Background

The Tech Model Railroad Club (TMRC) from MIT, Boston is one of the most popular model train clubs in the world. The club is famous for inventing hacker culture and is the origin of the terms for “hacker“ and “foo”, which had already spread around the world by the 1960's. They are also famous for the creative and advanced automated system control. The TMRC is the historical guide for this project.

Model trains, built solidly or temporarily, have been a cultural phenomenon in Central Europa until the 1980's.

Hobby model trains were digitised using proprietary components. The typical model train driving around the christmas tree has become just a historic image today.

Rising prices and new hobbies have shrunk the role of model trains. This industry is a prominent example of now a lack of standardisation and far too expensive digitisation destroyed their market.

The world drives direct current. Just where a vendor defends his market share, the enthusiasts are divided into two groups: “direct current“ and “alternating current“. These systems are incompatible.

The upcoming cheap semiconductors and integrated circuits. This hobby could revitalize.

With digitization, there are different solutions created and put on the market – including expensive supplements due to a lack of scaling.

The vendors are only covering the need of the upper middle-class and very engaged hobbyists and collectors

Progress through micromachines

Today, there are effiicient, inexpensive, uncomplicated microcontrollers and minicomputers with simple and easy-to-learn user interfaces and software. Batteries and recheargable batteries are becoming more and more powerful.

With the help of free software and hardware-everyone is able to shape the model train techno-logy. It seems to make sense to tie in with thehacker culture of the TMRC.

FYMT wants to demonstrate current technology with model trains.

Energy on Board

The fiight between direct and alternate current-use and two-wire-circuits against middle-wire-circuits can be stopped by a loophole:

The electrical energy won‘t be provided via the rails, but will be stored in the rolling material (batteries).

This has the following advantages:

- No wiring,
- Rail systems are irrelevant,
- Light corrosion of the rails don‘t interfere the run.
- The use of traction tires is possible on all driving shafts.
- Used material can be reused („Granddads attic“).
- If you want to use different models, only the rails are a requirement, not a special system.
- The service outside of buildings (like a garden train) is much relieved.

Freie Software Freunde e. V.

FYMT

Free Your Model Train

...and no, we're not a model train club!

https://fymt.de

Project Objectives

- Minimise vendor-lock-in
- Affordable hardware
- Use existing, established, old technology
- Educational use

Principles

All software and all documentation will be published under free licenses.

Restrictions, including those on commercial use, are not acceptable.

Why Do the Freie Software Freunde e.V. support this project?

We want to liberate Free Software and Open Standards from the “IT-Corner“ and convince technical oriented people of their advantages.

We want to talk with people who don‘t know the terms “Free Software“ and “Open Standards“.

Free Software and Open Standards should be in the everyday life of normal people.

Of course, we have fun with this project.

Only with joy you can inspire other people.

Support us!

- Participate!
- We accept donations:
  IBAN: DE57 6609 0800 0000 7999 47
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About the Freie Software Freunde e.V.

We are a non profiit association in the public benefit registered and located in Düsseldorf, Germany. We are committed to Free Software and Open Standards. Software is not just technology. It determines our everyday lives.

That's why we want to raise awareness of the importance of free software and open standards. We therefore take care of topics beyond technology: politics, education, ethics, psychology, ecology and economy, licences, …

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