



No more wires!

No wires. No effort. No problems!

When we created the Cobalt Alpha range, we reduced the number of wires between the average layout and control panel with LED indicators or feedback by considerably more than 100 and reduced the need for connecting and soldering wires between panel and layout to almost zero.

With the release of ESP®. It can now really be zero!



No long wires, no soldering, no complications

Usable in any scale

Totally universal and exceptionally simple interface

Allows anything to communicate, command or report to anything

Seamlessly useable with any DCC brand

Simple to install on DCC, DC or AC powered layouts

Equally comfortable on shunting planks and super-layouts

Zero dependence on local Wi-Fi networks

No complexity, routers, passwords or other arcane digital nonsense, but totally secure

Absolutely zero interference between layouts at exhibitions

Incredibly long communication range... ..even through walls!

Keeping the promise...



Since the inception of digital control, modellers have been told that less wires are needed. In its simplest form, DCC did indeed meet that promise... but add anything at all and it all returns.

If we tried to reduce that wiring, we often moved from simple connection of things to the need for Wi-Fi, with the inevitable routers, passwords and computers, with all the inherent limitations that brings, taking our hobby from relaxation to intense frustration in one giant leap as the need for both hardware and software compatibility reared its unwelcome head.

So... ..promise and reality have always been very far apart.



➡ **Bridging the gap**

There were two major hurdles. Technology choices that are, at first sight, versatile... but they have excruciatingly frustrating limitations and proprietary interfaces that force modellers to follow "branded product" paths that inevitably only ever get narrower as your need progresses. Somewhere in between are the "miracle products" that claim that they can do anything but need you to have the ability to do a Rubik Cube while juggling to get operational... wondrous bits of kit from software wizards that eventually make us all lose the will to live. DCCconcepts has a particular attitude to such things. A need to do it better while reducing the complexity and widening choices. We knew we could do it better if we thought long and hard, and we have.

➡ **So, with ESP® ...thinking outside the square is more than a by-line**

Always, we have explored making it better without making it harder. We are now proud to release just the first tiny stage in a new product group, which will be known as DCCconcepts ESP®. A small step with exceptional usefulness that makes new things possible, is unlimited in potential for even the largest layout and removes almost all of the need for long wires, no matter which brand of DCC or style of control system you prefer.



➡ **Removing the wires!**

The standard DCC bus is limited because of the need to maintain both proprietary brand and all forms of "backwards compatibility". So – the alternative has always been yet more wires & tech stuff! The alternatives just haven't worked either. Wi-Fi is both limited in the number of active devices it can support (as all with a busy Wi-Fi household already know) and it can be intensely frustrating for many modellers. It is also impossible at exhibitions, where a bus Wi-Fi environment just stops everything in its tracks! Proprietary feedback units can be even worse... often needing multiple outputs that need many, many wires or special cables to connect and even then, are limited to ONE brand of controller.

GET RID OF ALL THE WIRES AND KEEP IT SIMPLE.

➡ **Removing brand and bus dependency**

ESP® just talks DCC.

It does not care what brand of DCC you use, or which scale you model in. ESP® doesn't care if you drive your trains with DCC, DC or AC... there is always a way to use ESP® to massively reduce layout wiring complexity!



➡ Removing the limitations

ESP
Ψ
READY

The usual approach to “Wireless” has been Wi-Fi, but every Wi-Fi user knows the penalty for adding many devices to a network... Forgotten passwords, lousy Wi-Fi reception, long boot times, lost iP addresses, random failures of communication and general “tech-tiredness”... ESP® fixes all that too. Once an ESP® sender and ESP® receiver are married with a simple one-step process that needs NOTHING else to initiate, they stay faithful. They work perfectly, every time. ESP® works quickly too, even with many receivers in action, layout start-up times are super quick, and communication stays rock solid.

➡ Making it simpler

No routers, no passwords, no iP addresses, no channel number limitations, no conflict with any other wireless structures, no frustration at all.

Connect two wires. Move one switch. Press one button. Job done, ESP® is in action!

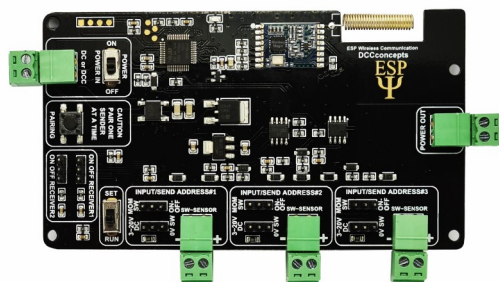
➡ Offering new potential without making anything redundant

You buy lots of good kit and get stuck in. You discover that you need or want to make that tiny EXTRA step and suddenly there’s a dramatic drum-roll and a smiling salesman says, "Thats OK, it can be done... but ONLY of you now replace almost everything you already own. Not this time! No redundancy and no waste. All your existing stuff is ALREADY “ESP® ready”. ESP® will literally work with pretty-well ANY device that can send a signal, change the impedance of a circuit or do anything else electronically.





