

# FREE 16-PAGE MINI-MAGAZINE!

## INTRODUCING...

**DCC** the best of everything  
**concepts**

## AN EXCLUSIVE INSIDE LOOK

AT THE DCCconcepts RANGE, THE PEOPLE BEHIND IT AND  
DEVELOPMENTS FOR THE FUTURE



DCC ■ ELECTRONICS ■ LIGHTING ■ TOOLS ■ ACCESSORIES  
■ CONTROL EQUIPMENT & MUCH MORE

FREE WITH **MODEL RAIL** MARCH 2014



*Guaranteed to dramatically improve the power and overall performance  
of all of your locomotives*

# PowerBase

**Created by DCCconcepts**  
**To make things work much better!**

## No more gradient or pulling power problems!

Installing Powerbase is so easy to do that you don't even need to remove the body from your locomotives.

We guarantee that once installed it will at least double locomotive pulling power on gradients and it will also give them remarkable pulling power in all other layout areas.

As a nice added bonus, PowerBase also greatly improves power pickup & reduces track cleaning by at least 75%.

PowerBase is surprisingly economical, very easy to use and requires no special tools or skills to install.

Available now in N and OO scale versions that are also suitable for OO9, HOe, HOM, TT, S, On30, and others...

PowerBase really will transform your loco's performance!



## Easy, 100% effective and affordable too!

The powerbase range covers all possible needs and is incredibly affordable. Easy to use and install, with two economical "starter packs", top up packs and special accessory packs available, the average layout and all your locomotives can be fully equipped with PowerBase for less than the cost of ONE sound locomotive!



## "With and Without" ...

An OO scale Bachmann "City" on a 1 in 30. from a struggle with 4 to an effortless climb with 8 Mk1 coaches After installation of PowerBase.

