RAILWAY Magazine GUIDE TO

Modelling JANUARY 2017 REVIEWS, INTERVIEWS, NOSTALGIA, ADVICE



BACK TO BASICS



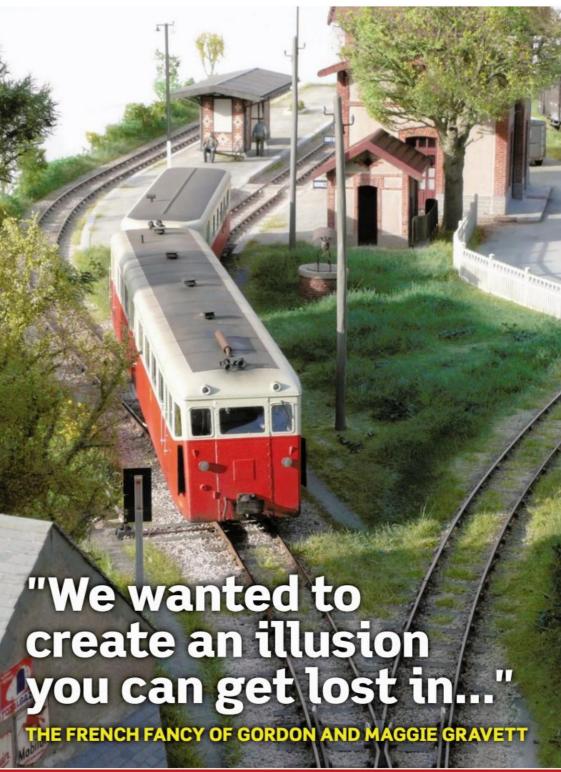
GET THE LOWDOWN ON 3D MODELLING



ASK A DAFT QUESTION



BLASTS FROM THE PAST: BASSETT-LOWKE





Exclusives Just Announced

Re-creating History with Every Model



Coming February 2017 39-526Z Bachmann PMV Cycle Van TMC Limited Edition Pristine £33.95

Weathered £38.95

The Southern Region 4 wheeled cycle van will be arriving early February. In 1951 fourteen standard Passenger Luggage Van's were converted primarily for the conveyance of cycles between London and the Channel Ports. They were used on trains to Dover, Folkstone and Newhaven. Fitted internally with between 24 and 60 hooks to carry bicycles and could be readily distinguished from standard vans by a white stencilled bicycle symbol.

Apart from use on the Channel Docks trains they were also used to convey new bicycles from Kent to London. They had one other use which took them away from the Southern Region as the Cyclist Tourist Club used to run special trains from the London area to other parts of the country. A typical train would consist of three or four coaches and cycle vans. British Transport Films made a programme about these excursions in the mid 1950's (See YouTube).

The cycle vans remained in service until the late 1960's following which they were used on parcels work alongside the standard vans. The TMC example will be \$1282\$ finished in pristine crimson livery or weathered by TMC and should be available in January 2017.



Coming April/May 2017

38-191Y Triple Pack BR Bauxite Ale Vans Factory Weathered | 38-191X Single Ale Van BR White - TMC Limited Editions Tripple Pack - £54.95* | Single Pack - £17.95*

TMC have also commissioned a triple and single pack of Ale Vans. By the early 1960's work for BR's fleet of Insulated vans was diminishing so a number of them were converted to Ale vans. Many of the converted vans were repainted Bauxite whilst others remained in their original white livery. Many of these vans were used by the Guiness Brewery at Park Royal in West London and travelled from there to various parts of the country. The TMC models will all be factory weathered and will include examples of peeling paint effects, replacement planks or doors, stickers and brandings that were found on the actual wagons.

A single pack [38-191X] will depict Ale Van B872054 in factory weathered white livery and a triple pack [38-191Y] will contain Ale Vans B872089, B872094 and B872145 in factory weathered bauxite livery.



Photos above of Bachmann Branchline Undecorated Engineering Samples, now passed for production.





Coming June/July 2017

Plate Wagons & Double Bolsters - TMC Limited Editions

Single Pack - £24.95* | Twin Pack - £49.95*

38-825Z Double Bolster Wagon, Freight Brown Livery

38-826Z Double Bolster Wagon Twin Pack, Freight Grey livery

38-827Z Double Bolster Wagon with Bolsters removed

Twin Pack, Freight Grey livery

38-828Z Double Bolster Wagon LMS Bauxite livery

38-829Z Double Bolster Wagon LNER Grey livery

38-830Z Double Bolster Wagon Olive Green/Freight Grey livery 38-856Z Plate Wagon, Lakenby Works, Freight Grey

38-850Z Plate Wagon ZDO Freight Grey livery

38-851Z Reach Plate Wagon

38-852Z Engineers 'Winkle' Wagon Engineers Black Livery

38-853Z Barrier Wagon Olive Green livery

38-854Z Plate Wagon Twin pack Freight Grey

38-855Z Plate Wagon Freight Grey

*All prices are subject to P&P Charges: Royal Mail: £3.50 Interlink Express: £4.95





Contact Us: sales@tmc-direct.com | t: 01947 899125 | Hours: Monday - Friday: 8am - 5pm | Saturday: 8am - 4pm

GAUGEMASTER Controls



The Complete Model Railway Experience

In Store ...

The Engine Shed MODEL RAILWAY SUPERSTORE

Probably the biggest store in the UK

Open 7 Days a Week

British, European, American, & Japanese Specialists

Over 5,000 Square Feet

Friendly, Helpful Staff





We are conveniently situated right next to Ford Railway Station in West Sussex, which is regularly served by Southern services to and from London Victoria, Brighton, Portsmouth Harbour, Bognor Regis, and Littlehampton. We are also under an hour from Gatwick and Southampton Airports. For those travelling by car, we are located to the south of the historic castle town of Arundel, just off the A27 and A259 in an attractive tourist area. There is plentiful, free parking on site. We are open 0900-1730 Mondays to Saturdays, and 1030-1530 Sundays and Bank Holidays.



Online...

GAUGEMASTER.com

Your one stop model railway shop!



Possibly the largest inventory in the UK

Wide range of Postal Services available

Totally Safe & Secure

Competitive Prices

Pictures & Resources

Email Order Updates

RIGHT LINES

The fortnightly e-Zine from GAUGEMASTER.com

As well as information on new items RIGHT LINES contains articles and guides written by members of staff here at Gaugemaster, all of them experts in their own particular field!

Published every other Friday straight to your inbox, full details on how to subscribe are on our website, www.gaugemaster.com

Technical and Practical Guides - Product Spotlights
Railway Histories and Visits

Visit our specialist websites for Slot Cars and Plastic Kits

Scalextric-Shop.com

AIRFIX-SHOP.COM

Gaugemaster House, Ford Road, Arundel, West Sussex, BN18 0BN United Kingdom Tel 01903 884488 Fax 01903 884377 E Mail - sales@gaugemaster.co.uk www.gaugemaster.com

EVERYTHING YOU NEED FOR YOUR DIGITAL RAILWAY

DIGITRAINS

Just starting out in DCC and not sure what's available?
Grown out of your system and thinking of upgrading?
Getting into sound and want to know the best decoders?

DIGITAL COMMAND CONTROL (DCC) is one of the fastest growing areas of the model railway hobby.

As the first new company to set up as a DCC specialist in the UK. DIGITRAINS now has a decade of hard-earned experience to share. Working in all the popular scales, we are here to guide you through the often daunting process of choosing the best equipment.

We stock a wide range of products as well as offering free advice, a decoder installation service and, we believe, the best DCC 'test drive' facility around.

Don't leave that major purchase to chance!

Why not visit our shop? Our comprehensive library of loco sounds can be demonstrated in front of your very own eyes... and ears!

We stock 1,000s of products from more than 30 leading manufacturers.
And don't worry if you're not digital.
We're also a traditional model shop, holding all the major ready-to-run lines



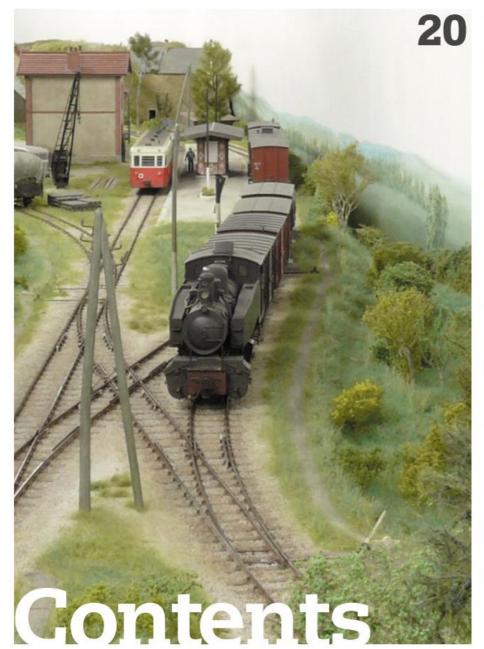
- Try before you buy
- Expert advice
- Great service
- Experience
- Major brands
- Worldwide mailing



-We regularly attend railway shows countrywide. Please check website for details

15 Clifton Street, Lincoln LN5 8LQ **01522 527731**

www.digitrains.co.uk enquiries@digitrains.co.uk











ON THE COVER Maggie and Gordon Gravett's Pempoul layout. Read more on page 20.

WHAT'S IN THE SHOPS Nigel Burkin reviews Mk.1

suburban coaches, Bachmann oo gauge 'Lanky tanks', and weathered edition wagons.

- **GET YOUR TRACK FIX**
- Maggie and Gordon Gravett's Pempoul layout.
- **MODELLING GIVEAWAY** Win a Railway Children train pack set. Plus, what was the Birmingham Carpet Dribbler?
- PAST AND PRESENT Getting down to baseboards with Ian Lamb.

- INSPIRATION PAGES Sarah Palmer takes a look at the cathedral city of Lincoln.
- **BLASTS FROM THE** PAST

Tony Stratford delves into the history books to investigate Bassett-Lowke.

- **DIARY DATES** Where to go in January and February.
- **BACK TO BASICS** Scales and gauges.

YOUNGER/RETURNING MODELLERS

> A peek into the world of 3D modelling.

- LAYOUTS WE LOVE Send us photographs of your layouts.
- 66 ASK A DAFT QUESTION
 Your questions and letters to Modelling.
- **PLACES TO VISIT** Pendon Museum in Oxfordshire.



Staff

Editor Sarah Palmer RMModellingeditor@Mortons.co.uk Contributors Brian Sharpe, Matt Wickham, Tony Stratford, Nigel Burkin, Ian Lamb. Production editor Sarah Wilkinson Senior designer Kelvin Clements Designer Michael Baumber Picture desk Paul Fincham, Jonathan Schofield Advertising manager Sue Keily **Publisher** Tim Hartley **Publishing director** Dan Savage Commercial director Nigel Hole Subscription manager Paul Deacon Circulation manager Steve O'Hara

To advertise, contact:

Marketing manager Charlotte Park

Colin Smith 01507 529454 csmith@Mortons.co.uk Fiona Leak 01507 529573 fleak@Mortons.co.uk

Where to find us

Editorial, advertising and administration Mortons Media Group Ltd, Media Centre, Morton Way, Horncastle, Lincs LN9 6JR Tel 01507 523456

www.railwaymagazinemodelling.co.uk

Copyright
© Copyright Mortons Media Group Ltd.
Reproduction in any manner, in whole or part,
without prior approval in writing is prohibited. The publisher cannot accept responsibility for errors in articles or advertisements, or for unsolicited manuscripts, photographs or illustrations.

Mortons Print, Horncastle, Lincs Tel 01507 523456



Sarah Palmer Editor

From the editor

ith feedback from the Warley show at the end of November pronouncing a great success, the show proved that the model railway hobby is very much alive, well and being actively pursued in the 21st century, let's hope this continues into a new year.

We officially launched The Railway Magazine Guide to Modelling at Warley to great success with more 5000 copies of the magazine being given away free to new readers.

Since Warley we've had lots of positive feedback about the magazine, and we're hoping in 2017 we can take it from strength to strength, helping to bring new people and returners into the modelling hobby.

If you'd like your local model

shop or nearby heritage line to stock the magazine if it doesn't already, then contact our distribution assistant John Sharratt on 01507 529401 or email jsharratt@mortons.co.uk

This issue we've got plenty to interest, including a feature on 3D printing from a volunteer on the Bluebell Railway, a look at Gordon and Maggie Gravett's Pempoul layout before it retires from show life in May, a trip down memory lane with a look at the history of Bassett-Lowke, while our inspiration pages feature the city of Lincoln.

If you'd like to be featured in the magazine, or have a layout you'd like to share, send your suggestions to:

RMModellingeditor@mortons.co.uk Happy new year!



Odds on Favourites



38-525W Bachmann WR Margon Horse Box W96357 (Single) Was £36.50 Now £27.50



38-526W Bachmann SR Green Horse Box S96403 Weathered (Single) Was £38.50 Now £28.95



38-528Z Bachmann SR Green Horse Box preserved at NRM S96369 (Single) Was £36.50 Now £27.50



38-527Z Bachmann ER Maroon Horse Box E96321 Factory Weathered (Single) Was £38.50 Now £25.55

Back The Winners at TMC

UPTO 30% OFF!

Horse Box Offer Must end soon!



38-526Y Bachmann SR Green Horse Box S96366 & S96413 Pristine (Twin) Was £67.00 Now £49.99



38-528Y Bachmann SR Green Horse Box S96402 & S96367 (Twin) Was £67.00 Now £49.99



38-527Y Bachmann MR Maroon Horse Box M96300 & M96301 (Twin) Was £67.00 Now £49.99

Send us your standard models Custom Finish Specialists

To get your models customised by TMC contact us by phone or go to: www.themodelcentre.com/customisation-at-tmc

Available Customisation options...

- · Custom weathering light, medium or heavy
- · Custom deluxe weathering (matching a picture) · Screw link couplings
- Renaming & renumbering
 DCC & DCC sound fitting service
- Cab crew

- · Real coal

 - · Shed code changes
- Crest Changes
- · Gloss finish
- Cab tarpaulin
- Fit parts pack
- Lamps
- Tool carrier
- · Fire irons

You can buy pristine or TMC customised models from our stock, or pre-order new releases at competitive prices. With any purchase from TMC you can enhance the model by choosing from the above customisation options.







32-859Z Bachmann 9F No. 92000 Now In Stock

Pristine - £169.95 | Standard weathering - £194.95 | Custom Deluxe weathering as pictured above - £239.95

CONTACT US

sales@tmc-direct.com

01947 899125 **OPENING HOURS** Monday - Friday: 8am - 5pm Saturday: 8am - 4pm

The Model Centre Hill Farm, Beck Hole Whitby North Yorks YO22 5LF

STAY WITH US

HILL FARM www.stayhfhc.co.uk enquiries@stayhfhc.co.uk

POSTAGE

All prices subject to £4.95 P&P.

Next day delivery available from £6.95

PAYMENT

Cheques made payable to: 'The Model Centre' Accepting all major credit & debit cards, PayPal & WorldPay Prices maybe subject to change

What's in the shops





Mk.1 suburban coach

Seated passengers enhance the popular Bachmann OO gauge suburban coach, writes Nigel Burkin.

K.I 'SHORT FRAME' suburban coaches have been part of the Bachmann oo gauge range for many years and remain popular with modellers. Current models include four BR Eastern Region coaches in plain BR blue livery, which would be suitable for modelling Great Northern suburban services centred on King's Cross and East Coast Main Line routes.

Four BR lined maroon models labelled for Midland Region suburban services, released at the end of 2016, include two brake coaches, a composite coach with both first- and second-class compartments, together with a second-class coach.

The inclusion of two brake coaches with this new issue of the models is not accidental – a relatively high proportion of brakes were used in locomotive-hauled suburban train formations compared with long-distance passenger trains. All of the coaches are modelled on high-density nongangwayed compartment stock with 57ft-long bodies fitted to

short underframes making them suitable for routes with a tight loading gauge and shorter than usual platforms.

'Metrogauge' profile 57ft stock allowed London Midland allocated suburban coaches to work the restricted tunnels through to Moorgate station.

Passenger conditions were cramped in the compartment stock – suburban coaches were not described as high-density stock for nothing. A 57ft second-class coach could seat 108 passengers, while the brake could manage 72 passengers. Compartments were enclosed with bench-style seats on either side and minimal leg room.

A small number of open second coaches (some with lavatories) and corridor composite coaches were constructed. However, the bulk of the 57ft suburban coach fleet was based on compartments for maximum passenger density.

Suburban coaches gave way to DMUs on the Midland and Western Regions whereas suburban coaches lasted until 1977 on the Great Northern when electrification of the inner suburban East Coast main line routes was completed in 1976 and later extended to Royston in 1978. Class 312 and 313s took over Great Northern suburban services from suburban stock and DMUs from that time. It is worth noting that suburban coach operation was not restricted to London routes

Model details:

BR Mk.1 short frame suburban coaches finished in BR lined maroon livery.

> Manufacturer: Bachmann Europe Plc.

Scale: 4mm (1:76) scale, 00 gauge.

Era: 1954 until the late 1970s depending on region.

Web: www.bachmann.co.uk

Suggested retail price: £39.95.

......

and both the short frame and particularly the 64ft-long frame versions did operate in other parts of the UK.

The models:

Bachmann's suburban coaches are not as up-to-date as its main line Mk.I coaching stock, lacking flush glazing and technical features such as NEM coupling pockets. Nonetheless, they stand up well to scrutiny in having finely tooled details and a neatly applied livery.

Care has been taken over livery application, which has accurate colour and lining that is sharp, clean and without any flaws such as dust. The variety of body shells offered by Bachmann allows modellers to represent most, if not all, suburban train formations too. One of the latest features to be added to Bachmann coaches is the fitting of passenger figures.

Of the sample models, the brake second coach numbered M43301, has 11 passengers fitted, equally distributed throughout the six compartments while M46067 is a second-class coach



Suburban coaches are popular with modellers and Bachmann's latest releases cover the majority of suburban stock used on the Midland suburban routes into London with several running numbers.

adorned with 12 passengers.

The interior moulding is composed of brown plastic and has no other detail other than the fitting of passenger figures. It is worth noting that the brake second coaches included a ladiesonly compartment located next to the guard's compartment and both models have the appropriate labels printed on the window glazing.

Of the lined BR maroon models, the composite coach is intended to represent a Diagram 311 coach, numbered 41000-41042 and 41049-41059 (Catalogue number 34-700C). The brake second coach as described in this article

represents Diagram 371 coaches which were numbered 43100-43061; 43171-43259; 43360-43367. (Catalogue numbers 34-630A and 34630B).

Finally, the second-class coach, the second of the two models to be reviewed, is based on Diagram 326 stock, which was numbered 46063-46259 and 46299-306 (catalogue number 34604C).

short frame suburban coaches escaped the scrapping and entered preservation with a

North Yorkshire Moors Railway, Keighley and Worth Valley Railway, the Mid Hants and the North Norfolk Railway. In preservation: A remarkable number of Mk.1

> Bachmann reissued its popular 00 gauge Mk.1 suburban coach in late 2016, finished in BR lined maroon and numbered for Midland Region services.

number of heritage railways;

allowing enthusiasts to sample

high-density suburban stock. It

appears that at least significant

coach types has survived and are beautifully restored on heritage

numbers of the important

railways as far afield as the

in brief

Modelling magazine launches at Warley

The Railway Magazine's Guide to Modelling, a new free monthly publication from Mortons Media Group, was launched at this year's Warley National Model Railway Exhibition, held on November 26-27. Thousands of visitors took up the offer of the free magazine which will be available from model shops and some heritage lines.

"I was really pleased with the reception Modelling got at the show," says editor Sarah Palmer. "We're hoping it will bring a fresh outlook to the marketplace and encourage more people into the hobby."

Also drawing the crowds at the show was Betton Grange now just three years from completion. It was the centrepiece of the exhibition hall, with other static exhibits including Vale of Rheidol locos No. 7 and No. 9, there to mark 175 years of the GWR, and Cleethorpes Light Railway's Effie on display to celebrate Sir Arthur Heywood, the innovator of the 15in railway, 100 years after his death.

Going on sale for the first time at Warley was Patriot, a limited-edition model from Dapol, of Freightliner's 66418, with proceeds from sales going to the ABF, the Soldier's Charity. Entitled Project Railway Honour, the scheme was created by Cpl Gareth Atkinson to raise funds while commemorating the historic sacrifices made by railway men during times of war.

"There was a lot of interest at the show," says Gareth, with 50 models paid for in cash and another 12 orders confirmed. "Another two models will go ahead, Valour and Remembrance, and we're also hoping for the go-ahead for a fourth model," he added. Next year's event will take place on November 25 and 26

GAUGEMASTER.com

Engine Shed The Online Home of The







DECODERS DCC18 OMNI Next18 Decoder DCC18 OMNI Next 18 Decoder
DCC22 CLASSIC 2 Function Micro
DCC22 CLASSIC 6 Fin Plug-in Decoder
DCC28 CCMSCE 8 Fin Plug-in Decoder
DCC28 COMSCE 8 Fin Decoder withdramess
DCC27 OMNI 21 8 8 Fin Decoder with Themses
DCC29 OMNI 6 Fin Decoder with Themses
DCC29 OMNI 6 Fin Decoder with Themses
DCC29 OMNI 6 Fin With Mext 16 Decoder
BPDCC27 OMNI 21 8 Fin Decoder (5)
BPDCC28 OMNI 6 Fin with Harmess (6)
BPDCC29 OMNI 6 Fin with Harmess (7)
DCC30 Accessory Decoder 4 Accessories

DCC ACCESSORIES DCC ACCESSORIES
DCC11 Prodity Extension Plate
DCC11 Prodity Extension Plate
DCC13 Prodity AA/C StackItt Walkaround £179.95
DCC14 Prodity AA/C StackItt Walkaround £174.95
DCC15 Prodity AA/C StackItt Walkaround £174.95
DCC40 Auto Reverse Module £42.95
DCC40 Prodity DCC Booster Unit 8 Am £18.95
DCC40 Prodity DCC Booster Unit 8 Am £18.95
DCC55 Prodity Wreelss Conversion Set £259.95
DCC55 Prodity Wreels Computer Interface £54.95
DCC65 Sprate puls for Prodity £14.85
DCC66 Sprate puls for Prodity £14.85
DCC66 Sprate puls for Prodity £14.85
DCC66 DC66 Prodity Universal Load (20m) £5.95 DCC63 Prodgy Universal Lead (7m) 150 DCC68 Prodgy Universal Lead (7m) 150 DCC68 Prodgy Universal Lead (7m) 150 DCC68 Prodgy Adv Power Supply Unit 253 DCC78 Prodgy Express Power Supply Unit 253 DCC77 Prodgy Decoder Tester CDC78 to 21 Fin Adapter 150 DCC77 Prodgy Walksround Adv.



DCC80 DCC Autofrog (5)

RPDCC80 DCC Autofrog (3)

The DCC80 Autofrog (3) a simple switch that

The DCC80 Autofrog is a simple switch that

advantachactly Autories the frog polarity on your

DCC layout. In most situations, the use of

selectrafrog points is recommended on oligital
layouts to ensure reliability but this can make extra

switching more complicated than it needs to be.

Visit our website for more information on this

innovative solution. Thousands sold so far!





GMC-P Single Track Simulation £99.95 GMC-PO Single Track Simulation O Scale £104.95



GMC-D Twin Track GMC-DO Twin Track O Scale GMC-DS Twin Track Simulation GMC-TS Three Track Simulation

PANEL MOUNT CONTROLLERS



GMC-100 Single Track
GMC-100 O Single Track O Scale
GMC-100 O Single Track O Scale
GMC-100 GS Single Track Scale
GMC-U Single Track Simulation
GMC-UF Single Track Simulation O Sc
GMC-UD Twn Track
GMC-UD Twn Track
GMC-UD Twn Track Foodback
GMC-UDS Twn Track Foodback
GMC-UDS Twn Track Simulation
GMC-UTS Trace Track Controller Sim.
GMC-UT Grace Track Controller Sim.
GMC-UT Grace Track £34.95

E89.95 E89.95 GMC-W Single Track E99.95 GMC-WS Single Track Feedback E94.95 GMC-WS Single Track Simulation

MAINS POWERED TRANSFORMERS GMC-M1 Output 2 x 16/r AC GMC-M1 OC Output 2 x 12/r DC GMC-M2 Output 1 x 18/r AC (2.5a) GMC-M3 Output 1 x 24/r AC (1.25a) GMC-M3 Output 2 x 12/r AC (1.25a) WALL MOUNTED TRANSFORMERS GMC-WM1 Output 1 x 16v AC or 12v DC GMC-WM2 Output 1 x 9v DC (0.6a) GMC-WM3 Kato Unitrack UK Power Suppl GMC-WM4 Output 12v DC (Regulated)

GMC-T1 Output 2 x 16v AC (1a) GMC-T2 Output 1 x 18v AC (2.5a) GMC-T3 Output 1 x 24v AC (1.25a) GMC-T4 Output 2 x 12v AC (1a)

MODULES
GMC-SS1 Super Shuttle Unit G Scale E44.95
GMC-SS2 Station Stop Unit E199.95

NE POINT CONTROL 0 POINT CONTROL STARTER SET



GMC-PCSET Point Control Starter Set £49.95 Contains Mains Powered CDU, 3 x Point Motors, 3 x Reels of 10m Wive & 3 x Toggle Switches, Ideal for the heapiner.

MAINS POWERED POINT CONTROL SYSTEM
GMC-PCU1 Point Control Unit £114.95
GMC-PCU2 Slave Unit for PCU1 £52.95

CAPACITOR DISCHARGE UNITS

GMC-MCDU Mains Powered CDU

UNCOUPLERS
GMC-EM1 N Electro Magnetic Uncoupler
GMC-EM2 Coupling Adaptor Fret (20)
GMC-TLU OO Tension Lock Uncoupler

POINT MOTORS GMC-PM1 SEEP Motor with Built-In Switch £5.50
GMC-PM2 SEEP Motor No Switch £4.95
GMC-PM4 SEEP Motor Latching Mechanism £6.25

1599



GMC-PM10D Digital Solenoid Point Motor £18.95 All the features of the PM10 but with an inbuilt DCC decoder to make wiring even easier. £54.95 £44.95



GMC-PM20 Surface Mount Point Motor E9.95
GMC-BPPM20 Surface Mnt Point Motor(5): £44.95
Designed with easy installation in mind. PM20 is
placed parasel to your point-work and operates
equally well orientated eitner way. PM20 works well
with all popular modelling scales, and with the
leading brands of frack in the UK. The magnetic
calls are high-efficiency for reliable operation.
PM20 also has a physin-framess that is very easy
to use. Mounting screws are included.



PM20D Digital Surface Mount Point Motor £22,95 All the features of the PM20 but with an inbuilt DCC decoder to make wiring even easier.

POINT MOTOR ACCESSORIES



GMC-PM50 Connection Boxes (3) GMC-PM51 Tripled Point Motor Wire 10m GMC-PM52 Point Motor Accessory Pack GMC-PM53 Harnesses for PM10D (2)



TRACK

GMC-HF2 Double Track Unit

AXLE-HUNG TRACK CLEANING PADS GM37 OO/HO Track Cleaning Pads (3) GM39 N Track Cleaning Pads (3)

TRACK TESTER



GM52 Multi Scale Track Tester £4.95 OO SCALE FLEXIBLE TRACK

ALE FLEXIBLE TRACK
900mm N/Siher Flexible Track (100) £315
900mm N/Siher Bik Flexi Track (24) £79.95
900mm N/Siher Bir Flexi Track (24) £79.95
900mm N/Siher Bir Flexi Track (100) £315
Code 100 (OO) Rail Joiners (24) £2.95

OO SCALE TRACK ACCESSORIES GM45 OO/HO Re-Railer GM54 OO Buffer Stop BPGM54 OO Buffer Stop (5 Pack) £1.95 £8.75

GM55 CO Lit Buffer Stop Lights (Pack of 2) GM56 CO Buffer Stop Lights (Pack of 2) GM13 Pair of Leads (Joiners/Bare Wire) GM66 Homby Type Track Pins 10mm GM67 Extra Long Track Pins 15mm £7.25

N SCALE FLEXIBLE TRACK GM96 900mm N/Silver Bik Flexi Track (24) £59.95 GM18 Code 80 (N) Rail Joiners (24) £2.95 N SCALE TRACK ACCESSORIES GM46 N Re-Railer GM53 N Scale Buffer Stop BPGM53 N Scale Buffer Stop (Pack of 5) GM57 N Lif Buffer Stop on Track GM58 N Buffer Stop Lights (Pack of 2) GM17 Pair of Leads (N Joiner/Bare Wire)

OO GREY BALLASTED UNDERLAY SYSTEM



£3.75 £2.65 £23.95 £8.25

 OO BROWN BALLASTED UNDERLAY SYSTEM

 GM111 OOHO Brown Balast (500g)
 £3.75

 GM210 Flexible Balasted Underlay (5m)
 £23.95

 GM214 Point & Crossing Ballasting KR
 £8.25

N GREY BALLASTED UNDERLAY SYSTEM
GM115 N Granite Ballast (500g) £3.75 GM115 N Granite Ballast (500g) £3.75 GM118 N Granite Ballast (200g) £2.65 GM201 N Flexible Ballasted Underlay (5m) £23.95 GM205 N Point & Crossing Ballasting Kit £8.25

N BROWN BALLASTED UNDERLAY SYSTEM
GM113 N Brown Ballast (500g) £3.75 GM113 N Brown Ballast (500g) £3.75 GM211 N Flexible Ballasted Underlay (5m) £23.95 GM215 Point & Crossing Ballasting Kit £8.25

OO SCALE CORK TRACKBED SYSTEM



GM251 3mm Cork Trackbed 4.5 x 50cm (6) £9.25 GM252 3mm Cork Plates 15 x 50cm (2) £4.55 GM264 For RH Sectional Points (2) £4.50 GM264 For RH Sectional Points (2) £4.50 GM264 For RH Sectional Curved Points (2) £4.50 GM264 For LH Sectional Curved Points (2) £4.50 £4.50 £4.50 GM247 For Y Sectional Points (2)

N SCALE CORK TRACKBED SYSTEM GM231 2mm Cork Trackbed 2.8 x 50cm GM232 2mm Cork Plates 15 x 50cm (2) GM225 For RH Sectional Points (2) GM226 For LH Sectional Points (2)

SCENICS



GM194 Scenic Starter Pack

£24.95

GRASS & GRAVEL MATS

GM20 Spring Grass Mat 100cm x 75cm E7.95 GM21 Summer Grass Mat 100cm x 75cm E7.95 GM22 Autuum Grass Mat 100cm x 75cm E5.95 GM23 Gravel Mat 100cm x 75cm E5.95 GM38 Spring Grass Mat 240cm x 120cm E34.95

MEADOW MATS

£4.95

GM140 Meadow Mat - Spring 6mm Grass £9.75 GM141 Meadow Mat - Meadow 6mm Grass £9.75 GM142 Meadow Mat - Spring 12mm Grass £12.75 GM143 Meadow Mat-Meadow 12mm Grass £12.75 GM147 Meadow Mat - Beige 6mm Grass £9.75 GM148 Meadow Mat - Beige 12mm Grass £12.75



£9.95 £4.95

GM196 Staric Grass Starter Set GM193 Putter Bottle GM196 Staric Grass Glue (250ml) GM176 Spring Grass Flook (30g) GM171 Summer Grass Flook (30g) GM172 Moodend Grass Flook (30g) GM173 Meadow Grass Flook (30g) GM173 Meadow Grass Flook (30g) GM174 Woodland Floor Grass Flook (30g)

BUDGET SCATTERS
GM101 Meadow Scatter (50g)
GM102 Mid Green Scatter (50g)
GM103 Dark Green Scatter (50g)
GM103 Dark Green Scatter (50g)
GM103 Spring Green Scatter (50g)
GM104 Spring Green Scatter (50g)
GM108 Earth Brown Scatter (50g)
GM104 Red (Brown Scatter (50g)
GM110 Red (Brown Scatter (50g)
GM112 Ministron Coat (50g)
GM112 Ministron Coat (50g)
GM116 Grey Tarmac Scatter (50g)

ICHENS & HEDGES

GM160 Light Green Hedgerow (1m) GM161 Dark Green Hedgerow (1m) GM164 Light Green Lichen (80g) GM165 Dark Green Lichen (80g) GM166 Assorted Lichen (80g)

FOLIAGE GM150 Fine Light Green Foliage (30g) GM151 Fine Dark Green Foliage (30g) GM152 Fine Mid Green Foliage (30g) GM153 Fine Light Brown Foliage (30g) GM154 Fine Brown Foliage (30g)

STANDARD TREES GM181 Plum Trees in Blossom (3) GM182 Fruit Trees (3) GM183 Apple Trees (3) GM184 Birch Trees (3) GM185 Weeping Willow Trees (3) GM186 Poplar Trees (3)

VALUE TREE ASSORTMENTS



BULK TREES GM120 Decidu GM120 Deciduous Trees (25) GM121 Mixed Trees (25) GM122 Fir Trees (25) GM123 Small Fir Trees (50) GM124 Deciduous Trees (25) GM125 Spruce Trees (25) MAKE YOUR OWN TREES GM195 Seafoam for Tree Ma GM195 Sealoam for Tree Making GM156 Light Green Scenic Leaves (50g) GM157 Mid Green Scenic Leaves (50g) GM158 Dark Green Scenic Leaves (50g)



GM139 Flowerbeds GM175 Garden Flowers GM176 Water Plants GM177 Garden Plants GM178 Wild Flowers

GM149 Green Plants 12mm (42) GM159 Yellow Plants 12mm (42)

GRASS STRIPS/TUFTS
GM136 Spring Grass Strips (36)
GM137 Summer Grass Tufts (104)
GM138 Flowering Grass Tufts (108)
GM162 Green fimm Mini Tufts (42)
GM163 Green 12mm Mini Tufts (42)

BRICKWORK GM39 Plain Stone Wall Grey GM31 Grey Stone Wall & Butresses GM12 Grey Stone Wall & Arches GM197 Stone Tunnel Wall GM198 Single Tunnel Mouth & Walls GM199 Double Tunnel Mouth & Walls

BACKSCENES GM701 Large Valley Backscene GM702 Large Countryside Backscene GM703 Large Open Field Backscene PRODUCTION OF A GMT04 Large Village Backscene GMT05 Large Cloudy Sky Backscene GMT06 Large Industrial Backscene GMT07 Large Housebacks Backscene GMT08 Large Prefty UK Town Backsce GMT05 Small Vostey Backscene GMT05 Small Open Field Backscene GMT05 Small Open Field Backscene GMT05 Small Open Field Backscene

6M753 Small Open Field Backsone £1,95 £1,95 £1,95 £1,95 £1,95 £1,95 6M755 Small Industrial Backsone £1,95 6M757 Small Housebacks Backsone £1,95 6M757 Small Housebacks Backsone GM755 Small Cloudy Sky Backscene GM756 Small Industrial Backscene GM757 Small Housebacks Backscene GM758 Small Pretty UK Town Backscene

HIGHWAYS



OO SCALE WIDE ROAD SYSTEM GM376 68mm Wide Universal Curves (2) OO/HO SCALE VEHICLE LIGHTING KITS

