

Roundhouse Double Fairlie

by JOHN HARWOOD

The iconic Ffestiniog Railway Double Fairlies must be on many a 16mm modeller's 'wish-list'. Several years in the making, Roundhouse's superb model is now in production. JOHN HARWOOD got his hands on an early arrival for SMT. Photos by Dave Billmore.



A good few years ago, whilst working in the model trade, quite by chance, I discovered that Bachmann had made/commissioned a track powered Double Fairlie, and being a 'Fessy Fanatic' this got me really excited. The only thing better at the time would be if Roundhouse were considering doing one in the future so I contacted them to see if this was a possibility. I was informed that this was very unlikely to happen, and on that basis I contacted Bachmann to place an order, and got very lucky to find that I would be getting the very last one that they had and no more would be available from them. Of course, being track powered, I would not be able to run it, but whilst staring at it sitting on the

sideboard one day, I suddenly thought of a mate who could radio control just about anything and had come up with some incredible stuff in the past. It only took a quick phone call to challenge his ability, and it seemed like no time at all before I was staring at it running in the garden. It has performed brilliantly ever since and still raises a few eyebrows whenever I run it at any of our group steamings. I also got lucky that my mate had a mutual acquaintance who is very good with an air-brush, and when it was returned to me it had been transformed from a black model – how it was sold by Bachmann – into one in Festiniog Victorian maroon. Even without the lining it still looks brilliant, and I absolutely love it.

Above:

1 – A fine locomotive indeed. This example is fully lined out by Matt Acton.

Under development

Going back all those years, when the design tools were a pencil and a drawing board it is understandable why Roundhouse were not considering doing one at that time, but since then things have moved on quite a bit, and with radio gear and batteries becoming much smaller and therefore easier to install in the confines of a steam loco, along with developments in design technology, it became only a matter of time before designer Rob Smith was prepared to give it a go. The fact that he had very successfully developed ►

the technique of radio controlling two linked power bogies running in opposite directions as seen under the Garratt, and had the appropriate bogie working brilliantly under 'Taliesin' must also have contributed to the decision to go ahead.

Because of other circumstances Roundhouse had to announce the release of the loco several months prior to the now usual January 1st, but as it had been under development for a long time before its announcement and had been tested very rigorously beforehand they were persuaded to run it at the

quite a few smaller manufacturers doing a great job producing a wide range of models/kits, and it must be difficult for all those companies/individuals to communicate on future production should they wish to avoid duplication. Add to this the fact that Roundhouse supply a lot of components to other companies/individuals and it becomes easy to imagine their very difficult situation in having to bring forward details of their next model that had

urgency to its completion resulting in a number of components being 'borrowed' from other locos, including the bogies from 'Earl of Merioneth', and whilst the situation was not problem-free, during its first ten years of operation "DLG" proved to be a very efficient and reliable machine that became the backbone of the railway's services.

The loco had its first ten year overhaul in 2002, and whilst there were no boiler problems at this point, over the next few years the use of the loco declined partly because the bogies were the becoming quite worn but also



Peterborough Show where a lot of people were able to see it running faultlessly on the modular layout in the afternoon.

On this point of an early announcement of its release I hark back to my days working in the model trade where it was the usual practice for all the larger manufacturers such as Hornby, Bachmann, Dapol and so on to communicate on a fairly regular basis to discuss their plans for future production so as to avoid the duplication of models with the obvious disadvantages that this would cause. In the garden railway business, if you take Roundhouse and Accucraft out of the equation, you see

been under development for a long time without upsetting/alienating anyone and impacting on potential future business relationships.

