

LocoNet-Checker V2.9.2 (has not been updated to the latest version)

This program helps you to manage your Digitrax devices connected to the Loconet bus and monitor their behaviour. It ensures that all devices have the correct settings.

The key areas of functionality are:-

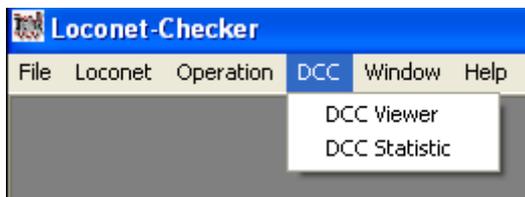
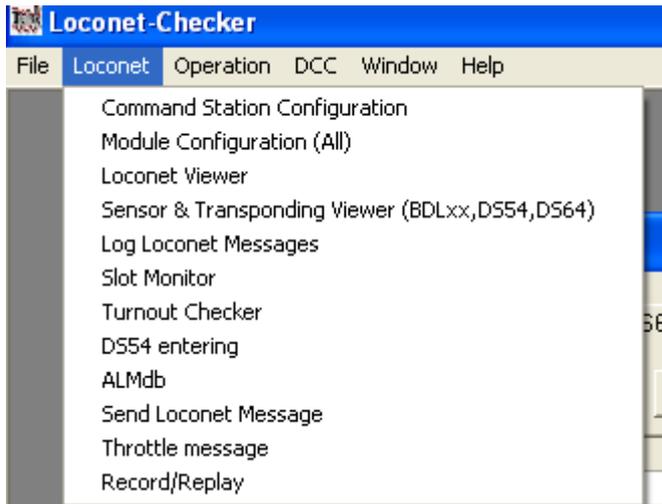
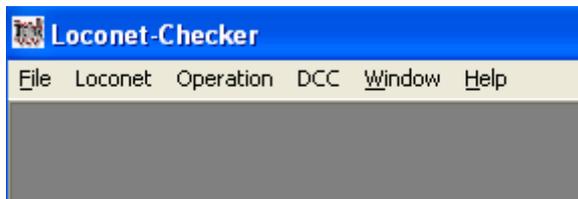
- Smart Configuration of your Command station. Easy to use settings window that allows you to make a change in a flash.
- Configuration of all BDL, PM and SE devices connected to your Loconet. The system stores your default settings for future reference and allows you to change the setting of any device instantly. The screen shows the current settings of all devices side by side for easy reference.
- BDL/DS54 Message viewer. This window displays and counts all sensor and Transponding messages allowing you to see if any boards are not behaving correctly. The system reports how many messages were lost on interrogation.
- Manual sending of any Loconet Message (checksum automatically calculated)
- Background logging all Loconet traffic to disk. This is useful when a problem has occurred with computer based control systems and you need to become the forensic detective.
- Smart Slot monitor that automatically synchronised with the Slot Manager. This monitors any problems with Slot Manager and Computer throttles. It shows also your consisted locomotives. Shows now in addition (if ALM used) the name of the locomotive & Id of the locomotive, the throttle name and the current transponding zone name. The slot monitor has the capability to stop or release all trains and also to allocate all trains defined in the ALM-Database (useful for transponding)
- Turnout checker allows you to check all your turnouts before you start a train session.
- ALM editor allows you to enter names for your locomotives and turnouts
- Display of all CML board in the screen "HW-Configuration" with the basic data
- Display of the LocoIO-Modules in the screen "HW-Configuration" with the basic data
- Separate screen for entering DS54 data
- Display of SIGM10 SE-messages in the screen BDL16
- Extra screen for displaying all loconet messages with filtering possibility
- Added full support for the DCC pocket tester, display loconet messages and DCC messages together, Filtering for DCC messages, saving of DCC messages
- Ready for the new Digitrax HW (DS64, PR2, etc)
- Every screen stores now its position

Let me know about any encountered problems (stefan.trachsler@swissonline.ch).

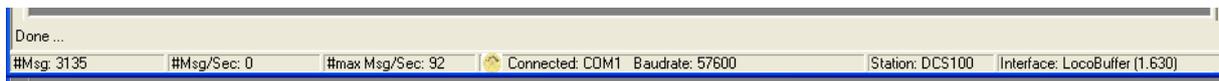
Regards
Stefan

Note: Some of the functions will need a detailed understanding of loconet; therefore these functions are more for an experienced loconet user.

1) Menu



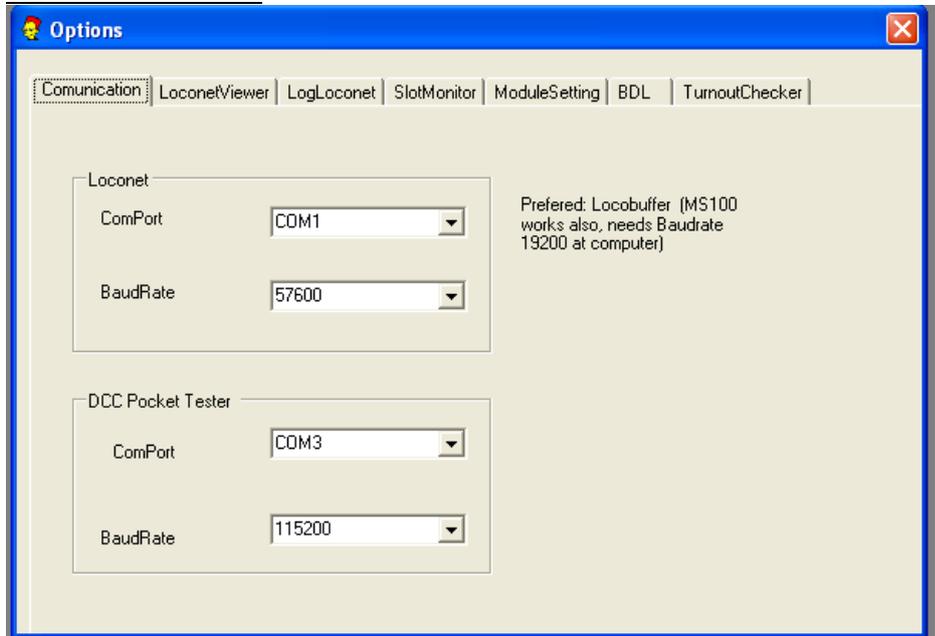
Status bar



The status bar shows also the type of the command station, the type of interface and the used ComPort.

