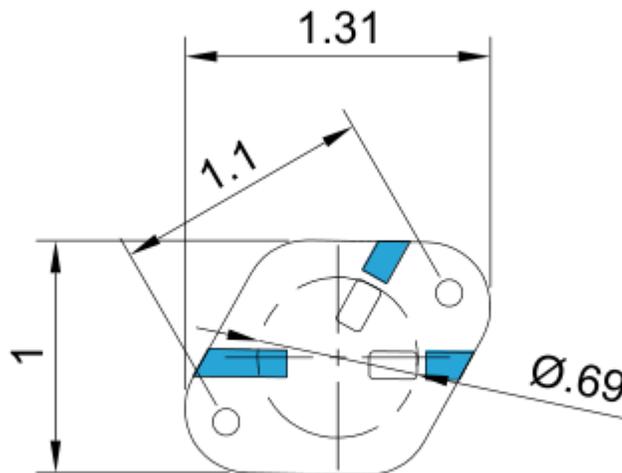


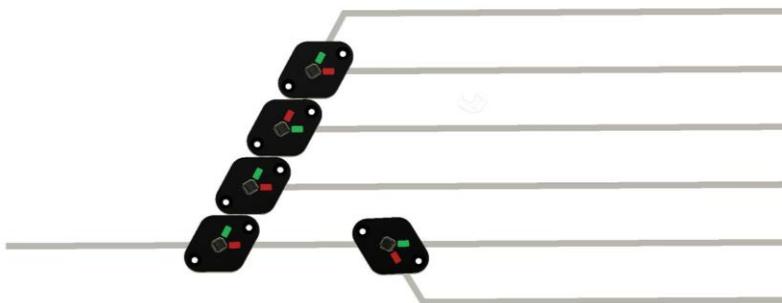


3D Printed Fascia Controller Instructions



Mounting. The fascia controller consists of an electronic circuit board, cable, and two-piece 3D printed enclosure. The fascia controller mounts in an 11/16" (0.69") hole in the fascia. The two enclosure pieces press-fit tightly together. There is also a flange on the shell that presses against the fascia once installed which ensures everything stays together. For that reason, it is recommended that the mounting hole not be oversized.

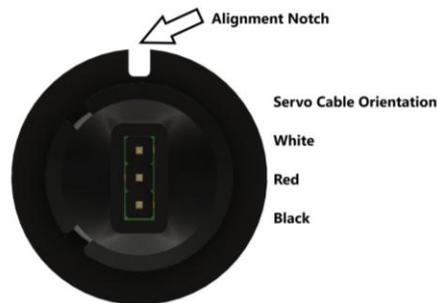
The fascia controller is normally mounted so that the LED bezels align with the track lines on the fascia. There are two fascia controller edges parallel to each of the bezels to make alignment easier.



The fascia controller design allows compact mounting for track arrangements like yard ladders.



The diagram above shows a 5 track yard ladder. The tracks are just over 1" apart, and the horizontal space needed for the 4 ladder fascia controllers is about 1.75".



Cable. Should the cable get pulled out of the fascia controller, reinsert it with the White wire towards the alignment notch as shown. Standard servo extension cables can be used to extend the wiring if needed.

Configuration options. By default the LEDs show both Green and Red appearances. For special applications each LED can be individually changed via trace cuts on the circuit board to show just Green, just Red, or to be dark. The trace cut details are given at the end of these instructions.

Access to the circuit board. Disassembly and reassembly of the fascia controller is required to access the circuit board. This is not difficult but care must be used to avoid damage to the circuit board. Damage during disassembly or reassembly is not covered by warranty, so take your time and follow the instructions below.

Disassembly. The rear shell is press-fit into the front of the fascia controller. To disassemble, grasp the front by the mounting screw corners in one hand and hold the neck of the shell in the other hand. Rock the front back and forth slightly, holding the shell steady, until the two parts start to separate. The press-fit will release with a little patience. Do not use excessive sideways motion during this step as that can break the pushbutton off the circuit board when the parts suddenly release. Once the press-fit releases pull the shell straight back and out of the front.

Note: Never press on the pushbutton to try to force the two pieces apart!



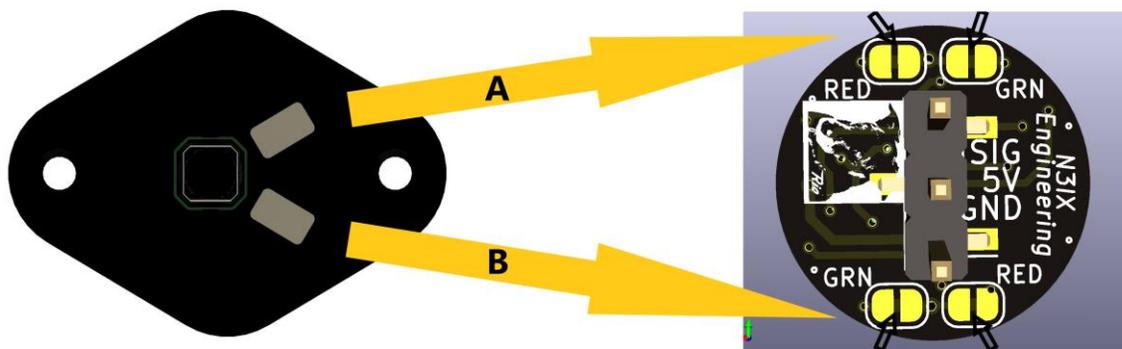
Once the two pieces are separated, the circuit board must be removed from the shell to access the trace cuts on the back of the board. To do this gently push the cable connector into the rear of the shell until the circuit board pops out the front and is clear of the shell. Next grasp the board by the edges only and separate it from the cable. **Never pull on the pushbutton to try to remove the board.**



Reassembly. To reassemble the fascia controller, start by plugging the circuit board back into the servo cable. The circuit board should be inserted as shown in the image above: the LEDs are vertical and to the right of the alignment notch; the pushbutton is slightly to the left of center. The white lead of the servo cable must be up, closest to the alignment slot, as shown previously. Check that the connector is aligned with the slot in the back of the shell, then gently press the board back into place inside the shell.



Orient the shell so the alignment slot matches the tab on the front as indicated by the arrow in the image above. Hold the front by the mounting screw corners with one hand and start to press the rear shell gently onto the front with the other hand. Check that the pushbutton is properly aligned with the opening in the face. If everything is aligned, press the shell firmly into place. Once the pieces snap together, work your way around the lip squeezing the shell and the face together with your fingers as needed. When done gently press the cable connector into the back of the shell to be sure it is seated.



Configuring the LED. Trace cuts are provided to tailor the fascia controller LEDs to the trackwork or to best fit the color-vision abilities of the operators. The trace cuts are on the back of the board: GREEN LED trace cuts are at the bottom left and top right, and RED LED trace cuts are at the bottom right and top left. The following table shows several possible configurations.

CONFIGURATION	LED A Color	LED B Color
Default	No cuts	No cuts
Closed	GREEN	RED
Thrown	RED	GREEN
Single Color	Cut RED trace	Cut RED trace
Closed	GREEN	Not Lit
Thrown	Not Lit	GREEN
Single LED	No cuts	Cut BOTH traces
Closed	GREEN	Not Lit
Thrown	RED	Not Lit