

Roundhouse Darjeeling NDM-6 diesel review

by JOHN HARWOOD

Photos by Dave Billmore.

Over the past couple of years Roundhouse have been in the habit of releasing two new locomotives a few months apart each year, usually one steam and one battery electric, but this time they surprised us all by releasing one of each on the same day at the 2016 Peterborough show. Does that mean we can expect a further release later in the year or is it just a ploy on their part to keep us all on our toes? Whatever happens, it all adds up to another exciting year that once again our wallets will not forget. It does not help however when deciding which to grab first for the purpose of review, but following the release of the Garratt last year and the fact that the Darjeeling B class has been in the Roundhouse catalogue for quite some time, it made sense to take the diesel first to continue the 'Darjeeling' theme and give several of that railway's enthusiasts in our

group the opportunity to have a go should I (fat chance!) become bored playing with it. It also gave me the opportunity to try out the innovative chassis design that this beast rides upon with a view to trying to persuade Roundhouse to do this in kit form at a later date should this be possible. More on the chassis design later.

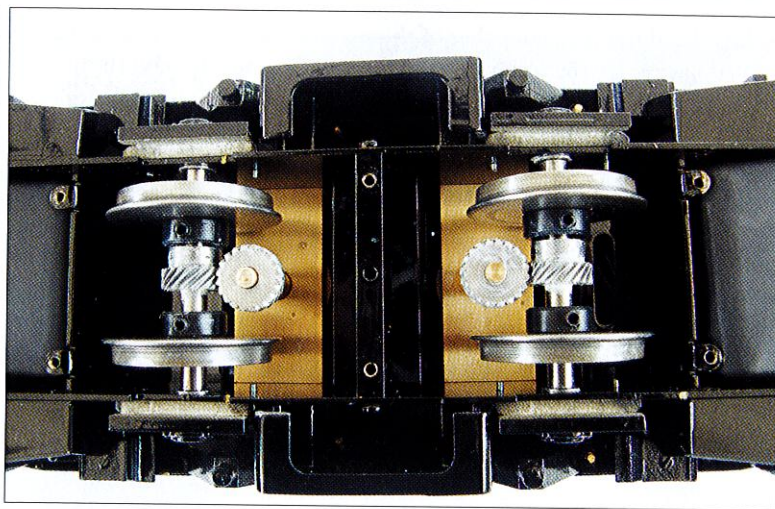
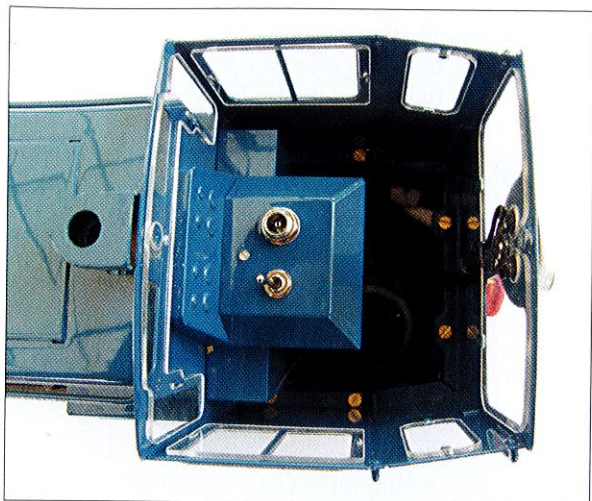
The prototype

Built by the SANCO (Suri and Nayer Engineering and Locomotive Company), Bangalore, the first three, Nos. 601-603 were built between 1997 and 1999 for the Matheran line, Nos. 601 and 602 subsequently being transferred to the DHR in 2006 following monsoon damage to the Matheran. They joined Nos. 604 and 605 which had been built for the DHR in 1999-2000 and remained there even

after the Matheran line re-opened. They have been repainted in DHR blue livery with yellow handrails and white stripes on the bonnet and cab sides which run into a single 'speed whisker' on the cab back. With a maximum speed of 30mph, though in practice 15mph below Rangtong and 7mph on the hill section the suggestion of 'speed' has to be pure fantasy but the 'whisker' does look quite attractive.

