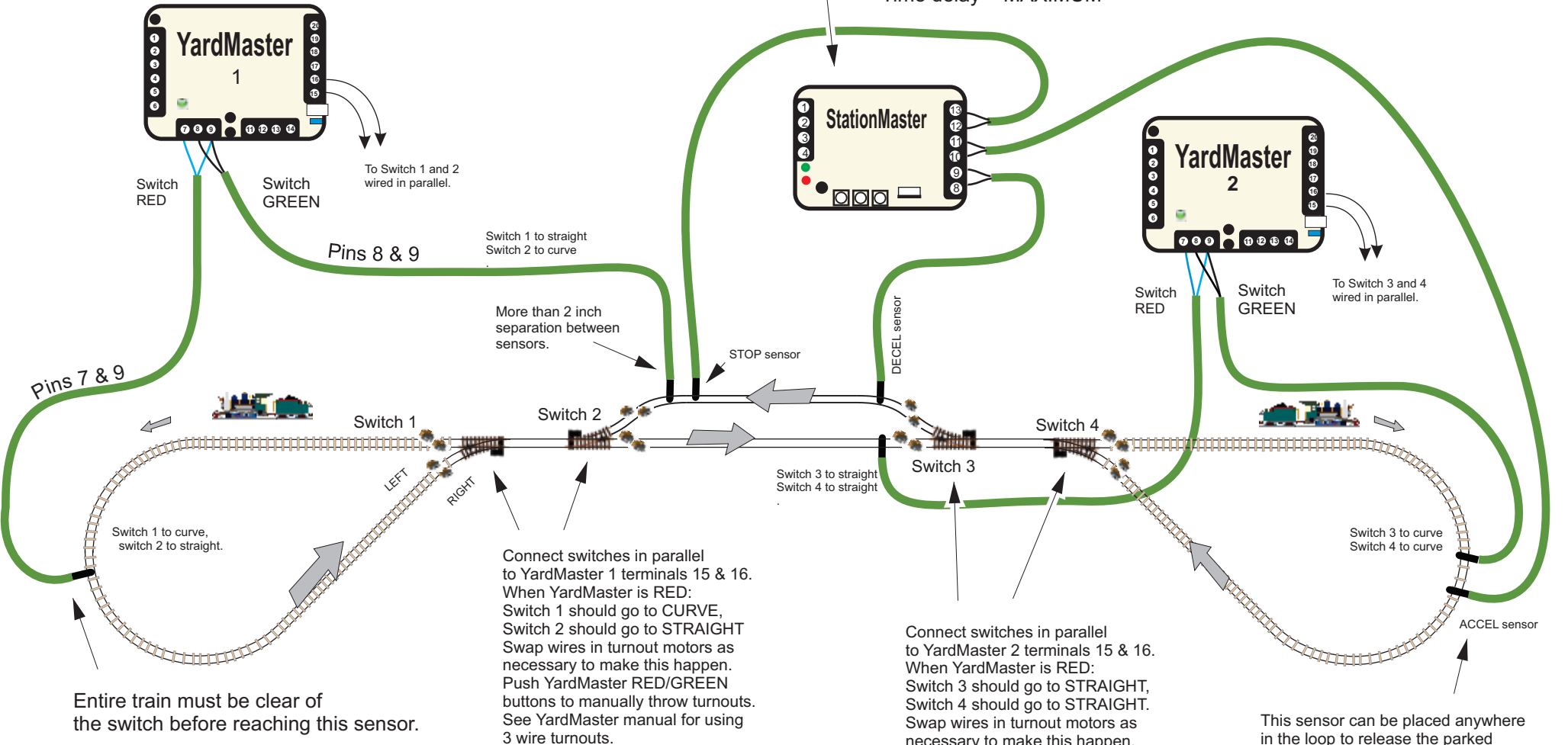


Reversing loops with a Passing Siding

Using the YardMaster and powered turnouts.

