

RoWaves entered the market with (tr)uSDX, that performed sub-standard. In their document, published here: <https://rowaves.com/wp-content/uploads/2022/07/Technical-analysis-file-truSDX-rev.1.2-rowaves.pdf> they try to explain how it happened in their perception, and how it allegedly can be fixed.

This is the official counter-statement to RoWaves „*Technical issues assessment file*“ by the project creators (DL2MAN and PE1NNZ).

Our counter-statement will be short, as the whole incident is really simple and can be narrowed down to a very few aspects.

### **1. License**

The cooperation between RoWaves and DL2MAN/PE1NNZ happened under the simple rules of (tr)uSDXs „CC-BY ND“ license. The relevant part of this license requirement is the „ND“ Part: „No Derivatives **-If you remix, transform, or build upon the material, you may not distribute the modified material.**“ In simpler words : „Don´t change anything“. Our reason to chose that exact license model is to make sure, the customer can expect a certain level of performance, when buying a (tr)uSDX.

### **2. RoWaves kits - assembled with incorrect components**

When reading through their „steps for improving PA stage efficiency to 65-78% on all bands“ section, reader will realize, this does not deviate from the developers assembly instructions. But one of the first sentences, reveals already the underlying problem:

„(...)On a non-assembled PCB (only SMT assembled), **with correct values of LPF capacitors installed (NP0/COG, 100V rated)**(...)“ They point out, that the correct components must be installed on the PCBs.

This is further **confirmed and admitted** in their document as experiment „c) TRU-I3“, where they replaced the wrongly chosen capacitors with the right capacitors - with the result of increased efficiency.

This is **continued and confirmed** in: „d) TRU-I4“ → „trial 10)“

„order a new batch from JLCPCB with no deviations (BOM and materials as described and recommended by DL2MAN) and tested all proposed solutions“, which resulted in 10-13% improvement in efficiency and abt. 4% in output power.

The low-efficiency problem in RoWaves kits was caused by the **-admitted-** fact, **RoWaves has knowingly chosen to substitute some NP0/100V capacitors with X7R/50V types.** They further claim, the required NP0 type capacitors were not available at that time, which cannot be confirmed. So they decided to deviate from the original design, without knowledge or approval by the original designers.

Their own document has now revealed, that **the root cause for their issues was the fact, that they deviated from the original design (which is in violation of CC-BY ND license)**

Other issues (like programming problems, caused by a different USB Chip), were caused by the same deviation of RoWaves components choice.

### **3. Constant requests by RoWaves to deviate from agreed license**

Even though, the cooperation was agreed upon, under the conditions of the CC-BY ND license -which is also confirmed by the referenced document- **RoWaves constantly asked for changes in the design or substitution of parts, showing their lack of understanding and/or respect for the agreed license model and the design itself.** (tr)uSDX was published „as is“ and anyone who thinks, that (tr)uSDX doesn´t suit his/her needs, is free to develop his/her own radio.

That´s all, that needs to be said regarding the technical issues with RoWaves Kits: **The problem was caused by RoWaves bad component choices only. The design itself is mature, which was proven and documented by RoWaves, when they started following our published assembly instructions.** They still were not able to achieve the required minimum 80% efficiency (for approval) which is explained by the fact, that their presented results are labelled “without tweaking“, which would be required (for approval).

### **4. Commenting on RoWaves „excuses“**

Now let´s just address some claims from the „how did this happen“ section:

- 3) → RoWaves was „pushed“ to 1 week vs RoWaves standard 5 weeks of project planning phase  
We made RoWaves aware of the fact, that there was a lot of competition, and speed would be key to their own commercial success. However: We did not -nor could we- force RoWaves. Participating as supplier is a voluntary choice. A professional company should be able to make their own decisions

regarding realistic time-lines. If they knowingly deviate from their required time-line, that choice is not to be used as excuse towards customers or us. Solution could have been their simple expression of "No!".

- 6) → Proposed NDA was never signed, as it contained phrases, that could have been interpreted, as if RoWaves would acquire „legal rights“ of the (tr)uSDX design. We insisted and agreed upon CC-BY ND license, and emphasized, we (DL2MAN/PE1NNZ) would be and stay the only license owners.
- 7) Non-availability of parts: We named RoWaves alternative -known good quality- sources for all of the "unavailable" parts. They just didn't chose to select „our“ sources. Correct parts were available for purchase at all times, yet not from all of their established suppliers.
- 9) and 10) was self-inflicted by their choice of wrong components during their JLC-PCB ordering process. See point 2 of this counter-statement.

## 5. **Commenting RoWaves „final thoughts“**

In final thoughts, section f) RoWaves complains about choice of vocabulary. Very „direct“ words had been chosen to match the circumstances, that were caused by RoWaves actions. Professionalism is not measured in choice of words, but choice of actions. Readers need to understand the context here: at this Point, we had discovered issues with the kits, we had communicated all our findings towards them, and **did not hear back anything for almost 1 month (no reaction between Feb 18<sup>th</sup> 2022 and March 14<sup>th</sup> 2022)**, while reported problems with RoWaves kits started to pile up in the forum. Sales were still ongoing at that point. We learned at the same time, that RoWaves was giving bad advise to customers (denying service, even though the underlying problems were directly related to their unauthorized substitution of parts). This was the moment, where RoWaves could have stepped up and really show by action, what kind of company they are. Instead they used my „direct“ language as their excuse to again break contact. Public rants by their unhappy customers were the direct result of RoWaves not showing any sign of **public** presence or support. Customers felt left alone by RoWaves and came to the forum as well as facebook, to warn other potential customers. That is to be expected, and not to be blamed on their customers, or even the designers.

RoWaves was **not** the „trial“ company as claimed. (tr)uSDX design was tested and proven. At the same time-frame, when RoWaves was trying to enter the market, another company obtained all the parts without problems or requests, by simply following the published documents. They´ve created and sent a perfect sample on their very first attempt and made it through approval process without any further issues. This fact is another proof, that the (tr)uSDX design and the published data was sufficient to get the job done.

Latest action was e-mails by RoWaves, announcing their wish to re-apply for approval. In general, we had no issue with that. All their related questions were answered by us. But we further wanted to clarify the problems, that lead to halt of communications and publication of their (referenced) document, instead of acting as if nothing had happened. We expressed our concern, it would be no basis for a cooperation, when there´ s still open disputes between two parties. They kept ignoring our requests for settlement. Instead, they started publicly to question our honesty and integrity. This repeated open display of disrespect lead us to the conclusion, that their understanding of work ethics is not in line with ours. RoWaves had shown more than once to not respect the CC-BY ND license and the creators of this project, so we see no other choice but immediately cancel all of our support for RoWaves.

We -the developers- are a private party and approval by us is a voluntary service, conducted in our limited free time. We don´t spend our resources on companies, that do not appreciate our efforts. We suggest RoWaves to clear their stock and stop producing and selling (tr)uSDX. This is the end of our cooperation with RoWaves. Any support for- and communication with RoWaves has fully stopped with immediate effect.

23. July 2022 Manuel; DL2MAN and Guido; PE1NNZ

Relevant Resources:

<https://dl2man.de/>

<https://dl2man.de/1-trusdx-group-buy/>

<https://dl2man.de/2-trusdx-assembly/>

<https://forum.dl2man.de/>

<https://www.facebook.com/groups/trusdx/>