GM385 Standard Vehicle Kit GM386 Emergency Vehicles Kit (Blues) GM387 Service Vehicles Kit (Orange) N SCALE ROAD SYSTEM GM390 40mm Wide Tarman GM390 40mm Wide Tarmac Road (1m) GM391 40mm Wide Universal Curves (2)

ROADSIDE CRASH







£22.95 £22.95 £22.95 £19.95 £22.95 £22.95 GM451 Wooden Fencing 300mm Length GM452 Lattice Fencing 300mm Length GM453 Garden Shed Kit

Gaugemaster Controls Ltd, Gaugemaster House, Ford Road Arundel, West Sussex, BN18 0BN, United Kingdom

Tel - 01903 884488

Fax - 01903 884377 E Mail - engineshed@gaugemaster.co.uk





STRUCTURES

OO SCALE "FORDHAMPTON" PLASTIC KITS







GM406 Fordhampton Locomotive Shed
GM407 Fordhampton Carriage Platforms
GM408 Fordhampton Village Store or Pub
£17.95

COMING SOON... GM409 Fordhampton Pub/Bistro GM410 Fordhampton Rest Home/Doctors GM411 Fordhampton Famihouse/Cottage GM413 Fordhampton Gasometer GM413 Fordhampton Nurseries



KESTREL **DESIGNS**

N GAUGE PLASTIC KITS £3.60 £5.95 £6.75 £6.75 £6.75 £8.75 £5.35 GMND04 Stringard
GMND05 House/Shop Unit with Glazing
GMND06 House/Shop Unit with Glazing
GMND06 House/Shop Unit with Glazing
GMND06 The Shop Unit with Glazing
GMND08 Country Station
GMND09 Station Buildings
GMND09 Station Buildings
GMND10 Station Pleatform with Flat Canopy
GMND11 Fisit Canopy
GMND11 Fisit Canopy
GMND12 Fisit Signal Box
GMND138 Farm Rail Fencing White
GMND14 Fisit Frenching White
GMND14 Fisit Group House
GMND14 Fisit GMND14 Fenching White
GMND14 Fisit GMND14 Fenching
GMND14 Fisit GMND14 F GMKD17 Platform Ramps (2)
GMKD18 Station Yard Huts
GMKD19 Weighbridge & Office
GMKD20 Cost Office
GMKD20 Level Crossing/Keepers Cottage
GMKD22 Level Crossing/Keepers Cottage
GMKD22 Tevel Crossing/Keepers Cottage
GMKD22 Tevel Crossing/Keepers Cottage
GMKD24 Water Tower
GMKD25 Were Shop
GMKD25 Fores Shop
GMKD26 Corner Pub
GMKD26 Tevel Storey Town Shop
GMKD28 Tiree Storey Town Shop
GMKD29 Modern Station Wating Room
GMKD29 Modern Station Wating Room
GMKD29 Modern Station Wating Room

GMND39 Modern Station Wating Room
GMND31 Station Masters House
GMND32 Fair Fee War Semi Det. Houses
GMND32 Fair Fee War Semi Det. Houses
GMND33 Boilerhouse & Chimney
GMND34 State Block
GMND35 Cow Shed
GMND36 State House
GMND36 State Footbridge
GMND39 Modern Industrial Unit
GMND40 Modern Free Station
GMND40 Floriborne Wide (2)
GMND43 Goods Shed
GMND40 GNnos Station
GMND40 House Trans Station
GMND40 House Free Station
GMND40 Plotform Ramps Wide (2)
GMND42 Plotform Ramps Wide (2)
GMND40 GNND40 Floriborne Station
GMND40 Floriborne Station
GMND400 Floriborn Station
GMND4001 GNnos Station

The same as the utra detailed OO equivalents
(GM451/GM452/GM453) - pack sizes vary from the
dmm versions though
GMMD51 Wicoden Fencing
GMMD51 Bidder Fencing
GMMD52 GMMD53 Garden Sheds (2)
£5.50

N GAUGE VALUE KIT SETS



LIGHTING

GM001 Barkey Twist Gas Lamp Soft Black (3) £12.95 GM802 BiTwist Gas Lamp Br/SR Green (3) £12.95 GM802 BiTwist Gas Lamp LMS Maroon (3) £12.95 GM803 BiTwist Gas Lamp GMN Stone (3) £12.95 GM805 BiTwist Gas Lamp Grey Underco aper Post Oas Lamp BR'OR Gm (3) £12.95
"Post Gas Lamps LMS Marron (3) £12.95
"Post Gas Lamps GMY Stone (3) £12.95
"Post Gas Lamps GMY Stone (3) £12.95
"Post Gas Lamp GMY Stone (3) £12.95
"Aper Post Ol Lamp Soft Black (3) £12.95
"aper Post Ol Lamp BR'SR Green (3) £12.95
"aper Post Ol Lamp GMY Stone (3) £12.95
"aper Post Ol Lamp GMY Stone (3) £12.95
"Seen Neck Lamp Soft Black (3) £12.95
"Seen Neck Lamp Soft Black (3) £12.95
"Seen Neck Lamp GMY Stone (3) £12.95
"Seen Neck Lamp GMY Stone (3) £12.95
"Seen Neck Lamp GMY Stone (3) £12.95
"Will Cunted Swan Neck Black (2) £12.95
"Will Cunted Swan Neck LMS MY (2) £12.95 GM321 Wildourhed Swan Neck SR/BR Gm(2) £12.95 GM322 Wildourhed Swan Neck LNS Mm(2) £12.95 GM323 Wildourhed Gwan Neck GWR Stre(2) £12.95 GM324 Wildourhed Gwan Neck GWR Stre(2) £12.95 GM325 Wildourhed Gea Lamp SR/SR Gm(2) £12.95 GM325 Wildourhed Gea Lamp LMS Marron(2)£12.95 GM326 Wildourhed Gea Lamp LMS Marron(2)£12.95 GM328 Wildourhed Gea Lamp GWR Stren(2) £12.95 GM328 Wildourhed Gea Lamp GWR Stren(2) £12.95 GM329 Midden SQI Head Adjustable Lamp(4)£45 GM330 Modern Dbl Head Adjustable Lamp (3)£12.95

OO SCALE VALUE PACKS LAMPS & LIGHTING



Typically 6 x temps, plus two neatching wall lamps with prothylpical good entensions as well as 5 prohtpy white LEDs for building intenses and all required light control PCBs.

Invaved light control IRV
GMB51 Barley Twist Gas Lamp Soft Black
GMB52 Briwst Gas Lamp SR/BR Green
GMB53 Briwst Gas Lamp M5 Affaron
GMB53 Briwst Gas Lamp LM Affaron
GMB53 Briwst Gas Lamp GWR Shone
GMB55 Taper Post Gas Lamp SWSR Green
GMB57 Taper Post Gas Lamp GWR Shone
GMB59 Taper Post Gas Lamp Undercost
GMB59 Taper Post Gas Lamp Undercost
GMB65 Taper Post GU Lamp SR/BR Green
GMB65 Taper Post OI Lamp GWR Shone
GMB65 Taper Neck Lamp SR/BR Green
GMB68 Swan Neck Lamp CMB Maroon
GMB65 Wan Neck Lamp GWR Stone
GMB69 Swan Neck Lamp GWR Stone
GMB69 Swan Neck Lamp GWR Stone
GMB69 Swan Neck Lamp GWR Stone £29.95 £24.95



TOOLS





GM667 Superfine Oil Pen w/Teflon Particles GM668 Electrical Contact Oil Pen

GENERAL MODELLING TOOLS

GM608 Bent Noze Pilers
GM609 S/Sled Tweesers (4)
GM610 Double Ended Pil Vice
GM610 Double Ended Pil Vice
GM611 Saeset I w Scalpel Handle
GM612 Hole Saw & Arbor for Point Motor Filte
GM613 ATT-mawy Killed
GM614 S/S Scalpel & Blades
GM615 Pilest Scalpel & Blades
GM615 Pilest Declary
GM617 Pilest Jorde
GM617 Pilest Pilest
GM617 Pil

GM506 Mini-Toggie DPDT
E3.15 GM507 Mini-Toggie SPDT
E5.75 GM507 Mini-Toggie SPDT
E14.95 GM509 Mini-Toggie SPDT (Celf)
E5.95 GM501 Mini-Toggie FDP Porist Motors
E4.95 GM501 Mini-Toggie FDP Porist Motors
E4.95 GM510 Mini-Toggie FDP Porist Motors
E4.95 GM512 Push to Prake Black (5)
E5.95 GM512 Push to Make Black (5)
E5.95 GM514 Push to Make Black (5)
E5.95 GM514 Push to Make Red (7)
E5.95 GM515 Push to Make Green (5)
E5.95 GM517 Push to Make Red (7)
E5.95 GM517 Push to Make Polov (8)
E5.95 GM517 Push to Make Polov (8)
E5.95 GM517 Push to Make Polov (8)
E5.95 GM518 Push to Make Polov (8)
E5.95 GM518 Push to Make Polov (10)
E5.95 GM521 Rokary Switch P Pol 12 Way
E5.75 GM522 Rokary Switch P Pol 12 Way
E5.75 GM522 Rokary Switch P Pol 12 (Celf) (25)
E5.95 BPGM502 Side Switch DPDT (Celf) (25)
E5.95 BPGM504 Mini-Toggie DPDT (Celf) (25)
E5.95 BPGM504 Mini-Toggie DPDT (Celf) (25)
E5.95 BPGM506 Mini-Toggie DPDT (Celf) (25)
E5.95 BPGM506 Mini-Toggie SPDT (Celf) (25)
E5.95 BPGM518 Push to Make Black (25)
E4.95 BPGM518 Push to Make Black (25)
E4.95 BPGM518 Push to Make Green (25)
E5.95 BPGM518 Push to Make Green (25)
E5.95 BPGM518 Push to Make Wine (25)
E4.75 BPGM518 Push to Make Wine (25)
E4.75

GM624 Swivel Top Pin Vice GM625 Curved Tweecer Reverse Action GM626 Straight Tweecer Reverse Action GM626 Straight Tweecer Reverse Action GM629 Cutting Decs (10) GM630 Screw Top Mandrels (3) GM631 Stiting Decs (10) & Mandrels GM632 Budget Needle File Set GM633 Glisse Filter Pencil 4emm GM634 Amm GFilter Refills (10) GM635 Zmm GFilter Refills (10) GM635 Zmm GFilter Refills (5) GM636 Cm636 Screw GFIlter Refills (10) GM636 Zmm GFIlter Refills (5) GM636 Cm636 Screw GFIlter Refills (5) GM646 Screw GFILTER Sc

GMM44 HSS Jubra Drills 10, (5)
GMM44 HSS Jubra Drills 12, (5)
GMM44 HSS Jubra Drills 12, (5)
GMM45 HSS Jubra Drills 13, (6)
GMM46 HSS Jubra Drills 13, (6)
GMM47 HSS Jubra Drills 13, (6)
GMM47 HSS Jubra Drills 13, (6)
GMM48 Microbox HSS Twist Drill Bits 61-80
GMM49 Microbox HSS Twist Drill Bits 61-80
GMM59 HSS Jubra Drills 10, 4, (6)
GMM59 HSS Jubra Drills 10, 4, (6)
GMM59 HSS Jubra Drills 10, (7)
GMM69 Wind Parinfrush Soft
GMM69 Wind Parinfrush Sof

RAZOR SAWS GM671 4 in 1 Saw Set

SOLDERING STATION



GM662 GM661 Spare Tip

GM41 Thermal Cut-Out 1 Armp
£11.95 GM42 Thermal Cut-Out 2 Armp
£11.75 GM75 PS6 6-Way Din Plug/Socket
£11.95 GM89 PS6 6-Way Din Plug/Socket
£11.95 GM89 Pack of 5 Armp Fuses (5)
£11.95 GM89 Pack of 5 Armp Fuses (5)
£11.95 GM80 Hidro LED White (4)
£12.75 GM61 Micro LED White (4)
£12.75 GM62 Micro LED Red (4)
GM64 Micro LED Blue (4)
GM64 Micro LED Drange (4)
GM66 Grain of Wheat Blub 12V Yellow (5)
GM7 Grain of Wheat Blub 12V Creen (5)
GM72 Grain of Wheat Blub 12V Creen (5)
GM72 Grain of Wheat Blub 12V Creen (5)
GM72 Grain of Wheat Blub 12V Creen (5)
BPGM69 GOW 12V Yellow (100)
BPGM73 GOW Blub 12V Creen (100)
£17.95 BPGM73 GOW Blub 12V Creen (100)
£17.95 BPGM73 GOW Blub 12V Creen (100)
£17.95 GM81 LED Red 3mm 12V (5)
£3.95 GM81 LED Red 3mm 12V (5)
£3.95 GM83 LED Green Smm 12V (5)
£3.95 GM83 LED Green Smm 12V (5)
£3.95 GM84 LED Red 5mm 12V (5)
£3.95 GM85 LED Yellow Smm 12V (5)
£3.95 GM84 LED Red 5mm 12V (5)
£3.95 GM85 LED Yellow Smm 12V (5)
£3.95 GM85 LED Yellow Smm 12V (5)
£3.95 GM85 LED Yellow Smm 12V (5)
£3.95 GM85 LED Relsow Smm 12V (5)
£3.95 GM86 Resistor 14 K Orm for LEDs (10)
£3.95 GM87 Resistor 14 K Orm for LEDs (10)
£3.95 GM86 Resistor 14 K Orm for LEDs (10)
£3.95 GM85 LED Sellow Smm 12V (5)
£3.95 GM85 LED Sellow Smm 12V (5) GM681 25W 230v Soldering Iron GM682 40W 230v Soldering Iron

GM02 Solder 180 degrees (20g) GM03 White Metal Flux

ELECTRICS



GM356 2016 NEW ITEMS BROCHURE

Free from your local from us.

GAUGEMASTER **Limited Edition News**

£2.70 £3.65 £5.95 £2.85

£2.15 £2.15 £2.15 £2.15 £2.15 £2.15 £2.15 £2.15 £2.15 £7.95 £7.95 £7.95

dapol N SCALE IN STOCK

DAGM202 LNER A4 (Valenced) 4488 "Union of South Africa" £149.95 - IN STOCK NOW





DAGM231 IC Executive Pristine £69.95 73 142 Broadlands





OO SCALE



GM101 Brighton Evening Argus NEW DCC FITTED £149.95 DCC SOUND FITTED £239.95

RANGES STOCKED

Atlas Bachmann Berko Busch Capital Transport Carrera Classix Dapol DCCconcepts Deluxe Materials DM Toys Dornaplas EFE FlySlot Gaugemaster Graham Farish Harburn Hamle Heljan **HMRS Transfers** Hobbytrain Hornby Humbrol Jagerndorfer Kadee Kato Kestrel Designs Knightwing

LGB Lifelike Lightcraft Mehano Metcalfe ddleton Press Middleton P MiNis Minitrains Modelcraft Model Scene Ninco

Oxford Rail Parkside Dundas Peco Piko Plastruct Preiser

Oxford Diecast

Racer Railmatch Ratio Revell Roco Rokuhan Rotacraft Scalextric Scenix Seuthe

Slot It Spraycraft

Superquick Tracksetta Train Tech TrainSave Vollmer Vulcan Slo W & T

Walthers Wills





Bachmann 00 gauge 'Lanky Tank'

The British Railways' version of the Bachmann Lancashire & Yorkshire (L&YR) 2-4-2T tank locomotive is described by Nigel Burkin.

HE LANCASHIRE & Yorkshire Railway 2-4-2T Class 5 radial tank locomotive was quite a numerous class and was based on a design by John Aspinall. Three hundred and thirty locomotives were constructed between 1889 and 1911, primarily for passenger service.

The design was upgraded during its construction life from a round top firebox, which matched the shape of the boiler, to one with a round cornered square Belpaire firebox. The same firebox, which improved heat transfer and therefore the production of steam, was also retrospectively fitted to many rebuilt L&YR 2-4-2T locomotives.

The wheel arrangement of the L&YR 2-4-2T is an interesting one in that it is a 'radial' design with small load bearing axles working in special axle box and horn block arrangements, which allows the axle and wheels at the front and rear of the locomotive to move laterally in the chassis as a gentle arc to better run through track curves. The result,

despite it being a more expensive arrangement than fixed-axle horn blocks or pony trucks, is to reduce wheel flange and rail wear on sharp curves.

Passenger duties were the primary use of the locomotive and many of the class were fitted with push-pull equipment, which was visible on the side of the smokebox. Workings varied from local and suburban passenger services to station pilot duties and carriage shunting. The class carried out this work throughout the L&YR system from Humberside to Preston and Liverpool and continued to do so into LMS ownership (one locomotive, No. 1041 was transferred to the Wirral Railway and remained there until the 1923 Grouping).

British Railways inherited around 110 of the locomotives upon Nationalisation in 1948 and these were subsequently withdrawn in small numbers until the last locomotive was finally taken out of use in 1961. Only one survived the cutting torch: No. 1008, which was secured for the National

Collection after withdrawal in 1954. It has received cosmetic restoration but has not run in preservation according to my records.

Its choice is perhaps significant in that it was the first L&YR locomotive to be built at the company's Horwich works. It is this locomotive that Bachmann has based its oo gauge model on and No.1008 was offered as an exclusive model in L&Y lined black by the NRM in November 2013 with loco-specific details. The

Manufacturer: Bachmann Europe Plc.

Scale:

4mm (1:76) scale, 00 gauge.

Era:

1889-1961 depending on livery (model dressed for 1948-56 period).

Suggested retail price: £109.95.

Web:

www.bachmann.co.uk

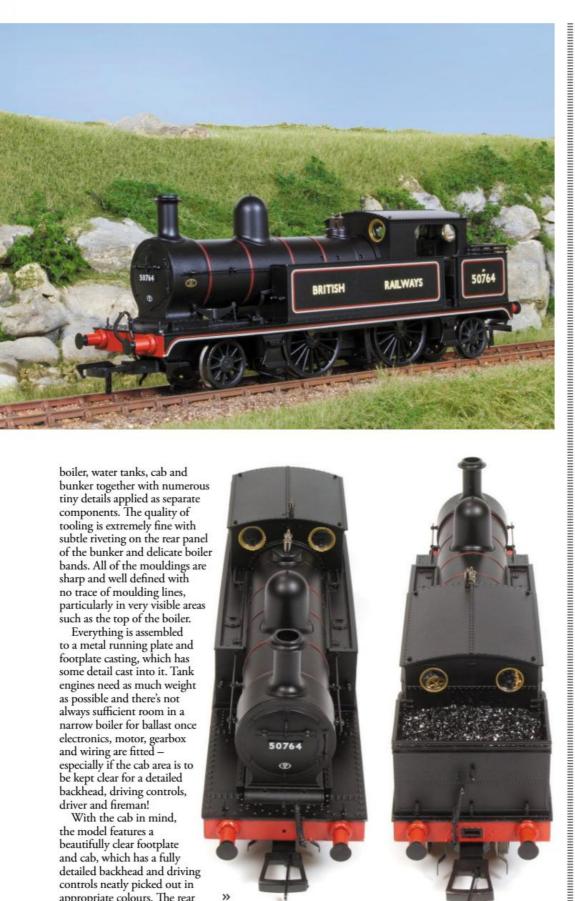
'production' models followed shortly afterwards in December 2013 and modellers generally agree that the model was both a brave choice for a mainstream model and very well executed. The model described in this article is British Railways No. 50764 finished in lined black livery (31-170).

Model details:

British Railways No. 50764, due for release by Bachmann in early 2017, was selected for this overview of the model. It features details specific to a BR locomotive including smokebox door cleat detail and a modified hand rail. The boiler arrangement is a round top; not a Belpaire firebox and no pushpull equipment is fitted. Two coal rails are fitted to a short coal bunker, which has no rivets on the sides, as per the locomotives when built. Class markings are for a 2P indicating that it is a Class 5 locomotive.

Body shell and detailing:

A number of tightly fitting subassemblies make up the body:



boiler, water tanks, cab and bunker together with numerous tiny details applied as separate components. The quality of tooling is extremely fine with subtle riveting on the rear panel of the bunker and delicate boiler bands. All of the mouldings are sharp and well defined with no trace of moulding lines, particularly in very visible areas such as the top of the boiler.

Everything is assembled to a metal running plate and footplate casting, which has some detail cast into it. Tank engines need as much weight as possible and there's not always sufficient room in a narrow boiler for ballast once electronics, motor, gearbox and wiring are fitted especially if the cab area is to be kept clear for a detailed backhead, driving controls, driver and fireman!

With the cab in mind, the model features a beautifully clear footplate and cab, which has a fully detailed backhead and driving controls neatly picked out in appropriate colours. The rear





in brief

Out and about



In December, editor Sarah Palmer visited Digitrains in Lincoln as part of her research for the feature on page 32. Sarah spoke to Nicole there about running a digital demonstration event for the first time. It included displays from Bachmann, Sounds Loco, Train Tech and On Demand Diaramas.

Revolution honoured at Warley

Revolution Trains was awarded the 2016 Gwyn Humphreys Memorial Trophy at the Warley National Model Railway Exhibition at the NEC in November.

RT was the first company to successfully bring a crowdfunded model to market, namely the TEA tanker.

Scenic Sounds Generator

Brimal Components in collaboration with Iain Hale are pleased to announce their new Scenic Sounds Generator.

With up to 15 sound effects available to play on demand, they can be played either individually or together to give a richer mix to the scene.

Powered from a 9-16 V DC supply, the unit can be powered either from the layout via the 2.1mm DC plug or a separate PSU plugged directly into the rear power socket.

For more information visit www.brimal.co.uk/scenicsound-controller.html



« of the cab is detailed too and flush glazed spectacle plates with simulated metal frames completes the picture.

Loco frames:

Spring detail, sand boxes, sand pipes, brake rodding and brake blocks mounted in line with the wheels are just a few of the neatly moulded details applied to the locomotive frames. The whole assembly sits neatly in the die-cast running plate and is equipped with NEM-362 coupling pockets at both ends. The pocket mounting slot is concealed behind the end of the frames where guard irons are fitted, so when the couplings and box are removed, there is no visible sign of there ever being such an assembly.

Wheels and axles:

A great deal of effort now goes into making wheels specific to the locomotive being modelled, with the correct diameter of driving wheels and the use of the correct number

of spokes. The four driving wheels fitted to this model have fine-looking spokes and were, on testing of the model, found to be fully concentric on the axles. The load-bearing wheels fitted to radial axles are also fine in appearance and the model meets 00 gauge standards perfectly. The model runs smoothly through even sharp curves and this good performance is assisted by Bachmann's version of radial axles. The leading and trailing wheel sets are pivoted within the frames of the model allowing it to run on sectional track curves with ease. An overall weight of 250g adds to its ability to 'hold the road' and its overall tractive effort too. It is unlikely that the model will be asked to handle more than five or six coaches at the most, which tests indicated that it was perfectly capable of doing.

Motor and electronics:

In common with many Bachmann steam locomotive models, the L&YR 2-4-2T is equipped with a NEM-651 6-pin DCC socket to save space. The model is not equipped with any electric lighting, so the use of a two-function six-pin decoder is more than adequate. The efficient motor draws little current, even under load, making a 0.5A decoder perfect for the job.

Current is collected from the track through wiper pick-ups acting on the rear of the main driving wheels. This on its own could result in gapping over complex junctions unless turnouts with metal frogs are used. However, the outer 'radial' axle wheels are also equipped with a pick-up system to avoid this problem. Current is collected on one side of each radial axle assembly through a wiper action on the axle. This spreads current collection over the length of the locomotive.

Livery and finishing:

The finish applied to the model of British Railways No. 50764

was immaculate - try as hard as I could, I could find no faults in the application of the black livery, the eggshell finish varnish or lining. Lettering, numerals and lining was straight and level with no traces of bleed.

Overall, the whole model is beautifully finished, down to the red buffer beams and lining applied along the running plate. The model is very well assembled with no traces of adhesive or loose fittings except the cab roof mounted whistle which had to be refitted with a tiny spot of glue.

Small details picked out in metallic colours add something to the lined black livery, including the brass finish around the cab glazing, which itself is commendably flush and very clear.

The model is a delight and perfect for smaller layouts, being no more than 150mm in length. It should not put the space-restricted modeller under any undue pressure! ■

Model Rail Scotland

SECC Glasgow 2017

Fri 24th, Sat 25th and Sun 26th February

50+ LAYOUTS

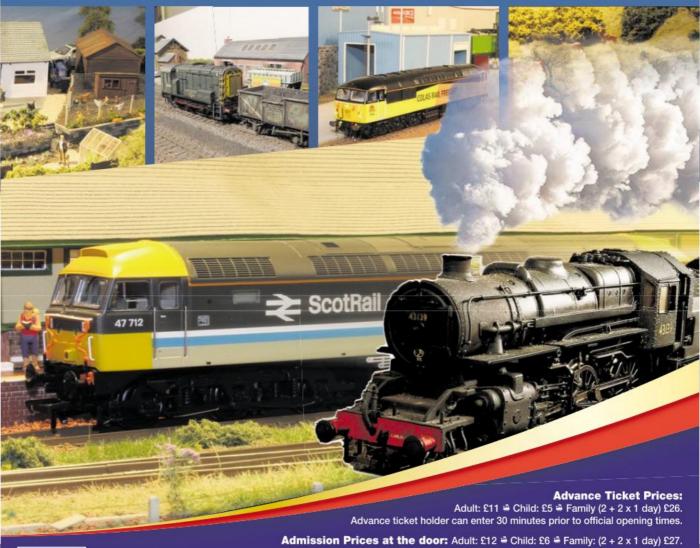
FREE EXHIBITION GUIDE

150 EXHIBITOR STANDS

GAUGE SOCIETIES

DEMONSTRATIONS

www.modelrail-scotland.co.uk



SQUIRES



Fri 24th: 10.30am - 6.00pm - Sat 25th: 10.00am - 6.00pm - Sun 26th: 10.30am - 5.00pm.

Tickets may be bought at the show or in advance by visiting our website www.modelrail-scotland.co.uk.

To purchase advance tickets by post, please forward a cheque or postal order made payable to 'AMRSS' together with a self addressed stamped envelope, to arrive no later than 15th February 2017. AMRSS, PO Box 9117, Shotts, ML7 9AF.

What's in the shops





Weathered edition wagons

Factory weathering of ready-to-run models is becoming increasingly realistic. **Nigel Burkin** reports on the latest weathered editions in OO and N gauge by Bachmann.

or NewComers to the hobby, together with those who wish to enjoy a more simple approach to railway modelling, the thought of taking a paint brush and weathering pristine models is a little daunting. In recent years, Bachmann has recognised the need for realistically weathered rolling stock models including wagons,

coaches and locomotives, and modellers not keen on risking ruining expensive models with weathering colours have given them an enthusiastic welcome.

The level of weathering effects applied at the factory has grown ever more sophisticated in response to this demand, with rust patching applied to wagons of steel construction, lime staining from hard water

running down the boilers of steam locomotives and brake dusting arising from intense daily use of rolling stock.

Weathering and distressing of models adds an additional level of livery application to the production process of any

model, in both N and OO gauge.

Further printing applications to add distressed effects such as differences in the planking of wooden-bodied wagons including 'unpainted' new planks are applied over and above the basic livery application. Distressing of private-owner markings will require a separate pass or two with the printing process.

All of this adds to the time required to finish a model at the factory and consequently, more expensive models compared with pristine releases. However, the results are pretty realistic and will save the modeller time (and money) in not having to add character to their own models, leaving time for layout building, scenery and structure modelling.

Bachmann released a number of 00 gauge seven and eight-plank mineral wagons late in 2016, which feature varying levels of weathering and distressing together with a 20t LNER brake van. In N gauge, a reissue of the popular COVHOP wagon in weathered condition is sure to be popular with those who like to replicate soda ash traffic. As the photographs demonstrate, the level of weathering goes beyond a quick squirt with dark brown paint in most cases.

Individual models:

37-885A: This weathered oo gauge seven-plank wagon, fitted with coke rails and finished with Cory Bros lettering, is a fine example of what can be done with the printing process





Manufacturer:

Bachmann Europe Plc.

Web:

www.bachmann.co.uk

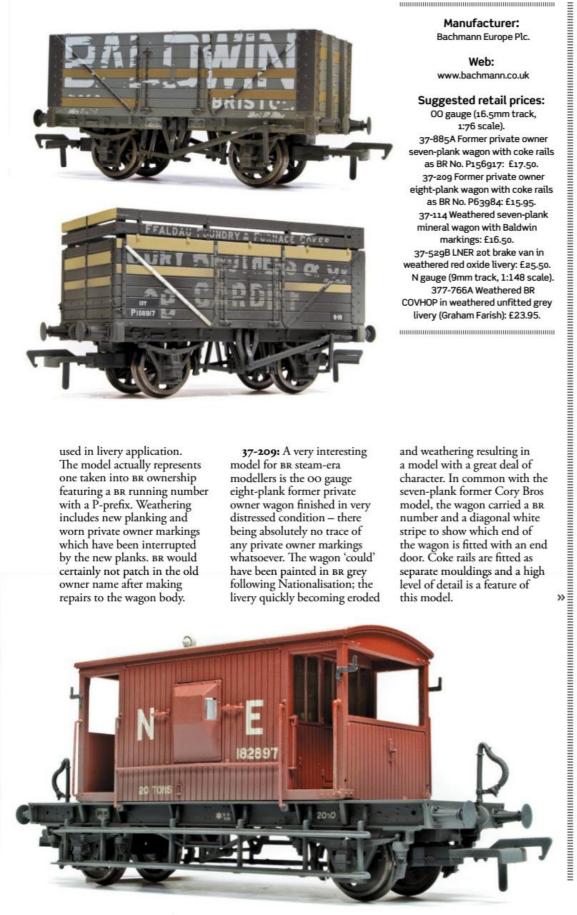
Suggested retail prices:

00 gauge (16.5mm track, 1:76 scale).

37-885A Former private owner seven-plank wagon with coke rails as BR No. P156917: £17.50. 37-209 Former private owner eight-plank wagon with coke rails as BR No. P63984: £15.95. 37-114 Weathered seven-plank mineral wagon with Baldwin markings: £16.50. 37-529B LNER 20t brake van in weathered red oxide livery: £25.50. N gauge (9mm track, 1:148 scale). 377-766A Weathered BR COVHOP in weathered unfitted grey livery (Graham Farish): £23.95.

used in livery application. The model actually represents one taken into BR ownership featuring a BR running number with a P-prefix. Weathering includes new planking and worn private owner markings which have been interrupted by the new planks. BR would certainly not patch in the old owner name after making repairs to the wagon body.

37-209: A very interesting model for BR steam-era modellers is the oo gauge eight-plank former private owner wagon finished in very distressed condition - there being absolutely no trace of any private owner markings whatsoever. The wagon 'could' have been painted in BR grey following Nationalisation; the livery quickly becoming eroded and weathering resulting in a model with a great deal of character. In common with the seven-plank former Cory Bros model, the wagon carried a BR number and a diagonal white stripe to show which end of the wagon is fitted with an end door. Coke rails are fitted as separate mouldings and a high level of detail is a feature of this model.



in brief

Creating a backscene New from Ian Allan **Publishing is Creating**

a Backscene: A Railway Modelling Companion by Paul Bambrick and John Ellis-Cockell.

It's 244 pages and costs £30. I was impressed with its references to paintings and streetscapes in order to learn from them about scale, positioning of figures etc without exhorting the modeller to be an artist in order to achieve scenic models.

GWR Dean Goods class

Locomotionmodels.com has announced the latest exclusive edition in the National Collection in Miniature model railway series - a finely detailed model of GWR No. 2516 Dean Goods Class, produced by Oxford Rail, and available in either DCC ready or with sound versions.

The National Railway Museum's Dean Goods locomotive no. 2516 is currently housed at STEAM - The Museum of the Great Western Railway in Swindon, Wiltshire.

Restored in the 1960s for display, it currently appears as it would have done in the late 1920s Great Western green livery.

This is the first National Collection in Miniature series model to be produced by Oxford Rail in a new partnership with Locomotionmodels.com

All profits generated from the sale of National Collection in Miniature models are reinvested into the ongoing work to conserve, expand and display the National Railway Collection and National Collection in Miniature.

Visit www. locomotionmodels.com for more details.

What's in the shops



ABOVE: Straight from the box: nothing more needs to be done to the Bachmann weathered seven and eight-plank models. RIGHT: Light weathering has been applied to the reissued OO gauge LNER 20t brake van, including soot around the stove pipe and brake dust to the underframe.

37-114: Some very fine tooling is a feature of the Bachmann oo gauge seven-plank models. This particular example features fixed ends and worn private owner markings and new planking following repairs to the body. Representing an example of the Baldwin wagon fleet, the wagon has pre-Nationalisation markings and would suit a layout based in the

1923-1947 Big Four era.

37-529B: The popular oo gauge 20t brake van is issued in its LNER guise with shorter running boards and finished in LNER brown oxide livery as No.182897. Features of the model include separate grab rails, flush glazing applied to the cabin and neatly applied lettering. Weathering is subtle, indicating that the wagon is not exposed to the wear and



the solebar are obscured. 377-766A: A weathered and rusted COVHOP soda ash wagon produced under the Graham Farish label demonstrates that the fine weathering and distressing effect can be applied to N gauge models too and to great effect. BR COVHOP wagons are steel-bodied and suffered as a result of the aggressive nature of the chemicals they carried. The BR grey livery has been distressed with rust patching with the rust colour applied as a realistic dark brown. The model is finished with a light dusting of what could be brake dust and also traces of soda ash itself. While the model has extensive weathered effects, the finely applied lettering and markings are clearly legible, including instructions for operating the under-hopper discharge equipment.



Peter's Railway

e e e e e

Email info@petersrailway.com Web www.petersrailway.com

Peters Railway.com

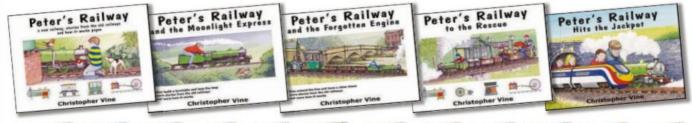
BOOKS FOR CHILDREN WHO LOVE TRAINS

Chris Vine's series of books tell the story of Peter and Grandpa building and operating a railway across their farm.

With adventures, stories from the old railways and real engineering, these books feed inquisitive minds!



Caught in a storm, two young girls dry out in a locomotive. Cheekily, they end up stealing the train! A true story. 15 x 14 cm, 32 pages. Age 6 to 12 years, £2.99 The children and Grandpa play trains on an epic scale, causing complete havoc! 15 x 14 cm, 32 pages. Age 3 to 6 years, £2.99





For more information about our unique books, please visit PetersRailway.com



FOR SIGNED COPIES

For signed and dedicated copies Special Offers & Sets

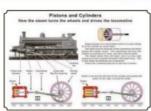
Peters Railway.com

Chris is posting out orders by return!

10% OFF WITH COUPON RMMOD17



Story



Technical



History



Adventure

A belle vue

A cycling holiday through Brittany seems an unlikely spur for a model railway, but as a long-distance cyclist myself I can certainly understand how being so open to the elements means you take in more of the sights of the countryside you're travelling through, says **Sarah Palmer.** That's exactly what happened to Maggie and Gordon Gravett after they went on a cycling holiday in France nearly 30 years ago and the experience spurred them to create Pempoul.