2) Options

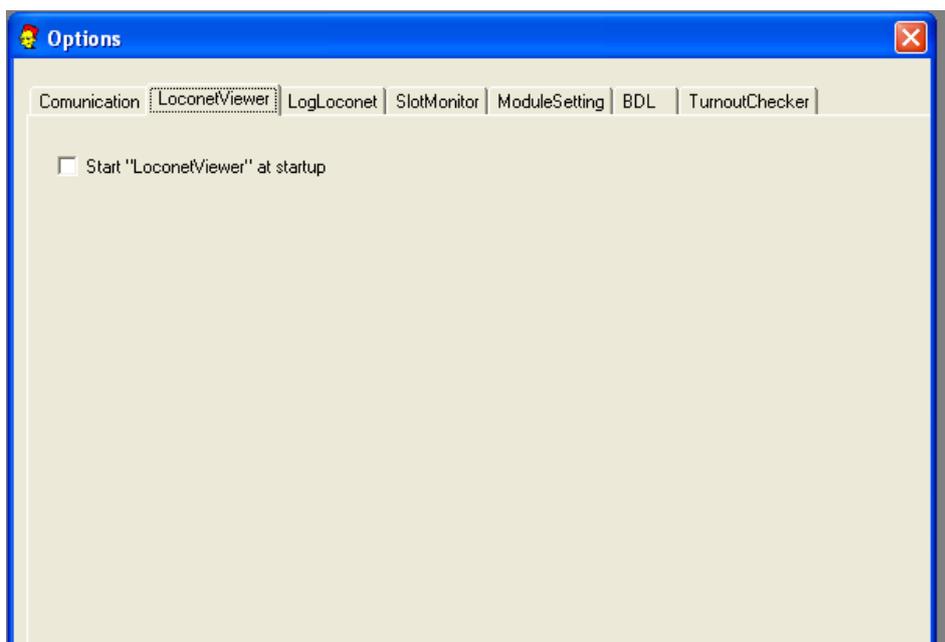
2.1 Communication



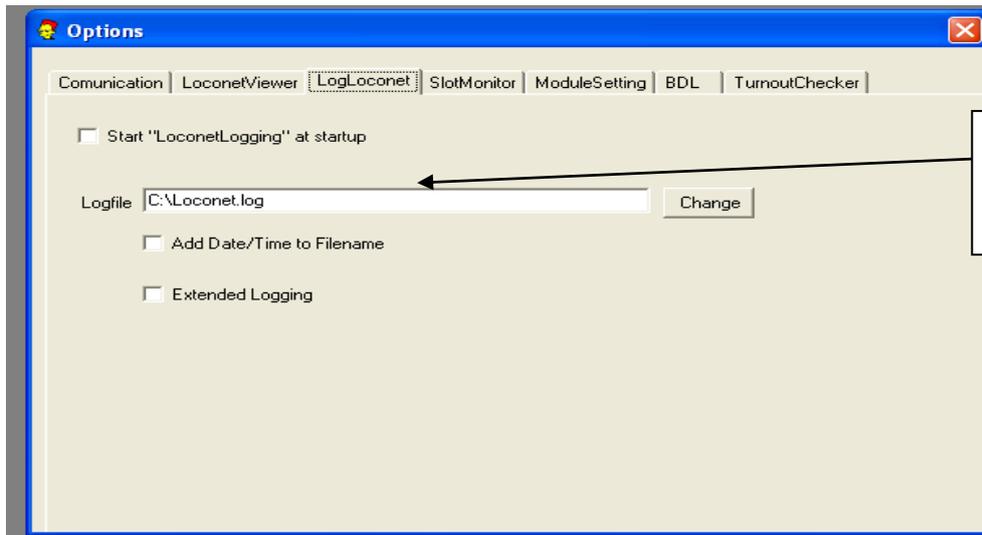
Configure the ComPort for the loconet interface and the DCC Pocket Tester from Pricom (<http://www.pricom.com/Trains/DCCTester.html>)

Select "NotConnected" if an interface is not connected.