Weighing in at 17.5 tons and powered by a Kirloskar-Cummins six cylinder turbo-charged four-stroke engine producing a continuous 335hp, these 2-axle air-braked locos are not exactly over powered for what they have to do, but as trials at various times with the larger bogie machines used on the Matheran and Kalka-Shimla lines have not proved successful, there is little alternative.





into the garden to play. As usual the full radio control arrangement covers stop, start and speed in both directions using the Roundhouse 'Locoglyde' electric speed controller, and by using the trigger on the handset you can turn the sound on and off if you opt for the sound-fitted version. Being able to sound the horn with the sound-fitted version is an added bonus. When it comes to it I could not imagine running a loco without sound, whether it be steam or battery electric, but then, if the sound of a diesel engine changing with speed does not tickle your fancy, you can always opt for the soundless version and also save a little bit on the purchase price. The choice is yours.

As mentioned before, the dimensions of the loco are pretty close to the prototype and this translates into a model with a length over couplings of 309mm, a width of 110mm and a height of 145mm, so it is just a tad longer than 'Harlech Castle' if you need to have something to compare it with. Being gauge adjustable and having insulated wheels fitted as standard it is possible to run it anywhere, and being available in any standard Roundhouse colour, without wishing to offend any DHR enthusiasts reading this, it only takes a little imagination to see it running on any railway.

So far as detail is concerned it is all there, and with front and rear working directional headlamps and fully glazed cab windows, the only thing you will need to add is a driver. With a removable roof to access the interior this is easy, the difficult bit I guess, being to find one that looks right to fit in with the personnel on your railway. Before we proceed to the garden just a note of caution. If you look at the photos you will see that there is a vertical handrail on either side of the footplate towards the front. ►

The model/technical bits

My first impression is that Roundhouse have captured the look of the prototype very well. It's a bit difficult and time consuming to pop out and measure the real thing so I am happy to accept that the dimensions follow those of the prototype very well. My second impression is one of a loco that has a chunky appearance which is further enhanced by all the body-side detail and the pretty big fuel tank below footplate level. Weighing 3.5kg this chunky appearance translates into a chunky feel that suggests a good haulage capacity and my hope is that David and Steve are around with their DHR rolling stock when we finally get into the garden.

Some time ago when visiting the factory for something or other I saw Rob playing with a battery powered chassis on the track in the showroom, and whilst he would not under any circumstances be drawn into telling me what it was for, I nevertheless had a good look at it and even managed to persuade him to let me have a drive. The first thing that I noticed was the two

motors, one driving each axle, which straight away suggested a completely new drive arrangement, and when I turned it over this revealed two precision made helical gear sets. This represents a significant change from what Roundhouse have done before and was obviously brought about by the requirement to produce a significant power output, and hence haulage capacity, without having the benefit of connecting rods to transmit power from a single motor to all axles. The other advantage over the worm and gear arrangement that has been necessary in previous models is that it does not stop suddenly when turning off the power, thus making it easier to drive smoothly and thus widening its appeal to those who have any aversion to using the 2.4GHz steering wheel handset that it comes with.

Powered by 10 AA NiMH rechargeable batteries, the long running time that we have come to expect is there, and with a fast charger provided for in-situ charging it does not take very long before you are able to get out

Whilst I did not damage either of these whilst playing for the purpose of this review I was a little concerned each time I packed the loco away after each running session that these were quite delicate, so I would urge caution.

And so to the garden

Not a lot to say, which makes a change, but as you would expect, a faultlessly performing loco that seemed to want to go on forever. As mentioned much earlier, David and Steve knew that I would give them the opportunity to play if they brought along their DHR

stock to provide an authentic train, so this they did and things just got carried away. Initially they added a rake of stock that would seem reasonable on the real railway, but then they continued to add more until there were *fourty* axles behind the loco before they ran out. What this equates to in grams/kilograms I would not like to guess, but when you look at the length of the train you realise that this is significantly in excess of what 'normal' people (sorry David and Steve, only joking) would expect it to pull. Nevertheless this only added to the fun that everyone had

all afternoon when I allowed them to have a play and proved yet again that Roundhouse have come up with another winner. ■

Conclusion

The cost including VAT of a sound fitted loco is £1275.00 and without sound is £1125.00.

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Roundhouse Bundaberg Fowler review

by JOHN HARWOOD

It's unusual to have two new locomotive reviews in one edition of *16mm Today*, but with two Roundhouse locos released at this year's National Garden Railway Show at Peterborough, it seems only right that both should receive equal billing. JOHN HARWOOD takes a look at the new Roundhouse steam loco. Photos by Dave Billmore.

