

Pensacola Model Railroad Club

HO Division

Standards for Module Construction for Improved Operation and Setup

Revised April 22, 2021

The following construction standards have been accepted in order to improve layout operation and setup of modules:

A. A Track and Module Standards Committee shall be established by election of the PMRC HO Division membership.

1. The duties of the Track and Module Standards Committee shall be:
 - a. Proposing standards for the construction of modules and track thereon with the aim of improving operation and setup of the Club layout;
 - b. Evaluating all Club and member's modules to determine compliance with the accepted standards of module, track and wiring construction;
 - c. Provide the Club or owning member with a written list of standards to which the evaluated module is in or out of compliance.¹
2. Modules belonging to the Club or a member that are not in compliance with one or more standards will not be included in layout setups during operating sessions until brought into compliance with the standards.
 - a. A module may be presented to the Track and Module Standards Committee for evaluation at any business, operating or work session with prior notice of the Standards Committee chairman

B. Track and Module Construction Standards

1. A module consists of two (2) 24 inch wide (or 30 in wide) x 4 foot long module tables (module total size is 2 x 8 feet). The tables should be separately identified by color or letter or number or etc.
2. The ends of all module tables will be vertical to the module table top as checked with a carpenter's square. The base for the mainline trackage will five eighths (5/8) inch plywood smooth side up. Table connections should be with 2 quick acting clamps (such as 11 in Vise Grips) per table end.
3. Module table legs will have three eighth (3/8) inch diameter screw-eye height adjustment screws in each leg as noted in the Club module plans (see module plans). Tee nuts will be used at the leg ends for threading each screw-eye. The tee nuts will be glued in place and strengthened with four 1 1/4" fillister head screws overlapping the edge of the tee nut.
4. The standard height to the top of the main tracks at the ends of each module table shall be forty (40) inches. The leg screw-eyes must provide a minimum of plus (+) or minus (-) one (1) inch of vertical adjustment from forty (40) inches from the floor to the top of the main tracks at the ends of the module to accommodate for variations in floor level.
5. There will be two (2) main tracks on each module. The centerline of the outermost

track ends (red line) will be three (3) inches from the front face of the module table frame. The centerline of the second main track ends (yellow line) will be five (5) inches from the front of the module (two inches in from the centerline of the red line track).

6. Both mainline tracks will terminate exactly even (vertically) with the ends of the module tables. Horizontal and vertical track alignment will be maintained by the alignment rods placed through alignment bore holes of adjacent modules tables (see no. 8 below).

7. Curves on the main lines of a module will be no less than 30 inch radius and easements are recommended. Centerline spacing of the main tracks on curves must be increased to two and one fourth (2.25) inches. There must be three (3) inches of tangent (straight) mainline track at the ends of a corner or straight module table.

8. Each module table shall have two (2) alignment bore holes of 5/8 inch diameter on the module table ends placed two and one half (2.5) inches below the top of the main rails (see Plan Sheet 3). The first alignment bore hole will be six (6) inches in from the front of the module table frame and the second exactly twelve (12) inches horizontally from the first alignment bore hole. All measurements are to center of the alignment holes. Holes will be exactly vertical to the module table end frames. Use of the Club's bore hole alignment tool will be utilized for this task.

Alignment Rods:

- 1) eight (8) inch sections of five eighths (5/8) inch OD PVC pipe tapered one end
- 2) or eight (8) inch sections of five eighths (5/8) inch OD metal conduit pipe tapered one end
- 3) eight (8) inch sections of five eighths (5/8) inch diameter birch rod tapered one end

9. Alignment of the bore holes will be set with the bore hole alignment tool owned by the Club. It should be noted that exact placement of the alignment tool is a requirement for precise alignment of the adjoining modules.

10. A check sheet of a module evaluation results will be provided to the Club or module owner-member