2.2 LoconetViewer



2.3 LogLoconet

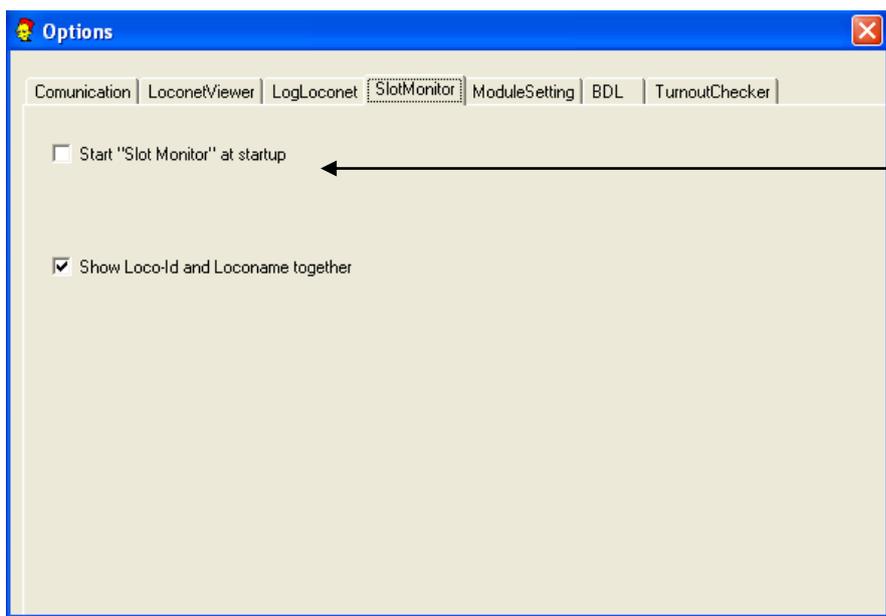


Automatically starts loconet logging in the background



Loconet logging can be stopped with the menu option or with the notify icon (right mouse click)

2.3 SlotMonitor



Automatically starts slot monitoring at start-up

2.4 ModuleSetting

Options

Communication | LoconetViewer | LogLoconet | SlotMonitor | **ModuleSetting** | BDL | TurnoutChecker

Open "Module Setting" screen at startup

AutoModule dedection at startup DedectionTime:

Detects and verifies connected BDL / PM / SE / LocoIO, etc modules

2.5 BDL

Options

Communication | LoconetViewer | LogLoconet | SlotMonitor | ModuleSetting | **BDL** | TurnoutChecker

Open "BDL" screen at startup

Auto Screen Update Update/Sec:

Auto Update Locobuffer Counter Update MessageViewer

Transmitt Messages

Normal Switch Msg Switch-Nr:

Priority Speed Msg Slot-Nr:

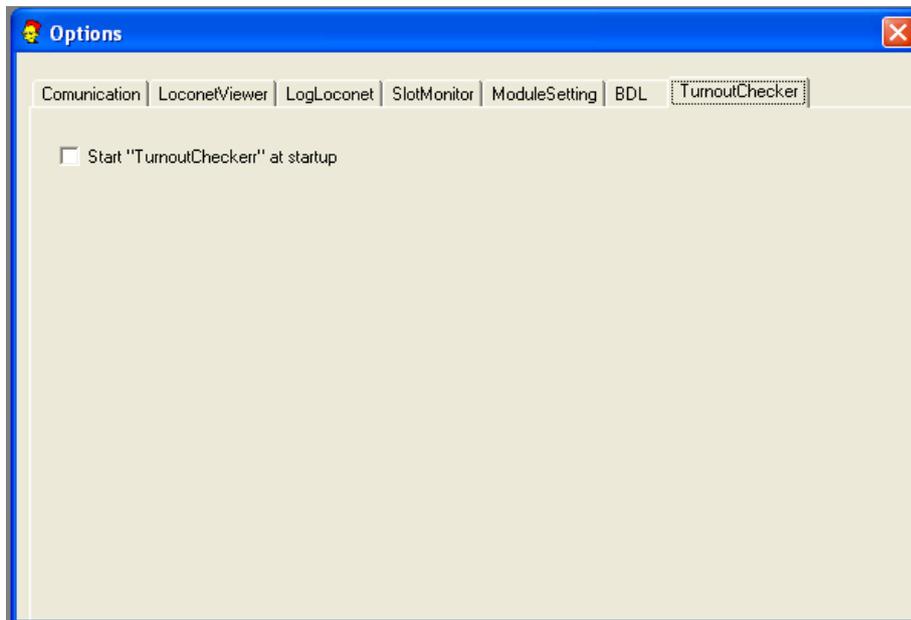
Interrogate Msg Int-Nr:

Automatically updates the screen with the new input sensor status

Automatically updates the screen with the error counters of the locobuffer

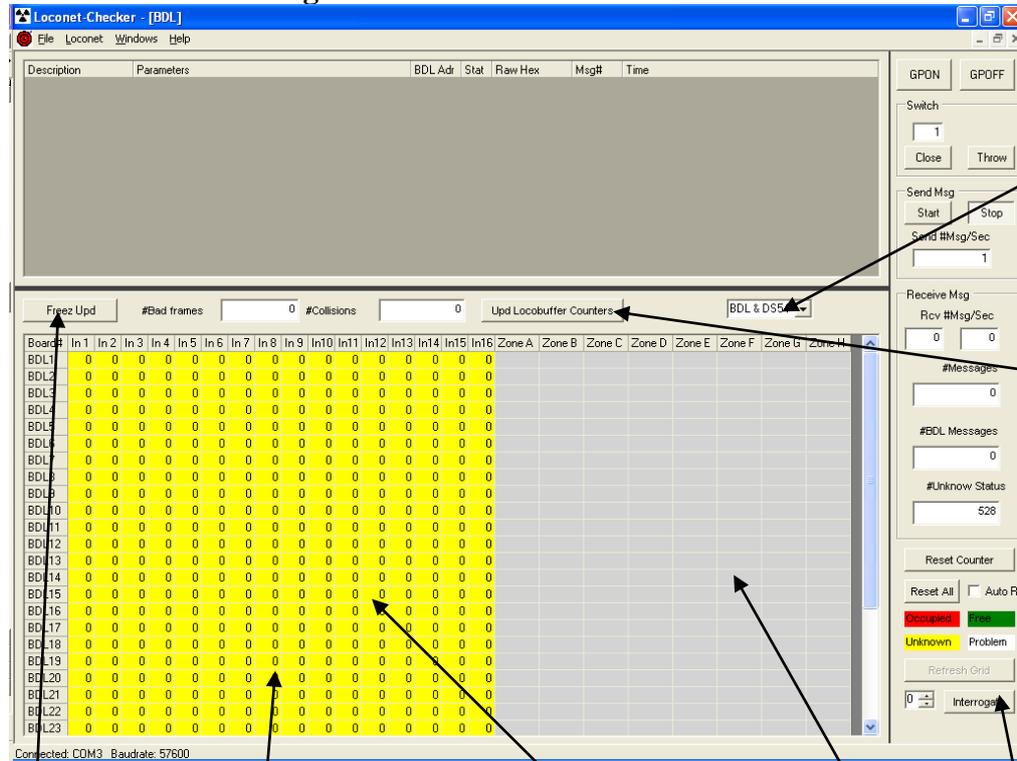
Advanced setting for producing loconet traffic