PROGRAM: Accel & Decel as desired,
Time delay = MAXIMUM



RRC Parts Required:

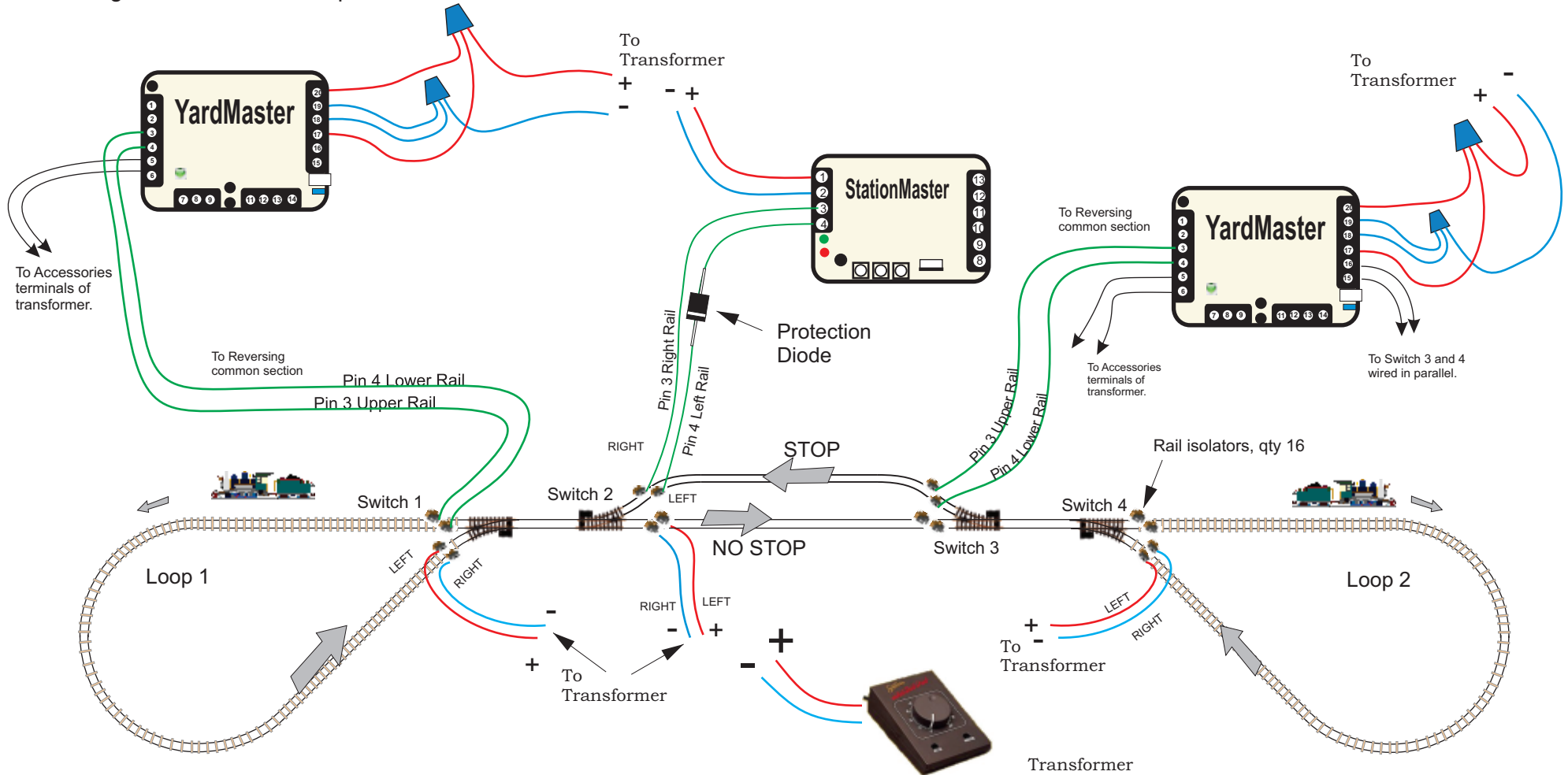
- StationMaster, Qty 1
- YardMaster, Qty 2
- Sensors, Qty 7
- Rail Isolators, Qty 16
- Protection Diode, Qty 1



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Reversing loops with a Passing Siding

Using the YardMaster and powered turnouts.

