TRACK + POWER CONNECTIONS Counterclockwise

Authentic Leap Frog Passing Siding

Place MAGNET on bottom of engines.

Right Rail should have NO isolators and will be connected straight thru

To Power Pack DC TRACK Terminals

+

1

4

StationMaster

Switch direction if SM does not light up.
Set for about 12 volts.

Attach to RIGHT RAIL non isolated

Attach to LEFT Rail of Main Line

Attach to LEFT Isolated Rail

YardMaster

Connect wires such that YardMaster is RED when switched to main line and GREEN when switched to parking siding.

SEE NOTE on following page. At least one diode is required.

Pin 15 & 16 To Turnouts In Parallel

Siding

Main Line

This is just a connection to the right rail. Non isolated. The right rail should be connected all around.

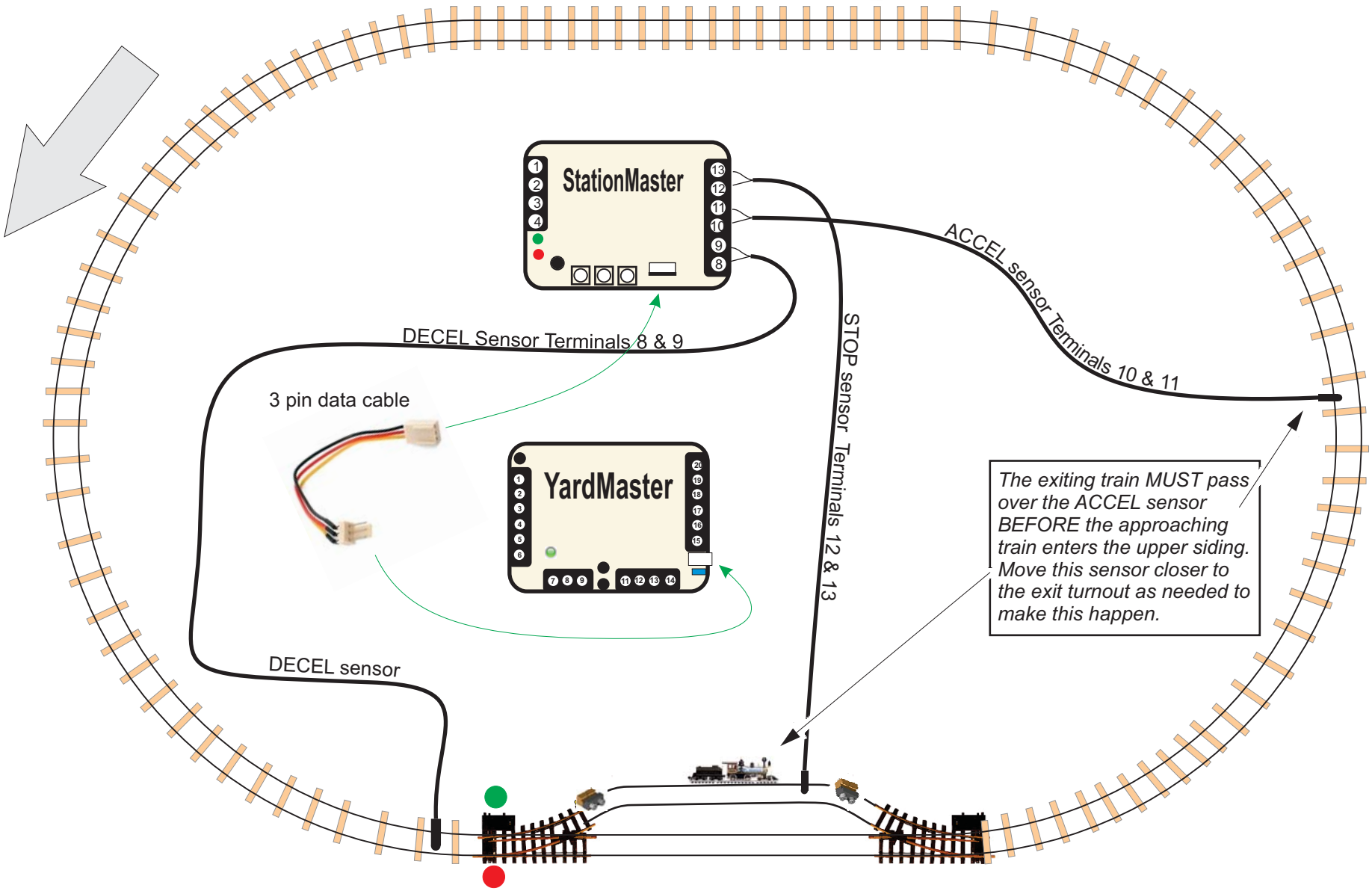
Track isolators, 2 Required. On LEFT rails of siding only.

The exit turnout can be powered in parallel with the entry turnout or floating with the train pushing the points.

SENSOR CONNECTIONS, Counterclockwise

Authentic Leap Frog Passing Siding

Place MAGNET on bottom of both engines.



Notes:
1. Set deceleration rate based upon train speed and distance between sensors. All trains must reach the STOP sensor.
2. StationMaster Programming: ① Factory Reset, ② Time delay = MAXIMUM, ③ Mode "Blinks 2 and 3" set: Fire YardMaster before acceleration & deceleration.
2. Sensors have NO polarity.

Authentic Leap Frog Passing Siding.

RRC Parts Required:

StationMaster:	Qty 1
YardMaster:	Qty 1
Sensors:	Qty 3
Magnets:	Qty 2
Rail Isolators:	Qty 2
Protection Diode	As Required.

Description

The Authentic passing siding (LEAP FROG) will allow 2 trains to run around the layout. One of them will enter the siding and wait for the other train to pass by. After the 2nd train passes by it will trigger a sensor which will release the parked train. Both trains will then be traveling at the same time. This hookup can also allow multiple laps to be run with the trains on the main line before releasing the parked train. See below for details.

StationMaster Hookup:

* Sensors (6 position terminal strip) have no polarity.

Terminals 8 and 9 are the DECEL sensor inputs and attach to the decel sensor as shown.
The train will decelerate when passing over this sensor.

Terminals 10 and 11 are the ACCEL sensor inputs and attach to the ACCEL sensor placed at a remote location on the main line.
When the train passes over this sensor the waiting train will throw the siding, accelerate, and enter the main line.

Terminals 12 and 13 are the STOP sensor. Attach these to the STOP sensors as shown. The train will stop and throw the turnout after reaching this sensor.
Note that the STOP sensor is only active while decelerating. (passing over STOP before DECEL will have no affect unless decelerating)

The XFMR terminals (1 and 2) attach to the DC transformer. (Track output) Note the + and - wires must be correct. If the StationMaster does not light up then reverse the track direction or swap these two wires. The DC voltage should be set for about 12 volts.

The transformer positive wire that is attached to terminal 1 also attaches to the main line track, left rail. If the train on the main line is running too fast then add slow down diodes as required. See additional details on next page.

The Track terminal (pin 4) attaches to the LEFT rail of the isolated siding section. If the train is running too fast turn down the top speed dial of the StationMaster.

StationMaster PROGRAMMING:

1. Set *Programming Features* for Green blinks 2, and 3. This corresponds to “Fire YardMaster after deceleration” (blink 2) and “Fire YardMaster before acceleration” (blink 3)
2. See next page for train count programming.
3. Set time delay to INFINITE which is maximum.
4. Set the accel and decel rates as desired. The trains must reach the STOP sensor before stopping. The Self-Adjusting deceleration is not recommended for this hookup.