

If you are planning to lay a railway, read our Buying Guide on PNP Railways Narrow Gauge Track System



PNP Railways track is a modern robust system of easy to assemble parts. Each component mimics the appearance of their full-size counterparts.

We have taken all the hard work out of laying track. All components are manufactured to the correct size. No cutting, drilling, treating required. Assemble and lay and enjoy years of trouble-free running.

Track components are available for both standard and narrow gauge. This guide is about our narrow-gauge system

What is Narrow Gauge?

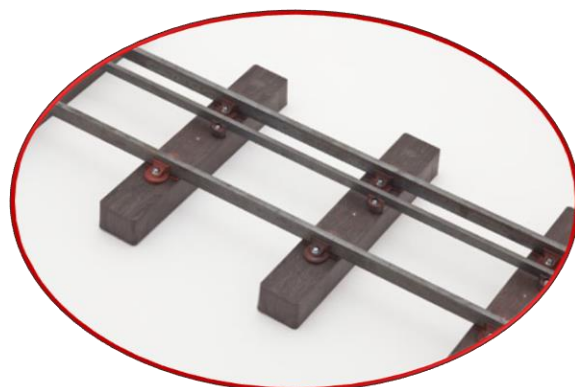
It is a railway gauge which is narrower than the standard gauge of 4ft 8 ½ inches (1.435 m).

We use the term narrow gauge to describe rolling stock and locomotives which are running on the same gauge as standard scale but are built to a larger scale and are usually from an industrial heritage.

What gauges can the track components be used for?

We produce narrow gauge components for:

- 7¼" Narrow Gauge
- 7¼" & 5" Narrow Gauge.
- 10¼" Gauge



What is in the range?

We can offer the following options for narrow gauge track.

- Surrey Track System
- Bar Rail System
- Rail Clips and Sole Plates



We produce one plastic injection moulded sleeper designed for 7¼" Narrow Gauge only or 7¼" & 5" Narrow Gauge. Manufactured from a high-grade polymer which is UV stabilised, frost and rot resistance. The sleeper has moulded in pilot holes ready for both gauges.

The sleepers can be used with 5.2lb/yard steel rail or 12mm x 30mm bar rail.
Dimensions - L 460mm x W 75mm x D 55mm

This sleeper is only compatible with our own designed 'Surrey' and bar rail chairs. We also produce 3 different types of rail clips and sole plates which are suitable for many different profiled rail types and are designed to be used with wooden or recycled plastic sleepers



What is the Surrey System?

The 'Surrey System' is a complete set of parts for large scale model railways and consists of the 7¼" & 5" Narrow Gauge sleeper, Surrey Chair, 5.2lb/Yard rail and fish plates.

This system is ideal for well used club tracks and private railways. It can carry heavy narrow-gauge loads yet is still able to accept standard scale models with fine wheel profiles.

Easy to assemble, the chairs can also be used on wooden or recycled plastic sleepers.



The rail chair for the system was designed in conjunction with Roger Hardwick of the Surrey Society of Model Engineers. The 'Surrey' chair as it is now called is a close scale rail chair based on the two bolt GWR type, with a simulated wooden wedge that is moulded in two parts.

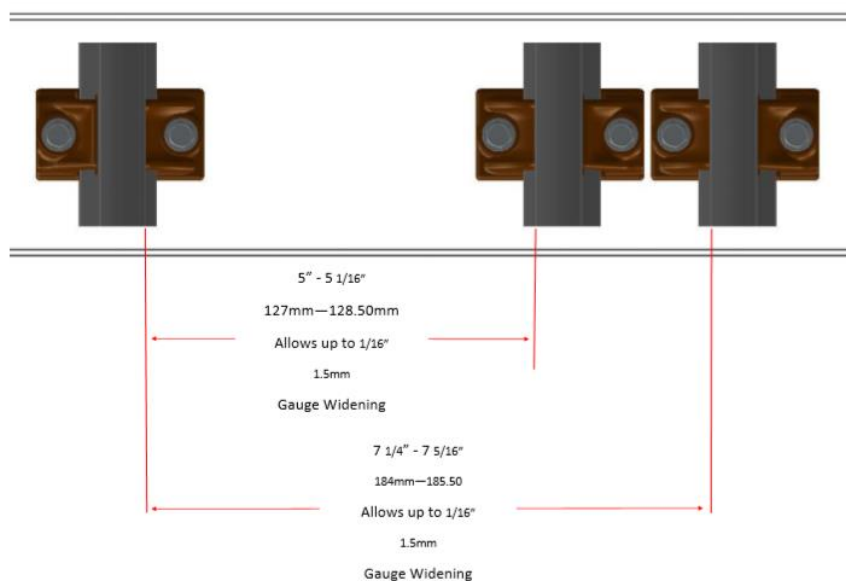
The chair has a 3-degree cant to present the rail to the tread of the wheel correctly, just like full size. This creates the parameters for a smooth ride and very little flange contact. Having a detachable side allows the chair to be fitted or removed from a length of rail without disturbing any more chairs than is necessary. The chair is moulded from a tough, rot and frost resistant, UV stabilised polymer.



