

D-3 Triple Track Mainline with Sequential Crossovers Layout Illustration (Right-Hand Layouts) - General Description

The D-3 layout, titled “Triple Track Mainline with Sequential Crossovers (Right-Hand Layouts),” features a three-track mainline with sequential crossover turnouts arranged in right-hand configurations. A “Triple Track Mainline with Sequential Crossover Turnouts” refers to a system where three parallel tracks are interconnected through a series of crossovers. These crossovers are arranged in sequence, allowing trains to switch tracks progressively, facilitating smooth transitions across multiple tracks in a single direction flow, which in this case uses right-hand turnouts.

This layout includes six blocks, divided to manage and control train movement effectively:

West Side: Blocks 7, 6, and 5

East Side: Blocks 2, 3, and 4

The signaling system is composed of six signals:

Two single-headed signals provide basic control at specific points.

Two double-headed signals allow for more complex control options, especially where multiple routing choices are necessary.

Two triple-headed signals enhance routing flexibility, providing control for areas where trains may need to transition across multiple tracks.

There are four turnouts in this layout, labeled SW-D, SW-C, SW-B, and SW-A, which form two sequential crossover sections:

SW-D and SW-C create the first crossover section, positioned to allow trains to shift from one track to the adjacent track on the west side.

SW-B and SW-A create the second crossover section on the east side, continuing the sequential transition capability across the triple track system.

This setup is ideal for high-capacity mainline operations that require efficient track-to-track transitions, supporting continuous train movement across the network. The sequential right-hand crossovers facilitate smooth train routing across multiple mainlines, making this layout suitable for scenarios with high traffic flow, where trains frequently switch tracks to maintain an optimal flow and balance on the network. The configuration of blocks, signals, and turnouts provides a robust control structure, ensuring organized and safe train movement across this complex layout.