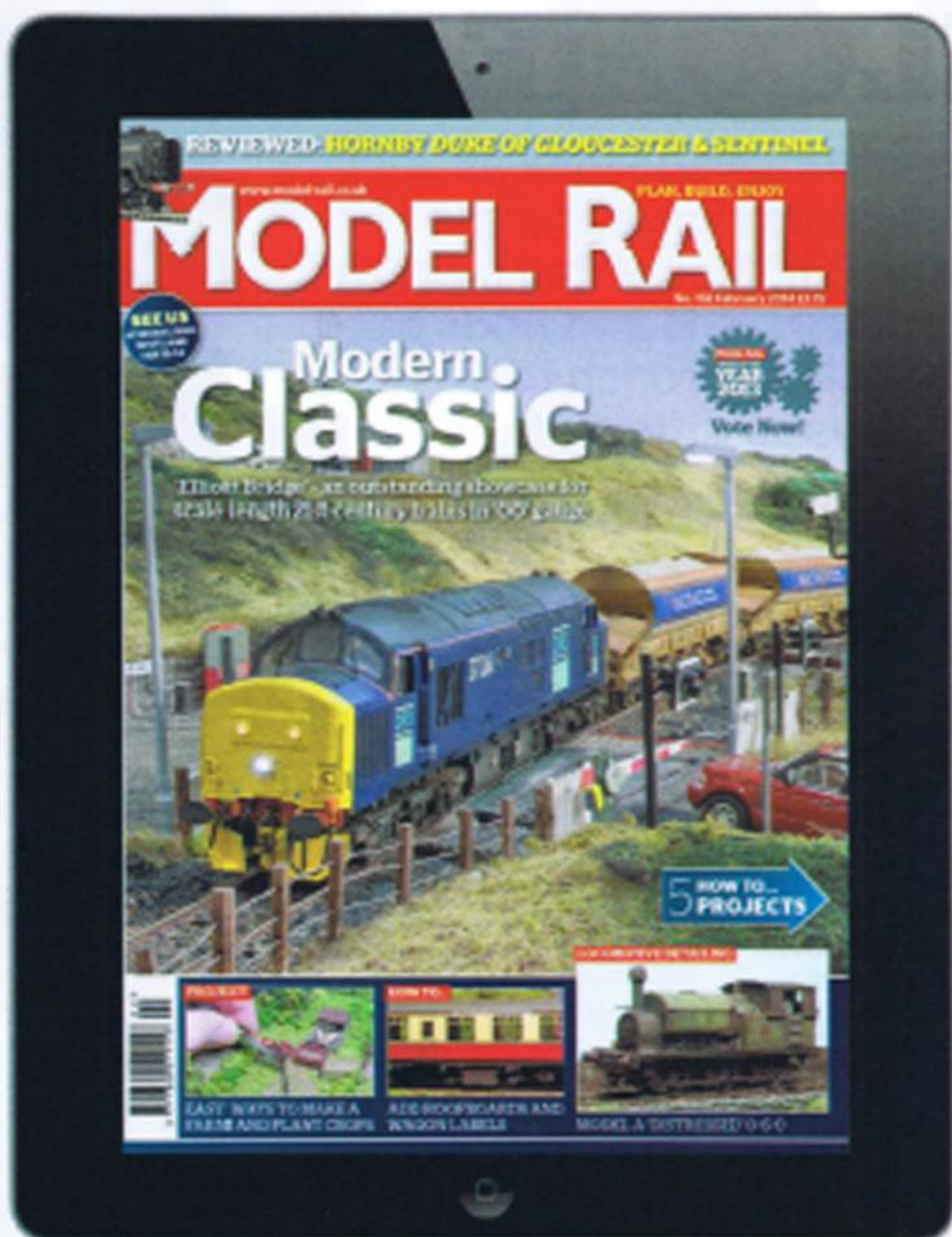
**DCCconcepts** the best of everything

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DCCconcepts products including the PowerBase range are sold and distributed to model railway retailers in the United Kingdom by Gaugemaster Controls Ltd, Ford Road, Arundel, West Sussex. Phone: +44 (0) 1903 884 488 Fax: + 44 (0) 1903 884 377 ...or by email via [www.gaugemaster.com](http://www.gaugemaster.com)

DCCconcepts welcomes trade enquires from dealers across Australia and around the world

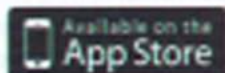




# MODEL RAIL IS NOW ON THE iPad

Created for the iPad, *Model Rail* is now available from the App Store. You are now able to enjoy *Model Rail* photography as you have never seen it before, plus videos, picture galleries, sound samples and much more...

**GET YOUR FREE SAMPLER AT THE APP STORE**





# WELCOME...

...to an exclusive inside look at the DCCconcepts range and the people behind it. *Model Rail* talks to **RICHARD JOHNSON** and finds out what makes his approach to model railways so different.

**MR:** DCCconcepts has risen to become a very visible part of the hobby, especially in the UK. How did it happen?

**RJ:** "Sometimes a simple start becomes something more than was originally envisaged."

DCCconcepts was born about ten years ago, and started very simply with LEDs and related products in the correct 'incandescent' tint for model railways. One thing led to another and soon more model railway products were conceived. Before long, a partnership was formed to improve sourcing and allow growth and DCCconcepts took on its current form.

"I think we have been accepted so well because we genuinely care about the things we do. We are very conscious of the UK modelling scene (I am an expat and while I have also built North American and other prototype models, I model UK railways in the main, so they are at the front of our minds) and product-wise, we are fussy."



"Our policy is that we will not stock any item I would not buy or use myself, and I am what could be described as a 'rivet counter' when it comes to quality, so compromises are close to zero."

"We prefer to do it our way rather than be led by habit and have an in-built desire try to either do things better or fill gaps that have been frustrating modellers for a long time. We also follow through and back up our products as well as we can, so we have gained a reputation for good customer service, proving that being many miles away makes no difference."

**MR:** How would you describe DCCconcepts and its approach to model railways?

**RJ:** "We are a specialist company that understands that modellers at all levels deserve the best, and respect both finescale and a more relaxed approach. In product design and concept, we prefer to follow our own path and take new directions rather than follow others. We love the hobby, and hope that that shows in what we do."

"Basically, we think that compromise always costs more than it should. Good value means quality and performance, not lower price. For example, look at our station lamps; where others are happy to use moulded plastic and accept the coarseness of lamp head details, we use a combination of hand-moulded plastics and etched brass. Our lamps aren't generic either as we've used original drawings for reference. In construction, we know plastics can warp over time so our finely moulded posts have a solid

metal core to keep them straight. We can therefore achieve 'best possible' results more often. In other words, we'd rather not release a product than one that is compromised."

"We like to be challenged and to do new things too - our steam-era locomotive lamps are a great example of this with the range now having expanded to include the two hardest to achieve - an accurate semaphore signal lamp with backlight and a shunt lamp. Although they're incredibly small and accurately scaled for 4mm:1ft ('OO/EM/P4'), can actually show either red or white out of the same lens, making accurate lamps on steam and early diesel shunting locomotives possible for the first time."



"In technology we also think the same: design for a result, not a price, and reliability or versatility will be better."

