

Minutes – Wien, Austria – April 4-6, 2002

The DCC Working Group meeting was held April 4th-6th in Vienna (Wien), Austria.

Dr. Grünig – Fleischmann	Peter Ziegler – Zimo Elektronik	(Saturday Only)
Torsten Kuehn – Ing. Kuehn	Arnold Huebsch – guest	Josef Siegl – Zimo
W. Seewald – Tillig	Marcel Thomas – CDF	Ewald Sperrer – STP Software
Stan Ames – L5357	Thomas Gutsche – Lenz Elektronik	Gerhard Gammerer – Zimo
Reinhard Mueller – NMRA 121885	Robert Bouwens –	Peter Littfinski – LDT
Brian Barnt – NMRA L5192	Jan Abbink – Abbink Software	Reinhard Pasbst – Roco
Bernd Lenz – Lenz Elektronik		Xuan Cuong Tran – cT Elektronik

1. Thursday Evening (7 PM)

1.1. Conformance and Inspection

Jan Abbink reported on the status of Conformance and Inspection testing in Europe. Attached with these minutes is a copy of his presentation.

Due to the rather high costs for testing at commercial and university institutes all participants agreed to look for other possibilities. Proposals are to be sent to Jan by mail. Jan will keep the core team informed about these proposals and further progress.

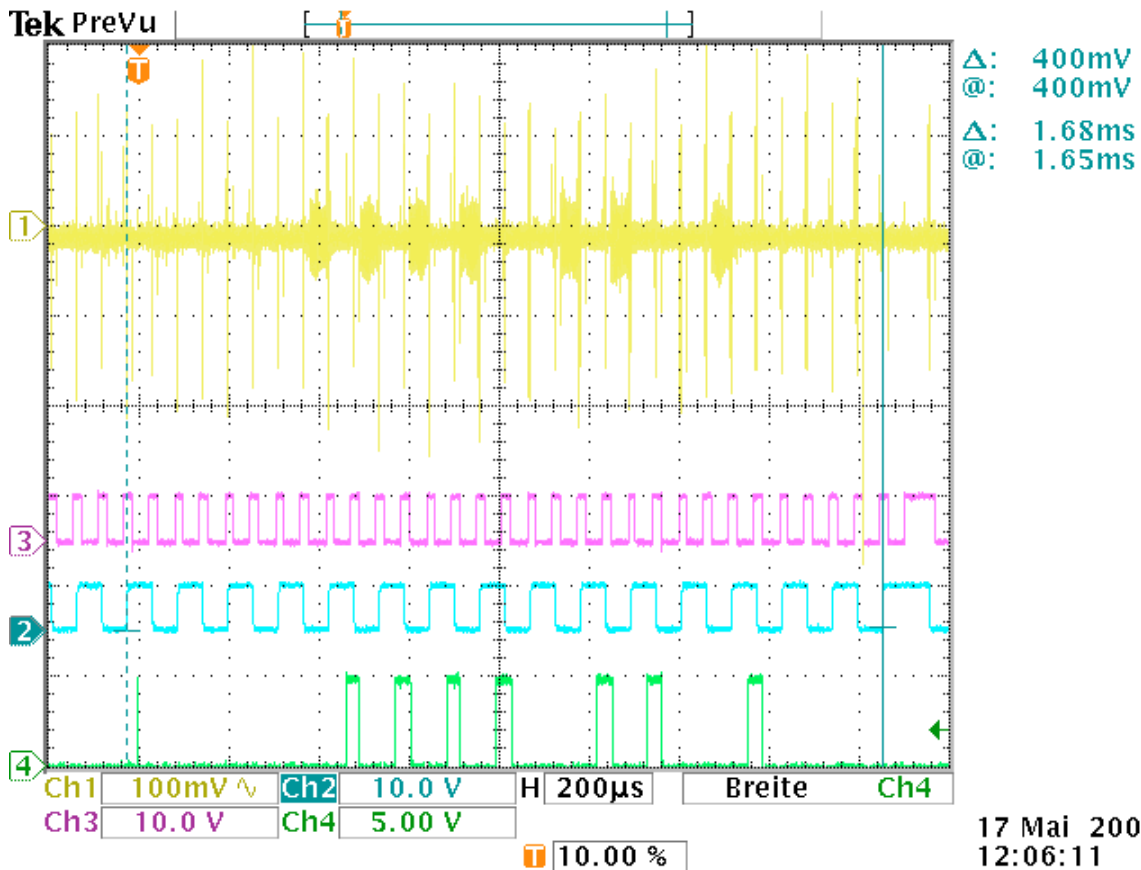
1.2. Marketing

No further discussion.

