

SD032 - Victorian Railways 1898 small signal box

Thank you for purchasing this kit and I hope you get many hours of enjoyment from it. Chris Pearce (Spirit Design)



Original prototype on Darren's layout with steps altered and interior detail.

Basic history notes:

The Victorian Railways built many signal boxes around the state and they have the same few designs but were altered to suit the location. E.g. Seymour's signal box is 1 ½ kits joined together, it's just a variation on a theme. As the system expanded, rail yards grew with the extra traffic and new and bigger designs of signal boxes started appearing utilizing hipped roofs. If more levers were needed the signal box was extended over time to accommodate them. Frankston is a good example of an extended hipped roof signal box. There are so many variations within the groups; some low to the ground versions whilst others were very tall to gain clear views of their large yards like Ararat's box.

Over the years, the boxes were generally painted the traditional VR colour schemes that adorned various infrastructures but when researching photos through books the interpretation of what was considered correct was thrown out the door. The large timber corner end posts which formed the main structure should be the same colour as the weatherboards but many examples have seen these picked out in the door or window colours. Windows, doors, and gable bargeboards also were painted the same way. The painting guide shown later is just that, a guide which you may vary from if you like, or you may want to recreate a colour scheme in a photo you have.

With the dawn of the 21st century, most signal boxes have now been replaced by automatic signalling and the days of men throwing the levers over in the signal box are but a faded memory. Many now have been removed, torn down or turned into museums. This model is based on the 1889 plan of Ballarat East and others utilizing the same design.

The Kit:

The kit can be put together in a few hours over a week. It is suggested that you **read** the instructions first to become familiar with the components and the essence of construction. There are a few steps that require close attention and they are highlighted in ***bold and italics!*** Parts referred to in the text are marked (P1), (P2) etc. Please use photos to aid construction. Generally, the kit will fit together without any problems, however as wood is a natural product sometimes cut lines burn more rapidly than others do and as a result, a part might be fractionally shorter. ***Please trial fit parts before gluing and make minor adjustments if necessary.*** A kit like this would be suited for medium to large yards.

Equipment & Materials:

Exacto knife (blade No. 16 or similar), 800-grit aluminium oxide sandpaper, small flat needle file, emery boards, toothpicks for spreading the glue or a Spirit Design Fine Line glue applicator and fast-drying wood glue like MDF PVA's

or Selley's water-based 'Kwik Grip' for assembly (all recommended: usual disclaimers). Also an assortment of weights, clamps, Blu-Tak and Scotch 'Magic' tape.

General Assembly extra notes:

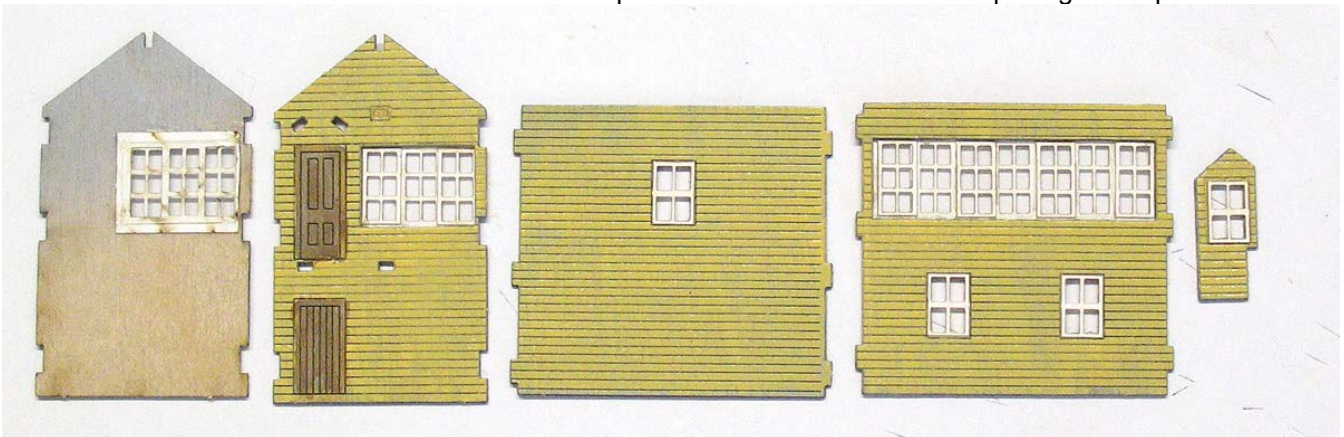
It is recommended to paint all the parts before assembly unless you are a skilled painter as the windows are fiddly. All parts freed from the laser etch should have their tabs neatly filed flush.