HEN YOU'RE CYCLING YOU SEE more and you smell more. We were in Brittany and cycled off the beaten track, where we discovered that there had once been a railway in the area," says Maggie. From this the couple decided to model the area they had cycled through.

The metre-gauge Réseau Breton system once served much of inland Brittany connecting rural areas to the SNCF main lines but it closed to all traffic in 1967. Maggie and Gordon's fictitious scene shows a small section of the railway in the last years of its life.

I first came across this layout at Spalding Model Railway Exhibition, and there was something about the scene that really grabbed my attention. It seemed to glow with a warmth and charm that felt more like peering over a stone wall into an actual French landscape rather than just a re-creation of one. It brought me in mind of Nicholas Hilliard, the noted British 16th century miniaturist who created microcosms of Elizabethan life and people using a fine squirrel-hair brush with acute attention to detail. It wouldn't be too much to say that this layout's

artistry belies a mere model railway.

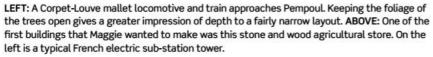
"Each building has been hand scribed from foam board, which is then covered in Das modelling clay, left to dry then each individual stone is etched on to the surface, with an area no more than 5cm² taking up to two hours to do. I then give them to my husband to paint," says Maggie as she explains how each building on the layout was painstakingly scratch-built.

"The layout took 17 years to make, including the research. My husband painted the backscene and trees as he has the skill with colour. These are real









buildings that we've re-created, it's just that they don't exist anymore. One of the buildings we have on the layout now has a motorway running through it," she adds.

Although it's just Maggie I'm talking to about the layout she is at pains to point out that it was very much a joint enterprise with both herself and Gordon bringing valuable but different skills to the table.

"I love France and I speak French, which helps with the research and Gordon has the technical skill," she says.

"Gordon was a draughtsman and with Pempoul he wanted to create a continuous scene to make the viewer feel as though they were in the scene. In his mind's eye he walked along the track and also used the idea of a vanishing point. He used to be a model ship maker, creating, among others, miniature cruise liners that might adorn travel agents' windows," she says.

As well as the sheer artistry of this layout the gauge also stands out as being unusual.

"The gauge we've chosen is a funny one really, but 1:50 makes for easy maths," says Maggie. 1:50 had the advantage of giving easy to use metric dimensions, for example one metre = 20mm. Having said that the track was built to the well-proven 18.2mm gauge (EM standards).

"I can live with this inaccuracy and it has saved many hours in what was always going to be a very long-term project."

There is only a short window in which to see Pempoul though, as May will be its last outing - at the Railex show at the Stoke Mandeville

stadium in Buckinghamshire.

"Gordon will be 70 soon and it will become more expensive for the van hire that we need to move the layout around." You could say that Pempoul deserves something of a retirement as it has travelled all over Europe including Germany, France, Luxembourg, Belgium and the Netherlands.

We have been working on something else, a scene based around the River Arun in Sussex, it will be called Arun Quay and is set in the steam era of the 1960s. When it's finished we want to build another French one."

With a layout of such quality, you'd think that everything was plain sailing, but that's not the case.

'We made lots of mistakes in the modelling of Pempoul," smiles Maggie. "The grass for instance didn't start off the colour it is now, so Gordon overpainted it to get it right.

"Also one of the first buildings was the barn and the two sides you can see have different stonework. But you can make it deliberate, we could say that irregular stonework was part of the original. The same applies when you make mistakes while operating the layout - you just pretend you did it on purpose.'

This attention to detailing and colour also applies to lighting the layout. Many modellers use their own lighting, such as daylight bulbs or LED lighting, to keep the lighting constant, at home and at shows. And if the green gloomy lighting at Warley »





You can see the full beauty of the handengraved stonework in this shot.

Helping the next generation

For more than 20 years, Maggie has worked on the stand at Warley show with Peco and Squires who give 00 gauge equipment free of charge for youngsters to use there. A team of eight works on the show now (it was originally three) and there are up to 150 children coming to model over the weekend.

Maggie also helps junior modellers at York Model Railway Show (April 15-17, 2017) and works at Pecorama in Devon over the school summer holidays.

Why does she do it? "To encourage children to do something other than press buttons so they can use their hands to create things and be imaginative. Children aren't often taught to make things and do seem to be getting fed up of screen-based activities. Too much in today's culture is about things being perfect and buying things off the shelf. We want to encourage experimentation and encourage trial and error, to not be afraid to fail and move on. Children can now use apps to control their layouts, I wouldn't have a clue how to use an app," laughs Maggie.





Most steam workings on the railway are freight and diesel 'autorails' cater for the timetabled passenger trains.

« is anything to go by then I can see why lighting is such a concern for exhibition layouts. Observation of nature and lighting do seem to be key to the accuracy and luminescence of Pempoul.

"Gordon walks every morning and often takes a camera with him to photograph what he sees. When we were doing our research for Pemoul, we visited France regularly for inspiration and photographed the trees. We would then print them off



Maggie is a big believer in encouraging youngsters into the hobby.

at the right scale for our layout and use them when making the models. You can spend a long time making a tree. Gordon has learned so much about modelling trees that he's written two books on the subject,

published by Wild Swan."

Part of the realism of the layout is created through the trees, as you can look through the trees as they aren't covered in leaves, one of the many ways that the layout creates space by fooling the eye.

About Réseau Breton

Réseau Breton was the only remaining metre-gauge railway in Brittany during the 1950s and 1960s, a reminder of former successful, and long-lived metre-gauge railways in this area of France. It was narrow gauge but by no means a small affair with the network consisting of five routes emanating from Carhaix in northwestern France. Pempoul featured in a 2013 BBC Timeshift story entitled The Joy of (Train) Sets.

"We wanted to great a feeling of space, which is why we set it in a springtime midmorning. We wanted to create an illusion you can get lost in."

This is what is clever about Maggie and Gordon's backscene; it adds to the illusion and by not seeing someone at the back operating, it doesn't interrupt the fantasy. You can stand in front of Pempoul and lose yourself in it, and isn't that what it's all about? ■



DCC by Modellers for Modellers

Stockists of

Bachrus, Circuitron, Tam Valley, CML Electronic, DCC Specialties, Digitrax, ESU, Express Models, Gaugemaster, LDT, CT Elektronik, Lenz, New Rail Models, Roco, RR-Cirkits, Sprog DCC, Team Digital, TCS, NCE, Zimo. Plus Many More!

Ipswich Model Railway Centre, 48-52 Tomline Road, Ipswich, IP3 8DB.



Coastal DCC

+44 (0) 1473 710946

www.coastaldcc.co.uk enquiries@coastaldcc.co.uk





Order online or call 01530 456952

STOCKISTS OF MODEL RAILWAY EQUIPMENT SECONDHAND BOUGHT AND SOLD

Sale Starts 10am Sat 7th of Jan 2017

www.flair-rail.co.uk

Flair Rail, Unit 7, Springfields, Nursery Estate, **Burnham on Crouch CM0 8TA** Tel: 01621 786198

E: roger@flair-rail.co.uk Open: Monday to Friday 10-4; Saturday 10-3 FIND US ON

Kent Garden Railways

16mm and G Scale Specialists

LGB * Accucraft * Peco * Piko * Bachmann nouse * Pola * USA Trains and more



Great Stocks of OO, HO & N

We have large stocks from the leading manufacturers

Hornby * Bachmann * Peco * Gaugemaster * Metcalfe * Heljan * Graham Farish * Dapol * Woodland Scenics * Kato * Walthers * Kadee * Expo * Noch * Oxford Diecast * Kestrel * Atlas * Broadway * Parkside * Ratio * Wills * Modelscene * Minitrains and more

66 High Street, St Mary Cray, Orpington, Kent, BR5 3NH Tel 01689 891668 email sales@kgrmodels.com www.kgrmodels.com Shop open 0900-1700 Monday to Saturday

AC Models

www.acmodelseastleigh.co.uk

Stockists of Bachmann, Graham Farish, Hornby, Peco, Scalextric and much much more at No. 9 High Street

Spares Dept and Games Workshop at 7 High Street

Gift Vouchers Available

RADIO CONTROL DEPARTMENT

www.acmodelsspares.co.uk

Open 5 days a week 9am - 5pm Closed Wednesdays & Sundays ON-STREET PARKING OUTSIDE THE SHOP

7-9 High Street, Eastleigh, Hants SO50 5LB Tel: 02380 610100 E: info@acmodelseastleigh.co.uk

MAC'S MODEL



_ROADING

4-8 REFORM STREET KIRRIEMUIR SCOTLAND DD8 4BS

TEL: 01575 572397

WWW.ECSCENICS.CO.UK WWW.MACSMODELS.CO.UK

SALES@ECSCENICS.CO.UK

OPEN MONDAY-SATURDAY 10:30 - 5:00

CLOSED THURSDAY

BRITISH, AMERICAN AND CONTINENTAL OUTLINE STOCKED

COMPREHENSIVE WOODLANDS SCENIC SELECTION

The Birmingham Carpet Dribbler

The carpet what?

Also known as the piddler, this was a classic Victorian toy with moveable front wheels, so it could be operated without tracks, hence the carpet element in its name. They date from around 1840 and were basically a small steam boiler mounted on wheels and were one of the first model trains. They loosely looked like the locomotives around at the time and were made completely from brass. They are classed as being the first commercially available model train.

So, it didn't run on rails?

No, they ran without track and were operated by filling a boiler with water, lighting the burner and then when in steam were allowed to run freely on the floor until they ran out of water, crashed into the furniture, or in the worst-case scenario exploded, which some did until they were fitted with safety valves.

Why was it known as a piddler?

As the tiny trains steamed their way across carpets they had a tendency to leave a watery trail behind them, hence piddler. As this water was often mixed with the fuel from the boiler, this trail could also be flammable, until the Victorian equivalent of health and safety intervened with design adjustments to make them less likely to catch fire.

Can I get my hands on one?

Reproduction models are available to purchase from www.steamengines.co.uk/ Birmingham-dribbler and some modellers

have attempted to build replicas. In

2012 a 31/4 in gauge live steam brass

2-2-2 Dribbler with steam
whistle, wooden insert
to buffer, red spoked
wheels and a flat back
wagon was sold for
£170 by Tennants
Auctioneers.

Diss Auction Rooms



sold a Maxwell Hemmens' limited-edition gold-plated steam model of a Dribbler at 19cm long, with wooden plinth and operating instruction manual replica from 1993 for £120.

Where can I see one?

Brighton Toy and Model Museum has one dating from 1865. You can also see clips of them in operation on YouTube.



Railway Children train pack

This month's giveaway is a Railway Children train pack from Bachmann Branch-line OO gauge, which comes with a GWR 57xx Pannier in GNSR livery, two GNSR coaches and Scenecraft Oakworth station building. It's DCC ready with an eight-pin socket and retails at £134.95.

This perennially popular book by E Nesbitt, first published 110 years ago, has been brought to the screen several times, the most well known of which is probably the 1970 Lionel Jeffries film starring Dinah Sheridan and Jenny Agutter, filmed on the Keighley and Worth Valley Railway.

"This line is in the premier league of heritage lines," says Heritage Railway's Robin Jones.

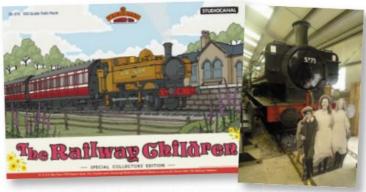
"It was perfect for the filming of the Edwardian classic,

The Railway Children."

More recently, The Railway Children has been enjoying a resurgence in popularity with a stage adaptation produced by the National Railway Museum in collaboration with York Theatre Royal, featuring a full-size pannier tank. It was first performed at the Signal Box Theatre in York and will be performed at King's Cross until January 8, 2017.

To be in with a chance of winning this amazing pack send your details to: The Railway Magazine Guide to Modelling, Mortons Media Group Ltd, Media Centre, Morton Way, Horncastle, LN9 6JR or enter online at www. railwaymagazinemodelling. co.uk/competitions.

Offer expires on January 11,



THE RAILWAY CHILDREN SPECIAL COLLECTORS' EDITION PACK Mr/Mrs/Miss/Ms (Please circle)

First name
Surname
Address
Postcode
Email

TERMS AND CONDITIONS: On occasion Mortons Media Group Ltd may decide to contact you by post/phone/email regarding information relating to current offers of products or services (including discounted subscription offers) which we believe may be of interest to our readers. If you do not wish to receive such offers please tick this box 🗆 On occasion Mortons Media Group Ltd may permit third parties, that we deem to be reputable, to contact you by post/phone/fax/email regarding information relating to current offers of products or services which we believe may be of interest to our readers. If you wish to receive such offers please tick this box 🗆 Offer expires on January 11, 2017. Terms and conditions apply. Please see Mortons' website for full terms and conditions. There are no cash alternatives available. The winners will be the first entries drawn at random.

Scale Link Ltd offer a range of products for 0, 00 & N

Visit our website catalogue at www.scalelink.co.uk to see our ranges for yourself.. Scale Link Ltd., 27, Applins Farm Business Centre, Farrington, Dorset. DT11 8RA E-mail: info@scalelink.co.uk Telephone/Fax 01747-811817 Open Mon-Fri 9-5

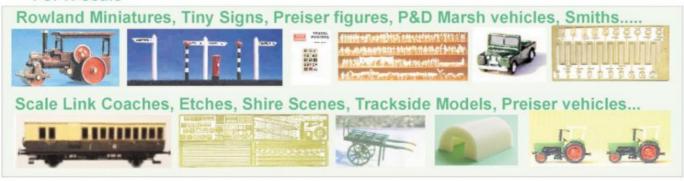
For 0-scale:-



For OO-scale:-



For N-scale



This is just a small selection of the items we stock, a visit to the web-site is well worth the time it takes and may well locate the elusive items you have been looking for.

You can also telephone us if you prefer to talk to real people with over 60 years experience.







Getting down to baseboards

lan Lamb offers some advice on setting up a basic layout while reminiscing about his own early railway modelling days.

HE FORMER HORNBY MARKETING manager, Simon Kohler, (affectionately known as 'Mr Hornby') has been a great inspiration to modellers over the years, and his enthusiasm - not just for the company he represented - summed up so well what the hobby was all about.

There cannot be too many hobbies that start with a Christmas, birthday or just a 'well done' present, which, over time, can evolve into being not only a hobby but also a passion that can, and does, last a lifetime. True, there are occasions in the enthusiast's life when young families, education and mortgages take the lead but the interest never really fades and is only waiting for the right time to re-emerge and when it does it inevitably arrives with a new vigour. To think it all started with a train set years before!"

While appreciating that most railway modellers leave the hobby in their teens and return to it in later life, in my own case I've continued with model railways whenever the opportunity presented itself, though it is only in the last 20 years since taking early retirement that I have concentrated on it as much as I now do.

For many, the interest in model railways was one that was shared with either parent or both and no doubt it was one of them who first placed the idea of a train set into their child's thoughts. From time to time in the early days my younger brother would share the hobby with me, but as I gradually moved away from playing trains towards serious railway modelling - plus the fact that he was more interested in football - I tended to pursue modelling

Once you have bought your first train

set, caressed it lovingly, and looked at it from every angle, you may feel rightly proud of yourself at the choice you have made. The next thing to do is very carefully remove it from its box, and without too much excitement - assemble the circle and off you go. However, creating a model railway takes more than just trains and track.

It is easy to forget that most of us started off with a Hornby train set and consequently forgot all the mistakes we made in our early days of railway modelling. Very limited pocket money often meant trying to 'cut corners', usually resulting in the end product being more expensive than if I had simply saved up for the original - such is the impatience of youth! Very limited knowledge and understanding of electrical circuits was a major problem - and still is for people starting out - so it is never too early to learn such basic information.

For most of us, our model railway baptism - thanks to impatience waiting to see the train run - is usually on the living room floor where it can be easily damaged and collect dust that can affect loco running. Hence the need to construct a formal baseboard as soon as possible, subject to space available.

Today's problems on this matter are no different to those of postwar Hornby Dublo for those starting off in modelling railways. Indeed, in today's modern housing space is even more limited than that of the 1950s. As an astute marketing exercise at the time, Hornby Dublo coined the phrase a 'table-top railway' to get the potential layout off the floor.

To a certain extent it was much easier operating Hornby Dublo (because of its electrical simplicity owing to its third rail) »



* than the changeover to today's two-rail system, and in a sense the evolution of the hobby is such that moving to DCC has made things even easier.

Giving due time and attention to this matter was always worthwhile, and could avoid a lot of heartache and disappointment at a later stage. Generally speaking the average baseboard was 8ft by 4ft, mainly owing to that being a standard size of sheet at the local timber merchant. Without thinking, most newcomers rushed off and purchased hardboard, the worst possible thing to do, as track pins are almost impossible to secure, and over time this material tends to warp. Nowadays it's best to discuss your requirements with your local model shop or go for a product like Sundeala. Hornby recommends 10mm or 15mm blockboard.

Whatever material is chosen it needs to be secured to an appropriate frame, usually made from lengths of 5cm x 2.5cm softwood, to provide a firm, even foundation for the track. Cross bracing is essential at approximately 0.6m intervals along the length and breadth. Before constructing this frame, a decision needs to be made as to whether the surface will be totally covered or have an operating well in the middle.

For many railway modellers a permanent layout on a table will satisfy their immediate needs. However, if possible do give serious consideration to portability; e.g. it may be necessary to dismantle the layout occasionally when the room is required for visitors. Also, table-top level is not ideal for operating purposes unless total control is performed

sitting down. It is much better to place the layout on longer legs, and stand for operating purposes, so avoiding back strain. This may not suit some viewers, but in many respects – such as young children and wheelchair occupants – the layout can be more realistic when seen from track level.

Gradually I am rebuilding all my layouts for leg support rather than tables – not least of all for speed of setting up at exhibitions, but also the tremendous space that is then available for central access and site storage beneath the baseboard.

Your hobby is only half the fun when operated alone, so encourage friends to share the pleasure of your layout with you. Not only do many hands make light work, it brings into the arena various other skills that you might not have yourself.









John Diffey acquired this derelict former GNSR Cromdale station in Strathspey and created it into the wonderful state it is now, for all to enjoy. At the far end is a 1916 Great North of Scotland railway carriage body which has been restored and converted into what is now a popular camping coach. On modelling, John jokes that he "works to the scale of 12 inches to the foot".





In my teens some of my friends and I would get together to share our model railways at each other's houses, or combine our efforts for charity events such as community or fundraising events. I recall quite a few occasions when we simply set up an oval of track in a church hall corner and ran a tank engine round it hauling about six trucks loaded with Merrols, Spangles and other long-gone sweets of the day. For the purchase of a 6d [21/2p] raffle ticket the buyer would receive a surprise sweet once the train emerged from the tunnel.

Once you have chosen a train set the next step is to think how you can expand the set into a layout. The comprehensive track system provided by Bachmann, Hornby and Peco (all interchangeable) will result in the creation of a layout to suit most users.

For many, a model railway is not just a question of watching trains travel around a track - as mesmerising as that may be but it is more than likely the fascination of miniature engineering, plus understanding the social history that formed the UK railways. Then there is the element of physics to ensure that the locomotives and rolling stock run and operate on a layout, as they should.

In my own case, with my father, other relatives and neighbours working on the railway in and around Edinburgh, it was much easier for me to access local depots than was the case for many of my peers, which inevitably meant that layout attempts at building an actual location tended to focus on my favourite place of the moment.

- 1: The excitement from this young lad is obvious as he proudly holds his first train set. After 40 years I wonder where he is now hopefully still modelling railways.
- 2: Fellow modeller Peter Holland carefully screws a softwood leg into position after assembling the Chawton layout ready for operation. John Diffey also constructed the layout display board.
- 3: This shows how the leg is located into position, pushed up to its maximum length before securing with the retaining screw to enable the baseboard to be easily moved without the leg falling out.
- 4: Setting up your first layout. Look at these 1970s curtains!
- 5: Hornby's TrakMat is ideal as a base for your layout at any stage in its development. By adding the suggested items to the TrakMat, a fully functioning model railway can be created.

Opening Hours

10am - 5pm Tuesday to Saturday Closed Bank Holidays







VISA







Retail Unit 2.

Tel 01275 774 224

sales@modelrailwaysdirect.co.uk

Model Railways Direct Ltd



www.modelrailwaysdirect.co.uk

N GAUGE

N GAUGE Code 80 Rail





PECO N Gauge Streamline Code 80

SL-300	Flexible Track* Wooden Sleeper Nickle Silver	£2.68
SL-300(25)	Flexible Track* Wooden Sleeper Nickle Silver Pack 25	£63.00
SL-302	Flexible Track* Concrete Sleeper Nickle Silver	£2.68
SL-302(25)	Flexible Track* Wooden Sleeper Nickle Silver Pack 25	£63.00
SL-384	Catch Point Right Hand	£5.63
SL-385	Catch Point Left Hand	€5.63

PECO N Gauge Streamline Code 80 Insulfrog

SL-386	Curved Turnout Right Hand	£9.87
SL-387	Curved Turnout Left Hand	£9.87
SL-388	Large Radius Turnout Right Hand	€9.87
SL-389	Large Radius Turnout Left Hand	£9.87
SL-393	Short Crossing	€8.25
SL-394	Long Crossing	£9.00
SL-395	Medium Radius Turnout Right Hand	£8.82
SL-396	Medium Radius Turnout Left Hand	£8.82
SL-397	Medium Radius Y Turnout	£8.82

PECO N Gauge Streamline Code 80 Electrofrog

SL-E386	Curved Turnout Right Hand	£9.94
SL-E387	Curved Turnout Left Hand	£9.94
SL-E388	Large Radius Turnout Right Hand	£10.60
SL-E389	Large Radius Turnout Left Hand	£10.60
SL-E395	Medium Radius Turnout Right Hand	£8.89
SL-E396	Medium Radius Turnout Left Hand	€8.89
SL-E397	Medium Radius Y Turnout	£8.89

N GAUGE

Code 55 Rail





PECO N Gauge Streamline Code 55 Fine

SL-300F	Flexible Track® Wooden Sleeper Nickle Silver	£3.00
SL-300F(30)	Flexible Track* Wooden Sleeper Nickle Silver Pk 30	£84.60
SL-302F	Flexible Track® Concrete Sleeper Nickle Silver	£3.20
SL-302F(30)	Flexible Track® Concrete Sleeper Nickle Silver Pk 30	£90.00

PECO N Gauge Streamline Code 55 Fine Insulfrog

SL-380F	Single Slip	£32.25
SL-390F	Double Slip	£33.75
SL-394F	Long Crossing	£10.00

N GAUGE

PECO N Gauge Streamline Code 55 Fine Electrofrog

SL-E386F	Curved Turnout Right Hand	£10.69
SL-E387F	Curved Turnout Left Hand	£10.69
SL-E388F	Large Radius Turnout Right Hand	£10,69
SL-E389F	Large Radius Turnout Left Hand	£10.69
SL-E380F	Single Slip	£33.38
SL-E383F	Scissors Crossing	£57.75
SL-E390F	Double Slip	£34.88
SL-E391F	Small Radius Turnout Right Hand	£8.63
SL-E392F	Small Radius Turnout Left Hand	£8.63
SL-E393F	Short Crossing	£8.82
SL-E394F	Long Crossing	£9.57
SL-E395F	Medium Radius Turnout Right Hand	£9.64
SL-E396F	Medium Radius Turnout Left Hand	£9.64
SL-E397F	Medium Radius Y Turnout	£9.75
SL-E399F	Asymmetric Three Way Turnout	£28.20

OO GAUGE

PECO OO / HO Streamline Code 100 Electrofrog

SL-E86	Large Radius Curved Turnout Right Hand	£12.00
SL-E87	Large Radius Curved Turnout Left Hand	£12.00
SL-E88	Large Radius Turnout Right Hand	£11.25
SL-E89	Large Radius Turnout Left Hand	£11.25
SL-E91	Small Radius Turnout Right Hand	£8.97
SL-E92	Small Radius Turnout Left Hand	£8.97
SL-E95	Medium Radius Turnout Right Hand	£9.90
SL-E96	Medium Radius Turnout Left Hand	£9.90
SL-E97	Small Radius Y Turnout	£9.08
SL-E98	Large Radius Y Turnout	£10.54
SL-E99	Medium Radius 3 Way Turnout	£24.45

00/H0 Code 75 Rail





OO GAUGE

00/H0 Code 100 Rail

SL-80 Single Slip





PECO OO / HO Streamline Code 100

Flexible Track* Wooden Sleeper Nickle Silver	£2.96
Flexible Track* Wooden Sleeper Nickle Silver Pk 25	£69.50
Flexible Track* Concrete Sleeper Nickle Silver	£2.92
Flexible Track* Concrete Sleeper Nickle Silver Pk 25	£68.50
Catch Point Right Hand	£7.84
Catch Point Left Hand	£7.84
	Flexible Track [†] Wooden Sleeper Nickle Silver Pk 25 Flexible Track [†] Concrete Sleeper Nickle Silver Flexible Track [†] Concrete Sleeper Nickle Silver Pk 25 Catch Point Right Hand

PECO OO / HO Streamline Code 100 Insulfrog

35-00	Single Silp	L20.32
SL-86	Large Radius Curved Turnout Right Hand	£11.93
SL-87	Large Radius Curved Turnout Left Hand	£11.93
SL-88	Large Radius Turnout Right Hand	£11.18
SL-89	Large Radius Turnout Left Hand	£11.18
SL-90	Double Slip	£30.75
SL-91	Small Radius Turnout Right Hand	£8.89
SL-92	Small Radius Turnout Left Hand	£8.89
SL-93	Short Crossing	£8.14
SL-94	Long Crossing	£9.49
SL-95	Medium Radius Turnout Right Hand	£9.83
SL-96	Medium Radius Turnout Left Hand	£9.83
SL-97	Small Radius Y Turnout	£9.00
SL-98	Large Radius Y Turnout	£10.47
SL-99	Medium Radius 3 Way Turnout	£24.38

PECO OO / HO Streamline Code 75 Fine

SL-100F	Flexible Track* Wooden Sleeper Nickle Silver	£3.00
SL-100F(25)	Flexible Track® Wooden Sleeper Nickle Silver Pk 25	£70.50
SL-102F	Flexible Track* Concrete Sleeper Nickle Silver	£3.12
SL-102F(25)	Flexible Track® Concrete Sleeper Nickle Silver Pk 25	£73.25
SL-104F	Flexible Track® Steel Sleeper Nickle Silver	£3.12
SL-104F(25)	Flexible Track® Steel Sleeper Nickle Silver Pk 25	£73.25
SL-106F	Flexible Track* Concrete Bi-Block Sleeper	£3.36
SL-106F(25)	Flexible Track* Concrete Bi-Block Sleeper Pk 25	£78.75
SL-184	Catch Point Right Hand	£8.07
SL-185	Catch Point Left Hand	£8.07
	SL-100F(25) SL-102F SL-102F(25) SL-104F SL-104F(25) SL-106F SL-106F(25) SL-184	SL-100F(25) Flexible Track* Wooden Sleeper Nickle Silver Pk 25 SL-102F Flexible Track* Concrete Sleeper Nickle Silver SL-102F(25) Flexible Track* Concrete Sleeper Nickle Silver Pk 25 SL-104F Flexible Track* Steel Sleeper Nickle Silver SL-104F(25) Flexible Track* Steel Sleeper Nickle Silver Pk 25 SL-106F Flexible Track* Concrete Bi-Block Sleeper SL-106F(25) Flexible Track* Concrete Bi-Block Sleeper Pk 25 SL-184 Catch Point Right Hand

PECO OO / HO Streamline Code 75 Fine Insulfrog

SL-180	Single Slip	£32.07
SL-190	Double Slip	£34.50
SL-193	Short Crossing	£8.85
SL-194	Long Crossing	£9.72

PECO OO / HO Streamline Code 75 Fine Electrofrog SL-E1095 Medium Radius Turnout RH with Concrete Sleepers £12.00

	SL-E1096	Medium Radius Turnout LH with Concrete Sleepers	£12.00
	3L-E1076	riedium Radius iurnout Lri With Concrete Sieepers	£12.00
.32	SL-E180	Single Slip	£32.44
.93	SL-E186	Curved Turnout Right Hand	£12.19
.93	SL-E187	Curved Turnout Left Hand	£12.19
.18	SL-E188	Large Radius Turnout Right Hand	£11.82
.18	SL-E189	Large Radius Turnout Left Hand	£11.82
.75	SL-E190	Double Slip	£34.88
.89	SL-E191	Small Radius Turnout Right Hand	£10.48
.89	SL-E192	Small Radius Turnout Left Hand	£10.48
.14	SL-E193	Short Crossing	£9.68
.49	SL-E194	Long Crossing	£10.47
.83	SL-E195	Medium Radius Turnout Right Hand	£10.77
.83	SL-E196	Medium Radius Turnout Left Hand	£10.77
.00	SL-E197	Small Radius Y Turnout	£10.37
.47	SL-E198	Large Radius Y Turnout	£11.52
.38	SL-E199	Asymmetric Three Way Turnout	£26.82



FOR DELIVERIES OUTSIDE THE EU WE WILL AUTOMATICALLY DEDUCT VAT (20%) AND CALCULATE POSTAGE CHARGES AT CHECKOUT.

UK POSTAGE £3.99 (*Flexible Track £7.95)

FAST, SECURE DELIVERY

Next Day delivery £7.95. Highlands, Islands are subject to a surcharge for large items and parcels over 1.8kg. *Some oversize items may have to be shipped by courier. Postage charges are per shipment

















Opening Hours

10am - 5pm Tuesday to Saturday Closed Bank Holidays







VISA





Phoenix Way Portishead. Bristol, BS20 7GP

Tel 01275 774 224 sales@modelrailwaysdirect.co.uk



www.modelrailwaysdirect.co.uk

OO GAUGE



Track & Accessories



Straight Track

R600	Standard Straight	£1.99	£1.60	
R601	Double Straight	£2.49	£2.00	
R603	Long Straight	£3.99	£3.20	
R610	Short Straight	£1.49	£1.20	
R618	Isolating Track	€8.99	£7.20	
R620	Re-railer & Uncoupler	£5.99	£4.80	



101101			
R602	Power Connecting Clip	£2.49	£2.12
R8242	Digital Connecting Kit	€3.99	£3.40
R8201	Track Link Wire Pack	£6.99	₹5.95
R8206	Power Track	£6.99	£5.60
R8241	Digital Power Track	€6:99	€5.60



Curved Track

R604	1st Radius Curve	£2.49	£2.00
R605	1st Radius Double Curve	£2.99	£2.40
R606	2nd Radius Curve	£1.99	£1.60
R607	2nd Radius Double Curve	£2.99	£2.40
R643	2nd Radius Half Curve	£1.99	£1.60
R608	3rd Radius Curve	£2.49	£2.00
R609	3rd Radius Double Curve	£2.99	£2.40
R8261	4th Radius Curve	£2.49	€2.00
R8262	4th Radius Double Curve	£3.49	£2.80
R628	Curve for use with Y Point	£2.49	£2.00

Points & Crossings



R207	Track Pins	€2.99	€2.40	
R617	Uncoupling Ramp	£3.49	€2.80	
R8087	Track Rubber	£2.45	£2.09	
R8244	Uncoupler Unit	£3.49	£2.80	
R910	Fishplates (12)	£2.99	€2.40	
R920	Insulated Fishplates (12)	£1.99	£1.60	



R617	Uncoupling Ramp	£3.49	£2.80
R8087	Track Rubber	£2.45	£2.09
R8244	Uncoupler Unit	£3.49	£2.80
R910	Fishplates (12)	£2.99	£2.40
R920	Insulated Fishplates (12)	€1.99	£1.60



R394 R537

Trackside Access

Level Crossings

R636 Double Level Cro Single Level Crossing Automatic Level Crossin



R658	Incline Piers	£14.99	£12.75
R659	High Level Piers	€8.99	£7.65
R660	Trackside Wall Set	€26.99	€22.95
R909	Elevated Track Support Set	£11.99	£9.60
K909	Elevated Track Support Set	£11.99	£9.6



R8072	Left Hand Point	£10.99 £8.80	
R8073	Right Hand Point	£10.99 £8.80	
R8074	Left Hand Curved Point	£16.99 £13.60	
R8075	Right Hand Curved Point	£16.99 £13.60	
R8076	Y Point	£11.99 £9.60	
R8077	Left Hand Express Point	£16.99 £13.60	
R8078	Right Hand Express Point	£16.99 £13.60	
0.14	Left bland Diamond Country	413.49 (10.00	

R615 Right Hand Diamond Crossing £12.49 £10.00



Bridges & Viaducts

Direct	es or riaducts			
R180	3 Arch Viaduct	Sold or		
R189	Brick Bridge	£9.99	£8.00	
R499	River Bridge	£18.99	£15.20	
R657	Girder Bridge	£16.99	£13.60	
R8008	Grand Suspension Bridge	5	sold out	



169	Home Junction Signal	£14.99	£12.00	
170	Distant Junction Signal	£14.99	£12.00	
171	Home Single Signal	£10.99	€8.80	
172	Distant Single Signal	£10.99	£8.80	
406	Colour Light Signal	£27.99	£22.40	



Turntable

R070 Electrically Operated £84.99 £68.00

PECO (HORNBY)



Underlay

£16.99 £13.60

€6.25 £5.32 €0.50 £7.23 £15.45 £13.14

R638 Underlay Roll (5m)



Hornby R8217 Hornby TrakMat £13.60 £16.99



Hornby R8221 Track Extension Pack A £13.60 £16.99



Hornby R8222 Track Extension Pack B £24.00 €29.99



Hornby R8223 Track Extension Pack C £22.40 £27.99



Hornby R8224 Track Extension Pack D £36.00 £44.99



Hornby R8225 Track Extension Pack E £16.00 £19.99







城

Flexible Track

R621 Flexible Track

R8090 Semi-Flexible Track

FOR DELIVERIES OUTSIDE THE EU WE WILL AUTOMATICALLY DEDUCT VAT (20%) AND CALCULATE POSTAGE CHARGES AT CHECKOUT.



£3.99 £3.20

are valid for pre-orders made on or before this date, all items are subject to availability. All items are in stock or on order at time of producing advertisement, payment (except PayPal) will

UK POSTAGE £3.99 (Flexible Track £7.95)

FAST, SECURE DELIVERY

Next Day delivery £7.95. Highlands, Islands are subject to a surcharge for large items and parcels over 1.8kg. Some oversize items may have to be shipped by courier. Postage charges are









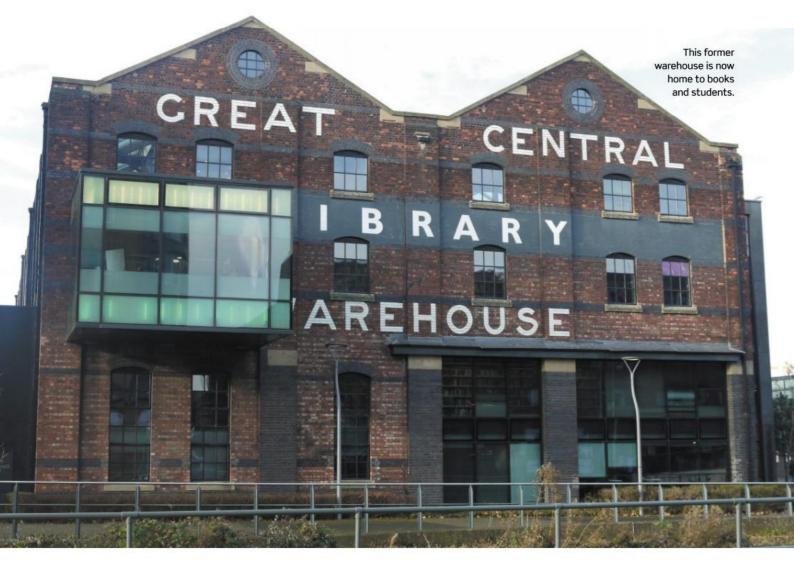




MANUAL MANUAL STATES







Making a historic Mark

Each month we'll take as our cue an area or route to give you some ideas about what you could create in model form... as well as offering some history and nostalgia and suggestions for places you can visit. This month **Sarah Palmer** investigates historic Lincoln.