The prototype

'DLG', locomotive number 12 in the FR fleet, built by the company in its own workshops at Boston Lodge, was completed in 1992, and whilst built to a traditional outline, was designed from the outset to be oil-fired. This led to there being significant internal differences to the other locos and thus had the advantages of a modern design based on experience. There was an

because the cost of oil was becoming an issue. Approaching its next ten year overhaul the cost of oil had become so significant when compared to the cost of coal that outings were becoming very rare and thus the decision was taken in 2013 to convert the loco to coal firing. For some time work had been carried out on building two new bogies and these were added at the same time, resulting in the loco returning to service painted grey in 2014. Over the winter "DLG" was repainted and lined in a variation of the FR's traditional red livery, and that is the colour that Roundhouse have replicated on their model.



The model – appearance

One day, a few weeks prior to the Peterborough show, living in Doncaster, it was easy to pop into Roundhouse when I needed to buy some gas, and the gods must have been smiling on me because Smithy was running 'DLG' on the test track in the showroom and he couldn't cover it up quick enough to prevent me from seeing it! The first impressions were mind-blowing and it brought a lump to my throat. After the initial shock had subsided, I was able to have a rational conversation with him and what I saw and spoke to him about, and the fact that he allowed me to drive it for a couple of minutes, absolutely convinced me that my placing an order had been the right thing to do. Not that I needed any convincing really, because being a Fessy fan it was THE loco that I had to have, and to me it is the best loco that Roundhouse have ever produced, notwithstanding the great stuff they have done in the past.

Coming back down to earth, the loco is as close to scale as anyone would expect and it captures the look of the prototype fantastically. I know there are people out there who would opt for a different colour to the one seen on the model and would choose a different name for it, but it was designed as a replica of 'DLG' even down to a new shade of the FR's traditional red livery being used, and with the individual

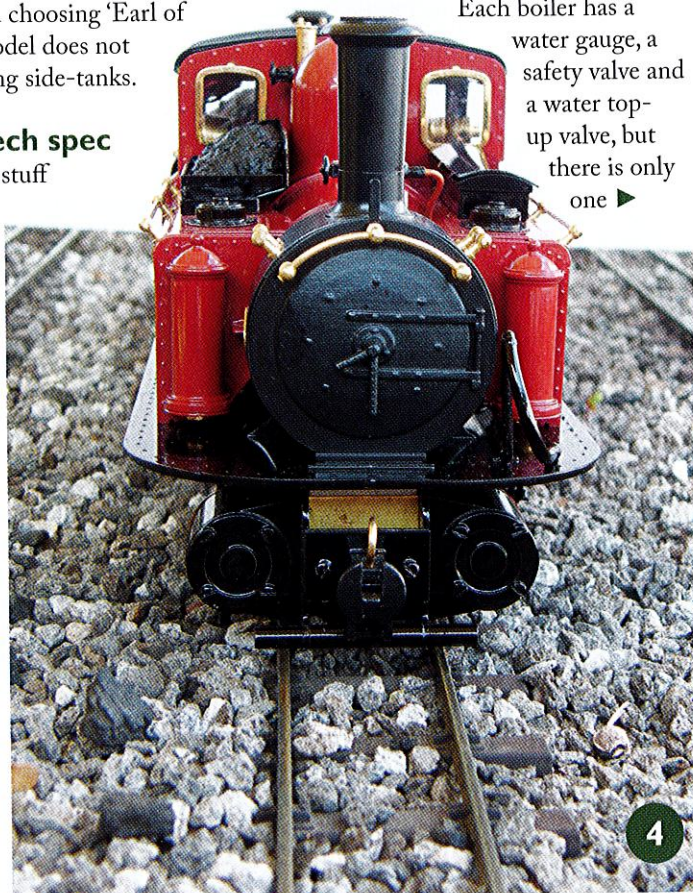
smokebox handrails that are different to the one-piece ones that are fitted to the other Double Fairlies, if you do choose a different name, avoid choosing 'Earl of Merioneth' as the model does not have the uglier sloping side-tanks.

