

Wiring accessories with your 153IR Controller

Accessories are connected to the terminals labeled ACC PWR, ACC GND, NO, and NC. The NC (Normally Closed) terminal is used for lamps or accessories that are normally ON. The NO (Normally Open) terminal is used for lamps or accessories that are OFF until they are triggered by the train. The ACC GND terminal is the ground terminal. The ACC PWR (constant voltage) terminal is designed to keep parts of an accessory ON (for example, interior illumination) while other accessory functions are triggered by the train.

As illustrated in Figure 2, press in the small button located directly above the terminal and insert the wires.

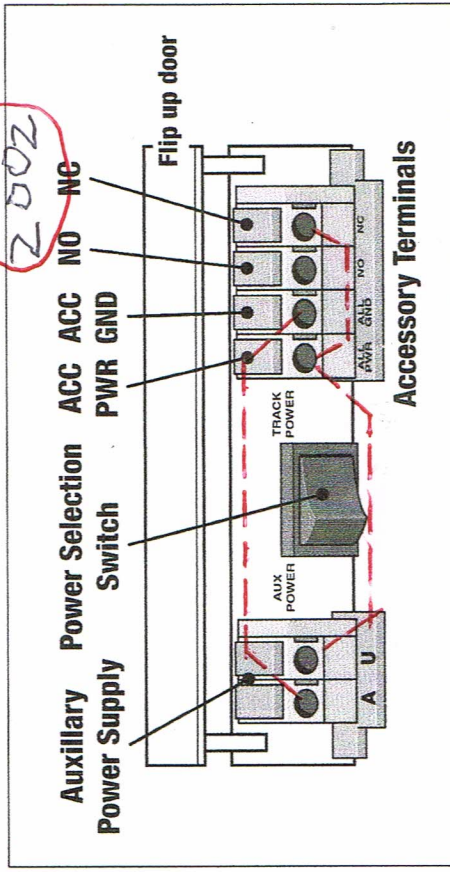


Figure 2. 153IR wire terminals and connections

Table 1 provides the basic wiring for various components (lamps, sounds, events, etc.) of your accessories. Some accessories feature only one component. For example, the only function of the Automatic Crossing Gate is to lower the arm. Other accessories feature multiple components. The Dwarf Signal features two lamps, each with a different function. Refer to the specific wiring examples that appear on pages 10-13 to help determine which accessory terminals control the individual components.

Note! Do not use wire that is larger than 24 gauge.

Operation of your #153IR Controller

Your 153IR has a lot of flexibility built into it to accommodate the trickiest of layouts. When you lift the lid on the front of your controller (please see the diagram below), you will notice that there are 6 connection areas and a rocker switch. The four connection areas located to the right of your controller are used to attach your accessory to the controller. The rocker switch allows you to change the input voltage between track power and a separate accessory power supply. The last two connection areas located to the left are used to connect to your separate accessory power supply.

You will notice that each of the connection areas is labeled. The four connection areas to attach your accessory to your controller are labeled **NC**, **NO**, **COM 1**, and **COM 2**. The connection point labeled **NC**

is the connection to be used for Normally Closed operation. The connection point labeled **NO** is the connection to be used for Normally Open operation. The connection to point labeled **COM 1** is the connection to be used for ground. Finally, the connection to point labeled **COM 2** is the connection to be used for constant voltage. **COM 2** is a special connection area to light the inside of a building without triggering the accessory. This will be better illustrated in the wiring section of this instruction manual.

You will then notice the rocker switch located in the center. Each side rocker switch is labeled **AUX POWER** and **TRACK POWER**. If you would like to use track power to power the optics, the rocker switch must be depressed to the side labeled **TRACK POWER**. If you would like to use