SK ANYONE WHO LIVES IN THE CITY of Lincoln about the railway, and chances are they may look skywards and mutter about the High Street level crossing, which over recent years has had a habit of grinding the city's traffic to a standstill as lengthy freight trains rattled past.

Having often been on the 'wrong' side of the level crossing gates as the sirens sound, I've often had to make a dash before the gates descend, usually as I was hurrying to catch my train home from Lincoln Central station.

Unlike Central, I have only vague memories of passing through the city's other station, Lincoln St Marks, in the far-off days

when there was a direct train to London from where I grew up. I recall nothing more than a station or signal box sign - maybe my parents had pointed out that the station was soon to close, which it did in 1985, and that's why I'd paid attention, who knows?

Many years later I worked in Lincoln, just as its university was starting to spread its capacious wings. On my early-morning train commute I'd pass dilapidated railway buildings including the former Holmes Yard buildings with rooflines resembling a mouth with teeth missing, sprouting with buddleia and always decorated with a string of pigeons. A warehouse and engine shed alongside Brayford Pool - the natural lake

in the middle of the city – were equally past their best even with their ochre brickwork bathed in golden-hour light.

In those years it was more the artistry the scene offered to a budding photographer that grabbed my attention, not the trackside history of the city. Thankfully a few of these buildings are sorrowful no longer, but given new leases of life with nods to their former lives, having been incorporated within the university campus as a library and entertainment venue.

The former station of St Marks is now a retail space for Argos and Lakeland, and the surrounding area was long ago turned into a retail complex complete with faux signal box.



An engineering legacy

Most famous for the production of the earliest tanks during the First World War and several aircraft including the Sopwith Camel, the original company of Rustons started out life in 1840 as Proctor and Burton, only becoming Ruston, Proctor & Co 17 years later when engineer and later mayor of Lincoln, Joseph Ruston, joined the company.

After the war the company evolved again, becoming Ruston & Hornsby Ltd after the amalgamation with Grantham's Richard Hornsby & Sons on September 11, 1918, and it was with Hornsby that the company acquired its heavy oil engineering capacity, becoming a builder of diesel and oil engines in varying sizes as well as steam engines for the agricultural market.

In the early Thirties Ruston and Hornsby

began producing diesel locomotives, continuing until 1967, and from the 1950s onwards was a gas turbine engine pioneer.

English Electric took over the company in 1966 with production of large Ruston engines moving to the EE Vulcan factory in Newton-le-Willows, with the gas turbine side of the business remaining in Lincoln, becoming Ruston Gas Turbines. GEC later bought English Electric, which later merged with Alcatel Alsthom, later bought by German company Siemens... which still runs its gas turbine industry in the old Ruston factory in the heart of Lincoln.

Ruston and Hornsby began producing diesel engines for ships and railway locomotives, and later in the 1950s started producing the world's first gas turbines for energy production.

Ruston Gas Turbines (as R & H became) was

the largest employer in the city at this time, employing more than 5000 people.

"Ruston shunters in preservation are not as numerous as I expected, although many lines do have one. Leighton Buzzard has 11 narrow gauge ones. Nene Valley has one standard gauge. Threlkeld quarry has seven narrow gauge and Midland Railway-Butterley has four narrow gauge but they are all narrow gauge or small standard gauge shunting engines," says Heritage Railway magazine's Brian Sharpe.

"Portable engines and road steam traction engines of all types were also built for home and export worldwide from the Sheaf Ironworks in Lincoln. 77 Ruston, Proctor engines survive in preservation in the UK and Ireland and 37 engines survive from the later Ruston & Hornsby era," says Old Glory editor Colin Tyson.



While in Lincoln you could visit Digitrains, which has an excellent running layout of Lincoln Central between 1965 and 1975 on display at its store in the city. The model of the station building is particularly impressive as it was scratchbuilt.



This wheelhouse, now a chip shop, was built in the 1880s as accommodation for the level crossing keeper for the Manchester, Sheffield and Lincolnshire Railway. From 1926 it housed the machine and operator for the crossing gates on the approach to St Marks station.

There are plans afoot to redevelop this area further, but the former railway station and adjoining office and platform is Grade II listed and the whole scheme is currently in the consultation phase.

The University of Lincoln sits on the south



side of Brayford Pool; the former goods yard » Lincoln Central in front of the city's beautiful cathedral.

33



Now an office for an insurance company, this building was the former stables for the Midland Railway.

« of the Great Northern station of Lincoln Central and the line to Gainsborough and Doncaster still passes alongside it.

Yet the city's first railway station was Lincoln St Marks, which dates from 1846 and was built for the Midland Railway by an unknown architect but Pevsner posits that it may have been W A Nicholson or I A Davies of the Midland Railway. For the first two years of its life the station was the end of the line from Nottingham.

As it was originally laid out as a terminus, the eastern end of the trackbed at the station may contain important remains of early engine turntables according to the Heritage Connect Lincoln website.

Lincoln's second – and now its only – station, Lincoln Central, was opened by the Great Northern Railway in 1848 at the height of 'Railway Mania' and the city council approved plans for a loop of the Great Northern line from Grantham to run through the city, meaning the creation of a new station. This was happening at the same time as St Marks station had begun an expansion programme with the aim of extending its track to meet the Great Northern mainline east of the city centre.

This presented a problem. At the time all

Horses for courses

Lincoln has surviving evidence of two lots of railway stables, both converted to modern use.

Railway horses were once commonplace, and could be found in many depots," says Railway Magazine deputy editor Gary Boyd-Hope. "They were primarily used for shunting individual wagons around a yard, but soon lost favour to shunting locos, which could move a lot more in one go. That said, many smaller yards retained horses for this work as they didn't warrant having a loco sent for minimal duties, and the horse was often cheaper.

"At the time of the Grouping in 1923 when the Big Four (LMS, LNER, GWR and Southern) came into being, they employed between them 1130 shunting horses, which had dropped to 238 by 1946.

"As I recall, the last shunting horse in the UK was called Charlie and based at Newmarket until 1967. He was used for moving the special rail horse boxes into the racecourse complex; steam locos were deemed too noisy and would spook the animals

"Railway horses were not confined to shunting though, and would be used



Horses were used on the railways for shunting. JOHN F STILES

for the onward/inward transport of goods to and from yards. They would pull drays, mail coaches, wagons, carts and omnibuses. Again, in 1923 the Big Four employed 18,083 road horses (as opposed to shunting horses), and even at Nationalisation there were still 8793."

railways were completely separate entities: tracks, trains and stations were exclusive to the companies that ran them, meaning this left the high street with the prospect of two level crossings within 200yds as the companies had opposed the idea of sharing a crossing. Concerns were expressed about the disruption the y would bring to the city, but plans proceeded after assurances that they would pose little problem.

The High Street's level crossing and rail traffic has caused severe delays on the High Street ever since; a problem only tackled in June 2016 with the official opening of Network Rail's footbridge.

By the later 19th century the city had four lines connecting Lincoln via the Great Northern Loop line to Gainsborough, Boston and Spalding, and joining the Great Northern main line at Peterborough.

Of the many sidings and rail buildings that once covered an area around Brayford Pool – once used as port by the Romans – there are a couple of notable survivors for a part of the city that has seen thorough redevelopment over the last 20 years.





A Lindum Fayre steam excursion makes an annual trip to the city's Christmas market in early December. This shot shows the High Street level crossing, the closure of which used to bisect the city before the installation of a footbridge in 2016. BRIAN SHARPE

The railway and Lincoln

The railways came late to Lincoln... and the city proved something of a problem to the railway builders.

Issues included unstable ground and flooding which affected the sites earmarked for the infrastructure of sidings, goods yards, warehouses etc. In addition many bridges were needed to cross water and there were the two level crossings on High Street. The high-level Avoiding Line, from New Boultham to Canwick Road, was a major engineering structure (opened in 1882), but was mostly removed in the 1980s.

The Great Central Goods Warehouse at East Holmes has been renovated and turned into the University of Lincoln's library, which opened in 2004. It was originally constructed in 1907 and spent the second half of the 20th century as a builder's warehouse before falling into decay. The building is important because it demonstrates a connection between railways and water transport in the city.

Brayford Pool had declined in fortunes but with the dredging and reopening of the Foss Dyke in the 18th century it became lined with warehouses, mills, granaries, breweries and maltings, with sailing barges and later steam boats bringing goods to and from Lincoln. Paintings and photographs from this era show the water full of barges, testimony to the thriving industry the Brayford facilitated. By the 20th century it was unable to compete with rail and road competition. A dock on its north side fell into disuse after the 1930s, and by the early 1970s it had silted up and been filled in.

The only surviving railway engine shed in

Lincoln is that built by the Great Northern Railway in 1876 at East Holmes north of the Great Central Warehouse. Built in 1874 by the Manchester, Sheffield & Lincolnshire Railway, it has now been converted into an entertainment venue with its walls reverberating to different types of tracks.

On Firth Road near the former St Marks station are the remains of the South Midland Railway stables; a two-storey building with a date-stone of 1844, meaning that it predates the arrival of the Midland Railway. This survivor offers an insight into early railways, particularly the use of working horses on the railways throughout the 19th century. Horses had been used to haul vehicles from the earliest days of the railways. Although locomotives could move heavier loads, horses were cheaper and more flexible, so for many years were kept to shunt at small depots.

In terms of representations of industry and ideas for the modeller, this area of the city has it all – barges, heavy industry, horses and railways.

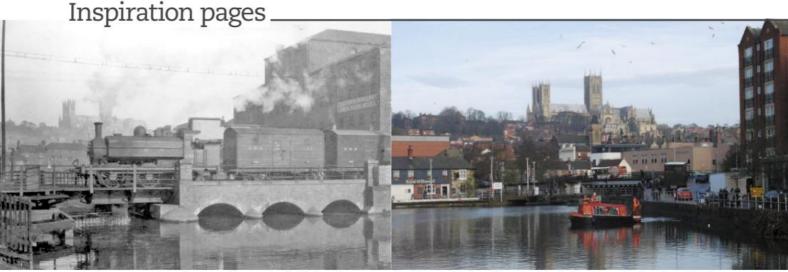


Lincoln has received acclaim for its St Marks station building, as well as the Engine Shed and library conversion of the Great Central Warehouse.

The Brayford Pool has always been pivotal to the city's history – since Roman times it was lined with wharves but before the arrival of the railway the area south of the Brayford Pool was undeveloped common land known as Holmes Common. By the 1920s the site was completely covered by railway sidings and goods yards which became known as Holmes Yard. These sidings served the industrial area around the railways, and included a coal stage for refuelling trains.

For much of the 20th century until the 1970s, the site did not really change, but as heavy industry declined, so did the need for goods yards, sidings and warehouses, and these were gradually abandoned. By the mid-1990s the area had fallen into dereliction, but from 1996 the University of Lincoln built on land once occupied by East Holmes yard and motive power depot, rejuvenating the area completely.

>



GNR Class J16 No. 638 going over Witham Swing bridge heading past Brayford Wharf in 1920.

Lincoln's Brayford Pool has gone from being disused and neglected in the 1960s to a thriving place surrounded by shops, a cinema and the city's university. It's also popular with the floating community.

Research sources

Track plans used to be difficult to source, requiring visits to local records offices to access old maps.

Today this can be simply done online by accessing the website of the National Library of Scotland at maps.nls.uk and going to Series maps.

The internet is not the only resource worth pursuing. Libraries usually include reference books on local history often containing information on local railways and stations. Local record offices are also worth investigating.

One of the best ways of finding out about an area that takes your interest and that you've decided to model is to go and look for yourself. In the case of Lincoln this beautiful cathedral city has many attraction and is well worth a visit. Find out more at www.visitlincoln.com

www.lner.info has some excellent information on LNER engines.

Where to look:

- www.disused-stations.org.uk provides a valuable insight into many former stations. Entries often include maps and photographs.
- www.davesrailpics.bravehost.com/ lincs/lincs.htm#lincoln
- The Lincolnshire Echo lincolnshirelive. co.uk/ – look in its photo archives
- www.rmweb.co.uk/community/index. php?/topic/6g285-lincoln-holmes-yard/
- The Railway HIstory of Lincoln by J G Ruddock and R E Pearson.

Lincoln's locos

"You'd have mainly seen LNER and ex-Great Central types such as BIs, JIIs, J69s, K3s, and J39s, says *The Railway Magazine's* Gary Boyd-Hope.

BI: LNER Thompson mixed traffic BIS would have been a common sight, which were built for a decade from 1942 and enjoyed popularity on ex-Great Northern and Great Central territory. If you want to see one in action No. 61264 runs on the North Yorkshire Moors Railway and No. 61306 Mayflower is mainline certified and based on the North Norfolk Railway. Hornby does a Hornby R3338 Class BI 4-6-0 61310 in BR Apple Green in Oo gauge.

JII: Bachmann has two oo gauge Robinson class JII models due for release in April, one LNER and one BR early emblem. None of the JIIs survived into preservation.

J69: 20 of these Holden 0-6-0Ts were built after their introduction in 1902 and were last in service almost 60 years later. Connoisseur, SE Finecast, and DJH all produce 00 gauge kits of J69. GER No. 87 has been preserved. It is currently on display at Bressingham Steam Museum.

K3: The K3 came about after Gresley wanted a new express goods engine for



B1 No. 61310 Mayflower at Thetford. BRIAN SHARPE

the Great Northern Railway based on his K2 2-6-0 loco, but with a higher boiler pressure. No K3s survived into preservation. In model form Bachmann does a 00 gauge K3 in lined black. The LNER version will be of No. 3934 with a Group Standard tender. SE Finecast produces a whitemetal kit of the K3 for 00 gauge and Proscale also produces a 00 gauge kit of the K3/2 variant.

J39: The LNER class J39 of medium-powered o-6-0 mixed traffic locos worked the LNER system between London and Scotland. It appeared in 1926 and became the standard goods loco with 289 built; the most numerous Gresley engine. All the J39s were scrapped. Oo gauge kits of the J39 are available from SE Finecast, Proscale, and Dave Alexander and Bachmann does a ready-to-run J39. ■

Finding a stockist

Here's where you can pick up a free copy... Not sure where you can get your great value copy of The Railway Magazine guide to Modelling? Here's the latest list of

stockists... and if there's no model shop near your home, ask your local retailer to call us on 01507 529401

Dunstable Model Centre, 23/25 West Street, Dunstable, Bedfordshire, LU6 1SL Tel: 01582 662566 East Bedfordshire Model Railway Society, The Roundabout Club, Sandy, Bedfordshire,

SG19 1EL Tel: 01626 864942

JW Toys at Reading Collectors' Centre, Unit 15 Harris Arcade, Station Road, Reading, Berkshire, RG1 1DN Tel: 0118 9588666 Timemachine, 32 Westborough Road, Maidenhead, Berkshire, SL6 4AR Tel: 01628 622603

MDR Direct, The Old Bank, High Street, Cookham, Maidenhead, Berkshire, SL6 qSJ Tel: 01628 528459 Model Junction, 916 Yeovil Road, Slough

Trading Estate, Slough, Berkshire, SL1 4JG

Brunel Model Railways (Richards Railways), 120 High Street, Yatton, Bristol, BS49 4DH Tel: 01934 876328

Model Railways Direct, Retail Unit 2, Phoenix Way, Portishead, Bristol, Bristol, BS20 7GP Tel: 01275 774224

Modelmania of Bristol, 13 Clouds Hill Road, St. George, Bristol, Bristol, BS5 7LD Tel: 01179 559819 Antics (Bristol), 8 Fairfax Street, Bristol,

BS1 30B Tel: 01179 273744

E Harding Prams and Toys Ltd,
45 East Street, Bedminster, Bristol, BS3 4HB

Tel: 0117 9663584

BUCKINGHAMSHIRE

SPD UK, Unit 15 Bessmer Crescent, Rabans Lane Ind Est, Aylesbury, HP19 8TF

Tel: 01296 334677 Garden Railway Specialists, 6 Summerleys Road, Princes Risborough, Buckinghamshire, HP27 9DT Tel: 01844 345158

Transport Treasures, 2 London Road, Aston Clinton, Aylesbury, Buckinghamshire,

HP22 5HQ Tel: 01296 631002

Buckinghamshire Railway Centre,

Quainton Road Station, Quainton, nr Aylesbury, Buckinghamshire, HP22 4BY Tel: 01296 655720

Nene Valley Railway, Wansford Station, Stibbington, Peterborough, Cambridgeshire,

PE8 6LR Tel: 01780 784444 Glendale Junction, 5 New Row, Deeping St James, Peterborough, Cambridgeshire, PE6 8NA Tel: 01778 343183 City Cycle Centre, 7 Market Street, Ely,

Cambridgeshire, CB7 4PB Tel: 01353 663131 Trains4u, 27 St Davids Square, Fengate, Peterborough, Cambridgeshire, PE1 5QA

Tel: 01733 895989 Abbiegails (Hornbyspares), 35 Westhawe, Bretton, Peterborough, Cambridgeshire, PE3 8BA Tel: 01733 266959

Cambridge Toy Shop, 15 Sussex Street, Cambridge, Cambridgeshire, CB1 1PA

Tel: 0123 309010

DB Models Ltd, 28c Europa Way, Wisbech,
Cambridgeshire, PE13 2TZ Tel: 01945 429252

New Modellers Shop Ltd, 25 Eastern Avenue,
Dogsthorpe, Peterborough, Cambridgeshire, PE1 4PH Tel: 01733 704502

Holder Collectables, Culcheth Model Railways, CPS Shopping Centre, Common Lane, Warrington, Cheshire, WA₃ 4EH

Tel: 0800 046 3595 **High Lane Model Railways,** Unit 3 Stockport Market Hall, Stockport, Cheshire, SK1 1ES

Tel: 01663 810 299 The Model Shop, 167 Witton Street, Northwich, CWg 5EA Tel: 01606 47740 Grimy Times Model Railways, 187 Orford Lane, Warrington, Cheshire, WA2 7BA Haslington Models, 134 Crewe Road, Haslington, Crewe, Cheshire, CW1 5RQ Tel: 01270 589079

Waltons Models, 30 Stamford Street, Altrincham, WA14 1EY Tel: 0161 928 5940 Widnes Model Centre, 128 Widnes Road, Widnes, Cheshire, WA8 6AX Tel: 0151 424 1196 Hattons Model Railways, 17 Montague Road, Widnes, Cheshire, WA8 8FZ Tel: 0151 7333655 Chester Model Centre, 71-73 Bridge Street Chester Model Centre, 71-73 Bridge Si Row (East), Chester, Cheshire, CH1 1NW Crewe Heritage Centre, Vernon Way, Crewe, Cheshire, CW1 2DB Tel: 01270 212130

Redcar Models & Hobbies, 130 High Street, Redcar, TS10 3DH Tel: 01642 494912 Stockton Modeller, 10 Silver Street, Stockton-on-Tess, Cleveland, TS18 1SX Tel: 01642 616680

Cleveland Model Railway Club, Unit 2 The BHive Centre, Skelton Ind Est, Skelton Saltburn-by-the-Sea, Cleveland, TS12 2LQ Tel: 07864 880242

CO DURHAM Windsock Models, 5-7 Fore Bondgate. Bishop Auckland, DL14 7PF Tel: 01388 603759

Models4Hobby, Unit 13 Avenue 3, Chilton
Business Park, Chilton, Durham, Co Durham, DL17 oPB Tel: 01388 417940

Locomotion - The National Railway Museum, Shildon, Co Durham, DL4 1PQ

Tel: 01388 777999 North East Model Centre, The Old Chapel, Durham Road, Chester Moor, Durham, Co Durham, DH2 3RJ Tel: 0191 3881128
National Railway Museum Shildon,
Locomotion', Shildon, Co Durham, DL4 1PQ

Tele 0.388 77.439

Head of Steam, Darlington Railway Museum,
North Road Station, Darlington, Co Durham,
DL3 6ST Tel: 0.1325 460532

Durham Trains of Stanley, 6 Station Road,
Stanley, Co Durham, DHg oJL

Tel: 01207 232545 Connellys Toy Shop, g-11 The Bank, Barnard Castle, Co Durham, DL12 8PH Tel: 01833 637 396

Bodmin & Wenford Railway, General Station, Lostwithiel Road, Bodmin, Cornwall, PL31 1AQ Tel: 01208 73666

Great Western Scale Models, 5 Pentowa Road, Loggans, Hayle, Cornwall, TR27 5AR

Tel: 01736 757679

Kernow Model Rail Centre, 98a Trelowarren
Street, Camborne, Cornwall, TR14 8AN

Tel: 01209 714099 **Liskeard Railway Models,** Station Road, Liskeard, Cornwall, PL14 4BX

World of Model Railways, Meadow Street, Mevagissey, PL26 GUL Tel: 01726 842457 Blewetts of Hayle, 19 Penpole Terrace, Hayle, Cornwall, TR27 4BQ Tel: 01736 753012

Lakeside & Haverthwaite Railway Co Ltd, Haverthwaite Station, nr Ulveston, Cumbria, LA12 8AL Tel: 01539 531594

Stainmore Railway Co, The East Station, South Road, Kirkby Stephen, Cumbria, CA17 4LA Tel: 01768 371700 C & M Models, 1 Crosby Street, Carlisle, Cumbria, CA1 1DQ Tel: 01228 514689

E Atkinson & Sons Ltd, Promenade Shop, Lake Road, Bowness On Windermere, Cumbria,

LA23 3DE Tel: 01539 443047 Crafty Hobbies, 54 Cavendish Street, Barrow in Furness, Cumbria, LA14 1PZ Tel: 01229 820759 Hadrians Hobbies, Unit 6 The Old Brewery,

Craw Hall, Brompton, Cumbria, CA8 1TR

Tel: 07962 177904 Jacksons Models & Railways, 33 New Street, Wigton, Cumbria, CA7 9AL Tel: 016973 42557

Ecclesbourne Valley Railway Association, Wirksworth Station, Station Road, Coldwell Street, Wirksworth, Derbyshire, DE4 4FB Tel: 01629 823076

Malcs Models, 2-4 Pelham Street, Ilkeston, Matcs Modes, 2-4 Periam Street, Inkestoni, Derbyshire, DE7 BAR Tel: 07786 896807 Midland Railway Trust Ltd, Butterley Station, Ripley, Derbyshire, DE5 30Z Tel: 0.1773 747674 Mount Tabor Models, Scarthin, Cromford, Matlock, DE4 3QF Tel: 0.1629 822294 TTCDiecast (Derby), 107 Nottingham Road, Derby, Derbyshire, DE1 3QR Tel: 01332 343943 WD Models, 25-27 Chatsworth Road, Chesterfield, S40 2AH Tel: 01246 208244 Barrow Hill Roundhouse Railway Centre, Campbell Drive, Barrow Hill, Chesterfield, Derbyshire, S43 2PR Tel: 01246 472450 Peak Rail PLC, Matlock Station, Matlock, Derbyshire, DE4 3NA Tel: 01629 580381 Chesterfield Railway Modellers, c/o 6 Fishponds Close, Wingerworth, Chestrefield, Derbyshire, S42 6SD Tel: 01246 271099

Austins Toy Store, 6 Courtenay Street, Newton Abbot, Devon, TO12 2DU

Newton Abbot, Devon, 1012 200 Tel: 01626 333444

The Model Shop Exeter, 4 St David's Hill, Exeter, Devon, EXa 3RG Tel: 01392 421906

Antics (Plymouth), 30 Royal Parade, Plymouth, Devon, PL1 1DU Tel: 01752 221851

Exmouth Model Railway, Queens Drive, Exmouth, Devon, EXB 2AY Tel: 01395 278383

Tel: Medale of Queen Street, Newton Bekra Models, 91 Queen Street, Newton Abbot, Devon, TQ12 2BG Tel: 01526 334884 Buffers Model Railway Ltd, Colston Cross, Axminster, Devon, EX13 7NF Tel: 0129 735557 Osborns Models, 7 Hongystone Street, Bideford, Devon, EX3g 2DL Tel: 01237 423453 Peco Model Shop, Underleys, Beer, Seaton, Devon, EX13 JNA Tel: 01297 21542 Shady Lane, 11 Grenville Street, Bideford, Devon, EX39 2EA Tel: 01237 238872 Brixham Model Centre, 83 Middle Street, Brixham, Devon, TQ5 8EJ Tel: 01803 882555 **Dartmoor Railway,** Okehampton Station, Station Road, Okehampton, Devon, EX20 1EJ

Platform Models, Unit 1, 10-12 Alder Hills, Poole, Dorset, BH12 4AL Tel: 01202 798068

Setchfield Models, 21-25 High Street, Poole, Dorset, BH15 1AB Tel: 01202 673300

Swanage Railway, Station House, Swanage, Dorset, BH1g 1HB Tel: 01929 475204 **Redlands Models,** 71 Greenway Road, Redlands, Weymouth, DT3 5BD Tel: 01305 812183 Scale Link Ltd, Unit 27 Applins Farm Business Centre, Farrington, DT11 BRA Tel: 01747 811817 Bournemouth Model Railway Centre, 329-

331 Holdenhurst Road, Bournemouth, Dorset, BH8 8BT Tel: 01200 2000

331 Holdenfurst Roda, Bournemouth, Dorset, BHB 8BT Tel: 01202 399872 Howleys Toy Master, 5 Frederick Place, Weymouth, Dorset, DT4 8HQ Tel: 01305 779255 Christchurch Model Railway Club, 8 Belvedere Roda, Christchurch, Dorset, BH23 1PT Tel: 01202 486802

Dorchester Toymaster, 25 South Street, Dorchester, Dorset, DT1 1BY Tel: 01305 261152 East Dorset Area N' Gauge Group, c/o 3 Riggs Garden, Bourmouth, Dorset, BH11 8QZ Tel: 01202 546679

EAST SUSSEX

Train Times, 37 Seaside, Eastbourne, East Sussex, BN22 7NB Tel: 01323 722026 Bluebell Railway, Sheffield Park Station, Sheffield Park, Uckfield, East Sussex, TN22 3QL

Tel: 01825 720803 Classic Rail, 30 High Street, Ticehurst, Wadhurst, East Sussex, TN5 7AS T el: 01580 200400

Silverhill Models & Toys, 383 London Road, St Leonards on Sea, East Sussex, TN37 6PA

Tel: 01424 431133 The Hobby Box, 121 High Street, Uckfield, East Sussex, TN22 1RN Tel: 01825 765296

EAST YORKSHIRE

KJB Models, Brushwood, West End Farm, West End, Pollington, Goole, East Yorkshire, DN14 oDP Tel: 07542 710005

53A Models, 430 Hessle Rd, Hull, East 53A models, 430 riessie Rd, Hull, East Yorkshire, HU3 3SE Tel: 01482 227777 Bridlington (Area) Railway Modellers & Train Enthusiasts Society, Barmates, Bridlington Railway Station, Station Approach, Bridlington, East Yorkshire, YO15 3EP Tel: 01262 603309 Croppers Models, 17 Landsdowne Road,

East Yorkshire, YO15 2QU Tel: 01262 677231

Clacton Art & Craft Centre, 93 Pier Avenue, Clacton on Sea, CO15 1QE Tel: 01255 436346 Flair Rail, Unit 7 Springfield, Nursery Estate, Burnham on Crouch, Essex, CMo 8TA

Burnham on Crouch, Essex, CMo 81A
Tel: o1621 786198
Plus Daughters, 8 Brittania Court, Burnt Mills
Ind Est, Basildon, SS13 1EU Tel: o1268 726211
John Dutfield Model Railways, Wards Yard,
133 Springfield Park Road, Chelmsford, Essex,
CMa 6EE Tel: o1245 494455
Mankim Models, 213 Shrub End Road,

Colchester, Essex, CO₃ 4RN Tel: 01206 574929 Marquee Models, Unit 71 The Harvey Centre, Harlow, Essex, CM20 1XS Tel: 01279 423334 Roneo Models, 32 Roneo Corner, Hornchurch,

Essex, RM12 4TN Tel: 01708 442836 Chiltern Model Railway Association, 119 Ipswich Road, Colchester, Essex, CO4 4EJ

Tel: 01438 715580 Colchester A1 Models, 64 London Road, Colchester, Essex, CO3 4DF Tel: 01206 572094 Colchester & District Model Railway Club, c/o The Clubhouse, Armoury Farm, Armoury Road, West Bergholt, CO6 3JP Tel: 01376 570156

Colin Bliss Models, 7 King Georges Place, High Street, Maldon, Essex, CMg 5BZ Tel: 01621 851327

GLOUCESTERSHIRE

ucestershire Warwickshire Steam Railway, The Shop Store, The Railway Station, Toddington, GL54 5DT Tel: 01242 621405 Forest of Dean Models, High Street, Bream, Lydney, Gloucs, GL15 6JF Tel: 01594 563054 Antics (Gloucester), 81 Northgate Street, Antics (stoucester), 61 Northgate Street, Gloucester, GL1 2AS Tel: 01452 410593 Antics (Stroud), 49 High Street, Stroud, Gloucestershire, GL5 1AN Tel: 01453 764487 Cheltenham Model Centre, 39 High Street, Cheltenham, Gloucestershire, GL50 1DY Tel: 01242 234644

Dean Forest Railway, Norchard, Forest Road, Lydney, Gloucs, GL15 4ET Tel: 01594 845840 Bourton Model Railway, Box Bush, High Street, Bourton On The Water, Gloucs, GL54 2AN Tel: 01451 820686

Mid Hants Railway, The Watercress Line, The Railway Station, Alresford, Hampshire, SO24 9JG Tel: 01962 733810

The Magic Toy Box, 210 Havant Road, Drayton, Portsmouth, Hampshire, PO6 2EH Tel: 02392 221307 Fratton Model Centre, 171-173 Fratton Road,

Portsmouth, Hampshire, PO1 5ET Tel: 023 928 27117 A C Models, 7 High Street, Eastleigh,

Hampshire, SO50 5LB Tel: 02380 610100 Alton Model Centre, 7a Normandy Street, Alton, Hampshire, GU34 1DD Tel: 01420 542244 Mainly Planes & Trains, 79 Stoke Road,

Moors Valley Railway, Moors Valley Country Park, Horton Road, Ashley Heath, Ringwood, Hampshire, BH24 2ET Tel: 01425 471415 Ron Lines, 342 Shirley Road, Shirley, Southampton, SO15 3HJ Tel: 02380 772681 The Model Shop, 117 New Road, Portsmouth, Hampshire, PO2 7QS Tel: 02392 653100 Waterlooville Model Centre, 225 Commercial

Road, Portsmouth, Hampshire, PO1 4BJ Tel: 023 9217 6367 Wicor Models, 7 West Street, Porchester, Hampshire, PO16 gXB Tel: 023 9235 1160

AC Models, 7-9 High Street, Eastleigh, Hampshire, SO50 5LB Tel: 02380 610100

37

Finding a stockist

Church Street Models, 10a Church Street, Basingstoke, RG21 7QE Tel: 01256 358060 Church Street Models, 10a Church Street Basingstoke, RG21 7QE, 01256 358060

HEREFORDSHIRE

Hereford Model Centre, 4 Commercial Road, Hereford, HR1 288 Tel: 01432 352809 Golden Valley Hobbies, Unit 1 Pontrilas Business Park, Pontrilas, Herefordshire, HR2 oAZ Tel: 01981 241237

HERTFORDSHIRE

Hurricane Models, Unit 7 Impresa Park, Pindar Road, Hoddesdon, Hertfordshire, EN11 oDL

Road, Hoddesdon, Hertfordshire, EN11 oDL Tel: 01992 447346

KS Models, 19 Middle Row, Stevenage, Hertfordshire, SG1 3AW Tel: 01438 746616

Junction 20 Models, 51 High Street, Kings Langley, Herts, WD4 9HU Tel: 01923 270247

Cuthberts Toys, 21a Eastcheap, Letchworth, Hertfordshire, SG6 3DA Tel: 01462 486030

Cuthberts Toys, 2: Christopher Place, Hoper Dargell Street St. Albane, Metfordshire

Upper Dagnell Street, St Albans, Hertfordshire, AL3 5DQ Tel: 01727 838753 De Havilland Model Railway Society, 12 Ellenbrook Crescent, Hatfield, Hertfordshire, AL10 9RP Tel: 01707 266368

Track Shack, Unit 4 Olive Court, Ramsey Road, Peel, Isle of Man, IM5 1RH Tel: 01624 845977 Model World, 16 St Pauls Square, Ramsey, Isle

Model World, 16 St Paulis Squaler, Karnsey, Is of Man, IMB 11H Tel: O1624 B16048 Isle of Wight Steam Railway, The Railway Station, Havenstreet, Isle of Wight, PO3 4DS Tel: 01983 882204 Reeds Hobbys, 5 Pier Street, Ventnor, Isle of Wight, PO38 1ST Tel: 01938 55189 Illnetairs Douwstairs. 2 pier Street Sandrow Upstairs Downstairs, 3 Pier Street, Sandow Isle of Wight, PO36 8JR Tel: 01983 406 616

Romney, Hythe & Dymchurch Railway, New Romney Station, New Romney, Kent, TN28 8PL Tel: 01797 362353 Chalk Garden Rail, 4 Brewhouse Yard,

Gravesend, Kent, DA12 2EJ Tel: 01474 351672 Manklows, 44 Seal Road, Sevenoaks, Kent. TN14 5AR Tel: 01732 454952

TN14 5AR Tel: 01732 454952 Model World, Unit 1 Anchor Business Park Castle Road, Sittingbourne, Kent, ME10 3AE Tel: 01795 410630

Ramsgate Models, 74a Queensgate Street, Ramsgate, Kent, CT11 gER

Tel: 01843 584073 **The Model Shop**, 8 Front Road, Woodchurch, Kent, TN26 3QE Tel: 01233 860008 Ashford Model Supply Centre, Unit 23, Ellingham Way, Ashford, Kent, TN23 6NF

Tel: 01233 635837 Invicta Model Rail, 130 Station Road, Sidcup, Kent, DA15 7AB Tel: 0208 3027774 Kent Garden Railways, 66 High Street, St Mary Cray, Orpington, Kent, BR5 3NH

Tel: 01689 891668 Regal Models, The Old School House, The Historic Dockyard, Chatham, Kent, ME4 4TZ Tel: 01634 838808

Rochester Games & Models, 21 Corportaion Street, Rochester, Kent, ME1 1NN Tel: 01634815699

The Hobby Shop, 122 West Street, Faversham, Kent, ME13 7JB Tel: 01795 531656 Turners Models, 14 London Road, Dover, Kent, CT17 0ST Tel: 01304 203711 Bexley Model Centre, Broughton House, Iris Avenue, Bexley, DA5 1HH Tel: 1846 25 65 646