**MR:** What does the future hold?

**RJ:** "There's lots to come and the real problem we face now is time - we are on the hunt for enthusiastic new staff to cope with our rapid growth and take some of the load to leave me free to do more."

"In lighting, a new 'End of Train' lamp with interactive switching is very close, as are working modern table lamps for UK passenger rolling stock. Additionally a completely new (and long-awaited) 'Flicker Free' coach lighting range, new easy-to-use added

pick-ups and other items are all nearing completion."

"For layouts, our 'PowerBase' system (MR189), which guarantees to more than double the pulling ability of locomotives, is going from strength to strength, and a new approach to building your own trackwork plus the best and most accurate range of track gauges ever produced are almost ready for the market. Our Cobalt levers have redefined control abilities and our Cobalt point motors will see a really positive new addition to the range."

"In DCC, several exciting new accessory products are on the drawing board - plus a completely unique new decoder range with truly superb performance, new UK-centric features

and a design concept that makes installation easier and more versatile is very close to release."

"There is more, but I'll save it for now. Suffice to say that 2014 is going to be an interesting year, with some very exciting new products that feature technology, finescale products and the fusion of both to keep the hobby interesting!"

"Most importantly, our website will be completely replaced. The existing site isn't good and lacks cross-browser compatibility. Much more information, many new products and much more interactive support is needed from us on the web, so despite being busy with products, this is our No. 1 challenge!" **MR**



# THE DCCCONCEPTS ROLLING ROAD

**W**hen you buy any tool, it has to do the job properly – and when you buy an expensive one, it really needs to be something truly useful, with both the quality and versatility to justify your hard-earned money! Both of those thoughts were in our minds when we thought about developing a rolling road.

A rolling road is a simple device that supports the wheels of your locomotive and is designed to deliver current as if they were on the rails. Each rolling road support set has roller bearings so that the locomotive can run on the spot, letting you 'run it in' and fine-tune its running qualities in controlled conditions. It performs a similar function to dynamometers used in a car tune-up workshops.

Hands-on modellers have long used rolling roads to diagnose issues and run-in locomotive chassis. And, for a builder of locomotive kits, they are a logical addition to the workbench. But what about the average modeller that would prefer to simply buy and enjoy his or her trains?

A good rolling road is invaluable there too;

■ Placing your new locomotive on the rolling road and running it for half an hour in each direction is no problem even if you do not have a layout. All new locomotives need checking even if the layout that they're destined for is still a long way from completion. Finding a fault early on means a quick exchange for a better model or repairs under warranty and while spares are still available!

■ Running-in a locomotive before heavy layout use is always a good idea too, and all locomotive manufacturers recommend it before DCC decoder installation to make sure all is well before installing an expensive decoder!

■ A rolling road is also great for diagnosing those small but irritating problems; a wobbly wheel, a tight spot in the valve gear or slightly out-of-quarter wheel causing lumpy running are all easier to spot on a rolling road, and fixing them is MUCH easier once the problem is clearly identified.

## Using the DCCconcepts Rolling road is simplicity itself.

Place each set of pre-assembled rollers onto a piece of clean track, spacing them appropriately

for the locomotive driving wheels and tender or bogies.

Place the locomotive onto the roller sets, turn on the power and watch the wheels turn. You will be surprised at the things you can see



## What if I have really big locomotives – or want to test EMU/DMU sets with full lighting or multiple power bogies?

Here is some totally NEW news, revealed here for the very first time!

The DCCconcepts Rolling Road has been available for some time, always receiving exceptional reviews, even being called "the very best present to give a railway modeller". Our RRA6 Rolling road set has six sets of rollers, enough for most UK steam and diesel locomotives, but we've realised that there are also many who model modern image with diesel or electric units that they want to tune together, units with continuous lighting and multiple power drives with numerous axles.

And then there are the steam gi-

ants; Hattons new LMS 2-6-0+0-6-2T Beyer-Garratt, huge US cab-forwards, Norfolk & Western 'Y6Bs', Union Pacific 'Big Boys', 'Challengers' and the Australian 'AD60' Garratts to name just a few. So, we have decided to take another step up with the Rolling Road. We are introducing the DCCconcepts RRA12, the mother of all Rolling Roads.

