

Introduction

This supplement shows you how to do the following with any version of the *Block Animator*:

- Interlock (i.e. force to red) two single head signals with turnout position
- Interlock a dual head signal with turnout position
- Alternate signal positioning

Interlocking two single head signals with turnout position

If you locate your signals near a turnout it is desirable (and prototypical!) to interlock the signals with the position of the turnout. What this means is that a signal will be forced to display red when the turnout is not aligned properly for the route the signal protects. Figure 1 below shows how you can use the auxiliary contacts on a switch machine/motor to accomplish this. Many switch machines/motors have one or more sets of "SPDT" (single pole double throw) contacts that you can use. You will need a single set of SPDT contacts for this application. What the SPDT contacts will do is to have a photocell (W1 for signal WB, E1 for signal EB) disconnected from the *Block Animator* when the turnout is thrown for the opposing route. When the photocell is disconnected the *Block Animator* will be tricked into thinking the photocell is covered from light (because the open circuit looks like an infinitely high resistance to it) and will thus display red on the signal. When the turnout is moved from the opposing route to the aligned route the appropriate photocell will be reconnected and, if uncovered, the *Block Animator* will delay, turn the signal yellow, delay and finally turn the signal green. **Please note that with this usage of the *Block Animator* you CANNOT enable approach lighting; you MUST have the APPRL switch in the OFF/OPEN position in order to have proper signal behavior.**

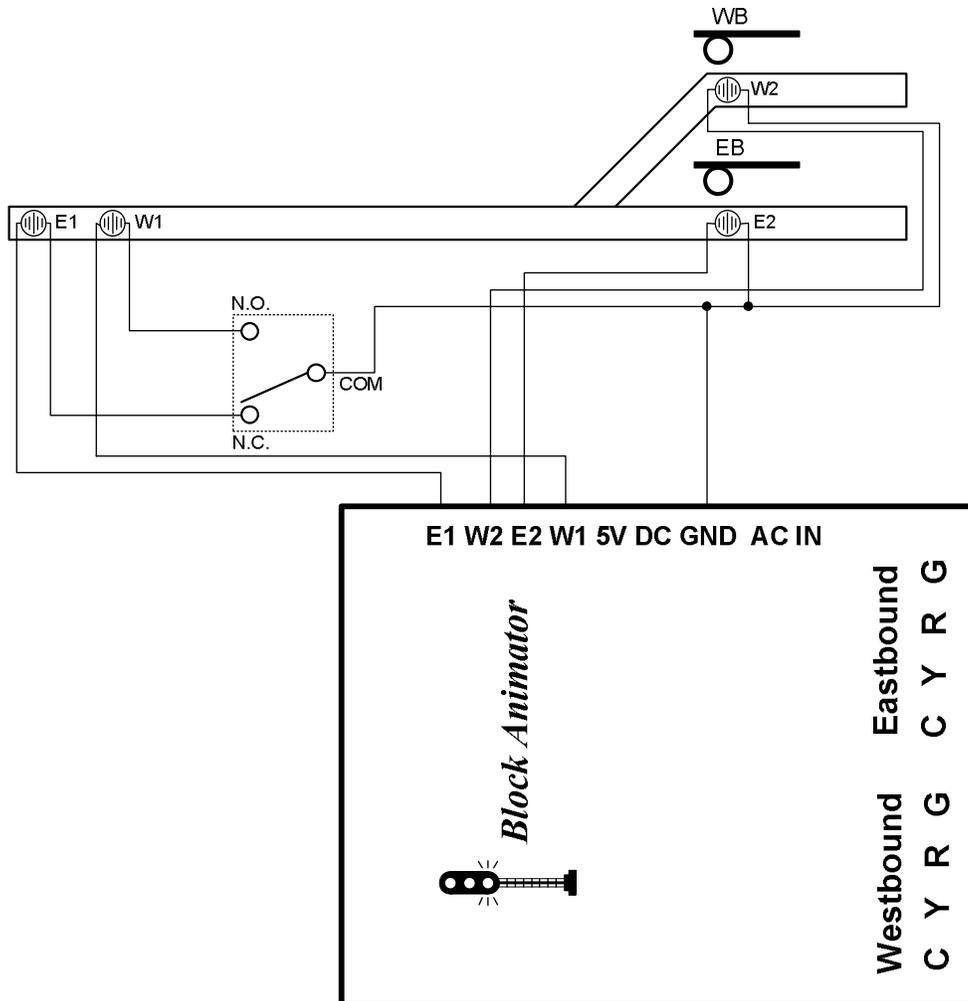


Figure 1

Interlocking a dual head signal with turnout position

If you want to have an even more prototypical signal arrangement near a turnout then you can use a dual head signal along with one *Block Animator*. One head or the other will display red since the turnout cannot be aligned for both routes simultaneously! Figure 1 above shows how you can use the auxiliary contacts on a switch machine/motor to accomplish this. You will need one set of "SPDT" (single pole double throw) contacts. The W1 photocell for the diverging route will be disconnected from the *Block Animator* when the turnout is thrown for the main route (the terminal labeled COM makes contact with the terminal labeled N.C. (Normally Closed)). Similarly, the E1 photocell for the main route will be disconnected from the *Block Animator* when the turnout is thrown for the diverging route (the terminal labeled COM makes contact with the terminal labeled N.O. (Normally Open)). When a photocell is disconnected the *Block Animator* will be tricked into thinking the photocell is covered from light (because the open circuit looks like an infinitely high resistance to it) and will thus display red on the signal. When the photocell is reconnected, and if uncovered, the *Block Animator* will delay, turn the signal yellow, delay and finally turn the signal green. **Please note that with this usage of the *Block Animator* you CANNOT enable approach lighting; you MUST have the APPRL switch in the OFF/OPEN position in order to have proper signal behavior.**