Tel: 0845 22 66 545

Iel: 0445 22 66 545 Fenwick (Canterbury), St Georges Street, Canterbury, Kent, CT1 2TB Tel: 01227 766866 Fenwick (Tunbridge Wells), Royal Victoria Place, Tunbridge Wells, Kent, TN1 2SR Tel: 01802 516716

East Kent Models, 89 High Street, Whitstable, Kent, CT5 1AY Tel: 01227 770777

Arcadia Models, 67 Rochdale Road, Shaw, Oldham, Lancashire, OL2 7JT Tel: 01706 882000

Bolton Model Mart, 58 Great Moor Street, Bolton, Greater Manchester, BL1 1SN Tel: 01204 382282

Conways (West Houghton), 46-48 Market Street, Westhoughton, Greater Manchester, Lancashire, BL5 3AZ Tel: 01942 812398

East Lancashire Railway, Bury Bolton Street Station, Bolton Street, Bury, Lancashire, BLg oEY Tel: 0161 7647790 Model & Hobby World, 7 Owen Road, Lancaster, Lancashire, LA1 2AW

Tel: 01524 843553

Toys 2 Save, 1 Brighton Avenue, Cleveleys, Blackpool, FY5 2AA Tel: 01253 855 905 Trains & Diecast, 138a Wright Stree Horwich, Bolton, Lancashire, BL6 7HL Tel: 01204 669782 Transport Models Ltd, Unit 1 Oyston Mill,

Strand Road, Preston, Lancashire, PR1 8UR

Tel: 01772 733644

Hobby & Model Centre, 1 Hutton Lane, Bolton, Hooby & Model: Centre, 1 Hutton Lane, Botto Lancashire, BL3 4JB Tel: 01204 61446 Topslots N Trains, Mariytime Street, Fleetwood, Lans, FY7 7PB Tel: 01253 773731 JPL Models, 129 Elliott Street, Tyldesley, Manacherte, Mar 801 Tel. Manchester, M29 8FL Tel: 01942 896138 MJR Models, Hobbies & Accessories, 11 Hindley Road, Daisy Hill, Westhoughton, Bolton, Lancashire, BL5 2 JU Tel: 01942 386790

The Locoshed, 48 Bury Old Road, Whitefield, Manchester, M45 6TL Tel: 0161 772 0103

Tower Models, 44 Cookson Street, Blackpool, FY1 3ED Tel: 01253 623797 / 623799
West End Model Centre, West End Buildings,
113 Albert Road, Colne, Lancashire, BB8 0BT

Tel: 01282 857711 Conways (Blackpool), 19-21 Birley Street, Blackpool, FY1 1EG Tel: 01253 626461 EC Toys, 44 Bond Street, South Shore, Blackpool, FY4 1BQ Tel: 01253 341897

LEICESTERSHIRE

Great Central Railway, Loughborough, Leicestershire, LE11 1RW Tel: 08708 308298 The Signal Box, 1 Albion Street, Anstey, Leicester, Leicestershire, LE7 7DD

Tel: 0116 236 2901

Keith's Model Railways, 2 Holyrood Drive,
Countesthrope, Leicester, LE8 5TR Tel: 0116 2778634

Mad About Trains of Gainsborough, 106 Trinity Street, Gainsborough, Lincolnshire, DN21 1HS Tel: 01427 811040

B& H Models, 7 The Strait, Lincoln, Lincolnshire, LNz 1JD Tel: 01522 538717 D Hewins Models & Hobbies, 7B East Saint Mary's Gate, Grimsby, Lincolnshire, DN31 1LH

Tel: 01472 347088 **GRA's Models,** 65 Scotgate, Town Centre, Stamford, Lincolnshire, PEg 2YB

Tel: 01780 751826 Model Railway Shop Grantham, 46 Watergate, Grantham, Lincolnshire, NG31 6PR,

watergate, Grantnam, Lincoinsnire, N531 6F 01476 563472 Models & Computers Plus, 55 West Street, Boston, Lincoinshire, PE21 8QN Tel: 01205 365102

RA Models, 182a Ashby High Street, Ashby, Scunthorpe, Lincs, DN16 2JR

Tel: 07561 400533 Caistor Loco, Ashtree Enterprises, 8 Market Place, Caistor, Market Rasen, Lincolnshire,

LN7 6TW Tel: 01472 859990 Granary Models, 31 High Street, Swineshead, Boston, Lincs, PE20 3LH Tel: 01205 820115

Masons Models, 20 New Road, Spalding, Lincolnshire, PE11 1DQ Tel: 01775 722456 Shermans Model Shop, 19 Dunstall Street, Scunthorpe, Lincs, DN15 6LD

York Model Railway Ltd, Veck House, Helmswell Cliff Business Centre, Gainsborough, Lincs, DN21 5TJ Tel: 01427 667470 Digitrains, 15 Clifton Street, Lincoln, Lincolnshire, LN5 BLQ Tel: 01522 527731 DB Models Ltd, No 4 Wheatsheaf Court,

Deeping St Nicholas, Spalding, Lincolnshire, PE11 3TH Tel: 01775 630479 / 07723 336344 A Part Toys & Models, Room 11 Welland Stationers, Cherryholt Road, Stamford, Lincolnshire, PE9 2EP Tel: 08701 424224 DB Models Ltd, No 4 Wheatsheaf Court, Deeping St Nicholas, Spalding, Lincolnshire

London Transport Museum, Covent Garden Piazza, London, WCzE 7BB Tel: 020 7379 7310 Ian Allan Bookshop & Model Shop, 45-46 Lower Marsh, Waterloo, London, SE1 7RG

PE11 3TH Tel: 01775 630479 / 07723 336344

E F Russ, 101 Battersea Rise, Battersea, London, SW11 1HW Tel: 020 7228 6319 Northfields Model Shop, 217 Northfield Avenue, Ealing, London, London, W13 9QU Tel: 078 064 711 73 Janes Trains, 35 London Road, Tooting,

London, SW17 gJR Tel: 020 8640 1569 Fenwick (Brent Cross), Brent Cross Shopping Centre, Brent Cross, London, NW4 3FN Tel: 020 8202 8200

Hannants London, Unit 2 Hurricane Trading Estate, Graeme Park Way, Collindale, London, NW9 50W, 0208 205 6697

Kitstop Models, 20 Oxton Road, Birkenhead, Merseyside, CH41 2QJ Tel: 0151 647 9067 MKG Hobbies, 14 Princes Street, Southport, Merseyside, PR8 1EZ Tel: 01704 500630 Formby Model & Hobby Scene, 77-79 Gores Lane, Formby, Merseyside, L37 7DE Tel: 01704 870432

Sawyer Models, 27 Bridge Street, Earlestown, Newton-Le-Willows, Merseyside, WA12 9BE

Tel: 01925 227 835 Broadbent & Boothroyds, 295 – 307 Lord Street, The Bridges, Southport, Merseyside, PN8 1NY Tel: 01704 535177

Hobbies, Units 8b-11 The Ravingham Centre. Ravingham, Norwich, Norfolk, NR14 6NU
Tel: 01508 549330
Mid Norfolk Railway, Dereham Station,
Station Road, Dereham, Norfolk, NR19 1DF

Tel: 01362 690633 Train Terrain Models, 199 Plumstead Road, Norwich, Norfolk, NR1 4AB Tel: 01603 304379

B J Models, 112 – 116 Norfolk Street, King's Lynn, Norfolk, PE30 1AQ Tel: 01553 773394 Great Eastern Railway Models, 199 Plumbstead Road, Norwich, Norfolk, NR1 4AB

Plumbstead Road, Norwich, Norfolk, NR1 4AB Tel: 01603 431457 Hunstanton Models, 36 High Street, Hunstanton, PE36 5AF Tel: 01485 533324 Bressingham Steam Museum, Bressingham ro Diss, Norfolk, IP22 2AB Tel: 01379 686900 Diss & District Model Railway Society, The Village Hall, Common Road, Shelfanger, Neffell: Inpa. 010 Tel: horse persons. Norfolk, IP22 2DP Tel: 01359 250739 Buoys Toys and Models, 30 Louden Road, Cromer, Norfolk, NR27 gEF Tel: 01263 519652 Bure Valley Models, Aylsham Station, Norwich Road, Aylsham, NR11 6BW Tel: 01263 733858

NORTH YORKSHIRE
Monk Bar Model Shop, 2 Goodramgate, York,
North Yorkshire, YO1 7LQ Tel: 01904 659423
P& S Hobbies & Models, 32 Castle Road,
Scarborough, North Yorkshire, YO11 1XE Tel: 01723 377020 Starbeck Models, 16 Devonshire Place,

Harrogate, North Yorkshire, HG1 4AA Tel: 01423 507089

Steaming Loco, Front Street, Grosmont, North Yorkshire, Y022 5QE Tel: 01947 895358 The Model Centre & Custom Finish Locomotives, Hill Farm, Beckhole, Whitby, North Yorkshire, YO22 5LF Tel: 01947 896040 The Toy & Book Warehouse, Rear of 9 Mark Place, Pickering, North Yorkshire, Y018 7AA Tel: 01751 474672 The Train Shop, 41 Eastborough, Scarborough,

North Yorkshire, YO11 1NH Tel: 01723 354019 White Rose Modelworks, Unit 10 Bedale Station, Bedale, North Yorkshire, DL8 1BZ

Tel: 01677 422444 Buffers, Backoth Hill Farm, Storiths Boltonabbey, Skipton, North Yorkshire, BD23 6HU Tel: 01756 710253

National Railway Museum, Leeman Road, York, North Yorkshire, YO26 4XJ Tel: 01904 686240

North Yorkshire Moors Railway, Pickering Station, Pickering, North Yorkshire, YO18 7AJ

Tel: 01751 473799 Ellis Clark Trains, Unit 1 Toller Court, Shortbank Road, Skipton, North Yorkshire,

Shortbank koad, Skipton, North Yorkshire, BD23 aHG Tel: 01756 701451 Monkbar Model Shop, a Goodramgate, York, North Yorkshire, YO1 7LQ Tel: 01904 659423 A1 Sports & Toys, and Floor Wetherell's Department Store, 13-16 The Crescent, Selby, North Yorkshire, YOB oPD Tel: 01757 705115 Conways (Harrogate), Unit 27, The Victoria Centre, Harrogate, North Yorkshire, HG1 1AE

Fenwick (York), Coppergate Centre, York, North Yorkshire, YO1 gWY Tel: 01904 643322 Harrogate Models, 67 Leeds Road, (above the post office), Harrogate, N Yorks, HG2 8BE Tel: 01423 871 364

Craven Model Centre, Unit 3 Mount Pleasant, High Street, Skipton, North Yorkshire, BD23 1JZ Tel: 01756 794919

NORTHAMPTONSHIRE

The Model Shop, 230 Wellinborough Road, Northampton, Northamptonshire, NN1 4EJ

Tel: 01604 631223
Wellingborough Trains & Models, 17 Market
Street, Wellingborough, Northamptonshire,
NNB 1AN Tel: 01933 274069

A & H Models Ltd, 95 High Street, Brackley, Northamptonshire, NN13 7BW Tel: 01280 701410

Daventry Model Railway Club, c/o Unit 10 Austin Way, Royal Park Ind Est, Daventry, Northants, NN11 8QY Tel: 07773 275428 H & A Models, 19 Keats Way, Higham Ferrers, Northants, NN10 8DQ Tel: 01933 355531

NORTHUMBERLAND

Trains & Planes Ltd, Unit 19b Airport Ind Est, Kingston Park, Newcastle Upon Tyne, Northumberland, NE3 2EF Tel: 0191 286 4175 Collectors Cellar, 11 Hencotes, Hexham, Northumberland, NE46 2EQ Tel: 01434 601392

NOTTINGHAMSHIRE

Access Models, 43/45 Castlegate, Newark, Nottinghamshire, NG24 1BE Tel: 01636 673116 D, 1 & F Benham of Edwinstowe, 45 High Street, Edwinstowe, Nottinghamshire,

NG21 9QR Tel: 01623 822302 Gee Dee Models, 21 Heathcote Street, Nottingham, Nottinghamshire, NG1 3AF Tel: 0115 9412211

Geoffrey Allison Railways, go Cheapside, Worksop, Nottinghamshire, S8o 2HY

Tel: 01909 473255 Sherwood Models, 831 Mansfield Road, nr Daybrook, Nottingham, Nottinghamshire, NG5 3GF Tel: 0115 9266290 The Goods Yard, Station Lodge, Lodge Lane

Ind Est, Tuxford, Nottinghamshire, NG22 oNL Tel: 07930 557601

Chinnor & Princes Risborough Railway Assoc, Chinnor Station, Station Approach, Station Road, Chinnor, Oxfordshire, OX 39 4ER Didcot Railway Centre, Station Road, Didcot, Oxfordshire, OX11 7NJ Tel: 01235 817200 Bicester Toys & Nursery Ltd, 66/68 Sheep Street, Bicester, Oxfordshire, OX26 6JW

Tel: 0.185g 32.39.46

Cholsey & Wallingford Railway, Preservation Society, 5 Hithercroft Road, Wallingford, Oxfordshire, OX10 9GQ Tel: 0.1491 835067

Dentons Cycles & Toys, 1 High Street, Whitney, Oxfordshire, OX28 6HW Tel: 01993 704 979

Alva Motor Factors Ltd, 31 Mill Street, Alloa, Alva Motor Factors Ltd, 31 Pail Side By Alva FK10 1DT Tel: 01259 723033

Sports & Model Shop, 66 High Street, Dingwall, IV15 9RY Tel: 01349 862346

Strathspey Railway Company, Aviemore Stathspey Railway Company, Aviemore PH22 1PY Tel: 01479 810725

The Hamilton Toy Collection,
111 Main Street, Callander, FK17 8BQ Tel:

01877 330004 **Time Tunnel Models,** Unit 3 Fenton Barns Retail Village, North Berwick, EH39 5BW Tel: 01620 850728
Wildcat Models, 251 Dumbarton Road,
Glasgow, G11 6AB Tel: 0141 3345599
Inverness Model Shop, 16 Victorian Market,

Queensgate Arcade, Inverness, IV1 1PJ Tel: 01463 712448 Invertrain Model Railways, 33 Rose Gardens, Cairney Hill, Dunfermeline, KY12 8QS Tel:

Mackenzie Models, Quarryside, Duncansby Head Road, John O'Groats, KW1 4YS

Tel: 01955 611210 Mac's Model Railroading, 4-8 Reform Street, Kirriemuir, Angus, DD8 4BS

Tel: 01575 572397 Waddell's Models, 56 Bell Street, Merchant City, Glasgow, G1 1LQ Tel: 0141 5528044

Wickness Models, 6 Greenlea Crescent, Collin, Dunfries & Galloway, DG1 4PR Tel: 07920 407724

Wonderland Models, 97-101-103 Lothian Road, Edinburgh, EH3 9AN Tel: 0131 229 6428

Abbey Models, 2 Maygate, Dunfermline, Scotland, KY12 7NH Tel: 01383 731116 Harburn Hobbies, 67 Elm Row, Leith Walk, Edinburgh, EH7 4AQ

Tel: 0131 556 3233 Invergowrie Model Centre, 118 Main Street, Invergowrie, Dundee, DD2 5BE

Tel: 01382 561064 McLaren Models, 155 Grahams Road, Falkirk, FK2 7BQ Tel: 01324 624102 Models Unlimited, 2 North Street, Inverurie,

AB51 4QR Tel: 01467 672277 Modelzone at WH Smith, 177 Sauchiehall Street, Sauchiehall, Glasgow, G2 2ER

Street, Sauchienaii, Glasgow, G2 2ER Tel: 0141 331 2833 Pastimes (Glasgow), 126 Maryhill Road, St Georges Cross, Glasgow, G20 7QS Tel: 0141 3311008 Uddingston Model Centre, 101 Main Street,

Uddingston, Glasgow, G71 7BP

Tel: 01698 813194 es & District Model Railway Club, Lockerbie Railway Station, Station House, Lockerbie DG11 2HA

Dundee Model Railway Club, 2-4 Huntly Square, Craigie, Dundee, DD4 7SX Tel: 01382 644342 / 07776 011601 Edinburgh & Lothians Model Railway Club, c/o 3 Piershill Terrace, (off Portobello Road), Edinburgh, EHB 7ES

The Crafty Modeller, 9 Saltoun Square, Fraserborough, Peterhead, AB43 9DA Tel: 07521 983662

SHROPSHIRE

Severn Valley Railway, The Railway Station, Hollybush Road, Bridgnorth, Shropshire, WV16 5DT Tel: 01746 765801 Classic Railway Models, 62 Whitburn Street, Bridgnorth, Shropshire, WV16 4QP Tel: 01746 769009

East Somerset Models, The Railway Station, Cranmore, Shepton Mallet, Somerset, BA4 4QP Tel: 01749 880651

Frome Model Centre, 1-2 Catherine Street, Frome, Somerset, BA11 1DA Tel: 01373 465295 Model Masters, International House, 50a

Clifton Road, Weston Super Mare, Somerset, BS23 1BW Tel: 01934 629717 Signals Model Shop, 8 Holly Court, High

Street, Midsomer Norton, Somerset, BA3 2BD

Tel: 01761 402484 **West Somerset Railway,** The Buffer Stop, The Railway Station, Minehead, Somerset, TA24 5BG Tel: 01643 700387 Denners, 23-25 High Street, Yeovil, Somerset,

BA20 1RU Tel: 01935 444444 Eric Snook Ltd, 22-24 Union Passage, Bath, Somerset, BA1 1RD Tel: 01225 464914

SOUTH YORKSHIRE

MG Sharp Models, 712 Attercliffe Road, Sheffield, South Yorkshire, Sg 3RP Tel: 0114 244 0851 Marcway Models & Hobbies, 598-600

Attercliffe Road, Sheffield, South Yorkshire, Sg 3QS Tel: 0114 244 9170 Rails of Sheffield, 27-29 Chesterfield Road,

Sheffield, South Yorkshire, S8 oRL Tel: 0114 2551436

Tag's Model Soptial Space Spac

Tel: 01302 320732 Olivia's Trains & Models, 25a Mansfield Road, Intake, Sheffield, South Yorkshire, S12 2AE Tel: 0114 2647 449

STAFFORDSHIRE

The Model Shop, First Floor The Octagon Centre, New Street, Burton on Trent, Staffordshire, DE14 3TN

Tel: 07939 544527

Chasewater Railway Museum, Chasewater
Country Park, Brownhills West Station, Pool
Lane, Burntwood, Staffordshire, WS8 7NL Tel: 01543 452623

The Hobby Goblin, 54 Hamil Road, Burslem, Stoke on Trent, Staffordshire, ST6 1AU Tel: 01782 818 433

The Tutbury Jinny, Unit 9 Tutbury Mill Mews, Lower High Street, Tutbury, nr Burton Upon Trent, Staffs, DE13 gLU Tel: 01283 814777 Topp Trains, 28 Marston Road, Stafford, Staffordshire, S116 385 Tel: 01785 247883

SUFFOLK

Perfect Miniatures, 86-88 Friars Street, Sudbury, Suffolk, CO10 2AJ Tel: 01787 375884 Model Junction, 10 Whiting Street, Bury St

Edmunds, Suffolk, IP33 1NX Tel: 01284 753456 Coastal DCC Ltd, Unit 2, 48-52 Tomline Road, Ipswich, Suffolk, IP3 BDB Tel: 01473 710946

Dorking Models, 12/13 West Street, Dorking, Surrey, RH4 1BL Tel: 01306 881747 LSWR Models, 10 Conyers Close, Walton on Thames, Surrey, KT12 4NG Tel: 01932 246123 Models of Distinction, 23 The Woolmead, East Street, Farnham, Surrey, GU9 7TT

Tel: 01252 716981 Addlestone Model Centre, 130 Station Road, Addlestone, Surrey, KT15 2BE, 01932 845440 Masters of Epsom, 29-31 Tattenham Crescent, Tattenham Corner, Epsom, Surrey, KT18 5QJ

Tel: 01737 356373 / 356867 Roxley Models, 4 Beckley Parade, Great Bookham, Leatherhead, Surrey, KT23 4RQ Tel: 01372 452976

s Ltd, 2 Northend, Croydon, Surrey, CRg 1SB Tel: 0208 6037400 Hampton Court Model Railway Society, 38 Arnold Drive, Chessington, Surrey, KTg 2GD

Tel: 020 8949 3431 TYNE & WEAR

oley's Puffers, 382A Jedburgh Court, Team ley Trading Est, Gateshead, Tyne & Wear,

NE11 oBQ Tel: 0191 4910202 Rolling Stock Model Rail, 53 Walton Avenue, North Shields, NE29 9BS Tel: 0191 257 4328 Stephenson Railway Museum, Middle Engine Lane, North Shields, Tyne & Wear, NE29 8DX Tel: 0191 2007146

A19 Model Railway Club, c/o Room 13, Groundwork South Tyneside & Newcastle, The Eco Centre, Windmaill Way, Hebburn, Tyne & Wear, NE31 1SR Tel: 0191 455526 Conways Toymaster (Sunderland), Unit 4/4A Walworth Way North, Sunderland, Tyne & Wear,

SR1 3DR Tel: 01915 651531 Fenwick (Newcastle Upon Tyne), Northumberland Street, Newcastle Upon Tyne, Tyne & Wear, NEgg 1AR Tel: 01g1 2325100

Conwy Valley Railway Museum, The Old Goods Yard, Betws-Y-Coed, LL24 oAL Tel: 01690 710568

Ffestiniog & Welsh Highland Railways, Harbour Station, Porthmadog, Gwynedd,

Harbour Station, Hortimadog, Gwynedd, LL4g gNF Tei 0.1766 516000 Gwili Railway Co, Bromwydd Arms Station, Carmarthen, SA33 6HT Tel: 01267 238213 Llangollen Railway Station, The Station, Abbey Road, Llangollen, Clwyd, LL20 8SN Tel: 01978 860979

North Wales Models, Southwold, Old Mill

Road, Penmaenmawr, LL34 6TG Tel: 01492 622298

Pontypool & Blaenavon Railway Co, The Railway Shop, 33 Broad Street, Blaenavon, Torfaen, NP4 9ND Tel: 01495 792263 Dapol Ltd, Gledrid Industrial Park, Chirk, Wrexham, LL14, 5DG Tel: 01591 774455
Kittle Hobby, Rhongyr Uchaf House, Penycae,
Swansea, SA9 1GD Tel: 01693 731005
Tallylynn Railway Shop, Wharfe Station,
Tywyn, LL36 gEY Tel: 01654 710012 The Conwy Valley Railway Museum, The Old Goods Yard, Betws y Coed, Corwy,

LL24 oAL Tel: 01690 710568 The Railway Shop, 33 Broad Street, Blaenavon, NP4 9NF Tel: 01495 792263 Trainstop, 10 High Street, Knighton, LD7 1EY

Tel: 01547 520673 **Voyle's,** Unit 33 Llanelli Workshops, Trostre Business Park, Llanelli, SA14 9UU

Tel: 01554 770041 / 749200 Welsh Highland Railway (Porthmadog), (Bookshop), Tremadog Road, Porthmadog, Gwynedd, LL49 9DY Tel: 01766 513402

Western Valley Models, 1 Crescent Road, Risca, Newport, NP11 6G1Tel: 01633 615445 **Abergavenny Model Shop,** 1 Brecon Road, Abergavenny, Monmouth, NP7 5UH

Tel: 01873 852566

Hippo Toys & Models, 5 Diamond Units, Blackmarsh Road, Mochdre, Colwyn Bay, LL28 5HA Tel: 01492 534169 Holt Model Railways, 100 Bishopston Road, Bishopston, Swansea, SA3 3EW

Tel: 01792 232264 ons of Cardiff, 192-194 Fidlas Road, Llanishen, Cardiff, CF14 5LZ

Tel: 029 2075 2563 Lord & Butler Model Railways, The Old Warehouse, Next to Pumping Station, Penarth Road, Cardiff, CF11 8TT Tel: 02920 667 225 MIB Models, 1 Lewis Buildings, Newton Nottage Road, Newton, Porthcawl, CF36 5PE

Tel: 01656 771121 **Model Railways Rhyl,** 44 Wellington Road, Rhyll, LL18 1BN Tel: 01745 798460 Old Barn Hobbies, Unit 18 Aberaeron Craft Centre, Closs Pencarreg, Aberaeron SY46 oDX

Tel: 01545 571634 Photoworld Model Railways, 26 Queens Road, Craig-Y-Don, Llandudno, LL30 1AZ Tel: 01492 871818 R & R Hobbies, 3 Shoppers Walk, Swansea,

SA1 3AY Tel: 01792 468749 **Railways Unlimited,** Unit 3, Y Barics, Nantle, Caernarfon, LL54 6BD Tel: 01286-882332 Rhuddlan Models, Bryn Awel, High Street, Rhuddlan, LL18 2TU Tel: 01745 590048 Rnuddian, LL18 210 let: 01745 590048

Brite Ideas Toymaster, Unit 1 Gwersyllt
Shopping Centre, Gwerstllt, Wrexham, LL11
4NT Tel: 01978 758451

David Newband Books, Drefor Cottage,

Kerry, Newtown, Powys, SY16 4PQ Tel: 01686 670 205

WARWICKSHIRE

Classic Train & Motor Bus, 21b George Street, Learnington Spa, Warks, CV31 1HA Tel: 01926 887499

Joto Hobbies, 7 Lawrence Sherriff Street, Rugby, Warks, CV22 5EJ Tel: 01788 562372 Our Place, 3 Swan Street, Alcester, Warwickshire, B49 5DP Tel: 01789 766755 Barby Model Rail, Studio 3, The Locks, orton, Rugby, Warwickshire, CV21 4PP Tel: 01788 543442

WEST MIDLANDS

Hobbyrail, Unit 38 Market Village, South Parade, Sutton Coldfield, West Midlands, B72 1QU Tel: 07981 757023 Ian Allan Bookshop, 12 Ethel Street, Birmingham, West Midlands, B2 4BG

Tel: 0121 6432496 Springhill Models, 4 Springhill Lane, Penn, Wolverhampton, West Midlands, WV4 4SH Tel: 01902 341302

Wonderful World of Trains & Plane 3 Mary Ann Street, Birmingham, West Midlands, B3 1B6 Tel: 0121 227 4000 **A Oakes Ltd,** Oakend House, 174/180 Vicarage Road, Oldbury, West Midlands,

B68 8JB Tel: 0121 552 1684 Modellers Mecca, 450 Albion Street, Wall

Heath, Kingswinford, West Midlands, DY6 oJP Tel: 01384 278 206 Tennents Trains, Shop 1, 130 Hagley Road, Haleygreen, Halesowen, West Midlands, B63 1DY Tel: 0121 550 1266

Martells Department Store, Martells, Queens Road, East Grinstead, West Sussex, RH19 1BB Tel: 01342 321303

ugemaster, Gaugemaster House, Ford Road, Arundel, West Sussex, BN18 oBN

Tel: 01903 884321 Morris Models, 80 Manor Road, North Lancing, West Sussex, BN15 oHD Tel: 01903 754850 Gaugemaster Controls Ltd, Gaugemaster House, Ford Road, Arundel, West Sussex. House, Ford Road, Artifices, West Sound BN18 oBN Tel: 01903 884488 East Grinstead Model Railway Club,

c/o Basement - East Court Mansion, College Lane, East Grinstead, West Sussex, RH1g 3LT Tel: 01342 314228

Chichester Toys, 53 South Street, Chichester, West Sussex, PO19 1DS Tel: 01243 788 055

WEST YORKSHIRE

2K Technologies, Ryder Court, Denholmegate Rd, Hipperholme, HX3 8JG Tel: 01422 209666

Kirklees Light Railway, Park Mill Way, Clayton West, nr Huddersfield, West Yorkshire, HD8 gXJ Tel: 01484 865727

Nick Tozer Railway Books, 159 Church Road, Paddock, Huddersfield, West Yorkshire, HD1 4UJ Tel: 01484 518159

Pennine Models, 33-35 Mill Hey, Haworth, Keighley, West Yorkshire, BD22 8NE Tel: 01535 642367 Pennine Wagons, 34 Leith Court, Dewsbury, West Yorkshire, WF12 80P

Tel: 01924 459104 Something Wicked Models, 1 Woodstreet, Huddersfield, West Yorkshire, HD1 18T Tel: 01484 537191

The Model Railway Shop, 30 Station Lane, Featherstone, Pontefract, West Yorkshire, WF7 5BE Tel: 01977 706730

Frizinghall Models and Railway, Unit 3C
Hillam Road, Bradford, West Yorkshire, BD2 1QN

Tel: 01274 747447 Going Loco, 38 Potovens Lane, Lofthouse

Gate, Wakefield, West Yorkshire, WF3 3JF

Tel: 01924 824748

Keighley & Worth Valley Railway, The
Railway Station, Haworth, Keighley, West Yorkshire, BD22 8NJ Tel: 01535 646838 Millennium Models, 67 Queen Street, Morley, Leeds, West Yorkshire, LS27 8EB

Moriey, Leeds, West Yorkshire, LS27 8EB
Tel: 0113 2189286
Milnsbridge Models, 160-162 Armitage Road,
Milnsbridge, Huddersfield, West Yorkshire,
HD3 4JY Tel: 01484 640007
Castlegate Toys, 45 High Street, Wetherby,
West Yorkshire, LS22 6LR Tel: 01937 582816
Conways (Keighley), 53 Cavendish Street,
Keighley, West, Yorkshire, BRD1 2896 y, West Yorkshire, BD21 3RB Tel: 01535 604045

Conways (Otley), 23A Westgate, Otley, West Yorkshire, LS21 3AT Tel: 01943 462065

Conways Toymaster (Halifax), 24 Commercial Street, Halifax, West Yorkshire, HX1 1TA Tel: 01422 353986 Halifax Modeller's World, 29 Union Street, Halifax, West Yorkshire, HX1 1PR

Tel: 01422 349157

Hobbybase, 19-24 White Hays North, West Wilts Trading Estate, Westbury, Wiltshire, BA13 4JT Tel: 01373 825825 Steam - Museum of the Great Western Railway, Kemble Drive, Swindon, Wiltshire,

SN2 2TA Tel: 01793 466646 **Gas Cupboard Models,** 6 St Georges Walk, Silver Street, Trowbridge, Wiltshire, BA14 8AA

Tel: 01225 777888 Modelmaniacs, Unit 9 Harris Road, Porte Marsh Ind Est. Calne, Wiltshire, SN11 oPT

Tel: 01249 817731 Salisbury Model Centre 2010 Ltd, 37 Fisherton Street, Salisbury, Wiltshire, SP2 7SU Tel: 01722 334757

Spot-On Models & Games, 49 Fleet Street, Swindon, Wiltshire, SN1 1RE Tel: 01793 617302 Westons Railways, Unit 44a Studley Grange Craft Village, Hay Lane, Studley, Swindon, Wiltshire, SN4 90T Tel: 01793 850554 Devizes Toys, 29-30 Maryport Street, Devizes, Wiltshire, SN10 1AG Tel: 01380 723841 Duncans Toy Chest, Unit 13, The Midland & Light Industrial Estate, Trowbridge, Wiltshire, BA14 6RU Tel: 01225 783280

WORCESTERSHIRE

Severn Wheels, 46 Old Street, Upton Upon Severn, Worcestershire, WR8 oHW Tel: 01684 591080

DCC Supplies Ltd, Unit 17a Top Barn Business Centre, Worcester Road, Holt Heath, Worcestershire, WR6 6NH Tel: 0845 224 1601 Footplate, 101 Comberton Hill, Kidderminster, Worcestershire, DY10 1QG Tel: 01562 750076 CDS Models, Sugarbrook Mill, Buntsford Hill, Bromsgrove, Worcestershire, B6o 3AR Tel: 01527 577175

If you would like to join this growing list and stock The Railway Magazine guide to Modelling, send your details to jsharratt@mortons.co.uk or call 01507 529401



BASSETT-LOWKE LTP

Tony Stratford looks into the history books and asks the aficionados in order to find out more aboutBassett-Lowke, a Northampton toy company specialising in model railways.

ENMAN JOSEPH BASSETT-LOWKE was without doubt the founding father of today's thriving model railway industry serving the UK market. He was an early exponent of both marketing and advertising and was responsible for introducing many to the hobby.

Born in Northampton in 1877 W J, as he was known, grew up in the family boiler making business of J T Lowke & Co. After the death of his father, his mother remarried into the Bassett family. W J added the name Bassett to his own upon his own marriage to Florence Jane Jones, the daughter of Charles Jones, one of the founders of the Crockett and Jones shoe manufactory, still in business today.

LEFT: W J Bassett-Lowke.

BELOW: This story from May 1987 of The Railway Magazine shows steam-outline petroldriven 4-6-2 No. 4472 Flying Scotsman run as a 0-6-0 on the Poole Park Miniature Railway after its move from Tucktonia. In the 1970s the Bassett-Lowke company supplied model railway components to Tucktonia.

Both the Lowke and Bassett families were involved in engineering in the Northampton area, which was well known for its involvement in the shoe-making industry. Not surprisingly W J served his apprenticeship with the family firm and also spent some time working for Crompton & Co, one of the world's first large-scale manufacturers of electrical equipment, in Chelmsford.

W J was a keen model-maker and was involved in model engineering from an early age. He was also interested in architecture and contemplated it as a career; he believed in good design and wanted to encourage its practice in others. This all had an influence on his emergence as the first supplier of model railway products in

In 1899 at the age of 22 he founded his own mail-order business supplying small steam engines, boilers and components for model engineers - while still an apprentice in the family company - supplying the needs-minded enthusiasts with his friend and colleague Harold Franklin.

In 1900, he attended the Paris Exposition Universelle, a world's fair to celebrate the achievements of the previous century. Here he found railway models by the German manufacturers Bing, Carette and Marklin. By the time he arrived in France, having left school at 13, he was already a well-travelled young man, although his home would always be in Northampton.

W J negotiated deals for Bing, Carette and Marklin to supply him with British outline trains to his own designs. The first – a LNWR 4-4-0, manufactured by Bing in Gauge 3 - arrived in 1901. The first catalogue was published in 1902 and four years later W J published the first of his Model Railway Handbooks. In the same year his business attended a model engineering exhibition with his first trade stand.

W J chose to sub-contract most of his production to outside companies while he concentrated on supplying items in what was, in effect, the first modelling 'one-stop shop'. He entered into agreement with another Northampton company, George Winteringham, which supplied track from »





What was Tucktonia?

Tucktonia was a model village in Hampshire opened by well-known entertainer Arthur Askey in 1976 but closed 10 years later.

Models were to ½4th

scale and ran on 2½in gauge track. Locos and rolling stock included a GWR Castle and seven GWR coaches, A4 Silver Link and Silver Link coaching stock, Bo-Bo diesel hauling 21 wagons, Co-Co diesel hauling seven container wagons and two HST trains. The steam-hauled trains had a total length of 21ft each.

« 1902, and in 1908 became a subsidiary Bassett-Lowke company.

The Bassett-Lowke company was formed in 1909 and became W J's full-time employment, the following year it became a limited company. Activities were not just confined to model railways; the company also produced stationary steam engines, ship models and was also instrumental in the growth of miniature railways across the nation. The company was also a major supplier of castings and components allowing modellers to construct their own models to their own designs and requirements.