## What if I model in 'P4', 'EM', 'TT', 'On30', 'H0m', 'N' or '009'?

No problem. We mentioned the importance of tools having versatility in the first few words of this article, and the DCCconcepts rolling road really IS versatile. The DCCconcepts rolling road is

the ONLY rolling road that is suitable for a wide variety of gauges. It comes preassembled for 'OO/HO' 16.5mm gauge – however, in the pack are spacers that will work for locomotives made to any scale/gauge combination mentioned above. Not only that – a three-rail adaptor is now included with every rolling road, so Marklin owners, Hornby Dublo three-rail and 'Trix Twin' collectors can now also enjoy its advantages – at NO extra cost!

Our RRA6 Rolling Road is available now – a check across popular UK retailers shows that you can find them for between £60 and £74.

The RRA12 will be available soon, and it really does contain huge value: 12 sets of roller bearings, plus 12 sets of spacers for all common gauges mentioned earlier and TWO three-rail adaptors, all in one pack.

RRA12 is so new that packaging is not yet quite complete, however here is a sample photograph showing what you will receive, and a photograph of its very successful sister product, the RRA6.

Pricing for the new RRA12, which will be delivered in March 2014, is estimated at £99 (retailer prices may vary). You will soon be able to reserve your RRA12 Rolling road at your favourite retailer. **WB**



# DCC CONCEPTS GAS LAMPS



**T**his attractive 'super value pack' features six post mounted LED lamps and two on wall brackets for use on platforms or in street scenes.

The set illustrated here carries BR Southern Region/SR green, but five more colours are also available: LMS crimson, GWR dark stone, soft satin black and grey undercoat. The pack also contains six 'prototype white' LEDs with level control printed circuit boards (PCBs) for illuminating building interiors.

The mouldings are crisp and delicate but well-defined and nicely finished. The 'swan neck' from which the lamps take their nickname is refreshingly fine for a working lamp. From a scale point of view the lanterns are possibly

a little overscale, and if anything look very similar to the contemporary 'heritage' style lighting popping up in town centres in recent times.

That aside, they are very acceptable and will enhance most historical layouts, especially where working lighting is required. There is no reason why they couldn't look the part on a modern railway scene either.

Supplied are extension sections to allow the columns to be extended to suit the location; without these the lights are 70mm tall and, with the tallest extension inserted, they are around 85mm as seen here. There is scope to make them even taller by combining more than one extension piece.



The lanterns are based around a traditional tungsten filament, which gives a slightly softer feel than LEDs. Two very fine lacquered copper wires protrude from the base; these are, in turn, soldered to the power supply. The recommended voltage is between 6V and 9V, the latter being very bright indeed, and probably too bright for most scenes. To address this, supplied are 'level control PCBs' for different lighting levels.

Installation was straightforward and simply a matter of drilling a 3mm hole through the baseboard and then opening up the top of the hole to around 6mm to allow the base of the lamp to be bedded in to the ground. Placing the two thin copper power supply wires into a length of tube, which in turn was passed through the baseboard surface before pushing the column home, made the job simpler.

For the test photographs shown here, I used a 3.7V supply without

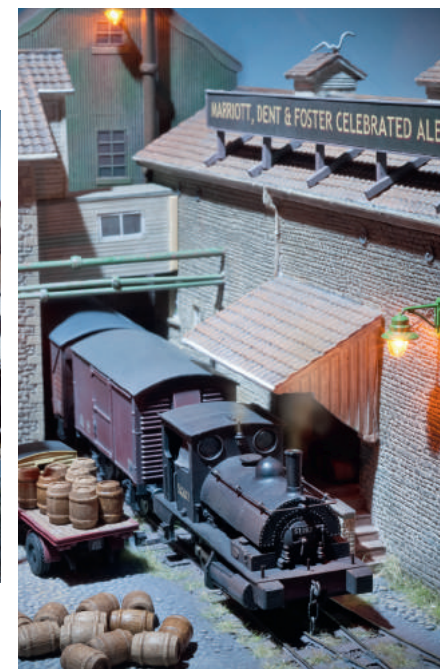


Above: Day burning lamps; note the warm colouring, which if used for a more modern scenario could even pass for sodium lighting, some modern 'heritage' lamps looks very similar to these.

Left: On the left, a column mounted swan neck and lantern, and on the right, a wall mounted bracket and lantern. It is worth planning ahead if possible, because ideally the power leads should run down the inside of the building rather than the outside - a task more easily performed before the buildings are glued down!

