

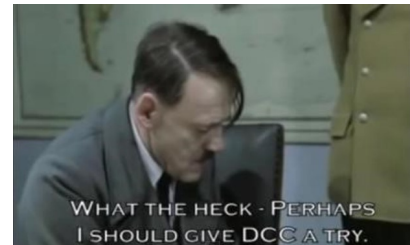
## TEN Very good reasons to "GO DCC"

### DCC is NOT new, and it IS here to stay.

However, as occurs with so many technological innovations... hype, misinformation and loads of good old fashioned "BS" abound when it comes to discussing DCC. The quiet ones already use DCC – they just smile a lot.

Lists can be onerous, so we've restricted ourselves to 10 items here – the first 5 are "removal of excuses" – the second five "real DCC benefits".

SO... here is a wee bit of "history", a little "benefit" data and a few facts comparing DC and DCC that may help to remove a nagging doubt and perhaps qualify the benefits of Digital Command control for you a little.



**If you don't mind the odd curse and have a sense of humour, you might enjoy this take on the DC vs DCC debate!**

### 1. DCC has been well and truly established for many years...

**So you can stop "waiting for it to become mainstream" - it already is!**

Time really flies - DCC in full-production commercial formats has been with us for more than twenty years, with deep, very significant market penetration supported by many DCC brands making control and decoder equipment, and many "niche" suppliers of decoders, accessories, computer programmes and related items.

DCC is a mature product with a solid base and many model railway manufacturers either sell decoder-equipped locomotives OR build the standard "NMRA DCC socket" into their locomotives.

In fact, the majority of current production locomotives from English, Japanese, US, Australian and European manufacturers are effectively "ready to go" with the addition of decoder.

### 2. DCC is standardized, so stop worrying about following one brands progress and hoping it'll grow... or worrying that your choice may disappear leaving you with no support. DCC is not a "brand exclusive" issue... any decoder will work with ANY DCC brand, and older decoders will work with newer systems:

In an effort never seen before in the hobby, a combined effort between the NMRA in USA, MOROP in Europe and mainstream DCC manufacturers has resulted in a comprehensive set of standards to which all DCC products must be made.

Therefore, for the first time, you can truly "mix'n'match" between brands when creating a control system for your model railway.

### 3. DCC works with ANY gauge or scale – There are no exceptions, no excuses (although Z is a challenge!):

Z, N, TT, HO, OO, S, O, G – there are decoders to fit all brands and all sizes. Take a look here to see just how small and easy to install decodes are now! ([DCCconcepts Zen range - including the worlds smallest 8-pin direct decoder](#))

DCC systems also come with varying output voltages and various power levels supplies to handle all current levels of models, from tiny Z scale loco's to "5 amp+ high-current hogs" in the large scale tinplate brands.

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### **4. DCC is safe with ANY Motor from delicate coreless motors beloved of kit-builder to older high current clunkers! In fact it's safer than normal DC as a decoder can be programmed to take care of its motor properly!**

With a little work, even old style Pittman open frame and ancient "ringfield" motors by Hornby Dublo can be adapted to DCC (especially if you also add new neodymium "super magnets"). In fact all motors fitted to locomotives for the past 50 years or so are able to run at least as well – if not better, under DCC control. Those old tender drives even become smooth runners!

Whether your loco's include Maxxon, Falhauber & Escap coreless, Cannon, Sagami or Mashima can motors, are made by Hornby, Bachmann, Atlas, Athearn – or ANY brand in fact, they are likely to run even better under DCC control, and modern "silent drive" decoders are totally safe for even the most delicate coreless motors. You could even run your locomotives on a 14-volt track bus with 4.5 volt pager motors in them, once the decoder is appropriately programmed!

### **5. DCC can be as simple or as complex as you want it to be, and "Going DCC" doesn't mean you have to lose anything, change everything or can no longer share your locomotives or layout operating sessions with friends. You can still do it all!**

NO, you DON'T have to use a computer to run with DCC, but you CAN if you want to. Yes, you CAN run your chipped loco's on a normal DC layout and they will probably run better than they did before you installed the decoder!

(By the way - yes, you CAN still run non-chipped loco' on some older DCC controllers... but we really don't recommend it, and manufacturers are also dropping this function because it can overheat DC motors, so its NOT a good idea!)

NO, you usually don't have to rewire your layout for DCC as long as it's OK and reliable under existing DC control.

Yes, you CAN operate points/turnouts and accessories from the DCC handset, but NO, you don't have to! (We always use panel + DCC control too by the way)

### **That's a few of the common "excuses to avoid change" taken care of. Now... ..on to the "benefits" of DCC!**

### **6. Your locomotives can be individually programmed and tuned to match the real thing so they can perform better than they ever ran under normal DC control**

Because every locomotive is different, even a very high end DC controller can't bring out the best for more than a few of your locomotives.

