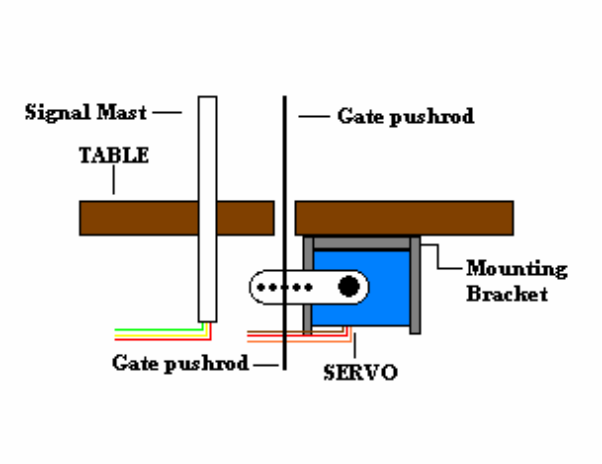
Installing the Servo

[1] The servo comes with the mounting bracket and the control arm installed. **Warning: Do not remove the control arm. It is preset for the proper position. DO not move the servo control arm manually. Doing so will damage the servo.** Place the servo under the layout so that the control arm is behind the gate or semaphore pushrod and centered over the center hole in the servo control arm. **See Figure2.** With a pencil, mark the positions of the holes on the mounting bracket. Drill 3/32nd in holes on the pencil marks. Use the screws provided to attach the servo to the underside or your layout.

Figure 2



Programming the Servo

[1] After connecting the device to be controlled to the **SERVO,** plug the servo into the servo board. The servo has a 3 pin socket attached to the wires (brown, red, and orange). The plug is pressed into the three pins located on the upper right of the board next to the ground terminal. The pins are marked **G, +, and S.** The brown wire connects to the **G** pin, the red to the **+**, and the **S** to orange.
[2] Remove the **RED MODE** jumper located in the lower left on the board. **Do not lose this jumper. It must be reinstalled after programming to run the servo. The servo will not work properly until it is programmed.**
[3] Connect the 12 volt DC power leads to the **+** and **GND** terminals on the board. **DO NOT USE** track power or an old throttle for a power source. **Use a filtered 12 volt DC power source which is separate from the throttle supply.**
[4] With the power connected, the servo will initialize to its starting position. The program light will begin blinking green telling you that programming is ready to begin.
[5] Press the **ENTER** button once**.** The programming light will stop blinking and now display a steady green. You are now going to program the first position that the servo will move to- (**S1**). Use the **UP** and **Down** buttons to move the servo control arm up or down. **The UP and DOWN buttons control the movement of the servo control arm and may not relate to the direction of the device being controlled.** For **SBSC's** Crossing Signal with Gates, **S1** is the gates **UP** position.
[6] Once the gate is in the proper position, press the **ENTER** button. This will save this position in memory.
[7] The program light will now be yellow (**S2**). Use the **UP** and **DOWN** buttons to move the device to the next position. Once the device is in the proper position press the **ENTER** button saveing the position to memory
[8] The program light will now be red (**S3**). Use the **UP** and **DOWN** buttons to move the device to the third position. Press the **ENTER** button again saving the last position to memory. The program light will blink red four times and then go dark. The programming of the servo is now complete. Remove the power to the servo board.

Table of Contents **Page** **NOTES**

Specification

- Power source 12v DC
- Provides control of crossing gate or semaphore
- Three individual programmable settings
- Control inputs 5v TTL level signal (ground activation)
- 45 degree movement
- Setting saved to non-volatile long term memory
- Realistic slow-motion
- Micro Servo included
- For all Scales

Supplies Needed

- Needle noise pliers
- Small Phillips screw driver
- Marking pen (Sharpie fine-point)
- Hook-up wire (22 gauge)
- Metal or plastic tubing for standoffs (1/8” ID)
- 12 volt DC filtered power supply