2.6 TurnoutChecker



3) Main screens

3.1 BDL/DS54-Messages



Selection of messages from modules

Sends out messages to the loconet (produces collisions)

Reads counters out of Locobuffer (needs latest)

Number of BDL-Messages received

Number of BDL-sections with an unknown status (no message received so fare)

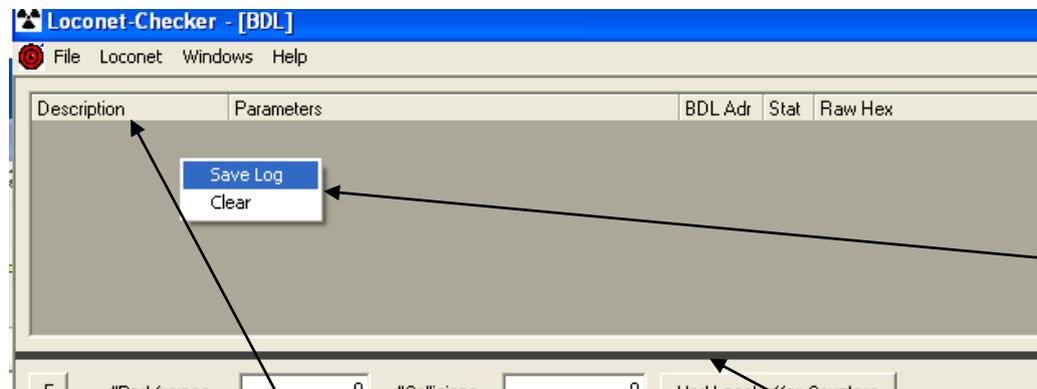
Sends all 8 interrogate requests

Double-click will show all the details of the received messages

Number of Transponding messages so fare received for this section

Number of DS-messages so fare received for this section (DS54 messages are displayed in white)

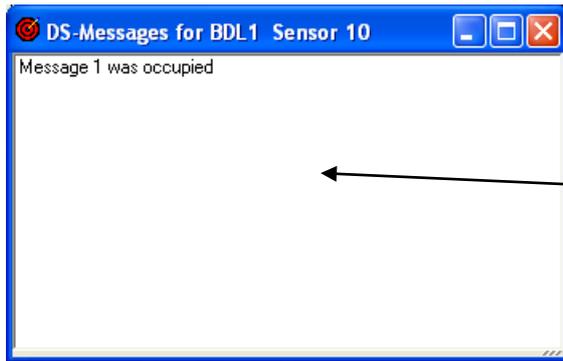
Freezes or unfreezes the updates of the loconet messages above



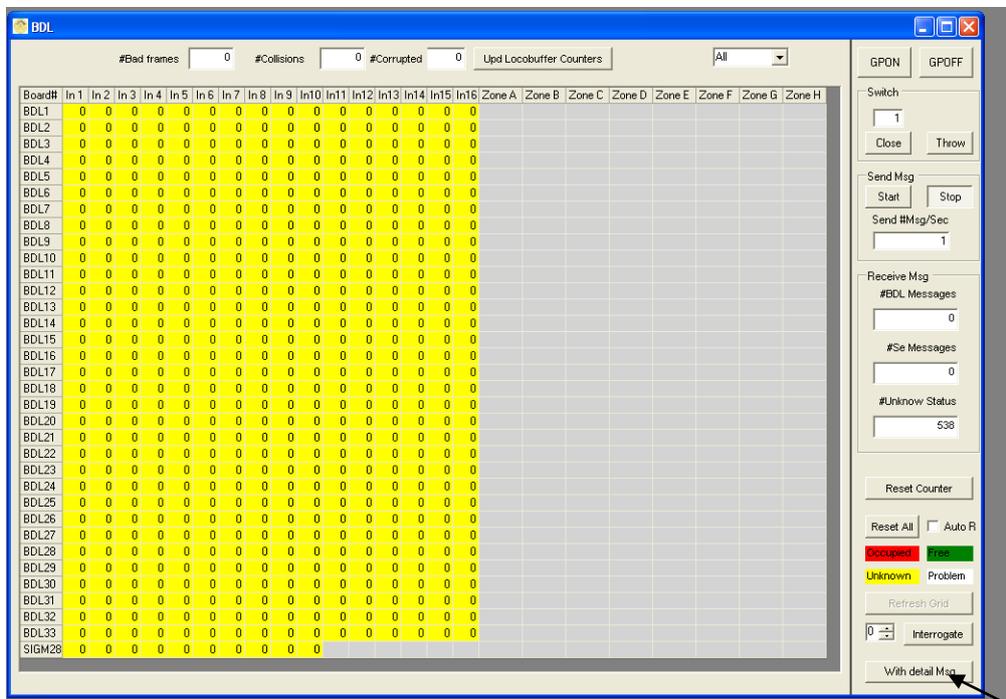
Right mouse Click: allows saving of messages to log-file and Filtering