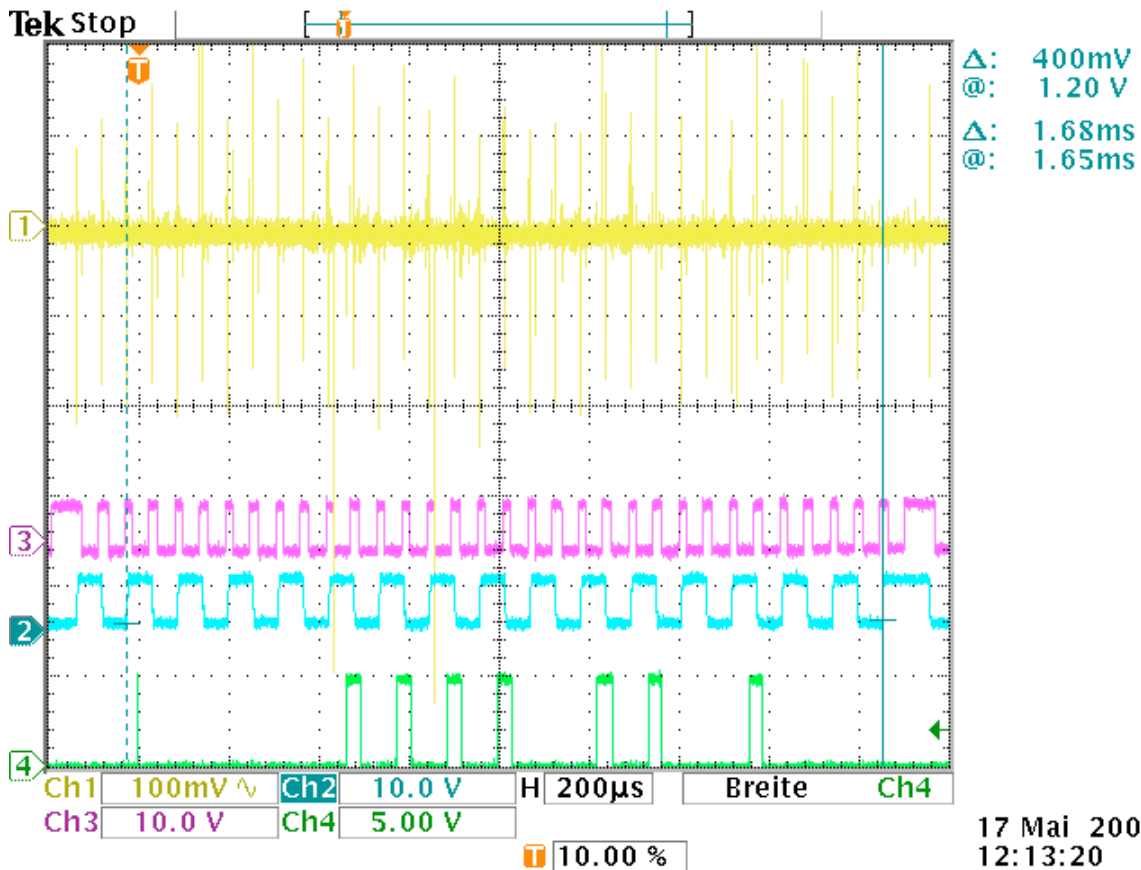
2. Friday (8 am)

2.1. Topic – Bi-Directional Communications

- Working presentation by Thomas Gutsche of Lenz, demonstrating the reliability of bi-directional communications in both a quiet and a noisy environment.