The model – tech spec

If you look at all the stuff underneath the loco you will appreciate that a minimum radius of 3ft is required for it to operate correctly, and with it effectively being two locos there are four double acting slide valve cylinders operated by Roundhouse inside valve gear. There are two boilers which are gas fired using FA type burners and standard controls are fitted. The steam regulator is fed from both boilers and is the only water connection between boilers; there is no connection from the bottom

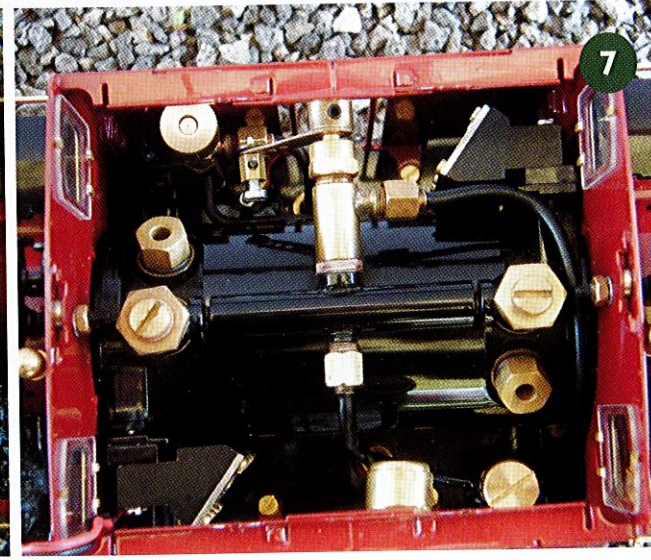
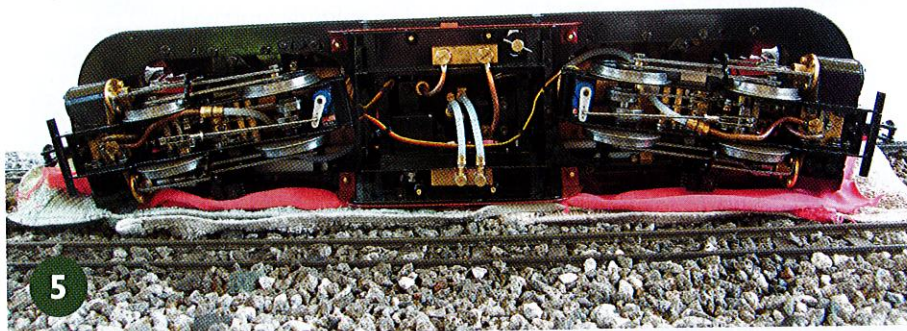
of each boiler and this necessitates each boiler being filled individually and topped up individually, but more of this later.

Each boiler has a water gauge, a safety valve and a water top-up valve, but there is only one ►



Photos on this page and opposite:

- 2 – Side view of David Lloyd George.
- 3 – Top view of the loco showing the filling access to the two gas tanks hidden under the toolboxes
- 4 – Head on view of the model really capturing the appearance of the prototype.
- 5 – Underside view showing the two power bogies.
- 6 – Location of the battery pack.
- 7 – The loco has two boilers and hence two sight glasses and two water top-ups.



Loco Review

pressure gauge for you to keep an eye on, one displacement lubricator for you to fill and one gas regulator for you to think about, so running the thing is not quite as involved as you would first imagine, but nevertheless, I would recommend that you overcome your first instinct and read the instruction manual before having a play. This, I feel, is particularly important if you are not familiar with the operation of a Roundhouse loco.

When it comes to size you are looking at a model not quite as big as the Garratt,