The chairs are fixed using a high tensile hexagon head screw with a flange under the head, so no washers are required.

What special features does the 'Surrey Track' system have?

Apart from being very easy to assemble. If using the plastic sleepers and chairs together, automatic gauge widening is achievable.



To achieve gauge widening there is a certain amount of clearance in the fixing holes of the chair, when used with the recommended screws.

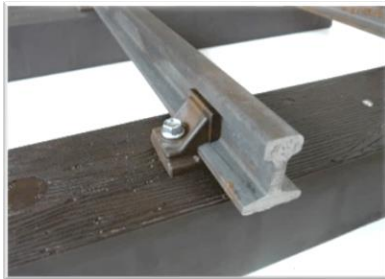
The chairs should be pushed in towards one another whilst assembling to create the correct gauge.

Push the chair out for gauge widening.

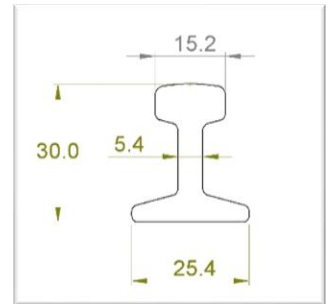
Once the desired gauge is achieved all screws should be tightened and the gauge re-checked

What rail profile can be used with the Surrey System?

The system has been designed to only be used with 5.2lb/yard steel rail.



It is a flat bottom rail with a prototypical crowned rail head of 15mm. It is strong enough to carry heavy 7¼" locomotives yet fine enough in section to accommodate standard scale models including 5" gauge. It comes in 4m lengths. It is recommended to use a roller gauge when laying a long track, shorter lengths can be laid by gauging manually.



Do you supply fish plates to suit 5.2lb Yard Rail?

We can supply a set of 4 steel fish plates with bolts and nuts. The fish plates have elongated holes to allow for expansion.

What sleeper spacing is recommended for the Surrey System?

We recommend that the sleepers are laid at approximately 300mm centres.

What is the bar rail system?

The bar rail system consists of the narrow-gauge sleeper and bar rail chair. Alternatively, the chairs can be used on wooden or recycled plastic sleepers.

Bar rail does have some advantages over prototypical shaped rail. It can cost less, due to local availability which will save on transport costs. The black mill scale finish helps make it resistant to corrosion. It does not need bending with rolls when creating curves and it welds easily. The disadvantages are not looking prototypical when used with some stock. Should the sleepers on ground level track not be on a firm substrate it can move down the bar which has no foot.



The system is very easy to assemble, push the bar into the chair, locate the chair onto the sleeper and screw down.

What size bar rail is used with this system?

12mm x 30mm or if you would like to lay a dual gauge 7¼" & 5" gauge line it will also take 10mm x 20mm bar rail, should you wish to not use the larger rail for the third rail.

What chair is used to secure the bar rail?