Right: Carefully placed lighting adds interest to forgotten corners of a layout, drawing the eye into detail that might otherwise be missed.

the recommended PCB, which gives a nice warm glow, so there is scope for some experimentation. The higher the voltage, the brighter and whiter the glow. Beware though that the bulb life could be compromised at higher voltages, and do be sure to follow the installation instructions if you're worried about invalidating the guarantee. Overall though, these lamps are a more economical way to add high-quality lighting to your layout. (Chris Nevard) **WB**





# SOLENOID ACCESSORY DECODERS

Every now and again a product seems to slip into the market and takes on a life of its own. The DCCconcepts ADS-2 and ADS-8 solenoid point decoders have done exactly that.

**A**s the creators of motor-drive Cobalt point motors, we had not originally intended to make such products, but in the end we felt that we simply had to. We had so many e-mails from modellers who were becoming frustrated with DCC because of the poor performance of the average solenoid point decoders that they had bought.

DCCconcepts ADS Decoders have become a super-success simply because they are easy to use, easy to wire and they 'just work every time' with NONE of the disadvantages of most of their peers. To add the icing to the cake, they are also very reasonably priced! A quick check of popular retailers shows a range of £40 to £49 for ADS-8, which can control no fewer

than eight points.

Here are just a few of the benefits;

- ADS Decoders connect straight to the DCC power bus and need no separate power supply, but because

every individual output has been designed to store all of the power it needs to drive a solenoid internally, there is NO negative effect on the DCC track power, a huge advantage when using smaller DCC systems.

- ADS is very powerful! Any output comfortably changes two solenoids, making powering crossovers easy.

- All ADS decoders can be wired for DCC control and use of control panel switches at the same time, so modellers can have both if they wish

- Because the power to throw the points is stored inside each individual output and it doesn't need an easily overloaded capacitor discharge unit (CDU) or transformer, ADS-2 and ADS-8 are the ONLY solenoid decoders available that can happily accept the rapid-fire commands of DCC controller or computer control and not overload.

- ADS accessory decoders have ZERO need for CV programming - each output has a simple 'run/learn' switch. Setting it to a DCC address is therefore easier than with any other DCC accessory decoder - just switch the ADS-8 into 'learn mode', act as if you are already changing a point at the address you would like it to be then return the switch to the run position. The ADS decoder, being in 'learn' mode, will remember the address you chose as its own, remembering it for future operation!

- Much less wiring and NO added power supply or CDU is needed! Just two wires from the track power bus and the ADS decoder is connected to the system, and of course, the usual three wires to the solenoid. Mount the ADS decoder close to your points and in reality very little wire is needed. If



you want a control panel as well, you can use a single length of lightweight low cost twin bell wire or similar back to a single pushbutton on the control panel.

Given how well they perform, it was no real surprise when the first release of ADS decoders sold out quickly, some stores may have run out around Christmas.

However our manufacturer has responded really well to an urgent re-order so by the time you read this there will be more on your dealers' shelves.

Warranty period is one year and fast interactive customer support is available at [sales@dccconcepts.com](mailto:sales@dccconcepts.com). DCCconcepts products, including the ADS accessory decoders are distributed in the United Kingdom by Gaugemaster, Ford Road, Arundel, West Sussex, BN18 0BN. Tel: 01903 884377. Web: [www.gaugemaster.com](http://www.gaugemaster.com) **WB**



## MODEL RAIL

# RECOMMENDS

## COBALT SWITCH MACHINE

**D**CCconcepts, slow-action Cobalt point motor looks similar to the more common Tortoise from Circuitron, and is a welcome alternative to those of us who prefer motor-driven points.

A comprehensive instruction document (available at [www.dccconcepts.com](http://www.dccconcepts.com)) covers installation, use and wiring. The comparative photographs show that Cobalt is around a third smaller than the Tortoise, which may be useful when installing in confined spaces. Also, Cobalt is designed to

be mounted in a number of different orientations, so it can be used for things other than points - operating semaphore signals, even level crossing gates. You are limited only by your own imagination.

The Cobalt is noticeably quieter and, because of its low gearing, moves slightly slower than a Tortoise at the same voltage. Current consumption is minuscule (10mA running and 20mA stalled) but still slightly higher than a Tortoise (3mA running and 15mA stalled) - a decent power supply should provide ample capacity, however. My 3Amp supply, for example, should be capable of powering over 150 units!

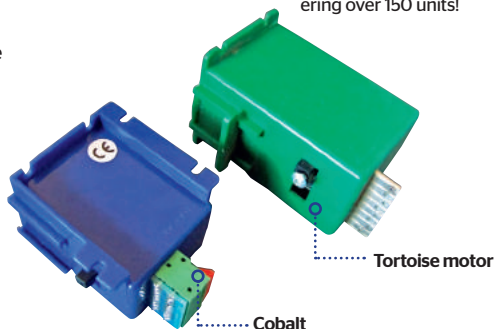
The low stall current means that indicator LEDs can easily be wired in series with the control wiring, to give simple and automated indication of turnout direction.