Columns can be sorted, Column size will be saved

Screen-Splitter can be adjusted and will be saved



Detail DS-messages for one sensor

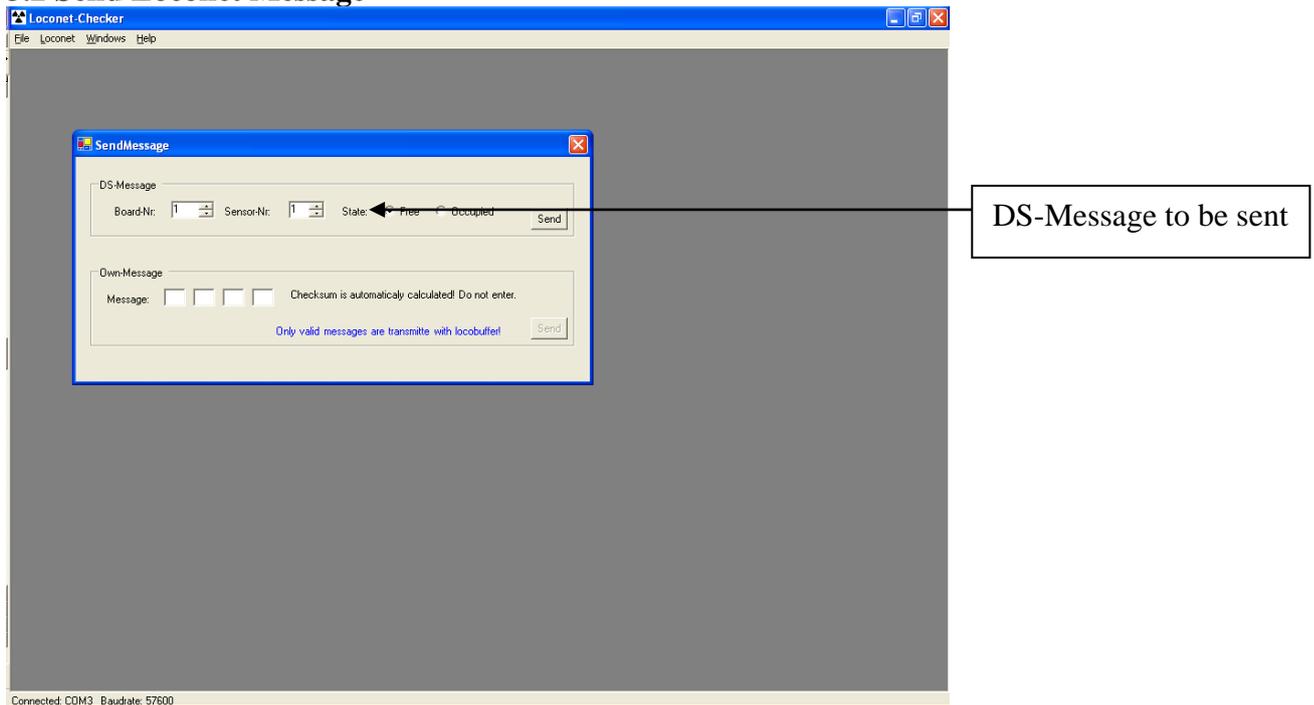


On this screen the detail messages are hidden

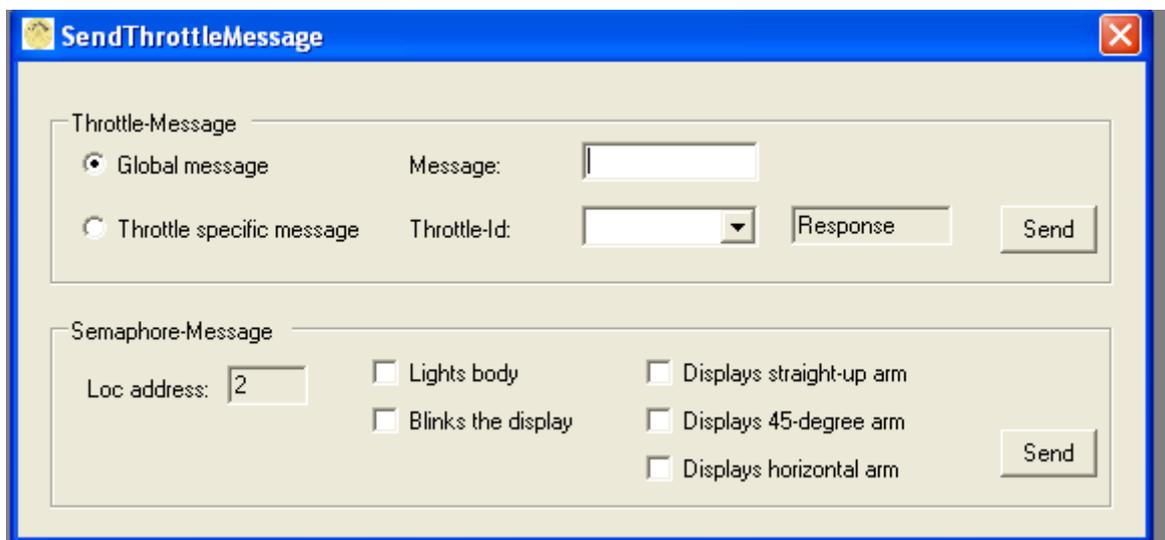
The screenshot displays the BDL software interface. At the top, a table lists various messages with columns for OpCode, Description, Parameters, BDL Adr, Stat, Raw Hex, Msg#, and Time. Below this is a summary section with fields for #Bad frames, #Collisions, and #Corrupted, along with an 'Upd Locobuffer Counters' button. The main area is a grid showing the status of boards (BDL17 to SIGM28) across zones (Zone A to Zone H). The bottom row, SIGM28, is highlighted in red. On the right side, there are control panels for GPON/GPOFF, a Switch, Send Msg, and Receive Msg, each with various buttons and input fields.