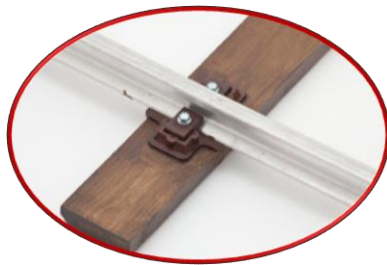
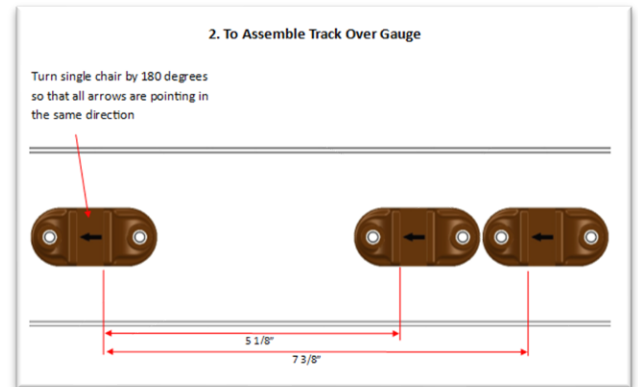
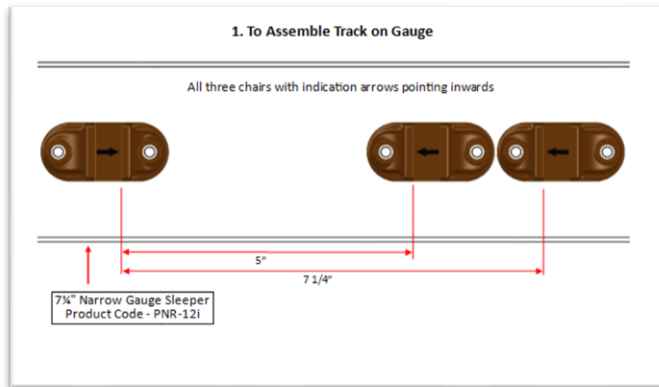


The bar rail chair is manufactured from a high-grade polymer, and is of a compact design of pleasing appearance, embodying many full-size features. If used with our plastic sleepers it has automatic gauge widening built in. If you want to lay a 5" gauge line as well in the smaller 10mm x 20mm bar rail then we can provide a packer which lifts the rail up.



What special features does the bar rail system have?

Apart from being very easy to assemble. If using the plastic sleepers and bar rail chairs together, automatic gauge widening is achievable as shown below.



I have a different rail profile and I don't want to use bar rail, what other options are available?

We can supply a rail clip which comes in three different clamping areas, 6, 8 & 10mm. The rail clip is manufactured from an extremely tough polymer, highly suited to accept loads imparted by the fastening screws. The clip can be used on its own or with a sole plate. There are three types of sole



plate available; Standard, raised and 3 degree cant.

What are the different types of sole plates?

The sole plate is moulded in a plastic with slightly softer characteristics, therefore cushions impact at the railhead. Stops moulded into the sole plate provide a secure fit for the rail clip.



Standard Sole Plate - This sole plate has a flat base so the rail will sit flat.



Raised Sole Plate - The raised panel allows thinner foot profile rails to be accommodated, to avoid the clips tipping at an adverse angle.



3 Degree cant Sole Plate - This sole plate has 3 degrees of cant to enable the rail to match the angle of the wheel coning on the wheels of locomotives and rolling stock in 7 1/4" and 10 1/4" gauge. The angle should improve running by minimizing flange contact (squealing) and hunting (side to side movement).

What type of sleeper are the rail clips and chairs suitable for?

These rail fixing are only suitable for wooden or recycled plastic sleepers.

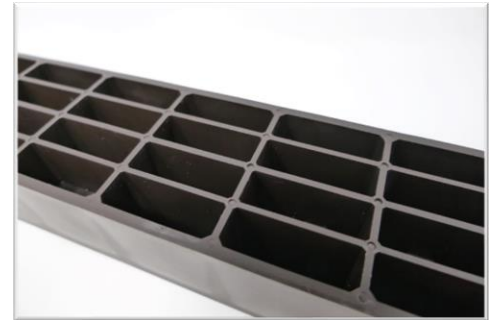
What is the track system manufactured from?



The sleepers and rail chairs are plastic injection moulded. The sleepers have a wood grain finish to give them a realistic appearance. Together with the two-tone colouring of the rail chairs this gives a rusty/weathered look

Is the sleeper solid?

The sleepers are not solid. They have a hollow ribbed underside that will allow the ballast to enter, creating a very stable base to run on, limiting the amount of track movement.



How long will the sleepers and chairs last being plastic?

The sleepers and chairs are both manufactured from virgin engineering polymers. The properties of these can be guaranteed. Our system will provide you with many years of trouble-free running. We have customers who have had our track system down for 20 years and it is still going strong.

What happens if you drop fire onto the sleepers?