Pricing is competitive, and now that DCCconcepts products are widely available via Gaugemaster and other stockists nationwide it's easier than ever to have reliable slow-action point motors on your layout.

In summary, the Cobalt is a really neat and compact take on the motor-driven switch machine, and is well worth a look. Lastly, Cobalt comes with a LIFETIME warranty against component or build failure. (Phil Grainger) **WB**

### VERDICT

- +** Build quality, size, comprehensive instructions, ease of use.
- Variations in price due to currency fluctuations.
- i** An excellent alternative to the Tortoise motor.



## COBALT S LEVERS

**D**CCconcepts has developed a novel product that takes model railway control to a new level. Its Cobalt S levers are 140mm high, made in brass and require the catch to be pulled and released at each throw, just like those in a real signalbox. They can be used to operate all manner of switches but are ideally suited to turnout control and you can assemble a real frame that can be coloured to mimic the real thing.

**Price:** £19.95 each

**Availability:** DCC Concepts stockists or [www.gaugemaster.com](http://www.gaugemaster.com)

### VERDICT

- +** Smart design, innovative, versatile, build quality.
- More expensive than traditional, simpler switches.
- i** An attractive solution for accessory and point switching.





# POWERBASE MAKES GRADIENTS POSSIBLE!

It's very rare that a product comes along promising to double the haulage power of your locomotives. PowerBase delivers just that, making gradients a more practical proposition on many layouts.

For many years, modellers of the UK scene have been frustrated by the lack of performance that their locomotives manage to deliver on gradients. It has seemed like the better looking they are, the feebleer they become, and some are downright disappointing to say the least!

As a result, many modellers have been frustrated and as experience grows, the trend has been to eliminate gradients altogether in order to retain the ability to pull realistic length trains.

What a shame! Gradients add a wonderful dimension to any model railway as they do in the real world, adding real variety and operational interest where they can be made to

work properly.

We are delighted to be able to say that DCC Concepts has created a product that can not only guarantee to fix this problem, it does it so consistently that we can absolutely guarantee that if used properly, it will more than double the pulling power of every locomotive you own on gradients of 1-in-30 or more!

As an added bonus, that same product also reduces the need for track cleaning AND improves the quality of current collection in your locomotives!

We call it PowerBase and its installation is so simple that any modeller, novice or expert, can do it.

PowerBase uses simple principles to make your locomotive cling to the track and increase adhesion. The

simple-to-lay PowerBase plates are placed under the rails prior to tracklaying, and specially created super-high power NEO magnets are attached discreetly to the baseplate of your locomotives. The result is a large increase in grip that makes an incredible difference to pulling power.

PowerBase is very economical too – the average layout can be fitted with PowerBase under 100% of its track, and all locomotives can be equipped for less than the cost of a single sound-fitted locomotive! Street prices vary of course, so check with your local retailers.

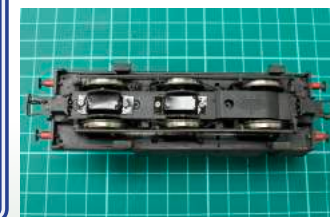
A full range of PowerBase products has been created – nominally there are two ranges that were designed around both 'OO/HO' and 'N' gauge. However, select components accordingly, and they are equally usable in any scale from 'O' to 'Z'. Sometimes pictures say far more than words, so please take a look at our YouTube channel by googling "DCCconcepts youtube channel" and take a look at our videos of this amazing system at work. Alternately, the "laying PowerBase" video manual can be found at: <http://www.youtube.com/watch?v=Sxiip-QdEEO> **WB**



## WHAT ABOUT POINTWORK?

Laying the PowerBase plates around points requires a little more planning but should not present any major difficulties. Mark where the tie-bar will sit on plate and drill a hole to accommodate it or cut the plate with sharp scissors or shears. It is not necessary to cover the whole base area of each point. Then glue and ballast your track in the same way as you would plain track, taking care to avoid gluing the tie-bar.

Below: Magnets fit easily and discreetly under the baseplate of steam or diesel locomotives.



Installation is very simple and requires only a few basic tools.





# A SMALL PRODUCT WITH BIG BENEFITS!

## SDC DC adapter for three-wire accessory decoders

**M**any modellers want to change from solenoid point motors to slow action motors such as the DCCconcepts Cobalt, but have already invested in three-wire accessory decoders. Changing would mean replacing expensive accessory decoders as well as point motors – and the cost is just too much for many.