This screen shows as well the status of the SIMG10 modules from CML electronics

3.2 Send Loconet Message

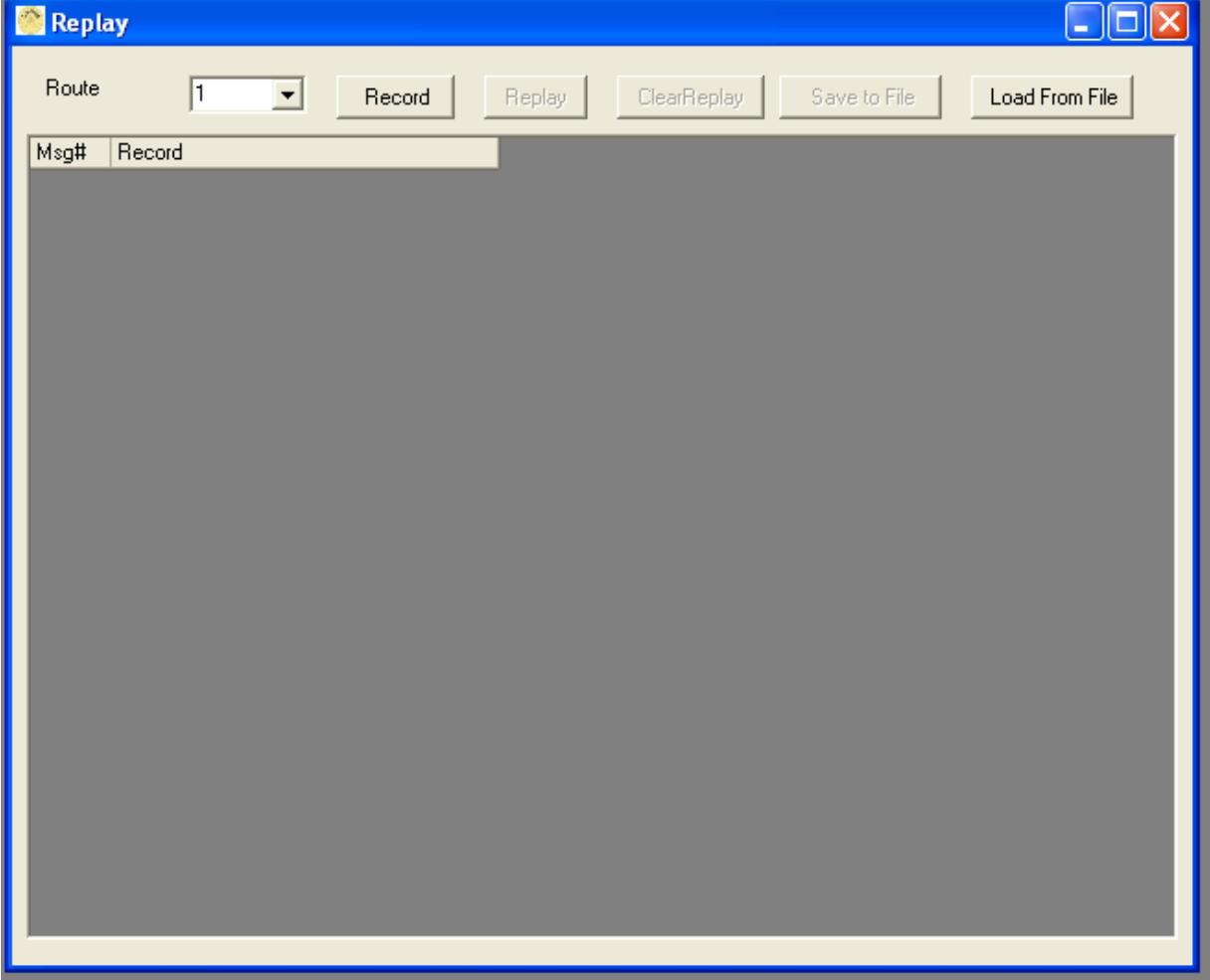


3.3 Send Throttle Message



This screen allows sending of messages to throttle. Unfortunately it does not work perfect **with the current DT400** (only one message can be sent).

3.4 Replay



Allows recording of a train schedule and a verification of the messages from a second run

3.5 Module Configuration

Allows the configuration of the Digitrax HW. Defaults can be saved, compared and reset. Has an “Easy View” and a “Major OPSW”-View for experts.

After the start-up of the screen, the SW detects all connected modules and reads afterwards the OPSW.

3.5.1 Commandstation

The screenshot shows the 'Loconet-Checker - [Module Configuration]' window. At the top, it displays 'Command Station: BDL16x | PM4x | Se8 | DS64 | CML | LocoD'. Below this are buttons for 'Easy View', 'Read', 'Write Modified', 'Compare With Default', 'Set to Default', and 'Save Default'. The main area is a table of configuration options for 'DCS100'.