As with wooden sleepers the fire should only be dropped in the appropriate place. Should hot coals drop onto the track they will mark but should not burn.

How do I work out how many sleepers, chairs and rail I will need?

If you need assistance working out how many sleepers, chairs and rail you will require, below are the recommended sleeper spacings. Alternatively, you can email us with your enquiry.

- 7¼" or 7¼" & 5" Dual Gauge 200mm – 308mm Centres

I would like to create a siding, are points available?

Unfortunately, we do not supply points for narrow gauge.



Point Lever

We can supply a point lever as an unpainted kit. It is based on full size and is suitable for standard and narrow-gauge equipment in both 7¼" & 10¼" gauge due to its adjustable weight facility and is self-adjusting over a wide range of gapping.

Can I add a buffer stop?

We supply a set of laser cuts to make a 7¼" Gauge buffer stop



I have a good idea of what I am looking for, before I commit can I see a sample?

Sample packs are available for each gauge. The pack consists of a sleeper and selection of rail fittings in your chosen gauge, the packs are free, but we ask for £5.00 towards postage and packing. If you are interested in receiving a pack please complete the sample request form and return it with your payment, alternatively you can pay for the postage via our on-line shop and email us your completed form.

PNP Railways also attend several exhibitions throughout the year. Please refer to our news page for details.

How do I purchase?

We hope that we have provided you with a good overview of the PNP Railways Narrow Gauge Track range.

All our products are available to buy on-line. Delivery is available worldwide. Please contact us for a quotation if you are outside of the UK. Collections from our premises in Stroud, Gloucestershire are by prior arrangement. The prices quoted in this Buying Guide are including VAT at the current rate.

If you have any further questions or would like a quotation, please send us an email at enquiries@pnplastics.co.uk

Safety

While all reasonable steps have been taken to produce a product for use on miniature railways permanent way. It is the responsibility of the end user to ensure that the track components are assembled correctly and have been laid on a stable and secure base and only used for the purpose for which they are intended. Frequent inspection of the track components for defects, loose fasteners, damage and stability should be carried out regularly

Narrow Gauge Track Price List

Narrow Gauge Sleeper

PNR-12I	7¼" Narrow Gauge Sleepers (Also suitable for 7¼" & 5" Gauge Sleepers Sleeper Dimensions: L 353mm x W 50mm x D25mm)	£2.60 each
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Surrey Track System – The items below can be used with the PNR-12I Sleeper or with wooden or recycled plastic sleepers

PNR-11Z	Surrey Rail Chair to suit 5.2lb a Yard Steel Profile Rail	£0.41 each
PNR-12E	5.2lb a Yard Steel Profile Rail – 4m Length	£POA
PNR-12J	Fish Plates to suit 5.2lb a Yard Flat Bottom Rail	£13.00 a set
PNR12JD	Technical Drawings to make Fish Plates to 5.2lb a Yard Flat Bottom Rail	£10.00
INSERT/4034	Fixing Screws	£6.25 per 100

Bar Rail System - The items below can be used with the PNR-12I Sleeper or with wooden or recycled plastic sleepers

PNR-12K	Bar Rail Chair – to suit 12mm x 30mm Bar Rail	£0.30 each
PNR-12L	Bar Rail Packer for 5" Gauge Line – to suit 10mm x 20mm Bar Rail	£0.16 each

Rail Clips and Sole Plates

PNR-3M-SHORT	Rail Clip – 6.5mm Hole & 6mm Clamping Area	£0.16 each
PNR-1F-D	Rail Clip – 6.5mm Hole and 8mm Clamping Area	£0.16 each
PNR-3M-LONG	Rail Clip – 6.5mm Hole and 10mm Clamping Area	£0.16 each
PNR-1F-B	Standard Sole Plate	£0.21 each
PNR-3L	Raised Sole Plate	£0.21 each
PNR-11J	Sole Plate with 3 Degree Cant	£0.21 each

Buffer Stops

PNR-BSK3	7¼" Gauge Buffer Stop Laser Cuts	£30.00
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Point Levers

PNR-10M	Point Lever – Unpainted Kit	£52.25
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The prices quoted include VAT - Valid from March 2019

Carriage is extra and is calculated on weight and destination

Orders can be place on-line at www.pnp-railways.co.uk or by telephone 01453 83 33 88