Additionally, those using Kato Unitrack discover that the Kato point motor is a two-wire DC solenoid; a product that almost no DCC accessory decoder can manage as it combines the need for reversing DC current with a need for high current, something that is not built into the average accessory decoder. SDC was created to solve these problems, and to do it simply and without complication!

Available in three-packs, six-packs and bulk packs of 12, SDC is simplicity itself. Each SDC has three input legs that are fixed to the circuit board at the same pitch as most accessory decoder outputs. Just push the SDC into the decoder output, tighten the screws and it is done! Your three-wire accessory decoder is now a two-wire 'reversible DC' output decoder.

The output

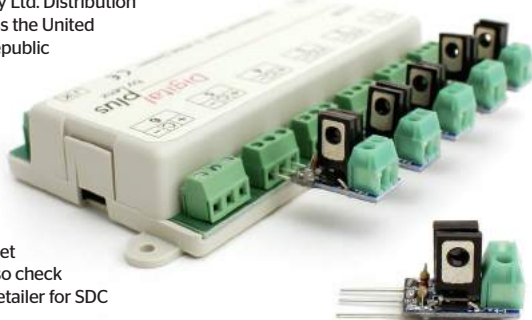
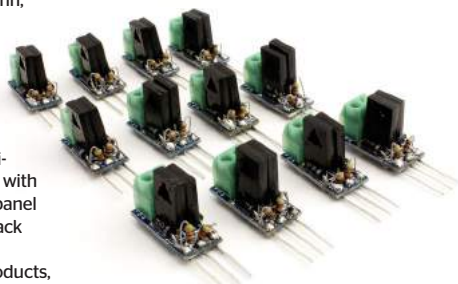
of each SDC is a pair of screw terminals that deliver DC power, swapping polarity as you change your accessory decoder. Connect one wire from your Cobalt or Kato motor to each of them, and that's the wiring complete.

If you are using Kato point motors, you can now start to control them with DCC with no modification to settings – if you are using a motor drive such as Cobalt, which needs power for a little longer to complete its change, a single CV change to alter the output settings will

give an approximately two second power timing at each change.

We have tested the SDC with Märklin, ESU, Lenz, Hornby, Bachmann, MRC, Digitrax and many other brands of three-wire accessory decoder so it will work with yours. There is now no reason not to make the change to Cobalt motors and gain the advantages of reliable slow motion point control with inbuilt frog switching, control panel lights and versatile signal or track circuit management.

As with all DCCconcepts products, SDC is distributed worldwide by DCCconcepts Pty Ltd. Distribution to retailers across the United Kingdom and Republic of Ireland is managed by Gaugemaster. Price averages about £3.50 each depending on pack size, but as with all products, street price may vary, so check with your local retailer for SDC pricing. **WB**







# MULTI-GAUGE ROLLING ROAD

- \* The DCCconcepts Rolling Road is DC and DCC compatible.
- \* Separate "Support Set" also available for larger locomotives.
- \* All cradles provide power pickup for maximum performance.

**6** sets of super low friction  
high quality roller bearing  
active wheel cradles.

**4** sets of easily changed  
"Gauge Spacers" for:  
9 mm - N, HOe, 009  
12 mm - TT, HOm, HOn3-1/2  
16.5MM - OO, HO, On30,  
and of course...EM and P4 fine scale



*DCCconcepts Multi-gauge Rolling Road has consistently been awarded  
"Best value and performance" in leading magazines across the modelling world*



DCCconcepts Products including Cobalt and its accessory range are sold and distributed to the trade in the United Kingdom by Gaugemaster Controls Ltd, Ford Road, Arundel. Sussex. Phone: +44 (0) 1903 884 488 Fax: + 44 (0) 1903 884 377 ...or by email via [www.gaugemaster.com](http://www.gaugemaster.com)

DCCconcepts welcomes trade enquires from dealers across Australia and around the world

DCCconcepts Pty Ltd, 3/13 Lionel Street, Naval Base, WA 6165 Australia \* [www.dccconcepts.com](http://www.dccconcepts.com) \* [sales@dccconcepts.com](mailto:sales@dccconcepts.com). Ph: + 61 8 9437 2470 (GMT + 8hrs)





