in the value for the CV followed by "Enter"
- 6) Press "Prog/Esc" to exit the programming menu.

## Programmable CVs in the Snap-It decoder:

### "Toggle" the outputs using only 1 pushbutton (CV548)

Setting CV 548 to a value of 1 uses pushbutton 1 to "toggle" the switch machine output. Each press of button 1 will alternate the switch position. Pushbutton 2 will be disabled when toggle mode is enabled Set CV548 = 1 enables the toggle option or CV548 = 0 disables it.

#### Capacitor recharge time (CV550):

You can use the PROG ACCESSÓRIES feature of your NCE Powerhouse Pro or Power Cab. Push "PROG" followed by "7" to access this feature. Set CV550 to ten times the number of seconds you wish to allow for the capacitors to recharge after throwing a switch machine. You will not be able to throw the switch again until the recharge time has elapsed. A Snap-It usually will recharge in .8 seconds with normal HO voltage settings. Use the lowest setting that gives satisfactory operation. The factory setting is 15 for 1.5 seconds to allow for the low voltages used in small scales.

#### "On time" of the output (CV552):

CV552 controls how long the output of the Snap-It is enabled while throwing the switch. Set CV552 to the number of milliseconds (1/1000 second) the output is to be activated. The range is 1-255. 125 (125 milliseconds or 1/8 second) is factory default. If the switch throws then "bounces back" to its original position lengthen the on time to keep the points in the correct position until the capacitor of the Snap-It discharges.

#### Legacy OPS programming disable (CV554):

There are two methods for programming accessory decoders "on the main" (OPS mode programming). Legacy mode, in use since 1995, is being phased out by the NMRA and replaced by the current, newer method. The Snap-It supports both kinds of programming on the main. You can disable Legacy mode by setting CV554 to a value of 1. If you disable legacy mode and find you can no longer program the decoder with your system, your system only supports legacy mode. You can re-enable Legacy mode by resetting the Snap-It back to factory defaults as described below.

#### Pushbutton lockout (CV556):

On some layouts it may be desirable to disable operation of the local control pushbuttons. Setting CV556 to a value of 1 prevents operation of the decoder by the buttons. Setting CV556 to 0 enables operation of these buttons. You can disable or enable ALL decoders on the layout at the same time by using the accessory decoder broadcast address of 2044 when programming CV556.

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