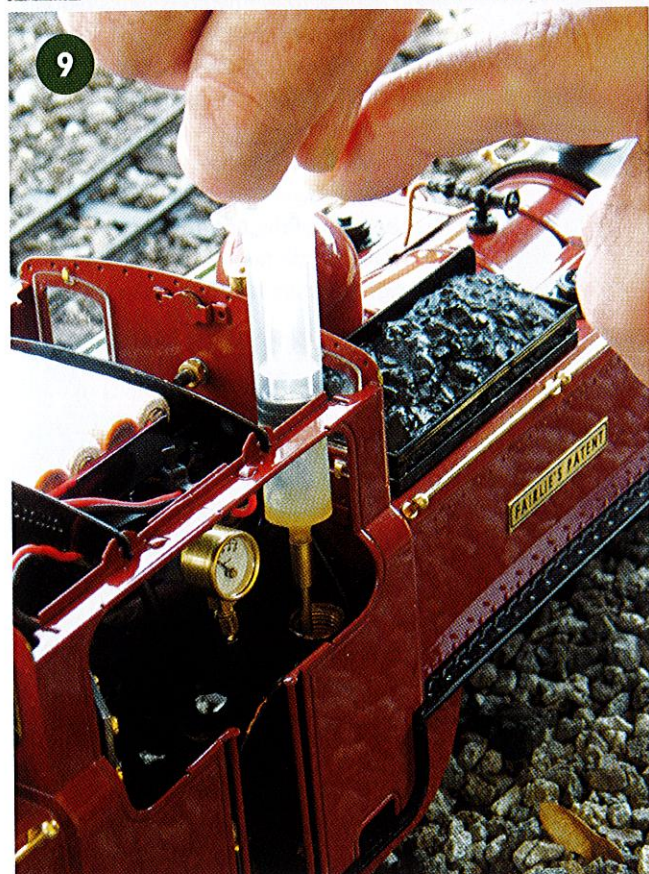
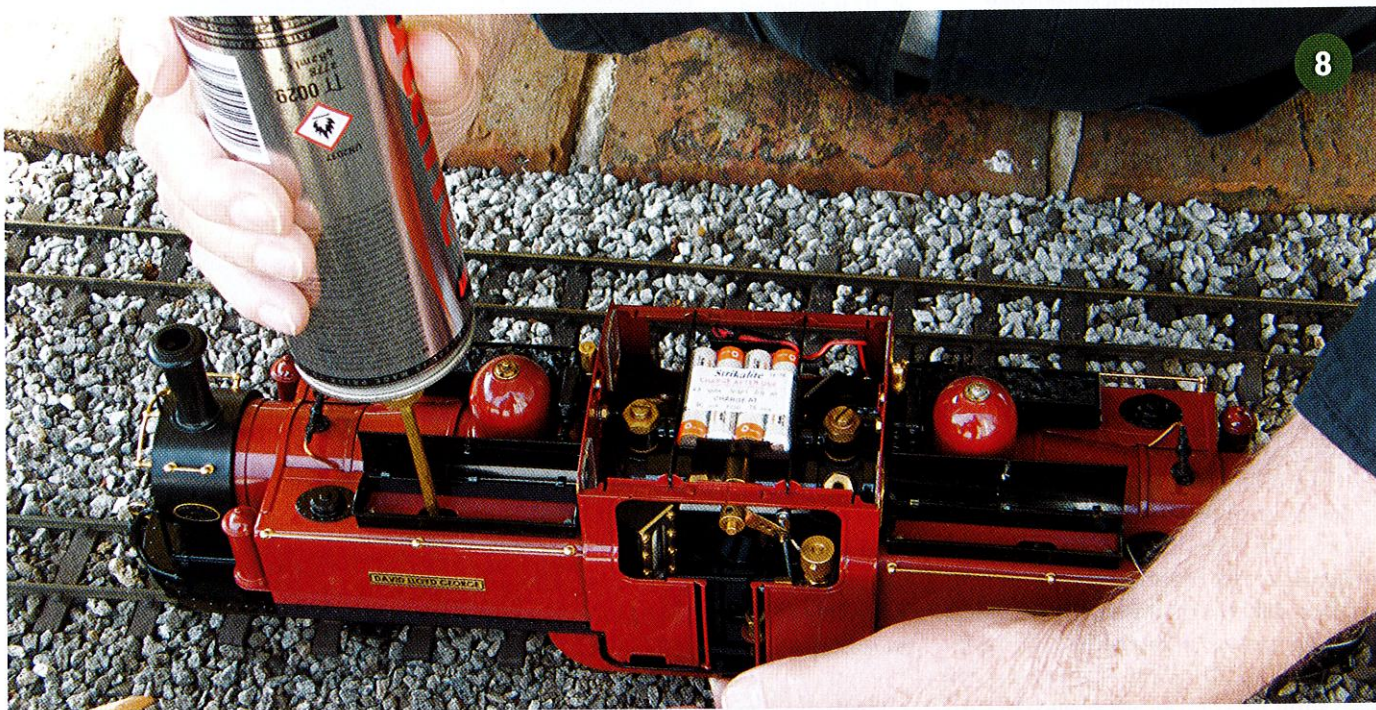
but still nevertheless a pretty big beast. The length is 501mm over buffers, width 108mm and height 135mm. Weight comes in at 5.7kg which is about 0.5kg more than the Garratt. So it is quite heavy and needs careful handling, but if you pick it up by sliding your hands under from each end it is solid enough not to bend in the middle and does not need to be handled differently from any other standard Roundhouse loco.