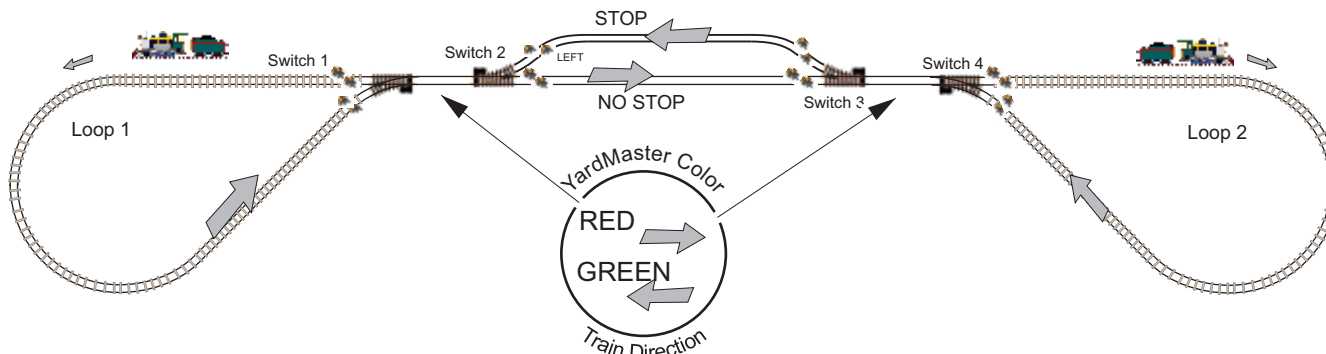


NOTES:

1. The Loop1, Loop2, and NO STOP track sections are all hard wired to the transformer and must travel in the directions as shown. With respect to the train direction, the LEFT rail will always be positive voltage. (Assuming Large Scale convention, NMRA will be reversed)
2. All RED wires are connected together and attach to the positive voltage from the transformer.
3. All BLUE wires are connected together and attach to the negative (or ground) voltage from the transformer.
3. The Protection Diode prevents damage in case of reverse voltage entering the StationMaster output. Recommended but not required.
4. Do not run trains until switch directions are wired correctly or the YardMasters may be stressed if a short circuit occurs.



Reversing loops with a Passing Siding



Functional checkout before running the first train

1. Power up transformer, If StationMaster does not light up then reverse direction on transformer. Note that YardMasters will light up when transformer is plugged in.
2. **Test fixed direction track sections.** With a very small engine or meter verify that the engine runs in the direction as shown by the arrows, with the LEFT rail positive and the RIGHT rail negative. Test Loop 1, Loop 2 and the NO STOP track sections.
3. **Test turnouts 1 & 2 throw to proper orientations.** Press the GO RED button on YardMaster 1 and verify that Switch 1 goes to curve and Switch 2 goes to straight when the YardMaster is RED. Green should switch the opposite. Swap wires in the turnouts as necessary to make this happen.
4. **Test the reversing section between Switch 1 and Switch 2.** When YardMaster 1 displays RED the small testing engine should travel in the direction of Switch 2, and the LEFT rail should be POSITIVE voltage. Switch the YardMaster to GREEN and verify the direction is reversed, traveling towards Switch 1.
5. **Test YardMaster 1 sensors.** With the screwdriver/magnet tool verify the sensor in Loop 1 causes YardMaster 1 to switch RED, and the sensor in the STOP section causes YardMaster 1 to switch GREEN.
6. **Test turnouts 3 & 4 throw to proper orientations.** Press the GO GREEN button on YardMaster 1 and verify that Switch 1 goes to curve and Switch 2 goes to curve when the YardMaster is GREEN. Red should switch the opposite. Swap wires in the turnouts as necessary to make this happen.
7. **Test the reversing section between Switch 3 and Switch 4.** When YardMaster 2 displays RED the small testing engine should travel in the direction of Switch 4, and the LEFT rail should be POSITIVE voltage. Switch the YardMaster to GREEN and verify the direction is reversed, traveling towards Switch 3.
8. **Test YardMaster 2 sensors.** With the screwdriver/magnet tool verify the sensor in Loop 2 causes YardMaster 2 to switch GREEN, and the sensor in the NO STOP section causes YardMaster 2 to switch RED.
9. **Test StationMaster.** With the screwdriver/magnet tool trigger the deceleration sensor in the STOP track section. Verify the StationMaster blinks RED. Trigger the STOP sensor and verify the StationMaster enters a slow blinking RED state. Trigger the ACCELERATE sensor in Loop 2 and verify the StationMaster blinks GREEN and eventually displays solid GREEN.

READY FOR TRAINS!!

Power down, place one train in the NO STOP section before the sensor and then power up. The train should enter loop 2 and then stop in the STOP section. Power down and place the 2nd train in the NO STOP section before the sensor and power up. The trains should now be running automatically assuming the magnets on the trains properly trigger the sensors. It will be possible to power down and up and continue running with no intervention as long as the trains are not manually moved. The StationMaster and YardMasters will remember their states.