By releasing two locos together at this year's Peterborough show Roundhouse have given our esteemed editor a bit of a problem. Whilst I have had the easy job and have been more than delighted to play with both of them and submit my reviews to him for his consideration, he has had to decide what to publish and when. A difficult decision then, but hopefully one I have been able to assist with by suggesting that because of the Darjeeling related theme that has emerged with the production of the NDM-6 diesel, that should take precedence. It has not been my intention to marginalise any steam loco enthusiasts out there by suggesting this, but this situation would be negated if both reviews were to be published together. *(And so they have been! – Ed)*. Sorry Gareth, but if you want to talk to me about putting position get next In the you in this we can together at year's show! meantime, what follows is the story of an

Australian steam loco, an unusual prototype that I guess not many people saw coming, and once again a surprise sprung by Roundhouse.

The prototype

As with many things produced in the railway world their origins can be traced back to the UK and what we are looking at here is a loco produced in Australia to a design by John Fowler & Sons (Leeds) Ltd. Prior to that, by the 1930s over half of the locos supplied new to Queensland sugar mills had been built in Leeds, and this being in excess of eighty locos, it is easy to understand the value of this level of production to the company. However, in 1935 they abruptly ceased building steam locos to concentrate on diesels, and it was only after the end of World War 2 that with the development of the sugar industry, more new steam locos were required. At this time the Bundaberg

Foundry were aware of the situation, and with many mills preferring the Fowler design given the choice, they came to an agreement to obtain access to Fowler's detailed design drawings to enable them to take up production. It is not clear how much John Fowler were involved, but with Bundaberg's resources to build steam locos from scratch they must have been sufficiently impressed to allow them to proceed.

Following on from this the Millaquin Mill ordered its Bundaberg Fowler loco in 1950, with delivery as works number 6 taking place in late 1952. Whilst following the Fowler 0-6-2T design featuring outside frames and cylinders and Walschaert's valve gear, the cylinders were slightly larger and there were other minor modifications to meet with that company's operating requirements. During the 1960s the