Painting general:

The main laser etch should be lightly coated (2 passing light coats not 1 heavy one) with a pale grey primer, Tamiya Surface Primer is ideal for this step. **Also, prime the rear of the main components to stop warping.** The cardboard window frames can be gently wiped with a tissue to remove most of the laser smoke stain and the remaining minor stain enhances the model's appearance saving you from having to paint or weather them. See the paint guide below.

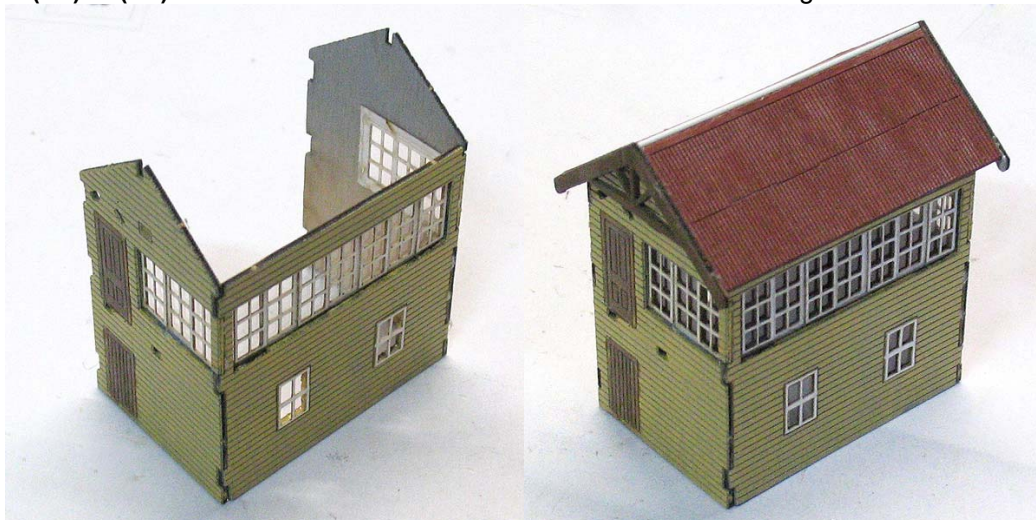
Assembly:

1. Paint the main pieces before assembly (in your preferred scheme) as its easier this way especially when painting the doors
2. Glue both (P1's) to (P2) ensuring the items are straight and at 90 degrees. This forms the inner signal box floor which you can decorate with people or instruments etc. Note this is **not** to be glued into the main signal box but sits freely inside
3. Glue (P24) cardboard window frames to the large window bay (P23) using glue sparingly
4. Glue the assembled frame in behind (P4) making sure that there is an even window edge around the opening when viewed from the front
5. Glue 2 x (P24) onto both (P25)
6. Glue (P25) to each of (P6) & (P7) at the rear of the parts. The larger window frame edge piece of (P25) points away from the corner. The shorter/narrower side is next to the opening that has less timber around the model
7. Glue (P26) to the small window openings on the wall side (P4) and wall side (P5) and porch shelter wall (P8)
8. Glue (P27) clear window glass behind (P23). **Tip:** use Selley's Kwik Grip water-based as the glue
9. Glue (P28) clear window glass behind windows on walls (P6) & (P7)
10. Glue clear window glass into the remaining small windows (P5, P6 & P8). **Tip:** place a tiny drop of glue at the centre of the cross of the small windows and then place the window into the rear opening of the parts