An AAA rechargeable battery pack is fitted and accessed by removing the

Photos on this page and opposite:
8, 9 and 10 – Preparing the locomotive for a run. Just apply, gas, oil and water.
11 – DLG out in the garden.

magnetically attached cab roof and a charger is supplied which will have you ready to roll after leaving it on overnight.

So far as control is concerned it comes fitted with the usual 2.4GHz radio control set that operates the regulator using the left stick, and by a clever modification, enables forward and





reverse to be done by using the right stick, just as you would expect on any Roundhouse r/c fitted loco. When you think about it, one half of the loco is running in forward gear and the other half is running in reverse, so Smithy has come up with a very simple but effective idea to overcome this problem. A 3D printed disc with a diagonal slot in it is fitted to the handset so that you can push forward or pull back the right stick to set the direction; simples.

Gauge is not adjustable so you have to specify 32mm or 45mm gauge and you have the option of having insulated wheels, but these incur an additional cost. So far as the 45mm version is concerned, the bogies are obviously wider to accommodate the wider track gauge and the loco sits a couple of mm higher to enable it to negotiate 3ft curves. Sit one of each gauge together and the 45mm one looks a bit bulkier round its bottom but this does not detract much from its overall appearance, unless you have recently taken up rivet counting. It is available in any standard Roundhouse colour as usual, but this is not an option that I would personally consider having spent a lot of time looking at the full size one on the FR.

Exhaust enhancers are fitted as standard but as you are sort of running two locos you get an overall sound without the distinctive chuff that you would get from one loco, but it still adds something to the running experience.

The model – setting up to run

As you would expect it is necessary to lubricate all the moving parts after carefully cleaning to minimise wear.

Gas, oil and water now need to be applied.

Gas: Roundhouse recommend butane for this loco for a better performance. There are two gas tanks, one for each boiler, and these are fitted under each toolbox on the same side of the loco. Carefully lift the lid and fill each tank; the lids are hinged very delicately so take your time.

Oil: The displacement lubricator is fitted in the right-hand corner of the cab, and is accessed by removing the magnetically attached cab roof and carefully placing somewhere where it won't get scratched. After removing the cap the lubricator has to be emptied of water as you would expect and this can be done in two ways. You can use the drain under the cab which is fitted with a T-piece to assist, but to do this you need to tilt the loco slightly. I didn't have a problem doing it this way, but Roundhouse provide an alternative means in the form of a syringe which you push to the bottom if the lubricator gently and draw up the plunger slowly to remove any water. If you also withdraw any oil, no problem because you are going to fill it up anyway.

Water: Both boilers have to be filled and this is done by very carefully removing each dome and putting to one side and out of the way so as not to get scratched, before unscrewing each safety

valve to enable you to fill up each boiler with the filler supplied. The domes fit very closely to the coal bunkers and you need to take extreme care so as not to damage any paintwork, but I have to admit that when I took one dome off and made a small mark on the coal bunker, on replacing it I struggled to see the mark, but it is something to bear in mind.