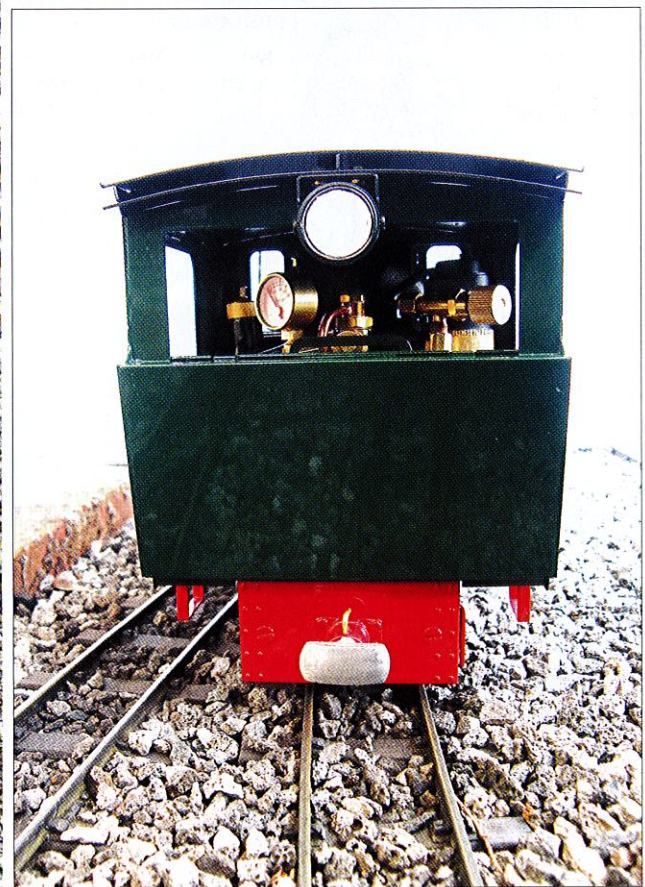
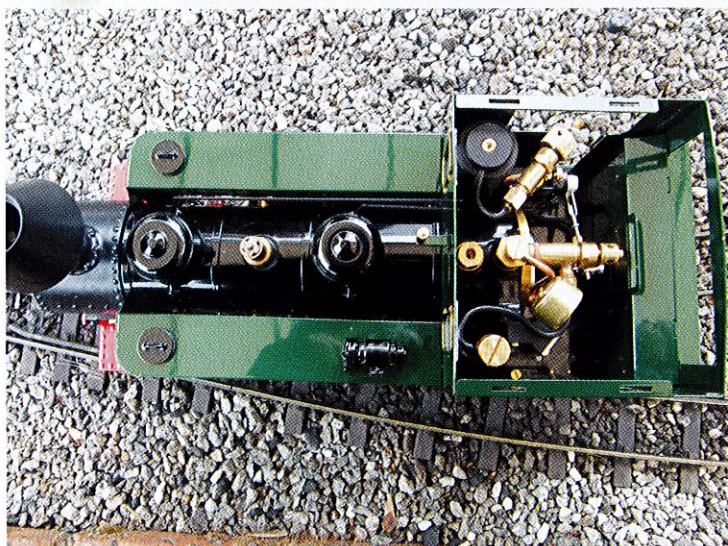
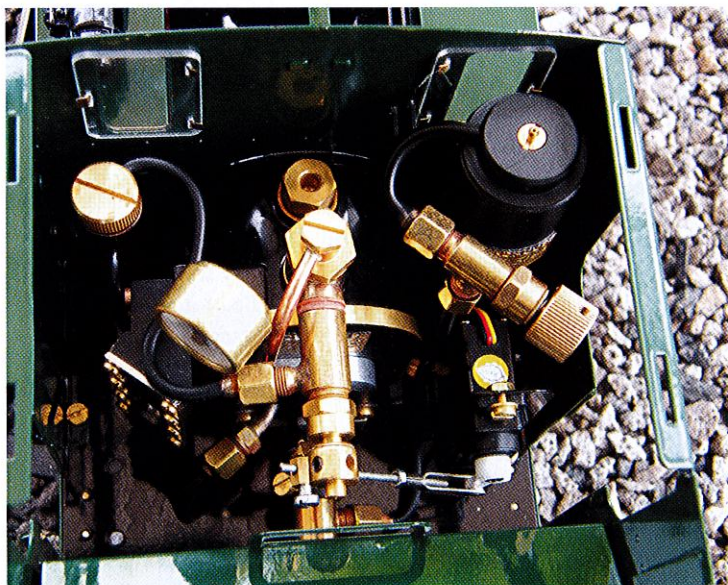


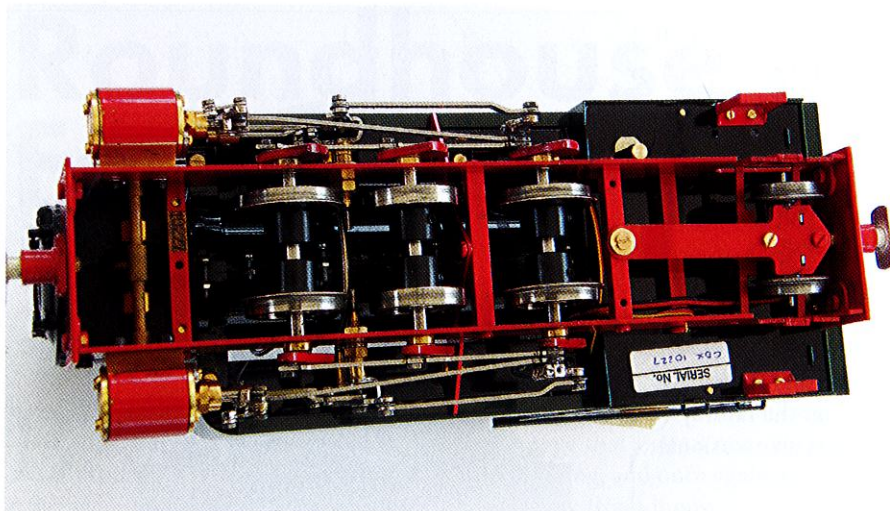
Millaquin locos were painted yellow with red frames, as depicted on the Roundhouse stand at Peterborough, but later, in preservation, for a time it was painted green as seen on the model under review.