 **Simple to use!**



The ESP® Transmitter or sender:

Connect the power input to any form of switch or detector or anything else that can “do stuff”.

Move a “SET ~ RUN” switch to “SET”

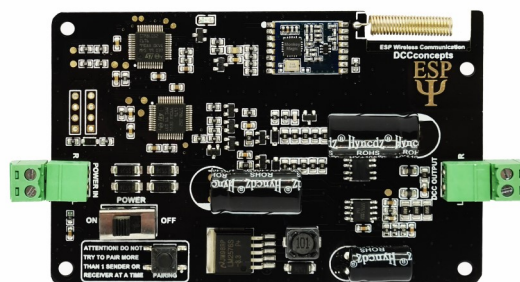
Give the first input any address between 1 and 2044, and the other two will auto-set as well.

Return the switch to “RUN”.

The ESP® Receiver:

Connect the power input to the DCC track bus OR to a regulated DC power supply.

Connect the output to the track bus OR to the sniffer input of your DCC system if you wish.



The Marriage:

Press the “PAIR” button on the ESP® Transmitter or sender.

Press the “PAIR” button on the ESP® Receiver.

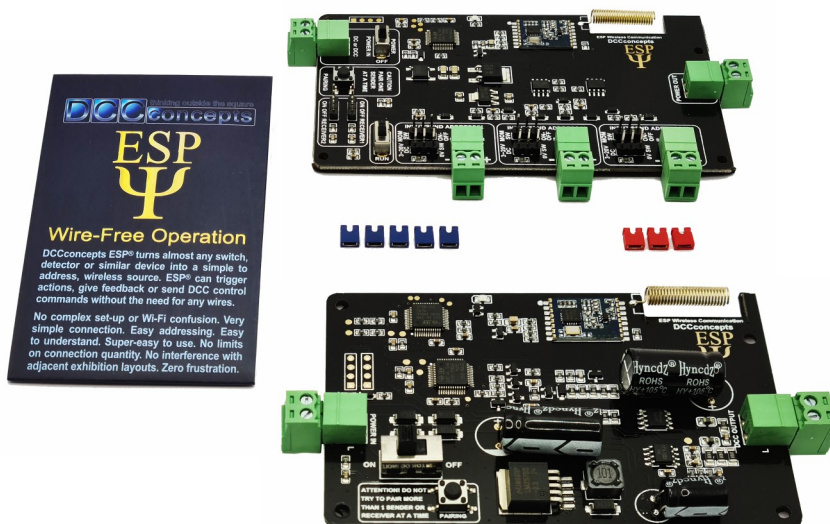
Watch the LEDs flash for a second or two... ...job done!

Any ESP® transmitter can be paired to TWO different senders if that is what you wish to do. Any input can be volt-free or have an active DC voltage connected to it if that is what you need to do...

 **Tomorrow really IS tomorrow, not an empty promise**

*Despite the world-wide shortage of microprocessors, we have at last managed to beg, borrow and steal enough to stay on-time and ESP® is being delivered right now. DCCconcepts ESP® will be in stock **and** on demonstration at **The Great Electric Train Show, Milton Keynes on October 2nd and 3rd, 2021.***





We are all modellers. We really understand the roots of technology, but like you, we want to enjoy our modelling, not get tangled in a computer game involving our trains. We just want the best, with the least stress and we want to get to be able to run trains without the need to boot a computer and re-configure our life before we start.

Look closely at ESP®

It's here now. It's easy to live with. It's DCCconcepts "Thinking outside the square" at its very best. You can take a look right now. We are accepting orders right now. Delivery will happen within 2 to 3 weeks, depending on your choices.

Click the image below to be taken to the ESP pages of our website...





DCCconcepts Dealer Network

You can buy ESP® direct from us by on www.dccconcepts.com - or you can order from any of our dealers. Our dealer network is always growing - find out if there is a dealer near you by clicking the globe below!



I hope you are as excited about ESP as we are... it's a product which is able to deliver a promise made decades ago by DCC and has the potential to completely revolutionise layout wiring!

We have done our best to make you a product that is super-simple to install and even easier to connect, but please... if you do have questions, we are always happy to help.

We are here 6 days a week and will be happy to take your calls any day between 10am and 5pm.

Best wishes from all of us here at DCCconcepts

Richard Johnson

Did you enjoy the contents—please let us know.

Don't be shy: We invite you to email us and discuss any changes you might like to see and welcome ideas for any "style" changes or additions we could consider to make more interesting reading.

Of course, if you have a specific subject that you would like us to cover, we will listen. Please email us at web@dccconcepts.com and we will see what we can do.

Until then, thank you for sharing your valuable hobby time with us.