In order to reach more modellers, Bassett-Lowke opened a retail shop in High Holborn, London. Up until 1964, when it was sold to Beatties (the model shop retailer that went bust in 2001), it was a mecca for modellers for generations. Further shops opened in Edinburgh in 1922 and Manchester in 1927. A retail shop also existed at the works in Northampton.

W J was himself a member of the Institute of Locomotive Engineers and had a long association with Henry Greenly, a locomotive engineer who worked alongside W J designing locomotives for miniature railways, the first of which was constructed in 1905. Greenly served his apprenticeship with the Metropolitan Railway at Neasden as a draughtsman. He left the Metropolitan in 1901 to become assistant editor of *Model*

TOP: c1924 Carette for B-L gauge 0 Peckett 0-4-0ST No.810 repainted. SPECIAL AUCTION SERVICES RIGHT: W J with his wife Florence outside the front door of 78 Derngate.

78 DERNGATE NORTHAMPTON TRUST

Engineer magazine. He went on to edit the first model railway magazine, which he founded with W J in 1909, entitled the Model Railways & Locomotive Magazine. It continued to be published until 1916. Greenly established his own engineering business in Hounslow, while continuing as a consultant with Bassett-Lowke.

The outbreak of the First World War cut off supplies of models from the German manufacturers, and when the war ended, not surprisingly there was a reluctance to purchase items of German origin. When supplies resumed, W J ensured that the items were marked 'foreign' made rather than carrying the marks of their manufacturers. Just before the outbreak of war the company had acquired the assets of Carson & Co in 1913 and that of Watfordbased Butcher & Co, both of whom had been suppliers to the company.

When model railways were first being developed they were either Gauge 3, 2, 1 or 0. Over the years the smaller scale gained in popularity and after the First World War, 0 gauge became the most popular.

During the 1920s the German company Bing introduced a small scale approximately half the scale of 0 gauge which became HO or half zero. The Bing Table Top railway emerged in 1922 and W J and Henry Greenly were very much involved in its development. It was available in both clockwork and electric versions.

For the first time, the small British prototypes challenged W I's ability to get the German mechanisms to fit into British models, so a compromise was necessary. Instead of producing British models to half o at 3.5mm to the foot, a compromise of 4mm to the foot had to be adopted and this we know today as 00 gauge. With the departure of Stephan Bing, the head of the company in 1927, the range was short lived and it would be another 10 years before a table-top system re-emerged in another form. By 1932 the Bing company had gone into liquidation and the table-top system passed to Karl Bub, another German manufacturer who purchased the Bing assets.

Commercial work was an important part of the Bassett-Lowke portfolio. The company made architectural models, display models and sales aids for ship builders and shipping lines. Locomotive models were produced for companies and some saw





Bassett-Lowke's buildings

Bassett-Lowke applied the same attention to detail and use of technology to his houses as he did to his pioneering models.

W J's interest in architecture was a constant in his life and he commissioned Charles Rennie Mackintosh to redesign the interior of the house he bought when he married Florence in 1917, No 78 Derngate. In March 2017 it will

be exactly 100 years since the newly married Mr and Mrs Bassett-Lowke moved into their residence. The house was a stunning showcase for Macintosh's avantgarde designs - realised against the challenging conditions of the First World War.

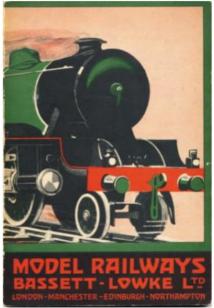
78 Derngate in

Northampton is open to the public and is the only house in England designed by Charles Rennie Mackintosh. Visit www.78derngate.org.uk

After leaving Derngate, in 1926 he moved to Britain's first Modernist house, designed by German architect Peter Behrens, at 508 Wellingborough Road, Northampton.



B. B-L Feltham-style tram. wallis & wallis auctions



Bassett Lowke advert from 1928.

BASSETT-LOWKE LTP

FOR MUSEUMS, EXHIBITIONS, PUBLICITY AND DEMONSTRATIONS



service on the large o gauge layout displayed by British Railways until the mid-1960s. The company also built models of diverse subjects such as power stations.

o gauge remained the gauge of choice for modellers up until the outbreak of the Second World War. In 1927 Bassett-Lowke supplied more than 30, 000 models of its 4-4-0 Duke of York in exchange for vouchers given away with BDV cigarettes!

1935 saw the introduction of a new но system, Trix. The Trix company was formed by Stephan Bing in Nuremburg in 1927 following his purchase of Förtner & J Haffner's facilities to produce metal construction kits similar to Meccano. These had holes in threes in an X pattern, hence Tri and X to form Trix. At that point Bing had no intention of re-commencing the manufacture of model railways but W J managed to convince him to do so.

A British Trix company was formed in London in 1932, with Franz Bing, Stephan's son, managing the company. Because British law required at least one British director, W J fulfilled that role.

By 1933 the Trix company had developed the first true HO table-top system, Trix

Express. Its unique pick-up system allowed two trains to run on the same line at once using two controllers. Bassett-Lowke was soon importing the trains, which were initially German outline.

In the same year the Bing company was taken over by the German government, as its owners and several key employees were of Jewish background. Fearing persecution, W J managed to arrange for Stephan to seek asylum in the UK.

By 1937 British outline bodies were fitted on to German chassis which were sent over minus bodies. Winteringhams commenced production of Trix Twin models sourcing die-cast bodies from a company in Worcester. As the political landscape changed in Germany, the British company became less reliant on supplies from Germany. With war declared between the two nations in September 1939 trading between the British and German Trix companies ceased.

Trix and Winteringham set up Precision Scale Models in 1941, although Winteringham's interest ceased the following year. Trix operated as a separate company and moved to Birmingham in 1960.

What happened to Beatties?

After the company collapsed in 2011 all that remained for sale was 'The Beatties Collection', a museum-quality collection of heritage transport toys from generations of production from model toy marques as famous as Corgi and Hornby. The collection was auctioned by Phillips.

Bassett-Lowke was soon employed on war work for the British government. We do know that the company produced scale models of potential targets produced from ariel photographs, such as those used in the build up to the Dambuster raids. It also produced models of Mulberry Harbours to be used as training aids ready for them to be used following D-Day in June 1944.

When peace came to Europe, production was slow to get going again. o gauge was no longer the dominant force and the pendulum swung very much towards 00. Early production concentrated on export orders and the Trix range lost its market

43



CORGI, the Northampton connection

Corgi was originally a brand name of Mettoy (Metal toy), which moved to Northampton in 1932 and was formed by Phillip Ullman and Arthur Katz.

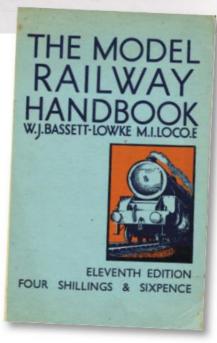
Both had worked for Nuremburg company Tipp & Co but being Jewish sought asylum in Northampton. By then the company was owned by toy giant Mattel. Mettoy was behind the 1960s model railway range Playcraft Railways.

Corgi introduced diecast scale model vehicles in 1956, which were vastly superior to Dinky Toys and other models available at the time.

The company suffered financial difficulties in 1983 but a year later a successful management buy-out took place which continued until 1989 when the company was acquired by toy maker Mattel. During this time models began to be produced in Hong Kong instead of Swansea where they had been made previously. In 1995

Mattel sold the company to another management buy-out, the company trading as Corgi Classics with the company moving to Leicester with production being wholly sourced from the Far East.

By 1999 ownership was in the hands of Zindart, an American company. As well as producing a wide range of road vehicles the company diversified into producing a range of aircraft and a range of OO-scale buses.



« share to the more realistic Hornby Dublo range and they were joined in 1949 by Graham Farish and a year later Rovex, which went on to become the dominant force when its emerging range was sold to Tri-ang. 234231234q

The death of W J in 1953, at the age of 76, saw the start of the company's decline. He had been a local Labour councillor in Northampton (1930-1952) and also served as an Alderman. He was one of the founders of the Northampton Repertory Theatre and served as a director for many years. He was also a keen photographer and amateur film maker, producing a film promoting Northampton in 1932.

Despite the o gauge market being in decline the company turned out some of its best models. These included some of the last to be built, including the DPI Deltic Prototype locomotives built by Vic Reader,

one of its suppliers. These models were handmade in brass and therefore expensive.

The last catalogue appeared in 1963 and in 1964 the last of the company shops in High Holborn, London was sold.

Bassett-Lowke ceased trading the following year and there were a number of attempts to get the company up and running again. The name was acquired by two London businessmen Richard Derry and Ivan Scott in 1966. In 1968 the company then trading as Bassett-Lowke (SM) Ltd reached agreement with a London retailer of collectable model railways and model engineering items trading as Steam Age. Retail premises were at 59 Cadogan Street and the company sold models that were still available notably the live steam 2-6-0 Mogul using the trading name Bassett-Lowke (Railways) Ltd. In return, repair and restoration work from Steam Age was

placed with the main company.

In 1969 a commemorative catalogue was produced for the ill-fated tour to the United States of America by British iconic locomotive A3 Class 4-6-2 No. 4472 Flying Scotsman and a train of Pullman cars promoting British companies and their products. Bassett-Lowke (Railways) Ltd took exhibition space on the train and 5000 numbered catalogues were produced for sale.

In 1970 the main company changed hands again being taken over by the wife of Richard Derry, Anne Ritchie, under the name Bassett-Lowke (Holdings) Ltd. The company produced high-quality commercial and industrial models for a number of customers.

During 1976 the company supplied the model railway components for Tucktonia Model Village in Christchurch, Hampshire, which were built in the company workshops in Northampton.



Magazine

BRITAIN'S BEST-SELLING RAIL TITLE

issues for

Offer expires: 31/01/17









- Britain's best-selling railway title
- Award-winning photography Get yours early!

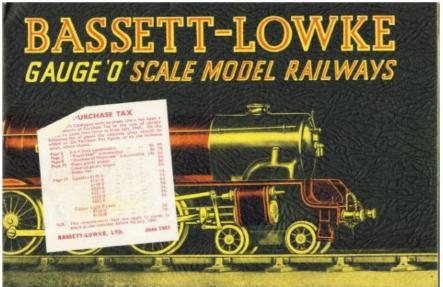
CALL - 01507 529529 and Quote: TRM82

VISIT – www.classicmagazines.co.uk/trm82

SUBSCRIBE TODAY!



Circa 1955 B-L 4-6-2 A1 BR green Flying Scotsman 60103 Nuscale. PAT HAMMOND



Famous son of Northampton

W J Bassett-Lowke was without doubt one of Northampton's famous sons. His name lives on at Bassett-Lowke Drive in the Upton area of the town and he has also been commemorated in a steel sculpture alongside Macintosh on a portrait bench placed alongside the River Nene near a Sustrans cycle route that runs from Beckets Park towards Upton in the town.

L.M.S. "ROYAL SCOT" No. 6100



The company moved out of its Kingswell Street premises in 1984 to new accommodation in Harvey Reeves Road. Anne Ritchie continued to run the company in addition to her other business industries.

In 1989 the business was sold again to Nigel Turner, a Northampton businessman. Turner was best known for his interest in fairground and agricultural machines, which had led to the creation of Turner's Musical Merry-Go-Round, near Wootton, Northampton. It was a popular night club attraction incorporating fairground rides and organs attracting thousands of visitors during its period of operation between 1983 and 2004. During this time Turner employed the services of Marcel van Cleemput who had been responsible for designing Corgi cars for more than 30 years before leaving to start his own design company.

Turner only owned the company for

a couple of years before selling it on to Acorn Models owned by Wellingborough businessman, Ken Robinson, in 1991. The company moved to 99 Sanders Road on the Finedon Road Industrial Estate in Wellingborough.

In 1993 the name was once again prominent in model shops following the introduction of short-run O gauge whitemetal models of steam road vehicles. These included a Burrell-type traction engine, Clayton steam wagon, Burrell-type steam roller, and a London B-type bus.

The name was acquired in 1996 by Corgi Toys. Four years later the name of Bassett-Lowke once again appeared on a model locomotive box with the release of a live steam 2-6-0 Mogul announced at the London Toy Fair. The range continued to be developed by one of the company's designers, Len Mills, until 2004 when development temporarily ceased resulting in Len moving to ACE Trains in a similar role.

Production restarted with the company working closely with ETS in the Czech Republic which manufactured much of the output.

In 2008, Hornby acquired the Corgi brands and with it Bassett-Lowke. Hornby went on to develop further models. However, Bassett-Lowke products did not generate the volume sales demanded of Hornby group products and production ceased in 2012.

For the time being the company name of Bassett-Lowke lies dormant despite being one of the most famous names in the model railway industry.

For further information

The Bassett-Lowke Society is an active organisation which meets on a regular basis to operate Bassett-Lowke trains visit www.bassettlowkesociety.org.uk





RM MODELLING LISTINGS DEC 2016-FEB 2017

Compiled by Jon Longman. Send details of your events to RMModellingeditor@mortons.co.uk

OPEN TUESDAYS TO SUNDAYS
Brighton Toy and Model Museum. 52/55 Trafalgar Street, Brighton, West Sussex BN1 4EB. www.brightontoymuseum.co.uk 10am-5pm (11am-5pm Sat). See website for admission prices.

DECEMBER 27

Keighley Model Railway Club Christmas Open Day. KMRC Club Rooms, Knowle Mill, South Street, Keighley, West Yorkshire BD21 1SY. www.keighley-mrc.org.uk 10am-4pm Tuesday. Adult £3.50, child £2.50. Club layouts.

DECEMBER 27/28

Gainsborough Model Railway Society Open Days. Florence Terrace, Gainsborough, Lincs DN21 IBE. www.gainsboroughmodelrailway.co.uk 1.3opm-6pm Tuesday and Wednesday. Adult £4, concession £3, child £3, family £10. (0) The East Coast Main Line from King's Cross to Leeds Central.

DECEMBER 29/30

Taunton Model Railway Group open days Platform One, Bishops Lydeard station, West Somerset Railway, Bishops Lydeard, Somerset TA4 3RU. www.bathgreenpark. co.uk 10.30am-4pm Thurs. 10.30am-4.30pm Friday. Adult £1.50, child 75p. Bath Green Park station and Tamerig layouts.

DECEMBER 30

Wimborne Railway Society open day. United Reformed Church, Chapel Lane, Wimborne BA21 1PP. www.wimrail.org.uk 10am-2pm Friday. Adult £2.50, accompanied child 5op. Club layouts.

DECEMBER 31

West Camel Model Railway Society Christmas Show. Davis Hall, West Camel, Yeovil, Somerset BA22 7QX. Society contact: i.goose261@btinternet.com 10am-3.30pm Sat. Adult £3, child (11-16) £1, child under-11 free. Eight layouts.

JANUARY 7

Ipswich Railway Modellers' Association. Open Day. 40A Norfolk Road, Ipswich, Suffolk IP4 4HB. www.irma.org.uk 10am-1pm Sat. Admission free. Layouts and

Marlow, Maidenhead & District Model Railway Club Exhibition. Cox Green Community Centre, Highfield Lane, Maidenhead SL6 3AX. www.mmdmrc.org.uk 10am-5pm. Adult £4.50, child £2, family £10. Layouts and demonstrations.

ScoutRail 2017. Exeter Hall, Oxford Road, Kidlington, Oxon OX5 1AB. www.scoutrail. org.uk 10am-4.30pm Sat and Sun. Adult £3.50, concession £2.50, child £1.50. Layouts.

JANUARY 14

Bridport & District Model Railway Club Exhibition. Beaminster Public Hall, Fleet Street, Beaminster, Dorset DT8 3EF. 10am-4pm Sat. Adult £3, child £1. Layouts.

Heywood Model Railway Group. Unit 3, Park Works, River Street, Heywood, Oldham OL10 4AB. www.hmrg.co.uk10am-4pm Sat. Admission by donation. Layouts.

JANUARY 14/15

Pratts Bottom Model Railway Exhibition. Village Hall, Norsted Lane,

Rushmoor Hill, Pratts Bottom, Orpington, Kent BR6 7PQ. www.orpingtonmod org.uk 10am-5pm Sat and Sun. Adult £3.50, child £1.50. Layouts and demonstrations

JANUARY 14/15

Bognor Regis Model Railway Club Exhibition. Felpham Community College, Felpham Way, Felpham, Bognor Regis PO22 8EL, www.brmrc.co.uk 10am-5pm Sat, 10am-4.30pm Sun. Adult £5, child £3. Layouts.

JANUARY 14/15

Chiltern Model Railway Association Exhibition. Stevenage Arts and Leisure Centre, Lytton Way, Stevenage SG1 1LZ. www.cmra.org.uk 10am-5.30pm Sat, 10am 4.30pm Sat. Adult £8, child free. 30 layouts and demonstrations.

JANUARY 15

Weston-super-Mare Model Railway Show. The Campus, Highlands Lane, Worle, Weston-super-Mare BS24 7DX. www.westonsupermaretrainsho 10am-5pm. Adult £6.50, concession £6, child £2, family £15. 25 layouts.

JANUARY 20-22

London Model Engineering Exhibition. Alexandra Palace, Wood Green, London N22 4AV. www.londonmodelengineering.co.uk 10am-5pm Fri and Sat, 10am-4.30pm Sun. Adult £12, concession £11, child £4 with reduction for advance bookings, Displays, layouts and demonstrations

City of Canterbury Model Railway Society Exhibition. St Anselm's School, Old Dover Road, Canterbury CT1 3EN. www.ccmrs.ic24.net 10am-5pm Sat, 10am-4pm Sun. Adult £5, concession £4, child £3, family £13.15 layouts and demonstrations.

JANUARY 22

Astolat Model Railway Circle Exhibition. Surrey Sports Park, University of Surrey, Guildford GU2 7AD. www.astolatmrc.co.uk 10am-5pm Sun. Adult £6, child £3, family £12. 16 visiting layouts, three club layouts and traders.

SNCF Society Model Rail Show. Lenham Community Centre, Groom Way, Lenham, Kent ME17 2QT. www.sncfsociety.org.uk 10am-5pm Sun. Adult £4.50, child £1.50. French outline layouts, displays and demonstrations.

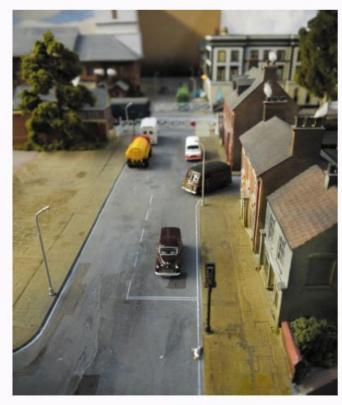
JANUARY 28/29

Erith Model Railway Society Exhibition. Longfield Academy, Main Road, Longfield, Kent DA3 7PH. www.erithmrs. ukmodelshops.co.uk 10am-5pm Sat, 10-4pm Sun. Adult £7, concession £6, child £3, family £18. Layouts and demonstrations.

JANUARY 28/29

Normanton & Pontefract Railway Modellers' Society Pontefract Model Railway Exhibition. New College, Park Lane, Pontefract, West Yorkshire WF8 4QR. www.nprms.org 10am-5pm Sat, 10-4.30pm Sun. Adult £5, child (under-16) free. 20 layouts and demonstrations.

Southampton Model Railway Society Exhibition. Barton Peveril College, Chestnut Avenue, Eastleigh, Hants SO50 5BX. www. southamptonmodelrailwaysociety. wordpress.com 10am-5pm Sat, 10-4.30pm



Sun. Adult £7, child £3, family £17. 23 layouts and demonstrations

G Scale Society Kent Group's Winter Meet. Teynham Village Hall, Belle Friday Close, Teynham, Sittingbourne, Kent MEg gTU. www.gscalekent.co.uk 11am-4pm Sun. Adult £2.50, child £1. Large-scale layouts and live steam.

Stafford Model Railway Exhibition. County Showground, Weston Road, Stafford ST18 oBE. www.staffordrailwaycircle.org.uk 11am-4pm

Sun. Adult £2.50, child £1. Layouts.

FEBRUARY 11

Blackpool and North Fylde Model Railway Club. Cleveleys Community Centre, Cleveleys FY5 1ER. www.blackpoolandnorthfyldemrc.co.uk 11am-40m Sun, Adult £2.50, concessions and children £2, family 2+2 £7.50. Club and members' layouts. Club meets every Monday evening 19.00-22.00. If you are interested you can contact chairman Alan Hawkins at chairman@ blackpoolandnorthfyldemrc.co.uk.

FERRUARY 11

G Scale Society West Midlands Group's Model Railway Exhibition. St Mary's Church Hall, Hobs Meadow, Solihull, Birmingham B92 8PN. 10am-4pm. Adult £3, child £1. Selection of layouts.

FERRUARY 11

Heywood Model Railway Group Open Day. Unit 3, Park Works, River Street Heywood OL10 4AB. www.hmrg.co.uk 10am-4pm. Admission by donation. Club layouts.

FEBRUARY 11/12

Bournemouth Model Railway Exhibition. The Hamworthy Club, Magna Road, Canford Magna BH21 3AP. www.bmre.org.uk 10am-5pm Sat, 10am-4pm Sun. Adults £5, children free. N, 009, 3mm, 4mm, 7mm, HO, OO, P4, G1 gauge layouts.

FEBRUARY 11/12

Gartell Light Railway Model Railway Exhibition. Common Lane, Yenston, Templecombe, Somerset BA8 oNB, www. glr-online.co.uk 11am-4pm Sun. Adult £4, concessions £3, child £1. Ten layouts. Please note that the GLR will not be running during the exhibition.

FEBRUARY 18

Hillingdon Railway Modellers' Test Track Open Day. Yiewsley Baptist Church Hall, 74 Colham Avenue, Yiewsley, Hillingdon, Middlesex UB7 8HF. www.hillingdonrailwaymodellers.co.uk 10am-4pm, Admission £4. O. OO and N test tracks.

Exmoor Toy and Train Show. Richard Huish College, South Road, Taunton, Somerset TA1 3DZ (Five mins drive from Junction 25 on M5) 10am-3.30pm. Admission: £2. Around 100 tables expected.

MARCH 11/12

East Grinstead Model Railway Club Exhibition. Sackville School, Lewes Road, East Grinstead, West Sussex RH10 3TY. www.egmrc.org.uk 10am-5pm Sat, 10am-4pm Sun. Adults £4.50, concessions £3.50p, Child (5-16) £3.50, Family £15. 17 layouts and trade support.

Gauging what's the best scale for you

Anything miniaturised needs to be scaled down from its full-size version, hence the often confusing number of gauges available to the modeller. Here we'll attempt to negotiate the minefield and explain what it is all about, writes **Tony Stratford.**

t seems that since the dawn of railways there have been battles over gauges, from Brunel's broad gauge to Stephenson's standard gauge, with people always having a preference for one over another.

The first commercial railways in the UK were designed to operate on a track gauge of 4ft 8½in, which was originally set by George Stephenson as it was the same distance apart as the wheels of horse-drawn carts used at the time, itself a measurement possibly dating back to Roman times.

In the UK lines that operate on track less than 4ft 8½ in are known as narrow gauge and those larger as broad gauge, the latter being favoured by Isambard Kingdom Brunel for the Great Western Railway and other lines he engineered in the west of England which ran on tracks 7ft 0¼ in apart. The last broad gauge lines were converted to standard gauge in 1892.

Narrow gauge lines were widely used for the construction of light railways and lines serving industry, particularly in rural parts where building standard gauge lines could not be justified financially or were constrained by the local geography.

In Ireland the track gauge for both Northern Ireland Railways (NIR) and Iarnród Éireann in the Republic of Ireland is 5ft 3in.

Scaling down the real thing

Model trains by German companies Bing and Trix were imported to the UK by Bassett-Lowke. While this was fine for the German outline models, British modellers wanted locomotives that looked like the ones that operated here. Immediately, Henry Greenly, the noted miniature railway engineer was required to fit a British outline body on to an existing German-built chassis. At 3.5mm the body was too small to accommodate the cab full of electrics which early locomotives contained. So he had to seek a compromise and opted for 4mm to the foot and it worked, although it means that this historical anomaly leaves oo track width technically narrower than it

In 1938, Hornby Dublo trains were introduced by Meccano Ltd in Liverpool and they also adopted oo scale. It has remained the British standard ever since, consistent with the British way of liking to do things a bit differently, as the most popular gauge worldwide is HO, more of which later.

The most popular scales today in the UK

are 00 and N (2.0625mm to the foot) with extensive ready-to-run models that can be easily bought from your local model shop. O gauge (7mm to the foot) has been reinvigorated in the past few years and is now enjoying a renaissance.

British 00 models and H0 models purchased from European or American companies can be used on the same track and with the same controllers as British 00 trains. Whereas in real life the British trains would be smaller, the use of 00 alongside H0 models makes them almost the same size when operating.

N gauge models share a scaling inconsistency with their 00 gauge siblings in that in order to accommodate engines within the models they had to be larger than the scale technically demanded, so 2.0625mm to the foot N gauge models run on 9mm width track. N gauge was originally called 000 (Scale 1:152) when it first appeared ready-to-run in the UK in the early 1960s following the release of Lone Star products on to the market. As the track scale was again compromised some modellers prefer to work to 2mm fine-scale standards.

The table shows the largest scales first and the smallest last, and isn't an exhaustive list as other gauges are available.

		·
	O, Pil	
Sout Sout		<)
	VV	7

Les Chatfield, Two Terriers, Creative Commons/Flickr

lame	Scale ratio	Track gauge imperial	Track gauge Metric	Notes	Supporting society
auge O	1:43 (UK) 1:45 (Europe) 1:48 (USA)		32mm		Gauge O Guild
	1:64	0.883in	22.43mm		S Scale Model Railway Society
0	1:87 (3.5mm to the foot)		16.5mm	Rest of the world - 00 in UK	
O (UK)	1:76 (4mm to the foot)		16.5mm		Various inc Double O Gauge Assoc
/3mm	1:101.6 (UK) (3mm to the ft) 1:120 (ROW) 1:130 (Russia)		12mm		The 3mm Society
	1:148 (UK) (2mm to the foot) 1:160 (ROW)		9mm		N Gauge Society
	1:220		6.5mm		Historial
	1:480		3mm	MILL	1 2 E



BELOW: The transfer « shed at Didcot Railway Centre demonstrates how passengers were expected to transfer from broad gauge engines to standard gauge once they reached the end of the Brunel line, ROBIN JONES

In order to correct the situation a number of modellers work to more accurate standards. The most accurate is P4, which uses a 4mm to the foot scale and is supported by The Scalefour Society. Other gauges include EM and Finescale.

Narrow gauge

There are many different track gauges and scales for narrow gauge railways so we have restricted the ones listed to those supported in the UK with ready-to-run models.

Name	Scale ratio	Track gauge imperial	Track gauge metric	Notes	Supporting Society
G *	1:22.5 (Europe)		45mm		G Scale Society
16mm SM32	1:19.05		32mm	Represents 2ft gauge prototypes	The Association of 16mm Narrow Gauge Modellers
On30 or 1/4	1:48 (USA)		16.5mm runs on 00 track	All USA outline available in UK	
016.5 mm	1:43 (UK) 1:45 (Europe)		16.5 mm runs on 00 track **		7mm Narrow Gauge Association
HOe (3.5 mm Europe)	1:87 ***		9mm	European outline	
009 (4mm UK)	1:76 ***		9mm	British outline	

Global interest as elite collectors eye Waterman model sale

In 2015 Pete Waterman put his collection of models up for sale, including 56 Gauge 1s. Each of the models being built from scratch for him.

* G stands for Grob, which is German for Big. When introduced by LGB in 1968 the scale represented narrow gauge European prototypes initially from Germany. G has since been allied to G for Garden as that is where it is usually found operating. In the USA it is known as Large Scale and can represent standard gauge trains. The scale of I:22.5 is not always strictly adhered to and depends on the country being modelled. All run on 45mm track and when used in the garden do not look out of place.

While the track gauge is the same as 00 or HO with wider sleeper spacing to represent 0 gauge narrow gauge modelled to 7mm to the foot.

*** As with standard gauge models of British and European prototypes there are the same scale differences for narrow gauge models. Both run on 9mm track and the track difference between N scale track and 009 / HOe track is the sleeper spacing which is wider apart and to 3.5mm or 4mm to the foot rather than 2mm.





Hornby's visualisation of the Great Gathering with its sell-out limited edition six A4s around the turntable. HORNBY

The Great Gatherina

Horses for courses

The smaller scales allow models to be created in smaller spaces. However, some people prefer to use the space to create a more scenic environment and N gauge in particular, allows some impressive scenic layouts to be built.

00 scale remains the most popular and can be accommodated in most homes. 6ft x 4ft is the minimum requirement for an 00 gauge continuous run layout although 8ft x 4ft is more commonly used particularly by those entering the hobby. While oo can be used in the garden, it does require a rigorous maintenance programme as the smallest twig, leaves or snails will require removal before operation commences and track cleaning will be required.

Unless you live in a very big house, then the larger scales are more challenging. G scale is normally associated with the garden but a number of portable indoor layouts have been created using the terminus to fiddle yard option.

Most of today's modellers working to fine-scale standards began with ready-torun equipment and once they had obtained the necessary confidence to change to more exacting standards they did so.

No scale or gauge is better than any other. What route you adopt will only be constrained by the available space, the cost and the availability of your chosen subject to be modelled.

Why we are still different

Over the years there have been a number of attempts by European manufacturers to tempt the British away from 00 scale.

Tri-ang Railways (predecessor of Hornby) produced a number of overseas models particularly those of countries that are part

of the Commonwealth such as Australia, Canada, South Africa and New Zealand. These were generic trains, which were sold аѕ но/оо.

Trix, which was the pioneer of what we now call oo scale, moved towards more scale products and adopted a scale of 3.8mm, which was roughly halfway between но and oo scales. It never brought the required results and in the late 1960s it followed other manufacturers and adopted 4mm scale for a range of LNER Pacifics (A2/A3 and A4 classes) which it produced alongside a 4mm electric locomotive that it took over from Liliput in the early 1960s. It was too late to save the company and it was ultimately taken over.

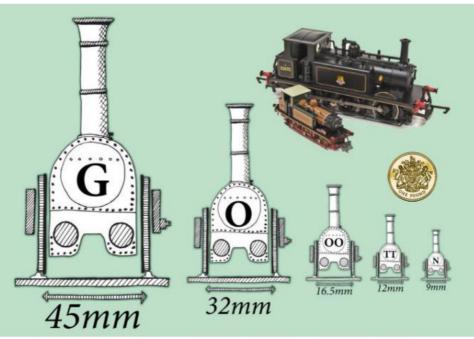
In the early 1960s, Playcraft Railways were produced for Northampton company Mettoy by the French manufacturer Jouef. While it tried to produce models







Class BR Standard 4MT 4-6-0. ROBIN JONES.



INSET PHOTO: Hornby and Dapol Terriers - N and OO gauge. NIGEL BURKIN.

« to но scale and some were, there were compromises because of the difficulty in getting HO scale British bodies to fit the existing chassis range.

In 1967 Marklin produced a но scale model of a Warship Class diesel. Sales were disappointing and it remained a one-off.

In the 1970s Lima introduced a range of pure HO models but despite their attractive prices they were not popular with British modellers who preferred to buy oo scale, so Lima dropped the но British range and adopted oo scale for the British market.

models of a Warship diesel and Bulleid coaches in the mid-1970s but again British modellers did not warm to them and plans for other models were dropped.

Rivarossi was the next to try producing an original Royal Scot Class locomotive and some nicely detailed panelled LMS coaches but to 3.8mm scale.

Britain remains loyal to 00 scale and is unlikely ever to adopt anything else. Having seen the difficulties that the European manufacturers had, when Airfix and Mainline entered the British

1970s, they played a safe bat and adopted

In Britain we like to be different and while HO models are no longer constrained by the difficulties of the pioneering manufacturers - it looks like we will retain 00 scale now that there are a lot of different manufacturers catering for it.

No wonder scales and gauges cause so much confusion!



SPECIAL OFFER!

issues for



Coverage of main line movements Stunning photographyGet your copy early

CALL - 01507 529529 and Quote: RE152 VISIT - www.classicmagazines.co.uk/re152

SUBSCRIBE TODAY!



Is 3D printing a skill of the future?

With laments of skills gaps and modelling not attracting a younger generation, Matt Wickham looks at a new technology that might just be the modern equivalent to using a lathe or milling machine.

OU MAY NOT KNOW IT BUT 3D printing has been around since the 1980s... so it's actually nothing new. However, as the technology has developed it has improved, and as with most technology has reduced in size, so it could be in family homes in a few years' time... if not already.

So, what is it? Basically it involves taking a 3D CAD (computer-aided design) file, that's been modelled on a computer and exported as a printable file. The 3D model/ shape or model gets 'sliced' into cross sections, in the process making it twodimensional for the machine to print in layers to form the 3D model or shape, and

this is done by the computer software that runs the printer.

The file is exported to the printer, depending on what material you want to use or what is best suited to the model you are printing; each material will have its limitations and guidelines for use including minimum thicknesses and surface detail.

There is a range of materials you can use involving different printing methods.

I am aware of the challenges and problems one can encounter in 3D printing as I started from scratch having no CAD knowledge apart from a very basic understanding. Opinion is still split about whether there is a real future in

railway modelling using this technology at the moment.

I'll demonstrate two models that I've created, I am a steam preservation-era modeller and so I am showing you a locomotive body model designed to fit on a ready-to-run chassis, plus a coach body also designed to fit on a ready-to-run chassis.

Firstly the research needs to be done, such as basic measurements of the loco, and coach - these can be done with permission of the railway they are based at, or from various books on rolling stock, which should

Once enough information is collected, I then purchase the model's donor chassis;





Free CAD software for beginners

3D Slash, 3D Tin, Leopoly, FreeCAD, K-3D, Leocad, Meshmixer, Sketchup, TinkerCad, Wings 3D, Netfabb

Free CAD software for experienced users

3D Crafter, Art of Illusion, Blender, BRL-CAD, Fusion 360, Meshlab, Onshape, OpenCascade, Openscad, Sculptris











the steam loco I'm looking at required a standard LnY pug chassis, produced by Hornby or Dapol.

The coach chassis required was found on a well-known auction website, and at this moment in time was still readily available; it is a J144 Jouef wagon chassis, with a bed of 28 x 105mm, which is reasonably close to the measurements required.

On to CAD. There are a number of programmes available, but for beginners I would recommend Google Sketchup as it's free, but there are others that I would say are for more advanced and for experienced CAD operators and these include Rhino 3D, Blender and Meshlab.

You will require one additional plug-in to export the files from Sketchup if this is the programme you are using, you will require

an .STL file plug in, this file extension allows the file to be read by 3D printers.

The one other programme required, to be used as an after process to repair or fix models to prepare them for printing, is called NetFabb - again a basic programme is available for free.

Once you have your desired programme, I would recommend you pick a material to print in before you start. This is important as each material has different design and print guidelines.

As these are miniatures and have quite a lot of surface detail I have picked two materials as the properties are similar.