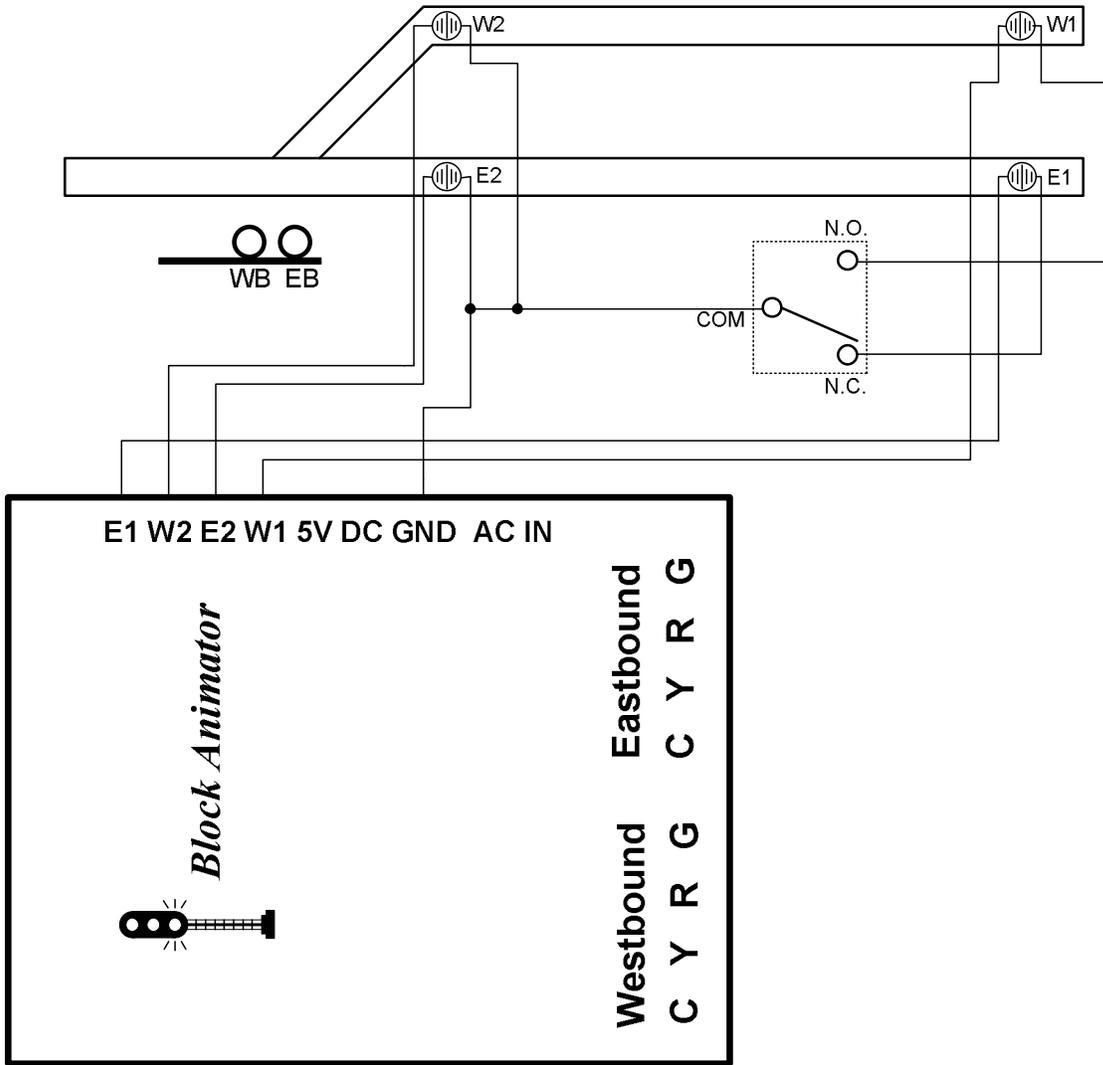


Figure 2

Alternate signal positioning

The *Block Animator* was designed such that the two signals it controls are located directly across the track from one another (and facing opposite directions). However, you could certainly choose to locate the signals at the opposite ends of a long section of track as shown in Figure 3 below. Use the standard wiring as described in the *Block Animator* instructions. **Please note that with this usage of the *Block Animator* you CANNOT enable approach lighting; you MUST have the APPRL switch in the OFF/OPEN position in order to have proper signal behavior.**

