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Subject: New "Tube" Books by "Elektor"

Posted by [FL152](#) on Wed, 27 Apr 2011 12:18:15 GMT

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Well, this one is a relatively new one. Dutch and German versions were out a couple of years ago, and the English version finally arrived by the end of 2010.

I bought the first Menno`s book in English „Transformers and Tubes in Power amplifiers" about 15 years ago (huh, time flies). It was one of the first „serious", new technical books about tube audio, and it was an „eye opener" for me.

In short form, together with some technical papers on the „Plitron" pages, it teaches the whole DIY community about output transformers, and their interactions with output tubes.

The second English book, „Modern High-End Valve Amplifiers" available about 2000. gives the same, and many new information. It didn`t contain everything, like some RDH-form, but concentrated on some Menno`s work about toroidal transformers, and possible DIY implementation.

The newest book, „High-End Valve Amplifiers 2" gives some new material, and new thoughts about some old subjects.

In the first chapter, about tubes, it gives some research about „modelling" triodes and pentodes, about Child-Langmuir equation and its limitations. Interesting for the readers involved in various SPICE models and mathematical lovers, but for more practical DIY-ers, sadly there are no final „recipes" or tube SPICE models.

In 2nd Chapter, there is more about tube/OPT setup, A - A/B class (missed in old publications); current model is used, as graphical method by Thompson.

The third chapter is about various OPT/tubes coupling - UL, cathode feedback, etc. Fourth chapter deals with frequency / phase domain, how the author tried to get an „optimum tuning". Fifth chapter is about feedback.

Other chapters contain less theoretical and more practical themes - various amplifiers and preamplifiers, thoughts and experiments, not just the technical side, but also sound-based. There are some new and interesting themes, for example auto-bias circuit, some discussions about ESL, RIAA preamp, etc.

I`m a bit confused by this book. There is a lot of mathematics that I didn`t check, there are many diagrams, formulas and tables. Graphics can be better, but it isn`t the point. The point is possible practical use of this knowledge / informations by „average" DIY-er. Obviously, the author cares for that aspect and gives some very basic DIY projects together with more advanced ones.

Maybe I expected more, after eleven years waiting for another book. Many information is good, but already more or less known, from the author`s web page, or other sources. As I said, after all this talk about tubes / OPTs modelling I expected working PC models. I expected better A/AB class explanations, more about various coupling (cathode feedback, etc.), probably through modern PC modelling, not just old Thomson graphics, ugly drawn in small pictures.

To be fair, this is a good book, full of many information you can`t easily find elsewhere, just (obviously) not the first one you grab when you need something tube-based, but, IMO-a speciality book for some special themes...and readers.

Another Dutch book, „Fundamental Amplifier Techniques with Electron Tubes" by author

Rudolf Moers is a very ambitious enciclopedia about tubes (800+ pages!), through author`s research, „theoretical explanation of how the practice works“.

In short, the author covered principles of electron tubes, from diode to pentode and their coupling „to the outside world“ through RC parts, transformers, etc. The book covers frequency dependent behaviour, distortion, negative feedback, and the practical side of building amplifiers. Every page is a full of formulas, pictures, and tables, many of them drawn by hand. There are no SPICE simulations, but also there are no some other DIY things like CCS, plate and grid chokes, etc. But, various tubes and circuits are covered, measured and (mathematicaly) explained , from EF86 to 300B, from SE to PP. The author establishes various test circuits with „universal“ OPTs and PS, then shares with us his findings. As far as I can tell, „tube theory“ is well-covered, and the experiments are nicely presented.

If a potential reader can find the time and patience, then this can be a very long read. And very interesting, if you are a math/electronics Geek. The less patient reader can probably skip about 70% of its content and read the conclusions, together with some more interesting diagrams. Are there some inovative projects, one that we can have a desire to build after reading this book? IMO - hardly.

Huh...obviously, it is not easy to write a „tube book“, especially one that can be interesting to the wider audience, without losing its correct technical contest.

I can hardly wait for „Valve Amplifiers 4“, by M. Jones...probably in November 2011., stay tuned...

## File Attachments

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- 1) [Mennovanderveen.jpg](#), downloaded 9585 times
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