One is a resin base material cured with a laser (a process known as SLA Stereolithography) and the other is a commercial material available through

1: This a very early print with everything attached, signs of stepping of a domed object on the front, showing an orientation error, the rest was okay. (ABS/PLA printer

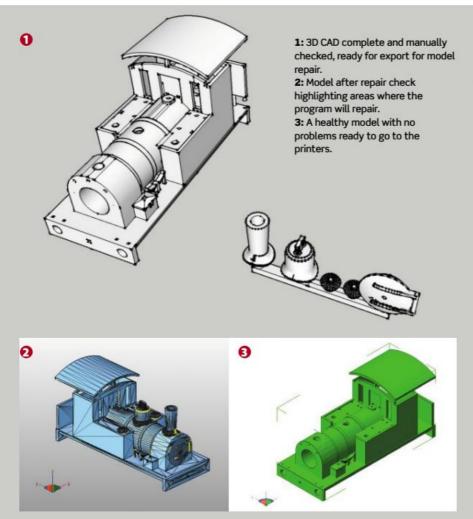
2: 3D print as arrived, slight cleaning required 3: Close-up detail on the dome showing the spring detail.

4: Fully assembled on the chassis detailed prototype.

5: 3D print after cleaning from the printer.

6: Almost complete and mostly painted model.

Younger/returning modellers _____



« Shapeways.com called frosted ultra detail, which is a UV-cured acrylic polymer. Both materials and processes are capable of reproducing detail including rivets, surface detail etc.

Now I have the design guidelines, and minimum wall thicknesses of the model I can go ahead and build a 3D model. I usually build the model twice to three times the size I am printing in, as each programme has its limitations on model size, but can be scaled down later.

With all the key parts of the design decided design work can start, with careful measuring of the loco chassis and coach chassis undertaken to make sure the prints will fit them.

I've had some experience of including a chimney, dome and smoke box door to one single print, and owing to the number of cylinders or circles/domes on the locomotive would not want to compromise their quality, as some printers cannot cope with the curvature or circles on different axes. So, I separate them to give the best print quality and orientation in the print process.

The coach body is quite a square object with slight curves on the side known as tumblehomes, and the roof profile, owing to these curves, would be best printed at an angle or on its end. Smaller detail items such as roof vents or seating would be printed separately.

The CAD files are then exported as an .STL file, which is a file read by the printer. The file is then opened up into Netfabb, which checks the model for issues, and any rouge or leftover geometry that shouldn't be there – and will hopefully clean it up if it's not too complex. As ever, if it's slightly too complicated the free version of the software would not be able to fix the issues.

Any issues with the CAD is highlighted with an explanation marker in a box, meaning it needs attention.

My model was sent off for a test print, detail parts went to a commercial company in the Netherlands called Shapeways, the body was sent to a 3D print hub with UK listed home 3D printers, it took approximately a week to print and deliver.

Some light cleaning will be required with



Matt's story...

I first got in to railways when I was just a youngster. My earliest memory is of the Nene Valley Railway and a Thomas the Tank Engine event. Since then I have always followed and gone to other preserved railway lines.

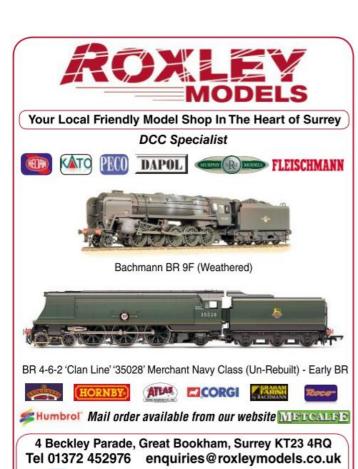
I got in to modelling by going to model exhibitions and shows in and around Buckinghamshire, and for Christmas when I was nine or 10 years old I got a Hornby Freight Hauler train set in OO, which had a little o-4-oT No. 43 Queen Mary... in fact I still have the box. For a few years I had no time or cash for the hobby but in the early 2000s I came back to it, although it has changed somewhat since my childhood. My current layout is based on Horsted Keynes on the Bluebell Railway as this was always one of my favourite lines to visit. But to model it was rather a big challenge.

I have always enjoyed creating and building things and I certainly feel quite proud of things that I have made and got running when I see them at an exhibition. The world of model railways is a friendly environment in which to meet people with a similar interest and learn new things or skills.

Having had contact with younger modellers I look back to when I had no help, or had to learn for myself how to do things. I now try to hand down skills that I have learnt or record them and place them on You Tube. You can find out more about me, and what I model on my various groups and channels: bluebell-railway. webs.com or youtube.com/user/bluebellModelrailway

soapy water before working on the model.

After light cleaning and tidying the modeller is then free to complete the model by using traditional glues, paints, and primers.





38 Potovens Lane, Lofthouse Gate, Wakefield, WF3 3JF

Tel: 01924 824748 email: goinglocomodels@hotmail.com



SOUTH EASTERN FINECAST



FOR RELEASE EARLY 2017

GWR 517 Class

Whitemetal body complete with etched N/S chassis. Can be built in either 00, EM or P4. Fully compensation compatible. The kit also includes name and number plates for 'Fair Rosamund' with number plates for five others. Chassis has options to build inside or outside bearing trailing wheel versions. (Also includes brake and pull rod options).

Price F212 Loco & Chassis Kit £89.50 FC212 N/S Chassis Kit £32.50

Don't forget our range of :-

VAC formed building sheets in 2, 4, 7 & 10mm scales Flushglaze Window Packs 1/24 & 1/43 CAR KITS 1/32 TRACTION ENGINE KITS 4mm LOCOMOTIVE Kits

Email or SAE for Price List

GLENN HOUSE, HARTFIELD RD, FOREST ROW, EAST SUSSEX, RH18 5DZ Tel: 01342 824711 email: dave@sefinecast.co.uk www.sefinecast.co.uk

South Eastern Finecast in conjunction with Branchlines have aguired the former NUCAST range. These will be sold under the name

NUCAST PARTNERS

For further details contact Dave at South Eastern Finecast on 01342 824711 Brian at Branchlines on 01373 822231

What is 3D printing?

3D Printing is basically rapid prototyping, taking a 3D CAD (computer-aided design) file and sending it to a 3D printer to create a prototype to check it fits together correctly. This is used by main manufacturers Hornby and Bachmann – if you go to exhibitions you will most likely see a 3D printed prototype to show the public what a model will be like.

3D printers are developing all the time, changing, improving and hopefully getting cheaper – possibly even cheap and small enough for the family home, in time.

If you cannot afford one there are other options available, such as using print hubs where public or businesses have listed their own printers.

Plus if you don't have CAD skills, there are some well-known companies with online shops, where members of the public, myself included, can upload CAD model files to be printed to order and shipped to you, the customer.

You do need to understand what material recreates detail on the model and this usually depends upon the type of printer. Here are some process that I have used in the past to create models:

- Stereolithography (SLA): A 3D printing machine called a stereolithograph apparatus (SLA), which converts liquid plastic/resin into solid 3D objects. Requires a lot of support material for waste material. (SLA-Resin is expensive in terms of wastage of support material, however, layer lines are minimal, especially from a professional printer, and it's good for small details.)
- Digital Light Processing (DLP): DLP, as well as SLA, works with photopolymers. But what makes SLA and DLP processes unalike is a different source of light. For DLP 3D amateurs generally use more conventional sources of light such as arc lamps. Support material and wastage is much reduced and is more cost effective. (DLP uses resin, it's expensive but slightly better in terms of using support material, layer lines are minimal, it's good for small details.)
- Fused deposition modelling (FDM): FDM
 Technology builds objects layer by layer
 from the very bottom up by heating
 and extruding thermoplastic filament.
 The whole process is a bit similar to
 stereolithography; ABS and PLA are
 common materials and common on
 desktop printers. (PLA/ABS is quite a
 cheap material but the disadvantage







1: Printed using a Formlabs Form 1, using SLA process, showing spring, rivets and detail on the bogie, still on its supports.

2: A complete coach side; you can see some faint print layer lines, these quickly fill when painting. You can see door hinges, and handles with clear mouldings.

3: This is a printed version of the same coach in SLS nylon, from a company in the Netherlands.

is there can be heavy lines on the print and it is not good for detail.)

 Selective Laser Sintering (SLS): This is a technique that uses laser as a power source to form solid 3D objects, using the powder not solidified by the laser to support the model. (SLS: Nylon is usually cheaper and common, the finish is quite coarse but softens slightly with painting. Not good for details.)

Each printer has its benefits and advantages depending what you're doing and at what scale.

I model in 00, and I am still quite new to 3D printing, I have printed a number of items ranging from small items such as roof vents for coaches to complete body shells for coaches.

I learnt the hard way what printer or material is good for what model, as they all vary. For example, you could do a loco body shell if you have good CAD skills. You can model rivets and surface detail, but you would need a printer and material that



4: With a closer look you can see the surface is not as smooth but can be worked with, the bogie is Ultra frosted detail, which is an acrylic material.

can cope with these small it items. SLA or DLP would be ideal for this as they can cope with small details.

There are a few companies out there who offer this print choice commercially. The prints pictured are expensive, you could expect to be spending close to £100 to £150 per coach, and that's before paint and details, so what about a cheaper option?

When I first started I used the SLS process using nylon powder. This at the time was cheaper, saving £50-60 on each print for a complete coach, but there is a trade-off in terms of detail... but will anyone notice if they are standing 4ft away at an exhibition?

The process for SLS is cheaper and easier. The finish is slightly rough, but can just about cope with some surface detail such as mouldings on a coach side. You can smooth this roughness slightly using various primers, and sanding, but it is an odd material to work with. The other downside is that it does tend to warp,





either through the cooling process or the orientation of the model, which is critical to this particular model printability.

However, if you are standing some distance away from the layout you're probably not going to notice a slightly rough surface. Painting it and using various primers does improve it to a degree along with clear varnish; comparing the two body shells up close shows that the more expensive SLA resin print is much more crisp and clean than the slightly rough SLS nylon option.

What printer to buy or use?

Not everyone can afford a 3D printer, I certainly can't, but if I could I would certainly look at a desktop SLA/DLP printers. They tend to range from £2-3000, if you model slightly bigger you may be able to get away with FDM printers, again

they are in that same price range for the

If like me you don't have that kind of money tucked down the side of the sofa, then there are alternatives. There are a small number of commercial printers out there, one or two in the UK but not as well set up as those in Europe. Shapeways is based in the Netherlands and has a good website, while I Materialise is based in Belgium - it's similar to Shapeways in terms of materials available and it's also possible to order other people's models, but it's not as good as Shapeways' shop

Or if you are actually a CAD designer and want one of your models printed, but don't want to go with the two companies above, then I suggest the route I have been using for the past few years; a 3D hub. This is a website where members

is there, but it's not as crisp, the slightly rough finish isn't too bad. With layers of filler primer, you can just about get away with it. 6: SLA print fitted with brass rod, you can clearly see how crisp the print is and how smooth the surface is; working with it is much like working with a plastic body shell.

of the public and some companies have listed their home 3D printers and also commercial printers where the public can upload their design or model to the website. You pick which printer or process you want and it lists the results in terms of quality and price. I have found this way to be very quick and also very helpful and a bit cheaper.

Some useful websites

- www.shapeways.com
- i.materialise.com
- www.3dprint-uk.co.uk
- www.3dfolkesprinting.co.uk
- www.3dhubs.com
- formlabs.com
- www.bgc.com
- ultimaker.com
- www.makerbot.com
- zortrax.com



Open Monday - Saturday 9am - 5.30pm

Model Railways - Diecast Planes & Vehicles - Plastic Kits & Figures Scalextric - Jigsaws

2 Goodramgate York - YO17LQ 01904 659423

monkbarmodelshop.co.uk





RAILWAY BOOKS BOUGHT AND SOLD

Free railway book search service Christmas Greetings and Best Wishes for 2017

155 Church Street, Paddock, Huddersfield HDI 4UJ

one: 01484 518159 Email: nick@railwaybook.com Website: www.re Visit our new shop - Open Tue/Wed 11.00-17.00 + Thu 14.00-20.00

BOLTON MODEL MART

ORNBY • BACHMANN • PECO • METCALFE • GAUGEMASTER • FARISH •LGB • RATIO AND MANY OTHERS OPEN SIX DAYS. MOST CREDIT & DEBIT CARDS www.boltonmodelmart.co.uk info@boltonmodelmart.co.uk 01204 382282





Tel: 02380 772 681 www.ronlines.com

Large stocks or pre-owned railways in store & on our website We also purchase your unwanted railways, whether it's a single item or collection, anything considered.

> 342 Shirley Road, Southampton SO15 3HJ OPEN MON-FRI 10am-5pm & SAT 9am-4pm



Opening hours: Mon, Tue, Thurs 10 till 3
Fri 10 till 3 & 5 till 7, Sat 10 till 5
Hornby • Parkside • Smiths • Peco • Cambrian
• Metcalfe • Bachmann • Coopers • Mail Coach
• Wills • Farish • Springside • Ratio • Railmatch Point
• Knightwing • Faller • Knoch • Javis • Woodlands
• Kadee • PE Marsh and more more
Mail order welcome

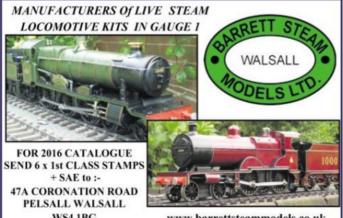






Visit our website www.modelrailways.tv

High quality locomotives and rolling stock 4, 7 and 10mm scales (00, 0, 1 and NG) 1A MARKET WAY, HAGLEY, STOURBRIDGE, WEST MIDLANDS DY9 9LT Telephone: 01562 884800









Harburns is one of the original 1st generation UK model shops, started in Leith pre-1938.

In 1978, we moved to larger premises further up Leith Walk, near the city centre.

Here in a welcoming environment you can see a comprehensive range of British rail and road models displayed to their best in illuminated cabinets. There's a vast range of kits and accessories too, including the famous 'Harburn Hamlet' products in N & 00.

Open Monday to Saturday 09.30 - 18.00 and, of course, www.harburns.co.uk - 24/7!

Harburn Hobbies Ltd., 67 Elm Row, Leith Walk, Edinburgh EH7 4AQ



Tel: 0131 556 3233 Website: www.harburns.co.uk











12 Volt Motors for 4mm/00 & 7mm/0

Gearboxes for 4mm/00 & 7mm/0 Gauge





Accessories by Markits, Romford, Gibson, Slaters, Roxey & Southwark Bridge

Handrail Knobs - Bearings - Axles - Crankpins - Whistles - Nut Spinners - Screw Link Couplings - 3 Link Couplings - Bicycles - Door Handles - Wheelbarrows - Sprung Buffers -Safety Valves - Frame Spacers - Westing-house Pumps - Vacuum Pipes - Smokebox Door Handles - Pickups - Window Grilles -Headcode Discs - Platform Barrows - Etc.

Website & Online Shop www.roxeymouldings.co.uk

PRECISION Paints (Exhibitions Only) IXION 7mm Locos / MASHIMA Motors TENSHODO Motor Bogies & Motors MARKITS/ROMFORD/SLATERS Wheels Accessories For Price List send C5 SAE

EXHIBITIONS: 2017 Jan 16-17 Chilterns at Stevenage / Jan 22 GOG Bristol / Jan 28-29 Southampton Feb 18 Tonbridge / Mar GOG Kettering Prices inc VAT @ 20% E&OE Now on Facebook

ROXEY MOULDINGS

58 Dudley Road, Walton-on-Thames Surrey KT12 2JU Tel:01932 245439 Website: roxeymouldings.co.uk Email: dave@roxeymouldings.co.uk VISA/Mastercard/Maestro accepted

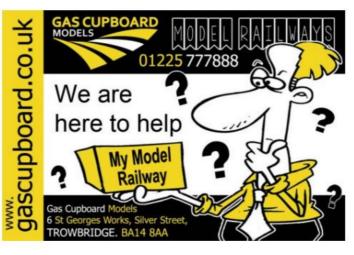


Tri-angman

specialist in model railways Tri-ang, Hornby, Bachmann, Wrenn, Minic etc...

Buy and sell hard to find items and collectables

Find me on www.tri-angman.co.uk or contact: Tel: 07966 333605 laurence@tri-angman.co.uk











Strawberry line Miniature Railway

Come and visit us at the West Country's longest ground level 5" gauge railway and ride behind our scale diesel and steam locomotives through the grounds of Avon Valley Country Park.

Now Open Daily all year (Closed Monday During School Term)

NOW OPEN: THE ONLY GRAVITATIONAL HUMPYARD ON ANY MINIATURE RAILWAY

Email: info@strawberryminirail.co.uk Phone: 0117 9860124 Mobile: 07960 151286

Britannia House, Avon Valley Country Park, Pixash Lane, Keynsham, Bristol, BS31 1TS



1

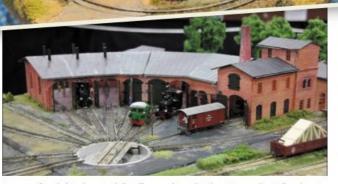


We want to dedicate these pages to your inspirational, unusual, well-loved layouts and models. So please do get in touch with us by emailing spalmer@mortons.co.uk or visit our Facebook page to like and share your photographs.

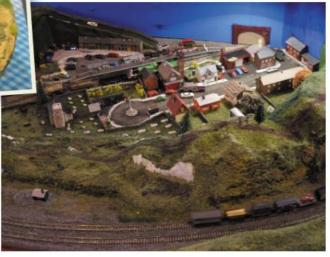
Find us at: If railway magazine guide to modelling

I love this circular layout, it has nostalgia, small-space appeal, charm, a chocolate-box cottage and a truly beautiful tree. If this doesn't make you want to fling open the doors of your nearest model shop and start work on a project immediately I don't know what will! We're going to be featuring some tips from Phil Parker on small-space layouts in a future issue.

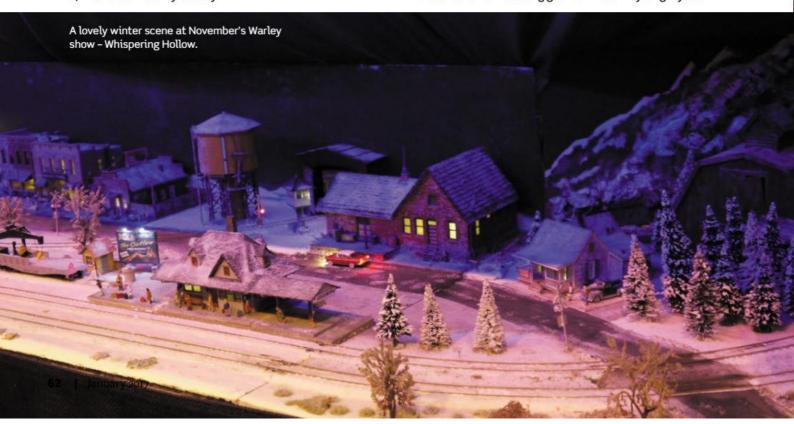
CREDIT: PHIL PARKER, MICRO LAYOUT, CREATIVE COMMONS/FLIKR



I recently visited a model railway show in the Messe in Koln about 400yds from Köln Messe/Deutz. The engine shed pictured was on an extensive German HOm layout. Submitted by Graham Lightfoot of The Lincoln Railway Society.



This N gauge layout is eight-year-old Sean Webley's, that he's created with a little help from family and friends. It has three running lines but isn't really based on anywhere in particular. Well done to Sean for this, who was inspired to take up modelling after his dad found his modelling gear from his own younger years.





This layout at Warley had a lot of visitors round it and a very enthusiastic operator. It was great to see something a bit different and I loved this Lego layout; it was really imaginative with lots of details to look for. One girl was frantically looking for one last thing to spot that was eluding her.



This layout at Warley was a real attention grabber - you'd never have thought it dates from the 1970s.



Stunning in-steam shot of a Stanier 2-6-0 No. 2951. The coach appears to be a pre-Stanier first class compartment coach. RONHOLPIC/WARLEY_WEB_240/CREATIVECOMMONSFLICKR

Where's my nearest expert?

Britain is blessed with a network of great model shops and outlets, with experts keen to help and advise. Here are some you can turn to... simply look for the number nearest you on the map, and find their details below:

REDCAR MODELS & HOBBIES 01642 494912

130 HIGH STREET REDCAR CLEVELAND TS10 3DH www.redcarmodels.co.uk

BARRETT STEAM MODELS LTD 01922 685889

THE OLD EXCHANGE 47A CORONATION ROAD PELSALL WALSALL WS4 1BG

ROXLEY MODELS 01372 452976

F & M & S RICE-OXLEY & S BLEWETT T/ AS 4 BECKLEY PARADE GREAT BOOKHAM SURREY KT23 4RQ www.roxleymodels.co.uk

HATTONS MODEL RAILWAYS LTD

0151 7333655 UNIT 17 MONTAGUE ROAD WIDNES WA8 8FZ www.hattons.co.uk

MERCIAN MODELS

01562 884800

1A MARKET WAY HAGLEY STOURBRIDGE WEST MIDLANDS DY9 9LT www.modelrailways.tv

CHURCH STREET MODELS

01256 358060

DTL ENTERPRISES LTD 10A CHURCH STREET BASINGSTOKE HAMPSHIRE RG21 7QE www.churchstreetmodels.co.uk

HARBURN HOBBIES 0131 5563233

67 FLM ROW LEITH WALK FDINBURGH SCOTLAND EH7 4AO

www.harburnhobbies.co.uk

RAILS OF SHEFFIELD

01142 551436

27/29 CHESTERFIELD ROAD SHEFFIELD SOUTH YORKSHIRE S8 ORL www.railsofsheffield.com

DIGITRAINS LTD 01522 527731

15 CLIFTON STREET LINCOLN LINCOLNSHIRE LN5 8LQ www.digitrains.co.uk

10. GAUGEMASTER 01903 884488

GAUGEMASTER HOUSE FORD ROAD ARUNDEL WEST SUSSEX BN18 0BN www.gaugemaster.com

11. NEW MODELLERS SHOP LTD

01733 704502

25 EASTERN AVENUE DOGSTHORPE PETERBOROUGH PE1 4PH www.newmodellersshop.co.uk

12. MONK BAR MODEL SHOP 01904659423

2 GOODRAMGATE YORK YO1 7LO www. collectable-models.co.uk

13. GRIMY TIMES

01925 632209

187 ORFORD LANE WARRINGTON WA2 7BA www.grimytimes.co.uk

14. THE MODEL CENTRE 01947 899125

HILL FARM BECK HOLE GOATHLAND NORTH YORKSHIRE Y022 5LF www.themodelcentre.co.uk

15. A C MODELS 02380 610100

7 HIGH STREET EASTLEIGH HANTS SO50 5LB www.acmodelseastleigh.co.uk

16. THE HOBBY GOBLIN

01782 818433

54 HAMIL ROAD BURSLEM STOKE-ON-TRENT STAFFORDSHIRE ST6 1AU www.thehobbygoblin.co.uk

17. GOING LOCO

01924 824748

38 POTOVENS LANE LOFT HOUSE GATE WAKEFIELD WF3 3JF www.modelrailways.co.uk

18. RON LINES

02380 772681

342 SHIRLEY ROAD SHIRLEY SOUTHAMPTON SO15 3HJ www.ronlines.com

19. POOLEYS PUFFERS

01914 910202

382A JEDBURGH COURT TEAM VALLEY TRADING ESTATE GATESHEAD TYNE & WEAR NE11 0BQ www.pooleyspuffers.com

20. GAS CUPBOARD MODELS 01225 777888

6 ST GEORGES WORKS SILVER STREET TROWBRIDGE WILTSHIRE BA14 8AA www.gascupboard.co.uk

21. BOLTON MODEL MART 01204 382282

58 GREAT MOOR STREET BOLTON LANCASHIRE BL1 1SN www.boltonmodelmart.co.uk

22. LLANGOLLEN RAILWAY PLC 01978 860979

THE STATION ABBEY ROAD LLANGOLLEN DENBIGHSHIRE LL20 8SN www.llangollen-railway.co.uk

23. FLAIR RAIL

01621 786198

FLAIR RAIL UNIT 7 SPRINGFIELD NURSERY ESTATE BURNHAM ON CROUCH ESSEX CM0 8TA www.flair-rail.co.uk

24. THE MODEL TREE SHOP

01890 819021

SIST TREES 4 DAVID HUME VIEW CHURNSIDE DUNS TD11 3SX www.themodeltreeshop.co.uk

25. UPSTAIRS DOWNSTAIRS

01983 406616

3 PIER STREET SANDOWN ISLE OF WIGHT PO36 8JR www.udiow.com

26. CAISTOR LOCO

01472 859990

Ashtree Enterprises 33 Nettleton Road Caistor Lincolnshire LN7 6NJ

27. COLLECTORS CELLAR

01434 601392

11 Hencotes Hexham Northumberland NE46 2EQ www.collectorscellar.co.uk

28. MILLENNIUM MODELS

0113 2189286

67 Queen Street Morley Leeds LS27 8EB



Why is modelling railways becoming so expensive?

Over the last few years, railway enthusiasts have demanded ever more accurate models that take manufacturers much more time to research, develop and assemble, says Phil Parker. Not only must each model have masses of detail parts that each need to be separately applied at the factory, we expect each one to be correct for the period it represents. That means many different chimneys, domes and other features have to be developed.

Years ago, a manufacturer could produce a single model of a locomotive and everyone would buy it. Now there are dozens of sub-classes and each must be correctly modelled, or customers will let them know. Instead of selling tens of thousands of one moulding, they will sell a few hundred each of many different mouldings but that requires far more to be spent on the tooling for each one.

Another problem is that there are so many different models available. Every month magazines will review new locomotives and it's tempting to try to want to buy them all. Keeping the costs down can be as simple as picking only models that suit the area and period that your layout is set in. If you are modelling prewar Scotland, you can safely ignore modern electric locomotives for example.

Technology has also moved on and many of us like our locomotives fitted with DCC, lights, sound and even smoke. All the



PETER BROSTER/MODEL RAILWAY/CREATIVE COMMONS/FLICKR

bells 'n' whistles can quickly double the price of a model locomotive.

All hobbies are expensive but there are areas really worth railway modellers spending money on. Good baseboards are a worthwhile investment; if they aren't flat then you'll always be fighting with them. Track with nickel-silver rails is another; it stavs cleaner than steel and will make operating more pleasurable.

After this, try making your own buildings rather than buying ready-made models. You'll save loads of money and have a lot of fun. Most model railway magazines cover buildings regularly to

show you how to do this. Your local model railway club will probably have a library of them you can read so it's worth joining for this and all the advice available from other members. Talking of libraries, your local one will have a railway section and can always order in books on model railways that you can borrow for free.

· Phil Parker has been building model railways since he was old enough to open a tin of Humbrol paint without spilling it. His layouts have appeared at exhibitions all over the UK and Europe for nearly three decades and he has written for many modelling magazines.

Q What is meant by two, three and four-rail models?

On real railways, most diesel-operated lines and those using overhead electrification equipment are two-rail, says Dennis Lovett of Bachmann. Three-rail is used mainly on the former Southern Region, Merseyrail and the former North London lines of London Overground (it was also used on Tyneside before the opening of the Metro). The third-rail system has a live rail outside of the main running rail from which a locomotive or multiple unit picks up power. These are normally electrified to a voltage of 650v-750vDC. The live rail is of course dangerous and contact with it can cause you severe injury or death.

The fourth-rail system is used by London Underground. In addition to the two normal running rails (4ft 8.5in apart)

there is an outside third rail and a fourth centre rail for return current.

In model railway terms two-rail is now the only standard used by the current model railway manufacturers. Three-rail was used by Hornby Dublo (and on one occasion Graham Farish in 00 scale) and was, postwar, the most common form of power supply for model railways until 1949 and the emergence of two-rail from Graham Farish and a year later from Rovex (now Hornby).

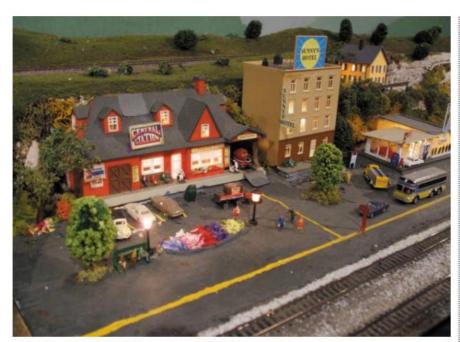
Trix, introduced prewar, used a different system which enabled two trains to run on the same tracks under separate control (using two controllers). One locomotive picked up power from the centre rail and one of the normal running lines with the other one picking up from the other running rail and the centre rail. When Trix introduced overhead electric trains

in the 1950s this gave another option for which a third controller was required.

Marklin remained true to its AC threerail system in Germany but replaced the initial three-rail track with small studs sticking up from the sleepers. Over the years, the track is improved and from normal viewing distance at an exhibition you cannot tell that they are there. Marklin remains very popular in Europe and many European manufacturers offer an AC version of their two-rail locomotives.

Any locomotive purchased in the UK after 1964 will inevitably be two-rail. However, not all will run on modern tworail track owing to tyre depth and wheel spacing. Operation of these old two-rail locomotives on modern track without wheel replacement will usually see them fouling the sleepers and also derailing on point work.





RICH BOWEN/N GAUGE MODEL TRAINS/CREATIVE COMMONS/FLICKR

Q Why is N gauge not half the price of 00 when it is half the size?

Most of the price of a new model locomotive is the manual labour involved assembling it at the factory, says Phil Parker. N gauge locos have nearly as many parts as 00 ones, they are just smaller and more fiddly. They also need to be painted, packed and transported in the same way as the larger scale. Cost of materials to make

them isn't a big part of the bill so there's little saving here.

In addition, there are fewer N gauge modellers. Only 15% of the total market, any costs have to be split among a smaller number of sales. It's more of a surprise N isn't more expensive than 00, although the gap between 00 gauge pricing and N gauge pricing has opened up a little in recent times.

Got a d questi

Then please email spalmer@mortons.co.uk or send letters to: The Railway Magazine Guide to Modelling, Mortons Media Group, Media Centre, Morton Way, Horncastle, Lincolnshire LN9 6JR. Please include your name, address and email in all correspondence.

Do I need really good eyesight for N gauge?

I have known several modellers increase the size of their models as their eyesight diminishes in later life, from say 00 to 0 gauge, says Dennis Lovett of Bachmann. There are many, however, who work in N, z or the more recent T scales and have no problem with it as they are used to using it.

Railing devices are available and are used to get stock on to the running rails for those who require them. A good pair of glasses and building layouts at above normal height (e.g. eye level rather than waist level) also aid stock placement.

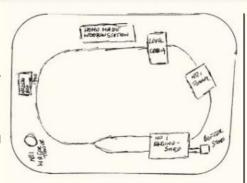
Dear RMM

I picked up a copy of The Railway Magazine Guide to Modelling at Warley and enjoyed it very much. I like its approach; both different and entertaining.

I am getting on in years and my first train set was delivered by Father Christmas during the Second World War. As you would expect during the early 1940s it was a Hornby set. I was train mad and my father and uncle plotted together along with Santa!

I got up early and on the table was this layout (see right) screwed to a board. It was a plain oval complete with the following: an M1 0-4-0 tender loco and two wagons, a number one signal box, a level crossing, number one water tower, a number one engine shed entered by a Y point; the outside rail ran just through the shed to a bufferstop. The mainline ran through the engine shed to complete the oval. There was a wooden station made by dad on the opposite side of the oval. It was heaven for a five-year-old.

On the main street in Stafford there



was a Halfords, which, before the Second World War was a Hornby retailer, and it had a cabinet with a display of Hornby goods just to the right of the shop entrance. Unfortunately it also had a notice saying 'not for sale' and as young boys we used to stare longingly at this heaven behind glass.

I did buy a Hornby watchman's hut with brazier from Selfridges in London soon after the end of hostilities.

Keep up the good work. David Rockett, Cheltenham

Dear RMM

The scan of a Meccano magazine cover on page 46 of the December 2016 issue I picked up at the NEC caught my eye. Are readers aware that copies of issues from 1916 to 1981 are available in an online archive at meccano. magazines.free.fr? A huge source of instant nostalgia..

Dave Peel, via email



Competition winners

Mrs Suzanne Wood-Simmons of Stourbridge is the winner of our 4Ground competition and the four winners of our Peter's Railway books are: Jon Wayne-Wills of Bridgend, James Nalborczyk or Bridgnorth, PP Blackford of Wisbech and Nick Dale of Staffs. Congratulations to all our winners, prizes are on the way. See p24 for this month's giveaway.

Places to visit

Modelling the past for the future

ustralian Roye England, the founder of Pendon Museum in Oxfordshire, had a vision in the 1950s of recreating rural scenes, traditional methods of transport and even a landscape that had altered beyond all recognition, in order that current and future generations could better understand the changes in a rural way of life, now changed forever.

When he arrived in Plymouth as an 18-year-old, he boarded a GWR train hauled by a Star class locomotive, Westminster Abbey, and claimed that on his first day in England he fell in love twice over, once with the

Great Western Railway and then with the countryside he had travelled through.

Rove decided that he wanted to re-create in miniature the 1930s world of rural England and traditional life that was disappearing. He wanted to model an imaginary village, set it on a hill, surround it with farmland and show the GWR main line crossing the landscape below.

The building that currently houses the scene was built in 1971 and Roye died in 1995, by which time Pendon was attracting thousands of visitors a vear.







What can you see at the museum?

The Madder Valley Railway is on permanent display and is preserved as a tribute to the modeller's art. It was built entirely by John Ahern and is a piece of history from the early days of scenic railway modelling and a pioneer in the field of scenic craftsmanship. It showed what could be done with the techniques and materials available at the time and many light railway and branchline layouts built in the last 50 years are its direct descendants. The railway portrays a

time between the wars, i.e. the 1920s and 1930s. The model itself is historic. built between the late 1930s and 1962, and so the control system and wiring is comparatively primitive by today's standards.

How many models feature? There are hundreds of

individual hand-built models that go together to form a credible landscape and railway operating system.

What do visitors always comment on?

How lifelike and convincing

the railway, townscapes and buildings are, given the age of the model and the materials used.

When did work begin on the railway and what inspired it?

It was inspired by a wish to capture the essence of the real railways of the UK.

Have there been any famous visitors?

Many, some of whom have asked to remain anonymous.

What scale is it? Various scales of locomotives

and rolling stock to fit on 16.5mm gauge track.

Was there any part of it that was really difficult to do?

The rolling stock and much of the scenery was started during the period of rationing; much is hand-made - for example the electric motors were hand wound, the wheel profiles turned on a lathe, but this was far from unusual when the model was started.

Describe the layout in three words: Before its time.

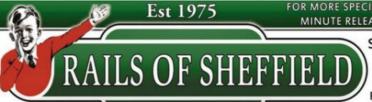
The Madder Valley Railway can be seen at Pendon in Abingdon, Oxfordshire, whenever the museum is open and runs four or five times a year; running times are on the museum's website www.pendonmuseum.com

OFFICIAL HORNBY
COLLECTORS CENTRE

TELEPHONE/ORDER HOTLINE

(0114) 2551436

Open 9:00 am - 5:00 pm 24 Hr Answerphone service for orders



FOR MORE SPECIAL OFFERS AND UP TO THE MINUTE RELEASES VISIT OUR WEBSITE

> 9:30 am - 5:00 pm Monday - Saturday Free parking outside the door!



CASH OR PART EXCHANGE

We urgently require collections of any size featuring products from the following manufacturers:



























































































We are always on the lookout for all types of kit built models including Pro-Scale, Nu-Cast, Golden Age Models, Silver Fox Models, Comet Models, David Andrews and Japanese/Korean Brass in addition to all manufacturers above.