A DCC decoder allows you to individually tune every locomotive so it runs more smoothly, starts easier and has a more pototypical top speed and pulling power.

This also means that double-heading steam loco's and multiple unit diesel lash-ups between dissimilar loco's are now possible, as each can be tuned to match the other for speed and acceleration.

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**7. DCC can be a simple "plug and play" changeover for an existing layout|: Forget all "doomsayers" who claim a layout MUST be rewired for DCC. Sure, there are "best practice" methods that a new layout should use, but your existing layout wiring probably doesn't need to be changed at all as long as you are currently getting good performance.**

You can however greatly simplify operation... immediately.

All the section switches and blocks can be just "turned on" when you run under DCC control, because you are now controlling every individual loco, not sections of track. Even things like reverse loops can be simply managed under DCC, and you'll never have to worry about a "reverse loop" switch again.

**8. Budget needn't be a problem: In fact, you can easily change over progressively to DCC so the cost can be spread over as long as you need. A controller needn't be buy #1!**

If money is tight, then just start by fitting DCC decoders progressively to each locomotive.

You see, a loco with a decoder fitted can still be run just fine under normal DC control, so you can even still run them on the layouts of your friends who haven't converted yet.

Once you or your budget is ready to go, buy the control unit, disconnect your old DC unit, connect your new DCC controller to the same two wires and GO DIGITAL – it's really that easy!

**9. You DON'T need to be stuck at a control panel any more – in fact you can even have a totally "wireless" controller so you can walk & watch the trains while being 100% in control!**

With DCC comes the opportunity for another change... DCC controllers can be console-based, hand-held or even "glass screen", using your existing smart phone or tablet to control the railway.

"Walk-around" wired-type controllers can be unplugged and moved to another control point without changing train speed or interrupting the action of course, and even turnouts/points and other accessories can be controlled from your handset if you wish.

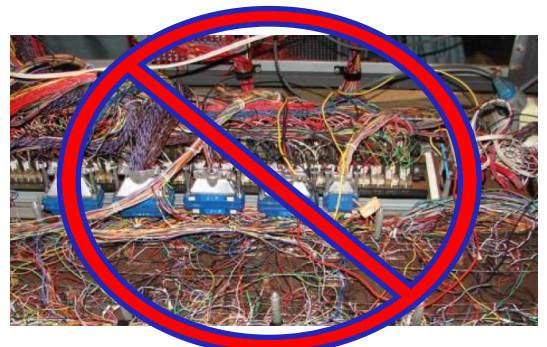
This brings a whole new dimension to operation, especially for "exhibition" and show use, and with larger layouts, you can stay in control and still look closely or be close to the action in areas usually "in the far distance" for a layout operator.

Thanks to [DCCconcepts ESP<sup>®</sup>](#), you can even have a control panel with no wires at all between it and your layout! Most importantly, you have CHOICE - Something that isn't easy to achieve when you run with DC control!

**10. With DCC, truly realistic operation is possible without complex wiring and trains can be used just as flexibly as they are on the prototype.**

No more need for precision stopping to locate the train loco exactly in the place so it can be isolated to allow another loco to draw up and take the train to the yard...

No more having to use only matched locomotives for multiple unit trains - any two locos can be "tuned" to work together perfectly! Add a banking engine "on the fly" for that steep section on the line or turn loco sound systems, smoke units and lighting on and off in the true prototype operating fashion!



## **TEN** Very good reasons to "GO DCC"

**OK – We confess, there are a LOT more benefits to DCC & Digital control!**

**We just told you there were only ten reasons so we didn't overload you with too much information right now.**

But... the only way you're going to find out most of them is by using DCC... and we guarantee that if you do, you will be smiling every time you find yet another of the many possibilities for realistic operation, including (if you want it) automated interlocking of points, turnouts and signalling, easy computer interface so each signal box diagram appears onscreen, easy "one button route setting", the potential for automated uncoupling, on-board sound systems...the list is already nearly endless, and the possibilities just keep growing!

### **Is everything easy and simple?**

NO, of course not... but modellers from 7 to 70+ all over the world are using and enjoying DCC, so you can too.

Some steps do require you to learn a little, and add the odd feature to your system, or need a bit of thinking through...

However ALL DCC is easier to be creative and operate with and in the end, It's far less frustrating than a hugely complex DC layout... anyway - many "simple" DCC functions are plain IMPOSSIBLE with a conventional DC control unit.

Go on – take the plunge – Be part of the DCC revolution and take the time to become familiar now with the control system of the future. You might as well do it now - because before too long, EVERY off the shelf loco will be ready for DCC!

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**There is also LOTS more information on our website at**  
**[www.dccconcepts.com](http://www.dccconcepts.com)**