Steps 4 through to 10 are shown here

11. Glue wall (P4) to RHS of (P6) making sure that the walls and corners are vertical and at 90 degrees
12. Glue LHS of (P7) to (P4) the walls and corners should be vertical and at 90 degrees to each other



13. Glue the remaining wall (P5) into place and then adjust the signal box so that it's square straight and true
14. Glue (P9) in the slots provided at the apex of walls (P6) & (P7). (P9) should be flush with the wall ends
15. (P11) Leaving 1mm between the ridge caps ends, which must be facing each other, apply Scotch Magic tape across the two halves
16. Glue (P11) to the roof of the signal box making sure of an even overhang round. Use weights, Blu-Tak or Tamiya tape to aid positioning and gluing dry time. **Take your time and plan ahead for the operation even if it means wetting the underside of the roof halves before making them flat when gluing in place**
17. Glue (P13) bargeboard Gables to the roof ends overhanging the signal box
18. Glue (P10) to the roof edge opposite the ridge caps and behind (P13) where the guttering would be
19. Trim and ridge cap rod (P31) to the length of the signal box roof and glue in place. Save the leftover for later
20. Use a Copic grey artists Texta and lightly stain (P15) which is the porch landing and needs to be glued into the holes provided in (P6) Make sure it's straight and level with the floorboards facing up
21. Glue (P32) on top of (P15) and against the wall (P6) but in 0.5mm from the wall edge
22. Glue (P12) into the hole in (P6). Make sure that the ridge capping is towards the apex and not the side of the building
23. Glue (P8) on top of (P15) and up against (P32) & (P12). Push the pieces into place to form the small verandah shelter
24. Glue the other (P12) into the hole in (P6). Make sure that the ridge capping is towards the apex
25. Trim the left (P31) and glue to the apex of the ridge capping on the verandah shelter
26. The gable bargeboard (P14) is glued to the front of the roof pieces (P12)
27. Glue both (P16)'s to each edge of the underside of (P15). The bottom has two short legs which sit in the scenery
28. There are two widths of end wall posts. Glue (P29) thinner end wall posts to the LHS and RHS of (P6) & (P7). For the LHS of (P6), you will have to trim the post to match the area as the wall of the verandah stops you from using a whole length
29. (P30) is glued to (P4) & (P5) LHS and RHS edges whilst overlapping the edges of the thinner posts (P29) so that when viewing the signal box ¾ on the posts look the same width
30. Glue (P18) RH handrail to the RHS and on top of (P15) **Note as you assemble the staircase it will protrude lower than the signal box base. This is deliberate so that you can sink it into your scenery to make the whole unit appear as part of the overall scenery**
31. Glue (P17) LH handrail to the LHS and on top of (P15). Before the glue is dry check that the plastic stairs provided will fit between the 2 handrails (P17) & (P18). Make adjustments if required
32. Glue the plastic staircase between the LH & RH handrails and to the underside of (P15). The first step should end up lower than the walkway of (P15)
33. Glue both (P19)'s together
34. Glue (P20) to the outside of (P19) and match the profiles to form the chimney
35. The chimney is glued to the wall (P5). The bottom of the chimney sits 14mm above the bottom edge of the wall and 6mm in from the left-hand edge
36. Glue (P21) final posts to the ends of the gable bargeboards (P13) using the photos as a guide
37. Glue (P22) to the verandah bargeboard end (P14)



Weathering: Touch up any areas that may need painting after assembly. Use pastels or paint to weather your model as per photos or to your liking.

Paint Guide: Shown above in the instructions are 3 colour schemes that can be used but as prototype notes there were variations. I like the colour scheme at the bottom LHS of the page the most which is suitable for areas up to the mid-1960s. Humbrol G7 for the weatherboards, Humbrol Matt 29 for the end posts, doors, bargeboards and gables with Humbrol Matt 73 for the roof and white for the other parts.

For the other model at the bottom of page 3, I used Humbrol Matt 61 for the weatherboards, Humbrol 153 for the roof and white on the windows and staircase.

