



Zen Decoders - A quick warranty guide and overview

Zen decoders and DCCconcepts control systems development is now in high gear and we now have several full-time hardware and software engineers working on this range of products.

This gives us a new and very important synergy and it is allowing us to investigate the limits of DCC and is allowing us to find new ways of doing things, keeping the Zen range very much in the "Lateral thinking" space it was originally designed to occupy.

Thanks to smart-phones etc, the microprocessors used in decoders are ever-harder to source, so we are also now migrating all Zen decoders to a much more available – and happily, also a much more sophisticated microprocessor as a rolling change.... So watch out for some exciting new features!

Manufacturing of our decoders is done by one of the best Surface mount assembly plants there is, with all items specifically ordered for each batch and supplied as "Just in time" parts so that pre-fluxing, pre-tinning etc. on both PCBs and components are all at their best when we assemble them.. . Leading to exceptional quality and reliability.

Every decoder is tested live 3 times on full track power as well on the programming track where loco drive, function outputs, addressing and CV change are checked.... This is before we ever receive them here at DCCconcepts, and once that happens yet one more test is done prior to packing, so we really do KNOW they all work when we sent them to you!

We have also done our best to make Zen and all of our digital products reliable in use, but as in all other areas of the hobby, modellers are endlessly creative and unfortunately loco makers also make mistakes... so we DO expect the odd failure, no matter what we do.

We are confident that very few will really be warranty though!



We have done our very best to make our ZEN and other Decoder products as good as they can be. All we ask is that you, as a re-seller, take the time to validate any problems properly first:

Basically: Decoder warranty is simple: If there is no burning or heat-marks on the heat-shrink and the decoder will not respond after 3 resets, we will replace it.

Learning what to look for:

- Read and learn about Zen Decoders using the many manuals and advisories here on the website and accessible via the "Manuals and Advice" section.
- Read about / use the warranty information provided here. Learn what is and isn't warranty.
- Listen carefully / talk to anyone who claims problems, make sure there really IS a problem (there often isn't) or find out what the problem is, why it happened.

Where needed, teach your customer how to get it right so they do not repeat the problem.

(Any time you educate a customer they become more and more "Yours" for the future!)



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Testing and proper assessment prior to warranty acceptance or replacement:

- If it has burned heat-shrink, it has been overloaded or either the motor drive or a function wire has been shorted accidentally. This is NOT warranty. (We do understand that it may be a faulty loco or something else that's not the customer's fault, but that still isn't warranty!)
- If a wire is broken off a harness this will more than likely be a customer issue, but it is quite easy for you to resolder it for them as a customer service – so please do so.
- Reset the decoder first (CV8 = 8) then Check and test the things that the customer has problems with. (By far, most "setup" issues are simply customer error)

Still have a problem?

- If there is no sign of physical damage and after 3 resets (set CV8 to 8) it will still not function, it can be treated as warranty. So it's probably OK to replace if necessary.
- Please remember that testing and checking comes first.
- ONLY replace any decoder after you've tested it... and then, ONLY if there is no visible heat damage to decoder or heat-shrink...

For other Zen products due soon, other things may apply: Please read all of the warranty information that will be made available as we release them

What is NEVER going to be warranty... again, this is mostly common sense!

- Modified items. anything changed in any way from the way it was when we sold it to you.
- Packaging damage. All Items leave our shelves in top condition. We check as we pack!
- If the packaging was damaged when you received it, you should have previously told us or your distributor about it, and / or claimed on the carrier or your insurance. (There are strict policies for this with most carriers).
- If you sold it and the customer finds out later it has damaged packaging, we are sorry but it is of course between you, your carrier and your customer.
(We MAY be able to help with new packaging - but please be sure to ask first)
- Incomplete returns. It left us complete, so of course, it must be returned complete. If the harness is missing, the accessories are missing, or in some cases, the packaging or parts are incomplete, then it's not complete.
- EBAY purchases. By definition most E-bay sales are second hand. We value real specialists within the hobby so we do not support resellers without bricks and mortar stores as the core of their business.

We hope this quick overview is of help to you.

Please read all of the detailed warranty and customer service info we have made available here.



A quick "Added comment" to help improve results for you.

Continued... A few things that help - and that we think you as a specialist should always do.

Modellers are strange beings... They will spend hundreds on a loco but go skip-diving for wire. They will lavish care on buildings and scenery, doing or placing everything according to detailed research... but they are careless & try to wire up complex electrical / electronic things before reading instructions. They'll look for the best and prettiest DCC control system but try to use 50 year old train-set controllers or DIY power supplies to power it - or use them for expensive scenic lighting or electronics...

There lies a BIG potential problem. Accessory products are at the core of YOUR profitability, but the products that we make and you sell are very often not being powered, wired or used properly... and if you let it continue, then you are actually contributing the problem, inviting more problems than you want... AND missing out on some seriously good, quite profitable sales opportunities!

Please....

- **Learn to listen - Especially DO take time and REALLY listen when something is returned.**
Listen... and listen again. Let the modeller talk about how or why it failed, ask simple questions... the real situation will often emerge and you will then have the possibility to talk him through it and teach him how to do it right so he will not repeat the problem. More often than not, failure is really all about how things are installed or were used... so there's NO point in replacing it if the customer is not also taught how to do it right, or history will just repeat itself!
Basically - be a true specialist! Make every customer contact a chance to share good knowledge.
- **Stock and sell the right wire and wiring Accessories.**
Learn about wiring for DCC in particular... and make that Accessory / wire sale. To see what it really takes, look at the DCCconcepts website for dead accurate "best practice" for DCC wiring.
Any modeller that follows good wiring advice usually has no problem elsewhere, making him or her the perfect customer!
- **Encourage modellers to throw away or not use older controllers or unregulated DC units.**
Their output is NOT suitable for modern model railway electronics. They seldom put out less than 1/3 more than the voltages printed onto their cases. Electrically they are also really quite unsafe compared to modern units and as time goes by they will deteriorate & become quite dangerous.
- **Other than for CDU use steer clear of all AC power supplies.**
Every bit of modern electronics, including DCC systems that sell AC supplies like Lenz, actually work BETTER on regulated DC. Stock only quality power supplies with regulated DC outputs. There is great potential income for you available from high quality DC power supplies, whether they are common wall plug types or "benchtop lab power supplies". Take advantage of it!
- **Get them to throw away Grand-dads soldering Iron.**
Old Irons are very dangerous things and kill people every year. Stock only good quality soldering Irons. Sell 50watt, not 25 (Faster heat delivery makes soldering easier for a novice) and read our web data on soldering please). Make sure every sale includes DCCconcepts top quality solder and flux- because all solder is NOT the same and they are the best there is! No, it isn't cheap... but it's not a price sensitive area anyway... And top performance really validates the cost!
- **Learn about the potential of DCCconcepts products as most can do more than you think!**

Your future existence as a specialist really does depend far more on knowledge and accessory sales than on loco's and the like. We have tried to provide you with knowledge here on our website. Please use it, succeed and bring a new lease of life to Model railway specialist retail!