In 1978 the loco was transferred to Qunaba Mill where it worked hard until being retired in 1981 when it was acquired for a tourist railway project by Mossman Mill. At this time Mossman commenced its Bally Hooley passenger operations which ultimately were extended to the Port Douglas area. Bally Hooley steam operations ceased at the mill in 1995, by which time the name 'Speedy' had been added, but a limited service was retained at Port Douglas with operation on some weekends. The venture was taken over on a commercial basis but this was unsuccessful and it was left to a group of volunteers who in 2005 were able to run the railway on a more sustainable basis and where it still provides an occasional service today.

The model

The model follows the usual Roundhouse technical specification that we know performs so well, so if you are familiar with this then please feel free to make a cup of tea and pick up the tale in the garden. For those who wish to be reminded the heart of the matter is the internal gas fired 'FG' type burner that raises steam pretty quickly. Controls fitted as standard are steam regulator, safety valve, pressure gauge, displacement lubricator, gas regulator and reversing gear, with all these working appropriately to provide power to two double acting slide valve cylinders. Should you ►





choose to go down the radio controlled route a 2.4GHz system is installed with the usual stick handset that is now standard with Roundhouse steam locos. There is a water gauge for you to keep an eye on and also a water top-up system, but whilst the loco was in my hands I did not have to use this, the gas running out first. But then, if you want to prolong the running time the top-up system is a useful device because once the boiler is up to pressure, by turning off the gas then topping up the gas tank before relighting, it becomes necessary to top up the water level as your run progresses. An exhaust enhancer is fitted as standard, which, at

the risk of repeating myself, I prefer to refer to as the 'pleasure enhancer' because to my mind this adds significantly to the driving experience and you know exactly where the loco is when it disappears behind the shrubbery if you are running the loco in an unfamiliar garden.

When it comes down to appearance my first reaction on seeing the loco on Roundhouse's stand at Peterborough was that this was a basic loco with not a lot to it, and it did not quite excite me in the way that other locos have done at previous shows. However, with the need to maintain impartiality for the purpose of this review, I put this feeling to one

side, and it was only after researching the prototype that I realised that the model captured its look very well. Yes, the prototype is a simple design but it is this simplicity that probably added to its appeal to the operators. Looking further into this I was able to establish that the locos were built one at a time by Bundaberg because they had to compete for priority with the main business of the Foundry which was the manufacture of sugar milling machinery, and to simplify production welding was used extensively for fabrication in place of the riveting that was such a feature of Fowler locomotives. Taking this into consideration I was able to see the loco in a different light and ignore the lack of riveting that we normally expect to see on a steam loco. The boiler top captures the look of the prototype very well but here I would offer a word of caution. There is a 'device' fitted on the left-hand tank top just in front of the cab that is quite delicate so take care when packing the loco away after a running session.

Weighing 4.1 kg, the model is heavier than quite a few Roundhouse locos, which is a surprise, especially bearing in mind that with a length of 322mm, a width of 123mm and a height of 165mm, it is not a particularly large loco. But then, when removing the cab roof to find that this is 'double-skinned', for want of a better expression, maybe this is not quite such a surprise. Why this arrangement was required on the prototype I don't know, but it is something that has been captured very well, and this, along with the cab glazing, all adds to the attention to detail that we now take as standard on any Roundhouse steamer.

A gauge conversion kit is available to order to allow changing between 32mm and 45mm and it is available with insulated wheels to enable you to run it where you want. Finally, you can have it in any standard Roundhouse colour, and whilst they let me play with the green one, I have to say that the yellow one looked quite attractive.

And so to the garden

Preparation consists of the usual oiling around of all the moving bits but not before remembering to remove the dome and the cab roof before turning the loco over, followed by adding gas, oil and water. It is then a matter of setting fire to it and waiting for a few minutes before it gets up to pressure. Engage gear, gently open the regulator to clear away the condensate and



away you go. The 'pleasure enhancer' adds to the usual Roundhouse driving experience and leaves me with very little else to say other than to thank them for adding to my enjoyment of being involved in the great hobby of garden railways.

One more thing

As usual this was the factory prototype and there is always the possibility that changes may be made before production commences to add to the overall experience. I am not sure, but I think I overheard a conversation that suggested a standard chimney might be offered as an alternative to the spark arrester one fitted to the test loco. In which case this would make the loco resemble Builder's No. 5 and would change its appearance quite a bit, but you did not hear this from me.

And finally

Another great addition to the Roundhouse range, this will cost £1578.00 in manual form and £1745.00 with radio control fitted, inclusive of VAT. ■

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