Please do contact us if you are at all unsure as to whether we would be interested in your collection.

We value your used models very highly and will pay top prices for all items offered.

We provide a fast, professional and friendly service from our family run business.

Distance is no object and anything is considered.

Please telephone us on 01142 551436, email secondhand@railsofsheffield.com, fax us on 01142 555982 or post your lists to the address at the bottom of the page quoting reference RM2013, all enquiries answered.

RAILS OF SHEFFIELD, 21/29 CHESTERFIELD ROAD, SHEFFIELD, S8 ORL. TEL(0114) 255 1436, 8 LINES. FAX (0114) 255 5982
PHONE/FAX/24 HR ANSWERPHONE FOR ORDERS OUTSIDE SHOP HOURS. EMAIL: info@railsofsheffield.com WEBSITE: https://railsofsheffield.com (E & OE)

PHONE/ORDER HOTLINE (0114) 2551436

Open 9:00am - 5:00pm

24 Hr Answerphone service for orders

ILS OF SHEFFI

SHOP OPENING HOURS:

9:30am - 5:00pm Monday - Saturday Free parking outside the door!

HORNBY **FULL RANGE STOCKED AT BARGAIN PRICES** R3300 R3302 R3311 R3323 R3324 R3325 R3326 R3333 R3334 R3335 R3337 R3337 R3346 First Great Western Class 08 822 Diesel Shunter 'John' RailRoad BR. 2-10-0 Cross Boiler 9F Class (Early BR) Heavily Weathered R3374 BR Class 71 '7012' - BR Blue R3382TTS BR 4-6-2 'Holland-Afrika Line' 35023 Merchant Navy (Unrebuit) Early BR veh T1'S Sound R3393TTS RailRoad RD Class 47 47033 with T1'S Sound R3393TTS RailRoad RD Class 47 47033 with T1'S Sound R3404 BR 2-6-41 T4234 Fowler 4P Locomotive R3405 LNER 0-6-0T 585 [50 Class Locomotive R3407 BR 4-6-0 'King Henry III' 6000 King Class - Early BR Locomotive R3410 BR 4-6-0 'King Henry III' 6000 King Class - Early BR Locomotive R3411 SR 4-6-0 30942 Maunsell 51 S Class - Early BR Locomotive R3412 LNER 0-8-0 Raven Q6 Class - BR Early Locomotive R3426 BR 0-8-0 Raven Q6 Class - BR Early Locomotive R3430 LNER 4-6-0 Holden BI C Class - BR Early Locomotive R3431 BR 4-6-0 Holden BI C Class - BR Early Locomotive R3431 BR 4-6-0 Claud Hamilton' D 16/3 Class Locomotive R3431 SR 4-6-2 'Clain He Packer' 2 IC1' Merchant Navy Class (Un-Rebuit) R3435 SR 4-6-2 'Clain He Packer' 2 IC1' Merchant Navy Class (Un-Rebuit) R3436 BR 4-6-2 'Clain He Packer' 2 IC1' Merchant Navy Class (Un-Rebuit) R3437 BR 4-6-2 'Clain He Packer' 2 IC1' Merchant Navy Class (Un-Rebuit) R3436 LNER 4-6-2 'Clain He Packer' 2 IC1' Merchant Navy Class (Un-Rebuit) R3437 LNER 4-6-2 'Sir Murrough Wilson' A4 Class Wartime Blk Loco £109.50 £109.50 £134.50 BR 4-6-2 (Clan Line* 35028* Merchant Navy Class (Un-Rebuilt) Early BR Ho-6-2 (Sin Murrough Wilson* A4 Class Wartime Blk Loco NRM BR 4-6-2 'Flying Scottman* 60103 A3 Class, Brunswick Gr BR 4-6-2 'Thomas Hardy Britania Class — Early BR Ho-6-2 (Cameliord* 34032 West Country Class — BR Early Air Smoothed LNR 4-6-0 'Kilverstone Half* BJ 7 Class Locomotive BR 4-6-0 'Kelbeck Abbey* BJ 7 Class - Early BR RR 4-6-0 'Stembook* 61032 Thompson BJ Class Locomotive BR 4-6-0 'Welbeck Abbey* BJ 7 Class - Early BR RR 4-6-0 'Stembook* 61032 Thompson BJ Class Locomotive BR 4-6-0 'Stembook* 61032 Thompson BJ Class Locomotive BR 4-6-0 'Stembook* 61032 Thompson BJ Class Locomotive BR 4-6-0 'Knight of Sc Patrick* 4013 4000 Star Class GWR 4-6-0 'Knight of Sc Patrick* 4013 4000 Star Class BR 4-6-0 'Stembook* 6100 ST Patrick* 4013 4000 Star Class SR 4-4-0 II 6 Class 'PJ Locomotive SR 88 Black (Early) Fowler Class 2P 4-4-0 Locomotive 40626 with £134.50 R3444 R3445 BR 4-6-2 Air Smoothed R3447 LNRR 4-6-0 'Kilverstone R3448 BR 4-6-0 'Welbeck Abbey BI 7 Jon. R3449 BR 4-6-0 'Kilverstone R3449 BR 4-6-0 'Kilverstone R3449 R3451 BR 4-6-0 'Kilverstone R3452 R3453 BR 4-6-0 45274 'Black 5' Class 5MT – Late BR R3454 CWR 4-6-0 Drysllwyn Castel '4073 Castel Class R3455 GWR 4-6-0 Sir Hervis de Revel' N15 King Arthur Class R3455 BR 4-6-0 Sir Hervis de Revel' N15 King Arthur Class R3457 BR 8Back (Early) Fowler Class 2D 4-4-0 Locomotive 40626 with T35 Sound R3460TTS BR 0-6-0 Fowler 4F Class 44198 – Late BR with TTS Sound R3461 R3462 BR 2-8-0 '4287' 42xx Class – Late BR R3463 BR Black (Early) Class 52xx 2-8-0 Tank Locomotive 5231 R3464 BR Black (Late) Class 52xx 2-8-0 Tank Locomotive 5231 R3464 BR Black (Late) Class 52xx 2-8-0 Tank Locomotive 7224 R3465 LNER 0-6-2T 4765 N2 Class Locomotive 7224 R3466 C-6-05T 594 Class 22x 2-80 Tank Locomotive 7224 R3467 SEBCR (6-6-07 51 Art Servier Locomotive 7224 R3471 NSE Co-C Diesel Electric 'Holominable' 50036 Class 50 Diesel R3479 Class 60 60066 Drax Diesel Locomotive 1345 R3479 Class 60 60066 Drax Diesel Locomotive 1345 R3497 Class 60 60066 Drax Diesel Locomotive 1345 R3497 R3497 RailRoad BR D9016' Class 53 Diesel Binuter 1499 R3486 C-0-C Diesel 'DP World London Gateway' '66185' Cl 6 Loco R3487 Co-C Diesel 'DP World London Gateway' '66185' Cl 6 Loco R3487 RailRoad BR D9016' Class 55 Diesel Electric '499.5 C499.5 C

releases for Locomotives, coaches and wagons to be at least 10-25% less than the RRP at the time of release. We also offer large discounts on many of our railway accessory ranges.

We continually monitor other retailers to ensure that our prices are always competitive.









VISA Mastercard VISA PayPal

despatched immediately. Forthcoming releases will be despatched immediately upon release.

If your order contains both current items and forthcoming releases then these will be despatched separately and subject to separate delivery charges.

BACHMANN			GRAHAM FARISH			
FULL RANGE STOCKED AT BARGAIN PRICES			FULL RANGE STOCKED AT BARGAIN PRICES			
30-430 Capital Commuter Train Set £ 31-003A Robinson Class 04 6184 LNER Black 31-004A Robinson Class 04 63762 BR Black Early Emblem Weathered	178.45 £99.50	370-130	The Night Mail Train Set	£169.95		
31-003A Robinson Class 04 6184 LNER Black 31-004A Robinson Class 04 63762 BR Black Early Emblem Weathered	£89.50	370-185	A Day at the Races Train Set	£161.45		
SI-119 BK Standard Class 401 I II/5035 BK Black Licrest - Vyeathered £	127.50	370-425	Midland Pullman Train Pack	£339.99		
31-170 L&YR 2-4-2 Tank British Railways Lined Black Locomotive 50764	£93.45	370-430	Capital Connection Train Set	£178.45		
31-170 L&YR 2-4-2 Tank British Railways Lined Black Locomotive 50764 31-187DS Jubilee Class "Kashmir" LMS Crimson (Welded Stanier tender) 4-6-0 Loco 5588 (DCC Sound)	203.95	371-023	Class 08 600 'Ivor' Network SouthEast Diesel Shunter	£75.95		
	140.20	371-024	Class 08 907 DB Schenker Diesel Shunter	£75.95		
31-190 Julileo Class Madras Black Bf. Lined Blk (Riveted Stanier tender) (31-214 Patriot Class 330 Sir Frank Red LIM S Crimson 31-318 A sobitson Class III (GCR 9) LNER Plans Black Spis 31-318 A sobitson Class III (GCR 9) LNER Plans Black Spis 31-379 Jebbs Spis Sir	131.50	371-035 371-036	Class 20 Twin Pack Hunslet-Barclay Class 20 227 London Underground Diesel	£178.07 £101.95		
31-214 Patriot Class 4-6-0 'Giggleswick' #45538 BR Green Early Emblem £	131.50	371-036	Class 20 227 Condon Onderground Diesel	£101.95		
31-321DS Robinson Class 111 (GCR 91) 64377 BR E/E DCC Snd & Wthrd &	195.45		Class 04 D2283 BR Green Warning Stripes	£76.46		
31-379 2EPB 2 Car EMÚ 5771 BR Green Small Yellow Panel £	175.50		Class 04 D2295 BR Blue with Wasp Stripes Diesel Shunter	£71.50		
31-380 2EPB 2 Car EMU 6262 BR Blue & Grey Network SouthEast £	186.96	371-054	Class 04 D2332 'Lloyd' NCB Yellow	£59.50		
31-427B 4 CEP 4 Car EMU 7106 BR Blue & Grey	239.50	371-063	Class 03 D2383 BR Green Wasp Stripes Weathered	£80.71		
31-434 Midland Class IF 41803 BRITISH RAILWAYS Black	£76.50	371-064	Class 03 03170 BR Blue Wasp Stripes & Air Tanks Weathered	£75.95		
31-435 Midland Class IF 41726 BR Black Early Emblem	£64.50	371-166	Class 37/4 #37406 'The Saltire Society' Railfreight Distribution	50337800		
31-44 DC Ivatt Class 2MT 2-6-2 Tank #41291 BR Lined Black Early Emblem &	123.50		Sector	£97.50		
31-461A C Class 0-6-0 1294 Southern Railway Black	£84.50	371-167	Class 37/5 #37514 Railfreight Metal Sector Diesel Locomotive	£97.50		
31-462A C Class 0-6-0 31227 BR Black Early Emblem	€84.50	371-168	Class 37/5 #37506 'British Steel Skinningrove' Railfreight Red Strip			
31-481 Ivatt Class 2MT 2-6-2 Tank #41243 BR Lined Black Farly Emblem £	107.50	271 204	Diesel Locomotive	£97.50		
31-528A Class A2 60529 'Pearl Diver' BR Lined Green Late Crest £	135.95	371-286 371-329	Class 55 'Kings Own Yorkshire Light Infantry' #D9002 BR Grn SYP Class 150/2 #150247 BR Sprinter – Weathered	£135.50		
31-531 Class A2 60536 'Trimbush' BR Lined Green Early Emblem	135.95	371-329	Class 150/2 #150/247 BK Sprinter – Weathered Class 150/1 #150128 First Great Western	£123.50		
31-615 Class V3 Tank #67690 BR Lined Black Early Emblem	103.50		Class 60 60035 EWS	£97.50		
31-627B Class 3F 3520 LMS Black Deeley Tender	£/7.3U		Class 60 60057 'Adam Smith' BR Coal Sector	£97.50		
31-635A Class 64xx GWR Green 0-6-0 Pannier Tank Locomotive 6424	£81.55		Class 60 60021 Colas	£97.50		
31-614 Class y3 Tank #67609 RR Lined Black Late Crest Cranked Pipes £ 31-615 Class y4 Tank #67609 RR Lined Black Early Emblem 31-6278 Class 97 330 L1975 Black Deeley Tender 31-635A Class 64xx RB Mack Early Emblem 0-6-0 Pannier Tank 6422 31-6364 Class 64xx RB Hack Early Emblem 0-6-0 Pannier Tank 6492 Withdra 11-656 Class 64xx RB Lined Green LIC 0-6-0 Pannier Tank 6919 Withdra 11-656 Class 47 346 RB Outch Livery Diesel Locomotive DCC SOUND £ 31-662 Class 47 346 RB Outch Livery Diesel Locomotive DCC SOUND £ 31-679 Type ALS Bectric #EJ095 RR Felterine Blue Small Yellow Panel LINS Stanier Mogul Class #2955 LINS Lined Black LINS Stanier Mogul Class #2958 LINS Lined Black LINS Machiner Mogul Class #2958 LINS Lined Black LINS LINE LINE MACHINER LINE MACHINER LINE LINE MACHINER LINE LINE LINE LINE LINE LINE LINE LINE	£81.55 £90.05		Class 66 66101 DB Schenker	£97.50		
31-656 Class 47 47256 BR Green Full Yellow Ends (TOPS) Weathered	£99.50	371-384A	Class 66 111 EWS Livery Diesel Locomotive	£103.65		
31-661DS Class 47 346 BR Dutch Livery Diesel Locomotive DCC SOUND £	203.95	371-396	Class 66 (Low Emission Variant) 'Interhub GB' #66731 GBRf	£97.50		
31-662 Class 47 359 BR Railfreight Grey (Metal Sector) Diesel Loco £ 31-679 Type AL5 Electric #E3095 BR Electric Blue Small Yellow Panel £	114.70 107.95	371-397	Class 66 66434 DRS Plain Blue Compass	£97.50		
31-690 LMS Stanier Mogul Class #2955 LMS Lined Black £	127.46		N Scale Class 101 2 Car DMU BR Green	£135.50		
31-728 GWR 3700 Class 3708 'Killarney' Great Western Green £	111.50	371-505	N Scale Class 101 2 Car DMU BR Network SouthEast	£135.50		
31-883 Midland Class 4F 3404 BR Late Crest Western Green 31-884 Midland Class 4F 3404 BR Late Crest Western Green 31-884 Midland Class 4F 4404 BR Late Crest Weathered	£91.50 £99.50	371-604	Class 42 Warship 'Onslaught' #D832 BR Green	£94.50 £99.50		
32-034A Class 20 20141 BR Green Full Yellow Ends Weathered	701.05	371-605 371-656	Class 42 Warship 'Cockade' #810 BR Blue Weathered Class 57 #57312 Network Rail Yellow	£97.50		
32-038DS Class20 #20124 BR Blue Indicator Disks – Weathered – SOUND £	183.95		Class 108 2 Car DMU BR Blue	£215.95		
32-044 Class 20 #D8028 BR Green Indicator Discs with Tablet Catcher : 32-045 Class 20 20118 'Saltburn-by-the-Sea' BR Railfreight Red Stripe :	£87.95		Class 108 2 Car DMU BR Blue & Grey	£135.50		
32-067A Class 43 Warship 'Powerful' BR Blue Diesel Locomotive D836 €	127.45		Class 108 2 Car DMU BR Green Small Yellow Panel	£135.50		
32.067A Class 43 Warship "Powerful" BR Blue Diesel Locomotive D836 £ 32.068 Class 43 Warship "Rapid" BR Mm FYell Ends Diesel Loco D838 £ 32.069 Class 43 Warship "Roebuck" BR Green Diesel Locomotive D841 £	127.45	371-985	Class 64xx 0-6-0 Pannier Tank #6407 GWR Green	£79.95		
32-069 Class 43 Warship Roebuck BR Green Diesei Locomotive D841 £ 32-085 Class 56XX #6639 BR Black Early Emblem	(7) 95	371-986	Class 64xx 0-6-0 Pannier Tank #6403 BR Black Early Emblem	£79.95		
32-109 Class 08 631 'Eagle' Network South East Diesel Shunter Loco		371-987	Class 64xx 0-6-0 Pannier Tank #6400 BR Lined Green Late Crest			
32-109 Class 08 631 Eagle Network South East Diesel Shunter Loco 32-115B Class 08 08818 BR Blue Wasp Stripes Weathered	£87.50	372-030	Castle Class 'Earl of Dunraven' #5044 GWR Lined Green	£118.96		
32-119 Class 08 08907 DB Schenker : 32-120 Class 08 13287 BR Plain Green Early Emblem : 32-120 Class 08 13287 BR Plain Gre	£79.50 £79.50	372-031	Castle Class 'Tiverton Castle' #5041 BR Green Early Emblem	£118.96		
32-170 Class 08 13287 BR Plain Green Early Emblem 32-176 LMS Crab 42765 BR Lined Black Early Emblem	123.21		Castle Class 'Sir Daniel Gooch' #5070 BR Lined Green Late/C	£118.96		
32-178A LMS Crab 13174 LMS Lined Black Welded Tender £		372-03303	SCastle Class 'Nunney Castle' GWR Preserved Livery Loco 5029 DCC SOUND	£186.95		
32-235 Fowler Class 3F 0-6-0 (jinty) 4/6/3 BK Black Late Crest Weathrd 3	111.50	372-060	Midland Class 4F #43924 BR Black Late Crest Fowler Tender	£87.50		
32-281 K3 Class 61862 BR Lined Black Early Emblem	111.50	372-061	Midland Class 4F #3851 LMS Black Johnson Tender	£87.50		
32-1784. LmS Crab 13174 LmS Lineo Black Welded Lender 32-235. Fowler Class 19 Co-0 (Jinny 47673 BR Black Late Crest Weathrd 32-2774. K3 Class 1304 LNER Lined Black Early Emblem 43-281 K3 Class 1304 LNER Lined Black Early Emblem 43-2874. Class 101 2 Car DMU BR Blue & Grey Weathered 52-2874. Class 101 2 Car DMU BR Blue & Grey Weathered	135.50	372-062	Midland Class 4F #43875 BR Black Early Emblem Johnson Tender			
32-289 Class 101 BR Refurbished White & Blue 2 Car DMU & 32-290DS Class 101 Network SouthEast 2 Car DMU DCC SOUND &	169.96 229.46	372-138	Class 5 #5190 LMS Plain Black	£103.50		
	£87.95		Class 5 #45206 BR Lined Black Early Emblem	£103.50		
52-355 BK Standard Class 4P1 80135 BK Green (Preserved) £	103.50		Class 3F (Jinty) 7309 LMS Black	£80.71		
32-359A BR Standard Class 4MT Tank 80092 BR Black Early Emblem £ 32-360A BR Standard Class 4MT Tank 80104 BR Lined Black Late Crest £	103.50		Class 3F (Jinty) 47314 BR Black Early Emblem	£80.71		
32-376A Class 37 422 Robert F. Fairlie Regional RVVs Diesel Loco Vythro £	123.20		Class 3F (Jinty) 47500 BR Black Late Crest	£80.71		
32-390 Class 37/7 37706 'Conidae' Railfreight Petroleum Sector £	103.50		Merchant Navy Class #35024 East Asiatic Company BR Blue E/E			
32-482 Class 40 97407 'Aureol' BR Blue Departmental Weathered £ 32-483 Class 40 D338 BR Green Split Head Code Small Yellow Panel £	123.50	372-311 372-312	Merchant Navy Class 35023 Holland-Afrika Line	£131.50 *		
32-484 Class 40 BR 40159 BR Blue Centre Head Code Full Yellow Ends £		372-312	Merchant Navy Class #35028 'Clan Line' BR Green Late Crest Merchant Navy Class 35021 New Zealand Line	£131.50		
32-560 Class A1 60117 BRITISH RAILWAYS Apple Green £	143.50	372-330	BR Standard Class 3MT Tank #82028 BR Black L/C – Weathered	£106.21		
32-561 Class A1 60122 'Curlew' BR Express Blue Early Emblem £ 32-575A Ivatt Class 4MT 3000 LMS Black £	143.50 107.50	372-331	BR Standard Class 3MT Tank #82020 BR Plain Green Late Crest			
32-580A Ivatt Class 4MT 43014 BR Late Crest Weathered £	119.50	372-385	Class A2 'AH Peppercorn' #525 LNER Apple Green	£131.50		
32-680 Class 45 #45036 BR Blue Split Centre Head Code	£95.95	372-386	Class A2 'Bachelors Button' #60537 BR Brunswick Green E/E	£131.50		
32-764 Class 57 305 'Northern Princess' Northern Belle Diesel Loco £ 32-781B Class 37 041 BR Blue Split Headcode Diesel Locomotive £	127.45	372-387	Class A2 60527 'Sun Chariot' BR Lined Green Late Crest	£131.50		
32-787 Class 37 D6714 BR Green Split Headcode Diesel Locomotive £	110.45	372-536	Class 4MT Tank #80119 BR Lined Black Late Crest	£95.95		
32-788 Class 37 284 BR Blue Centre Panel Headcode Diesel Locomotive £	110.45	372-578	Rebuilt Royal Scot 'Royal Scot' #6100 LMS Crimson (Preserved)	£111.95		
22-781 Class 37 04 IR Blue Split Headcode Diesel Locomotive £ 32-785 Class 37 04 IR Blue Split Headcode Diesel Locomotive £ 32-786 Class 37 D4 IR Blue Split Headcode Diesel Locomotive £ 32-788 Class 37 324 RB Blue Centre Panel Headcode Diesel Locomotive £ 32-880 BR Standard Class 97 92 IR 98 RB Black L/Cress IF Tender W'thrd £ 32-880 Faitburn 2-6-4 Tank 2279 LMS Black Wastbered £ 32-881 Faitburn 2-6-4 Tank 42 IO 5 RK Lined Black E/Emblem Weathered £	140.21	372-579	Rebuilt Royal Scot 'Royal Ulster Rifleman'			
32-881 Fairburn 2-6-4 Tank 42105 BR Lined Black E/Emblem Weathered £	110.46	372 /53	#46122 BR Green Late Crest - Heavily Weathered	£119.95		
32-862 Pairburn 2-6-4 Tank 42062 BK Lined Black Late Crest £	.103.73	372-653	BR Standard Class 4MT #76079 BR Lined Black Early Emblem	£103.50		
32-98	119.50		N Class 2-6-0 #31811 RR Black Early Emblem N Class 2-6-0 #31811 RR Black Late Cress	£99.95		

Fairburn 2-6-4 lank #2002 BK Lined Black Late Crest (1037)
Class 66 6416 Freightliner Powerhaul (119.50
Class 66 6414 DRS Plain Blue Compass (119.50
Wickham Type 27 Trolley Car BR Maroon (67.76
Wickham Type 27 Trolley Car BR Engineers Yellow Wasp Stripes (67.76
Wickham Type 27 Trolley Car BR Engineers Yellow Wasp Stripes (67.76 See our website for full 2016 range. See our website for full 2016 range. RAILS BLACK LMS LIMITED EDITIONS

372-932

Colour coding: No DCC

DCC READY

DCC Fitted/Sound PLEASE NOTE:

All items currently in stock are

31-999X LMS Twin Loco 10001 in BR Black with Chrome trimmings and

N Class 2-6-0 #31811 BR Black Late Crest N Scale N Class 2-6-0 810 SWCR Grey

UK POSTAL RATES: £4.00 (1st Class), £4.50 (1st Class Recorded), Special Delivery £8.50 next day delivery inc Saturdays by 1:00pm (orders must be placed before 2:00pm on date of despatch), £7.50 per parcel over 2kg sent via ParcelForce courier for next day delivery inc Saturdays (orders must be placed before 3:00pm on date of despatch). This excludes post codes: IV, HS, KA27-28, KW, ZE, PA20-78, PH17-50, BT, IM, TR21-25,

JE-GY and PO31-41 which will be charged at £12. WORLDWIDE POSTAL RATES: Postage charged at cost sent via Royal Mail Airmail under 2kg, Parcelforce over 2kg. (Air sure and international signed for available on request). Non EEC countries are VAT deductable.

New releases may be booked in advance

ail order or telephone orders despatched immediately with an immediate refund or follow-on option on 'Out of Stock' items. Please advise with your order. All goods are either in stock or on order

By Car: From MI South, Junction 29, follow A617 to Chesterfield then A61 to Sheffield. From MI North, Junction 33, follow Parkway then A61 Chesterfield Road.

dapal DAPOL AT BARGAIN PRICES

N GAUGE

OO GAUGE O GAUGE

£94.50

GOLD STAR STOCKISTS

FULL RANGE STOCKED

Call us or see our website for more details and bargain prices

ESU Loksound AT BARGAIN PRICES

HST/44/45

V4.0 Steam Sound	Classes A4 Pacific, A1/A2 Pacific,	
	A1 Pacific 'Tornado'	£94.50
Decoder with Speaker	GWR Pannier 57xx, GWR Manor 78xx,	
550.2500500 1.1600200000 F	BR/LMS Mogul, 4MT Tank, Jubilee,	
5	BR/LMS Fairburn, Ivatt Class 4,	
	3F Jinty, Bulleid Pacific	
V4.0 Diesel Sound	Classes 03/08/20/24/25/31/37/40/43	

Decoder with Speaker	47/50/52/55/57/66/67/108 DMU/158 S	printer
DCCSSFIT	Fitting service for all OO gauge	
	Steam Classes	£25.00
DCCDIFIT	Fitting service for all OO gauge	
	Diesel Classes	£25.00

All sound decoders are available with either 8 or 21 pin connectors, several of the steam decoders are suitable for use in other locomotives. See our website for more details.

50010	ECoSBoost ext Booster 4A DCC/MOT/SX/mfx	£202.50
50011	ECoSBoost ext Booster 8A DCC/MOT/SX/mfx	£379.50
50095	ECoSDetector Extension Module - 32 outputs	£42.50
50200	ECosCommand Station (2nd Gen) 15-21V & Colour	
	Touchpad	£507.50

DCCEITA	DCC Decoder fitting service for N gauge 6 pin	
Decimo	DCC Ready locomotives	£29.50
DCCFIT8	DCC Decoder fitting service for OO gauge 8 pin	
	DCC Ready locomotives	£29.50
DCCFIT21	DCC Decoder fitting service for OO gauge 21 pin	
	DCC Ready locomotives	£29.50

The charges for our fitting services are inclusive of the cost of the decoder vhich will either be a Hornby 4 or Bachmann 3 function decoder chosen at our discretion.

THE HELIAN AT BARGAIN PRICES

OO GAUGE

O GAUGE

FULL RANGE STOCKED Call us or see our website for more details and bargain prices

	more details three ban game price	
3522	Heljan 3522 Class 35 D7012 in plain green	£99.50
3523	Heljan 3523 Class 35 D7054 in green with small yellow warning panels	€99.50
3524	Heljan 3524 Class 35 D7076 in green with full yellow ends (preserved)	£99.50
3525	Heljan 3525 Class 35 7011 in blue with full yellow ends	£99.50
2590	Heljan 2590 Hunslet Class 05 BR Plain Green Unnumbered	£310.00
2591	Heljan 2591 Hunslet Class 05 BR Green with Wasp Stripes Unnumbered	£310.00
2592	Heljan 2592 Hunslet Class 05 BR Blue with Wasp Stripes Unnumbered	£310.00
2593	Heljan 2593 Hunslet Class 05 Industrial Yellow Livery Unnumbered	£310.00

dapol DAPOL AT BARGAIN PRICES

2D-001-000	Class 33/0 #33030 BR Blue	£108.50
2D-001-000D	Class 33/0 #33030 BR Blue - DCC Fitted	£130.50
2D-001-001	Class 33/0 #D6571 BR Green No Yellow Warning Panel	£108.50
2D-001-001D	Class 33/0 #D6571 BR Green No Yellow Warning Panel - DCC Fit	£130.50
2D-001-003	Class 33/0 'Merlin' #33046 Engineers Grey/Yellow 'Dutch'	£108.50
2D-001-003D	Class 33/0 'Merlin' #33046 Engineers Grey/Yellow 'Dutch' - DCC Fit	£130.50

PHONE/ORDER HOTLINE (0114) 2551436

Open 9:00am - 5:00pm 24 Hr Answerphone service for orders



Gift Vouchers

AUGEMASTER GAUGEMASTER AT BARGAIN PRICES

DCCUI	Prodigy Express Package	£117.75
DCC02	Prodigy Advance Package	£209.50
DCC03	Prodigy Advance 2 Wireless Starter Set	£359.50
DCC13	Prodigy Advance 2 Wireless Walkaround	£149.50
DCC14	Prodigy Advance 2 Backlit Walkaround	£106.50
DCC23	6 Pin N Gauge Plug-in Decoder	£21.00
DCC27	OMNI 21 & 8 Pin Decoder	£15.95
DCC30	Accessory Decoder	£50.00
DCC40	Auto Reverse Module	£34.00
DCC51	Prodigy Wireless Conversion Set	£199.50
DCC55	Prodigy Advance Wired Computer Interface Cable	£47.95
Model D	Twin Track Controller	£67.50
Model Q	Four Track Controller	£129.50
PMI	Point Motor with Accessory Switch	£3.99
PM2	Point Motor	£3.50
PM4	Point Motor Self Latching with Switch	£4.95
100M	Single Power Controller	£67.95

PECO PECO AT BARGAIN PRICES

FULL RANGE STOCKED

All Gauges Track and Accessories Call us or see our website for more details and bargain prices

DI MODELS AT BARGAIN PRICES

Advance Orders Now Being Taken for the new DJ Models Range Call us or see our website for more details and bargain prices

ı	00]94-002	Class (94 0-6-0 Steam Loco #6806) BR original bunker height	€81.5
ı	00]94-003	Class (94 0-6-0 Steam Loco #8064 LINER with original bunker height	€81.5
ı	00]94-004	Class J94 0-6-0 Steam Loco #8023 LINER with original bunker height	€81.5
ı	00]94-005	Class (94 0-6-0 Steam Loco #68068 BR with tall bunker	€81.5
ı	N17-001	Class 17 Clayton BR Blue Diesel Loco D8574	£97.5
ı	N17-002	Class 17 Clayton BR Blue Diesel Loco D8512	€97.5
ı	N17-003	Class 17 Clayton BR Green with small yellow warning panel Diesel Loco D8555	£97.5
ı	N17-004	Class 17 Clayton BR Green with small yellow warning panel Diesel Loco D8536	£97.5
ı	N17-005	Class 17 Clayton BR Green with small yellow warning panel weathed Diesel Loco D8501	£106.5
ı	N17-006T	Class 17 Clayton Diesel Loco D8574 BR blue (powered) + D6583 BR blue (dummy) Twin Pack	£127.5
ı	N17-007T	Diesel Loco D8616 BR green SYWP (gowered) + D8561 BR green SYWP (dummy) Twin Pack	£127.5

100's OF ITEMS ADDED DAII

VISIT OUR RAILS-SHEFFIELD EBAY STORE SPECIALISING IN QUALITY NEW & SECOND-HAND MODEL TRAINS, DIECAST & OTHER RARE & HIGHLY SOUGHT-AFTER COLLECTIBLES

VISIT OUR RAILS-VAULT EBAY STORE SPECIALISING IN SECOND-HAND ACCESSORIES, DIECAST, RESTORATION PROJECTS, SCENICS & OTHER MISCELLANEOUS MODELS

In addition to full ranges from all the manufacturers featured here we also offer full ranges from:





model scene













Exclusive

and many more. If you can't find the product you are looking for on our website then please contact us and we can order it in for you. Check out our end stores to see what discontinued and rare items we have on offer and for your chance to pick up a second-hand bargain today.

Visit: http://stores.ebay.co.uk/Rails-Of-Sheffield

Visit: http://stores.ebay.co.uk/The-Rails-of-Sheffield-Vault

MODEL RAILWAYS BUY - SELL - EXCHANGE ANY GAUGE ANY AGE TOP PRICES PAID

www.railsofsheffield.com



Tel: 0151 733 3655 info@hattons.co.uk

17 Montague Road, Widnes, WA8 8FZ

Phones Open Mon - Sat 7:30am to 6pm Sun 9am to 5pm Shop Open Mon to Sun 9am to 5pm

Step 2: Track

We stock the complete range of Hornby and Peco track in OO, N and O gauges in 1st, 2nd, 3rd and 4th radius. We also have the entire range of

points and curves in both insulfrog and electrofrog, setrack and finescale, rigid

and flexible. At www.hattons.co.uk/OOtrack you'll find everything

16,000+ items available on www.hattons.co.uk

Step 1: **Planning**

PECO

The first stage in building your model railway is planning the design and layout of your track. To help you we stock a range of planning books, DVDs and CD-ROMs from Hornby and Peco, all available at www.hattons.co.uk

> R8145 Hornby TrackMaster CD-ROM STP-OO Peco OO gauge Setrack plan book IN-1 Peco N gauge Setrack plan book SYH01 Peco "Shows You How" Layout planning SYH06 Peco "Shows You How" Making a start in OO



SYH01





STP-00



you need to turn your designs into reality.

Whether it's analogue control or DCC we have a great range of controllers to help run your model railway. We also stock a huge range of switches and point motors from manufacturers such as Peco, Hornby, Gaugemaster, DCC Concepts and Expo. We also have a fantastic range of DCC decoders from a whole range of manufacturers, including Bachmann, Hornby, DCC Concepts, Gaugemaster, Lenz and NCE.To find out more visit www.hattons.co.uk/electrics.











Analogue controllers

DCC controllers

Point motors & switches

DCC decoders

Cables & Wires

Step 4: Techniques

For everything from painting, weathering and masking, to filling, soldering and kit building, Hatton's have all the tools and products you'll need in order to master all the techniques required for putting together your model railway. Whether you're constructing buildings from scratch or painting and weathering your locos and stock, you'll find a great selection of modelling tools and products online and in store



















Step 5: Scenery









Scenery helps bring your layout to life and at www.hattons.co.uk/OOscenics you'll find everything you need to help you to add realism to your project. We offer a great range of scenic and modelling items from all the leading manufacturers such as Woodland Scenics, Bachmann, Hornby, Javis and Busch







Hedges & Trees

Ballast & Scatter

Grasses & Walls

Step 6: Buildings & Structures

You can add the finishing touches to your layout with buildings, signals and other scenic items such as turntables, level crossings and lights. We have hundreds of different products in all gauges from all the leading manufacturers, including Bachmann's Scenecraft and Hornby's Skaledale ranges - find them on www.hattons.co.uk.



























Step 7: Locos & Stock

When you've finally built your layout, the track and ballast are down, the wiring is in place, it's set up for analogue or DCC, and the scenery is in place with all the buildings and lighting and other finishing touches that make it unique, the final step is to get your locos and rolling stock running.

Whether they're straight from the box and onto the track, or whether you want to add some extra detail and finishing touches to your locos, coaches, wagons and trucks, Hatton's have everything you need to help you get the right look and feel for your model railway.

We also have a great range of products that will help you to service and maintain your locos and rolling stock. Everything from lubrication and oiling, rolling roads and loco lifts, through to cleaning tools and products. At www.hattons.co.uk you'll find everything you need to keep your model railway running smoothly.







Track cleaners

Rolling roads

Servicing kits

UK P&P £4

Tracked Delivery

£2 P&P orders under 130g £7 P&P Next Day (Orders before 2pm)