Fill each boiler then remove the usual 30ml before putting it all back together.

The model – points to bear in mind when running

One safety valve will blow off and the other not necessarily at the same time but this is not a problem.

Water levels between each boiler can vary in use so there is a need to check each water level gauge regularly and top up each boiler with sufficient water to bring it up to a good level. An innovation with this model is that each gauge has a white insert that enables the level to be seen much more clearly and, hopefully, will be a feature on any future releases as this is something that has always been a bit of a problem for me. Roundhouse suggest that you check each gauge at the same time and top up when each gauge gets down to half and try to top up to the same level or as close as possible.

Placing it on the track

With a 'normal' loco which is the 'front' is obvious but with 'DLG' this is not so. Why, may you ask, have I raised this point. When I was playing with the loco on Dave's layout for the ►

purpose of this review, the steaming up area is at a very comfortable height off the ground to enable you to do all the preparation without kneeling down. Okay, the risk of it shooting off in the wrong direction and ending up on the floor was extremely unlikely, but the first steaming of a loco loaned to me by Roundhouse is a slightly more nervous time as I am expected to return it to the factory undamaged. Looking back, this beast is so controllable that it should not have crossed my mind but there you go.

If it helps the 'front' is to the left if you set it on the track with the pressure gauge and the coal bunkers facing you. This is useful to keep in mind because the on/off switch is under the tank towards the front, with it set towards the smokebox being 'on' and towards the cab being 'off'.

Just a reminder. You should always turn the handset on before the loco to ensure that everything is working and that the batteries are charged.

And so to the garden part one

On picking the loco up from the factory it was decided that I should receive a driving lesson and this was given to me by Itchy. I have covered the preparation so will not go over it again, but it started by being told to turn the gas on VERY low; lower than usual, followed

by lighting both chimneys quickly. You then have to put a hand over each chimney to feel the heat to make sure that each burner is lit. The unofficial suggestion is that you fleetingly touch each smokebox to feel the heat, but with health and safety going mad these days, this is not the official Roundhouse approach but is the option I prefer.

It is very important to make sure each burner is lit and that you keep the gas low for the first couple of minutes.

You can then turn the gas up but very gently as the regulator is very sensitive.

The loco is ready to roll after approximately three minutes from lighting up and it is only a matter of clearing the condensate by opening the regulator quite wide to achieve this.

As you start to run, turn the gas down as it heats up and you can look forward to a running time of approximately 20 minutes.

And so to the garden part two

The loco looks spectacular in the garden setting and is so easy to drive that it becomes easy to get carried away but not too far without remembering to keep an eye on both water gauges so that each boiler is kept topped up, as I have explained before. This did not distract from the experience in any way and is something that is easy to get used to, this being a feature of several

previous releases from Roundhouse, and what might be your normal practice anyway.

The newly designed buffers are interesting. I did not realise that a new design had been fitted, so I expected to attach rolling stock using the usual three-link chain method, but looking at it the bottom lugs look absolutely right for attaching slate wagons using a pin and chain. Something to try when I get my own loco!

There is not much else to say other than this is a beautiful piece of engineering that fulfils my dream going back a good few years and I can't wait get my hands on mine.

What will you come up with next Rob? I have something in mind, so don't be afraid to ask!

Conclusion

You are getting 'two' locos for the price of one, so at £4,100.00 including VAT you might have to save up a little longer, but if you order one now you might have to wait a bit, which will give you time, because I understand that a lot of orders have been placed which are going to take time to be fulfilled. ■

Supplier contact details.

Roundhouse Engineering

Tel: 01302 328035

e-mail: mail@roundhouse-eng.com

website: www.roundhouse-eng.com



12 – DLG, hard at work steaming in the garden.