Darren's model on the first page used Humbrol Matt 90 for the weatherboards, Humbrol 100 for the roof and white for all the other parts.

VR paint schemes - painting guide.

Pre 1960

Wall plinths, angle stops, architraves, barges, gutters, door framing, veranda posts	Dark Brown – Floquil RR70 Roof Brown - Humbrol approx colours M29 or M186
Weatherboards, window sashes, facias door panels	Light Stone – Floquil RR 87 Depot Buff - Humbrol G7* (Matt coat afterwards)

Post 1960 Style 1

Architrave, sashes
Walls, fascias, barges, gutters, veranda posts
Doors

White
Suntan – Floquil 23 Flesh - Humbrol M61 + white
Grey/Green – Floquil RR 41 Light Green & Floquil RR 9
Primer – Humbrol M90*

Post 1960 Style 2

Architraves, veranda posts, corner posts

Grey/Green – Floquil RR 41 Light Green & Floquil RR 9
Primer – Humbrol M90*

Walls

Cream – Floquil RR Antique White Humbrol G41 (Matt coat afterwards)

Walls version 2

Mocha - Humbrol M119 (60%) + White (40%)**
alternative M121 Pale Stone

Fascias, barges, sashes

White

Doors and Roof

Terracotta Revell M85 or Humbrol M100 or approx M73

Post 1960 Style 3

Architraves, fascias, sashes, veranda posts
Walls

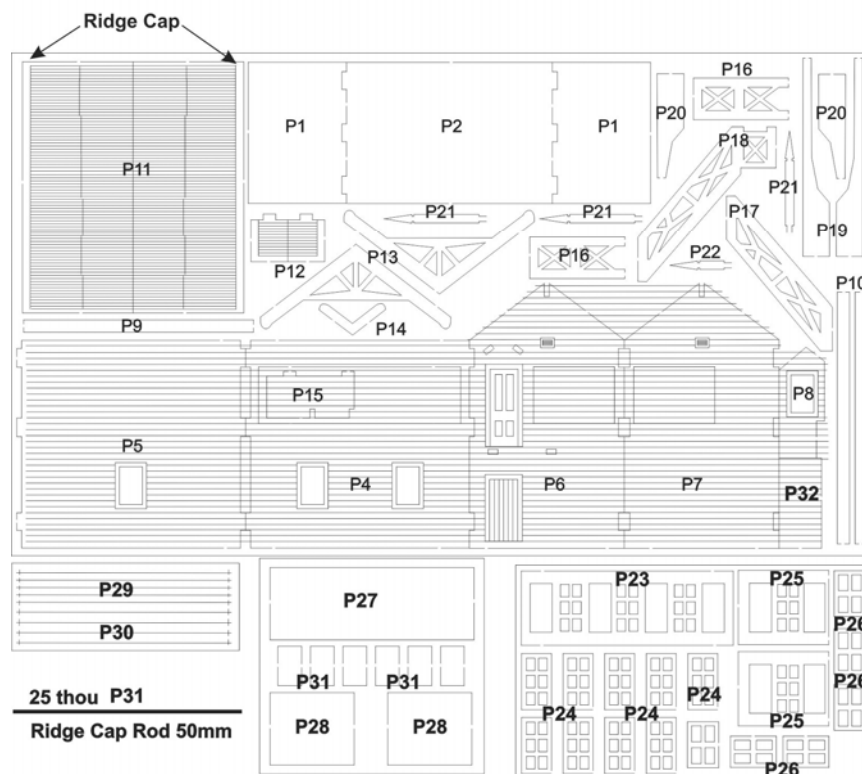
White
Grey/Green – Floquil RR 41 Light Green & Floquil RR 9
Primer – Humbrol M90*

Doors and Roof

Terracotta Revell M85 or Humbrol M100

**Matches close to the actual paint sample taken from a building many years ago*
***Matches the paint sample taken from the building many years ago*

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Stairs

Any alterations, suggestions or queries please contact me.

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