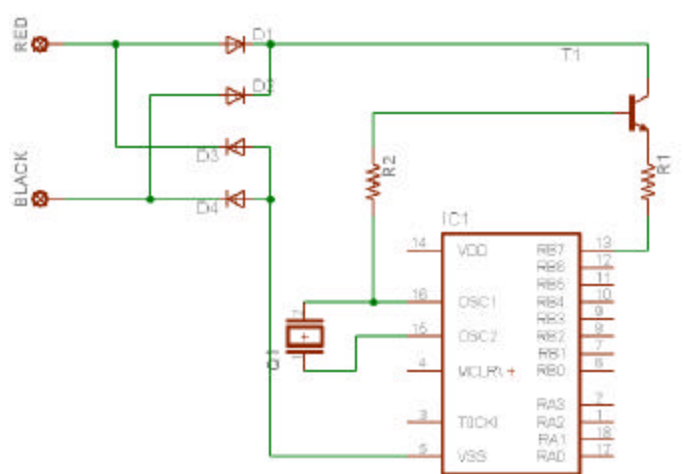


The top (yellow) trace is the current supplied to the track section. Note the 7 current bursts. The violet trace is the sampling window. The cyan trace is the DCC track signal, and the green trace is the encoded output (3 of 6 and 4 of 8) of the detector,.



This is the same setup as the previous example, with more current masking the signal. The detector still picks up the 4 MHz signal.

- Discussion of signal generation (Example shown)



- Discussion of signal detection – 4 MHz signal is detected with tuned circuit, then mixed with 200 kHz
- Discussion of Patents
 - Lenz
 - Ireland
 - Ames (Application)

Vote to proceed with Bi-Directional concepts: Aye – 16 Nay – 0 Abs – 1

Review of RP-9.3.1, section by section.

Vote to proceed move RP-9.3.1 to Draft & start 10 week review: Aye – 16 Nay – 0 Abs – 2
(Huebsch joined meeting)

Review of RP-9.3.2, section by section

2.2. Tour of Zimo (Friday Afternoon)

Toured Zimo's factory, then (very nice) large private layout.

3. Saturday (9 am)

Continued discussion of Draft RP-9.3.2 – Split into two parts:
RP-9.3.2 – to contain requirements for Bi-directional support
RP-9.3.3 – to contain extended features using Bi-Directional

Vote to proceed move RP-9.3.2, as discussed, to Draft status and start 10 week review:
Aye – 16 Nay – 0 Abs – 2

3.1. Review of Fall Meeting

Minutes reviewed & accepted.

3.2. Comment Period for Proposed RPs (RP-9.1.1 to RP-9.2.3)

Discussed status of each RP

Motion from the floor to Re-open RP-9.2.3 Service Mode discussions (due to Digtrax comments)
Aye – 0 Nay – 12 Abs – 5

3.3. Topic 951001 – RP-9.1.2 Control Bus

Discussed Control Bus RP. Several did not like the name 'Control Bus' – suggestion to change RP Name to 'Power Station Interface'.

3.4. Topic 9910241 – Analog Output Instruction

Tabled till Ft. Lauderdale.

3.5. Topic 0106171 – Equipment Control Instruction

(was Power Station Control Instruction)

A counter-proposal is being prepared for Ft. Lauderdale – tabled till then.

3.6. Topic – Signal Decoders

Discussed signalling in Europe and the US. If values for the different aspects are not defined in the RP, more flexibility is added. The only defined aspect should be absolute stop. User and/or manufacturer determines all other aspect values. Vote to move forward with discussed changes: Aye-16 Nay – 0 Abs – 2.

3.7. Topic 0104191 – CV Table Structure Proposal

Discussed uses of CV Table structure. No additional action.
Waiting on a demonstration of a successful implementation.

3.8. Topic 0107122 – User Defaults

This is one use of the CV Table proposal Topic 0104191. No action taken.

3.9. Topic 0109071 – Small Plug/Socket Changes

Larger diameter pins, shorter length pins. Clearance required for decoder ?

Pin length	0.118"
Tolerance	0.001"
Pin diameter	0.017"

3.10. Topic 0203011 – Additional CV 14

Topic is OK; reword proposed changes to add that these CVs define the status of functions that cannot be controlled in an alternate power mode.

Upcoming Meetings

The summer DCC Working Group meeting will be held in Ft. Lauderdale, FL, during the NMRA National Convention. It is tentatively scheduled for Thursday, July 18th from 8 am to 1 pm. The location has not been determined.

The fall DCC Working Group meeting will **not** be held at the NHRA Show in Chicago. It is tentatively scheduled for October 18-19, in Durango, CO.