# Cobalt-S

the switch that  
switches everything

## controls it all

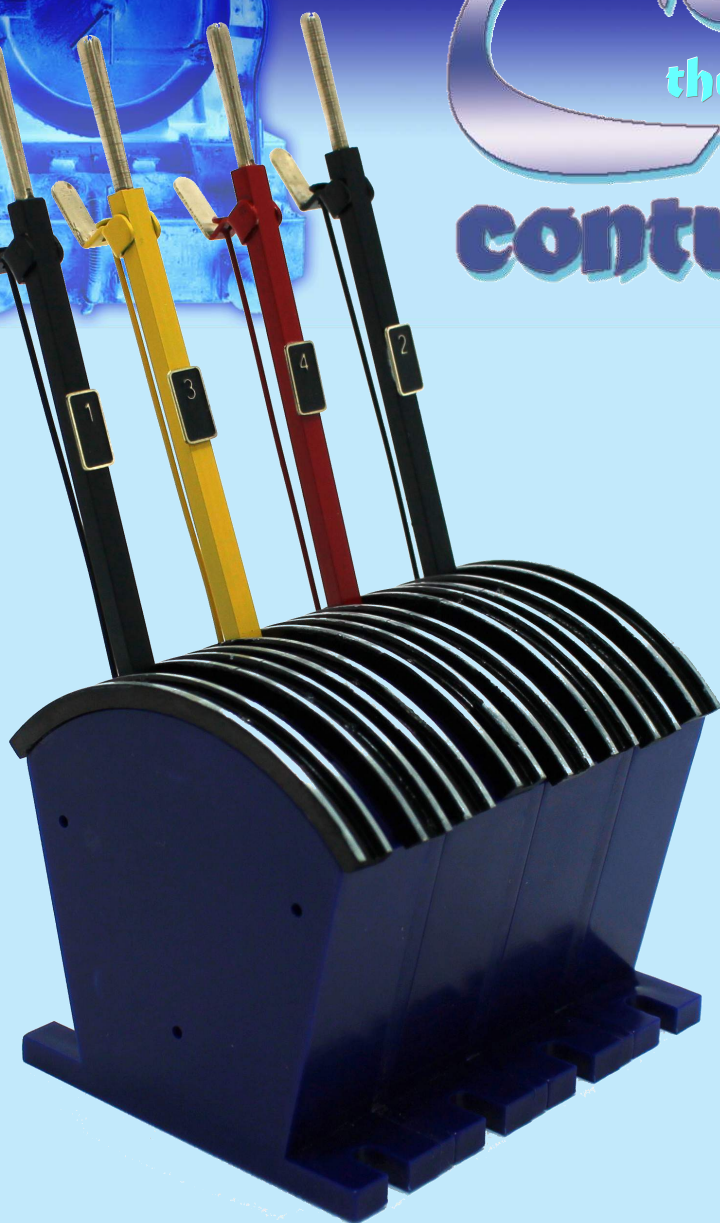
### Cobalt-S can do anything!

Cobalt-S is a high quality "control lever" which has been created to allow modellers to use ONE kind of switch to control ALL of the devices on their layout.

Cobalt-S is equally usable for any scale or with almost any accessory whether AC, DC or DCC powered and with any form of train control at all.

There are a myriad of uses... either for dissimilar or linked operations: For example, one Cobalt-S can do all the following for you: change a Seep, Hornby or Peco Solenoid, Cobalt or motor drive point motor, switch frog polarity, control your panel lights & signals and operate a "safety section" interlocking to prevent a point being crossed without being correctly set.

Cobalt-S really can control almost anything that has ever been created for use on a model railway.



### Cobalt-S: Super-smooth in operation:

140mm high with a solid brass lever & engineering plastic case, Cobalt-S is built to last with a feeling of real quality rarely seen in our hobby.

Cobalt-S uses a typical form of traditional signal box lever. The catch must be gripped to release the lever, and released at end of throw to lock it in position. The pull is smooth and firm and locking is positive. The quality of feel is only exceeded by its abilities - because with one momentary and two standard switches built in to every one, there is nothing it cannot do!

**Cobalt-S can be purchased in singles for you to try - then you can save money by buying it in economical six or twelve packs.**

Six and Twelve packs contain an appropriate "Signal lever" quantity plus the proper quantity of all accessory items. Of course, these packs also save you some hard earned hobby money by offering a lower per-lever cost too.

**Cobalt-S comes complete with accessories that you would usually only find in an expensive limited production Fine-scale hand made kit!**

You don't just get Cobalt-S: Each pack includes etched brass lever numbers, Some finely cast and blackened detail castings, a harness, connection PCB and even the screws you need to mount it with. Accessory kits are available separately too!