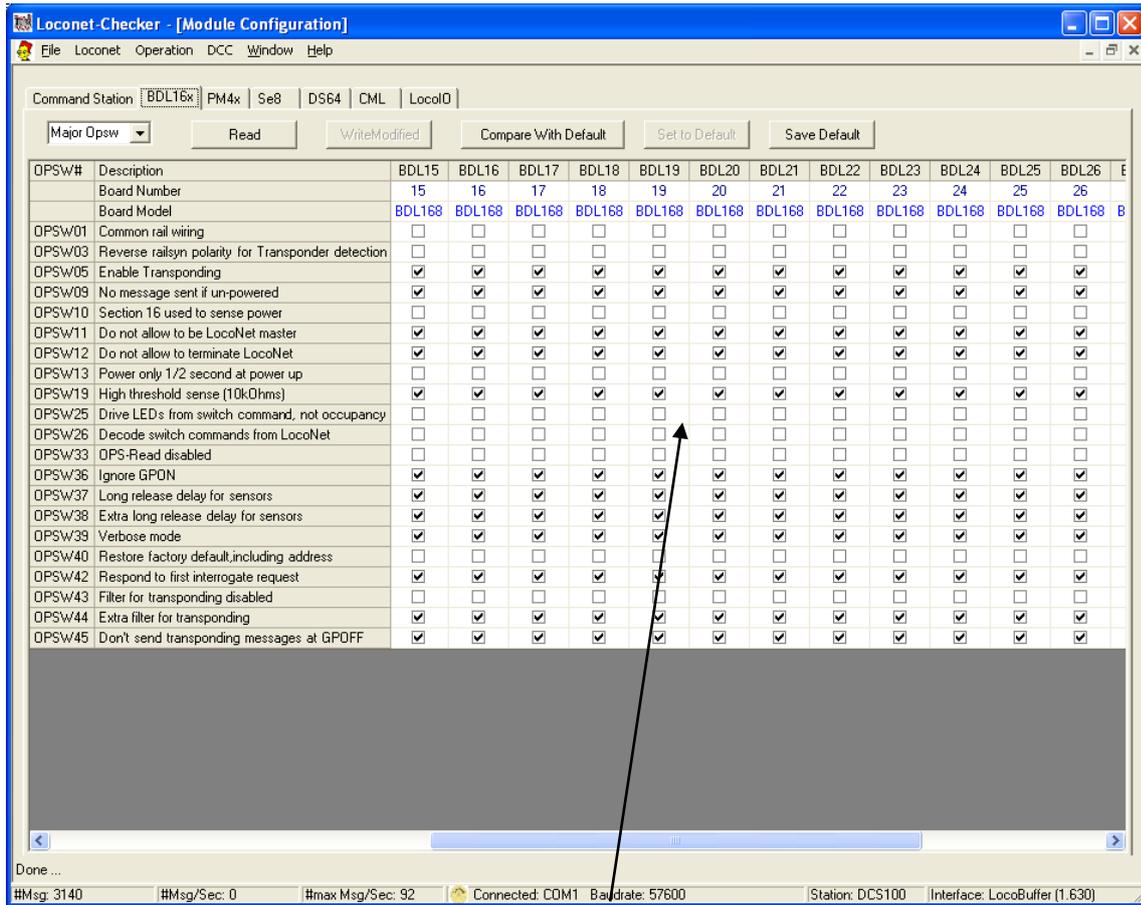
Description	Value
System Setup	
Act as a command station	Command Station
Booster is autoreversing	<input type="checkbox"/>
Command station master mode	<input checked="" type="checkbox"/>
Automatic advance decoder assisted consists are disabled	<input type="checkbox"/>
Extend booster short circuit shutdown time	1/8 second
Disable address 0 or analog stretching for conventional locomotives	<input checked="" type="checkbox"/>
Default type for NEW loco selections	128 step
Disable aliasing	<input checked="" type="checkbox"/>
Enable routes	<input type="checkbox"/>
Disable normal switch commands to the track (Bushby bit)	<input type="checkbox"/>
Meter route switch output rate when not trinary	<input type="checkbox"/>
Programming track braking	<input type="checkbox"/>
Diagnostic click when valid loconet message	<input type="checkbox"/>
Slot Control	
Number of slots	119
Loco address purge	Disabled
Disable 3 Beeps when loco address is purged	<input type="checkbox"/>
Trinary Format	
Allow Motorola binary format format	<input type="checkbox"/>
Expand trinary switch echo format to 1-256 when OPSW 9 = T	<input type="checkbox"/>
Make trinary switches long duration	<input type="checkbox"/>
Motorola trinary AD decoder allowed	<input type="checkbox"/>
Power Up	
Track power at power on	Set to run state
Disable interrogate command at power on	<input checked="" type="checkbox"/>
Disable Loconet update of command station's track status	<input checked="" type="checkbox"/>
Reset	
Clear all mobile decoder & consist info	<input type="checkbox"/>
Clear all routes	<input type="checkbox"/>
Clear the loco roster	<input type="checkbox"/>
Clear all internal memory states	<input type="checkbox"/>

Callout boxes provide the following information:

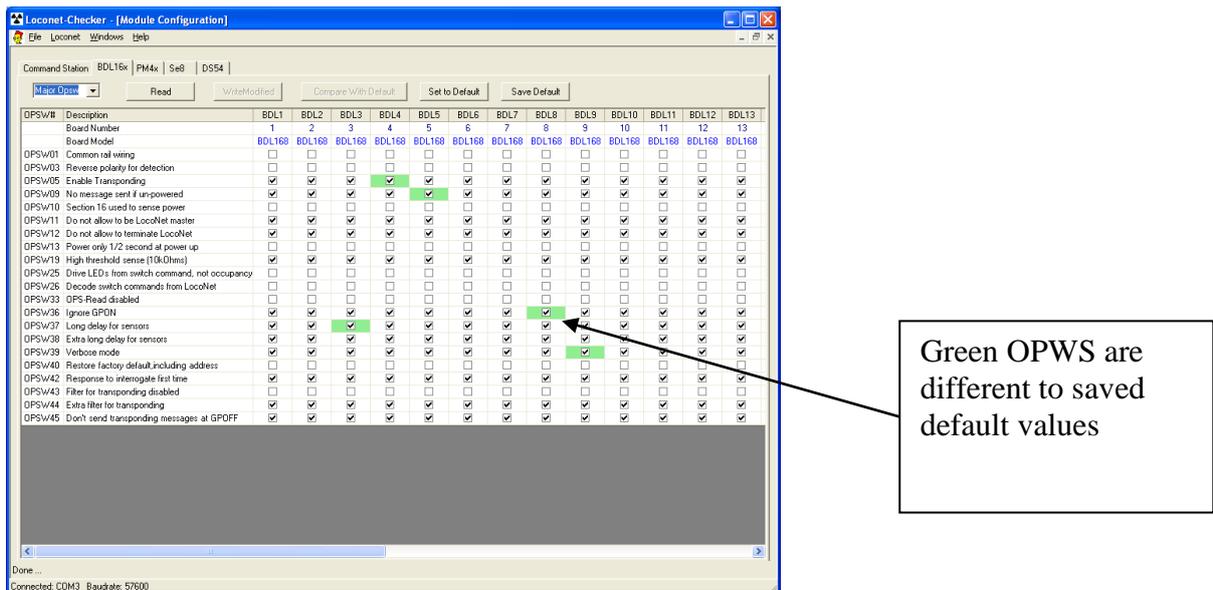
- Easy View:** Reads again the OPSW from the module
- Read:** Compares the current setting with the stored setting. Changes are marked in green
- Compare With Default:** Saves the current setting
- Save Default:** Saves the current setting
- Display-Mode can be changed:** (points to the 'Easy View' dropdown)
- To change a value, just click to the field:** (points to the '119' value in the 'Number of slots' row)

Status bar: Done... #Msg: 3135 #Msg/Sec: 0 #max Msg/Sec: 92 Connected: COM1 Baudrate: 57600 Station: DCS100 Interface: LocoBuffer (1.630)

3.5.2 BDL



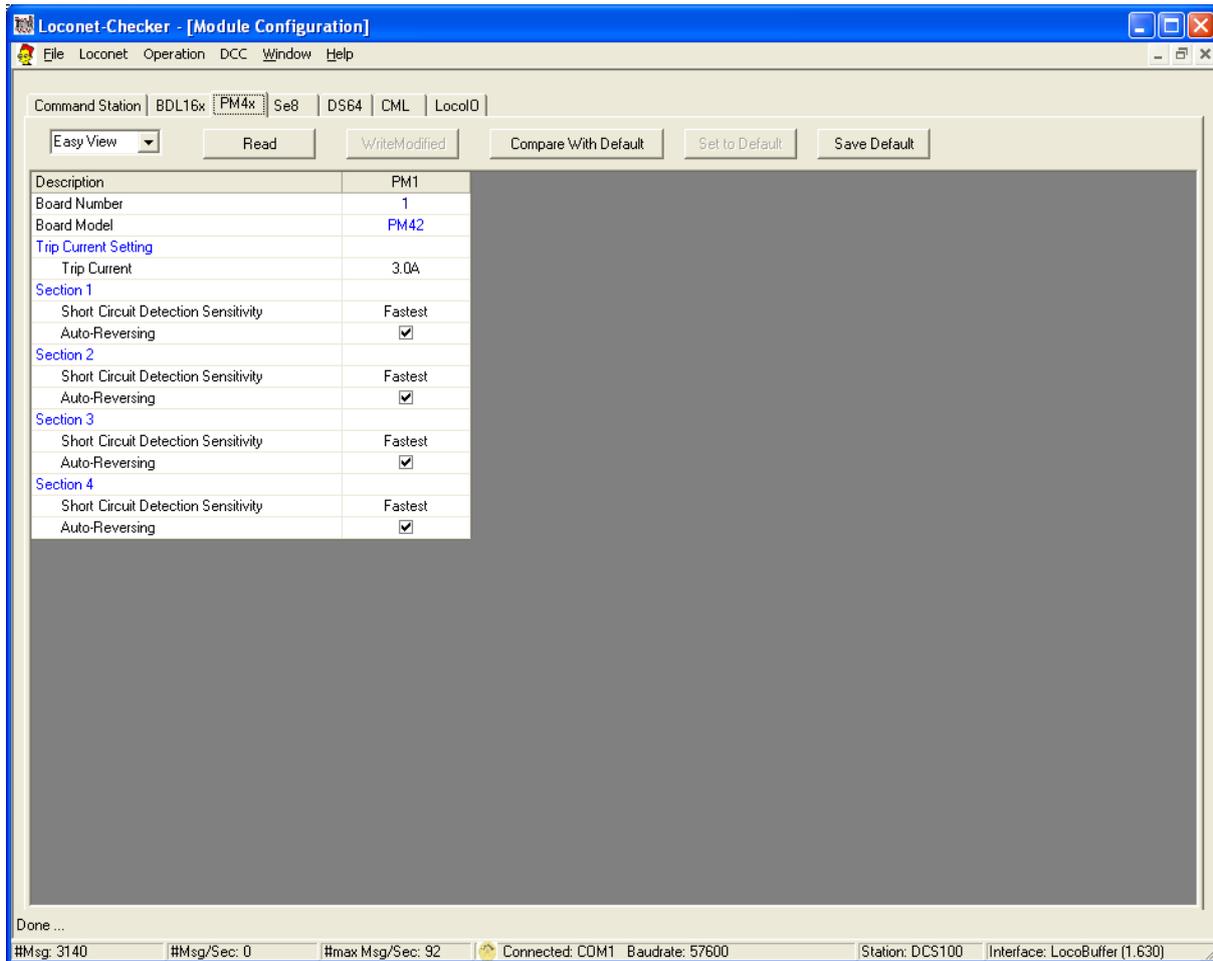
Multiselects are allowed!



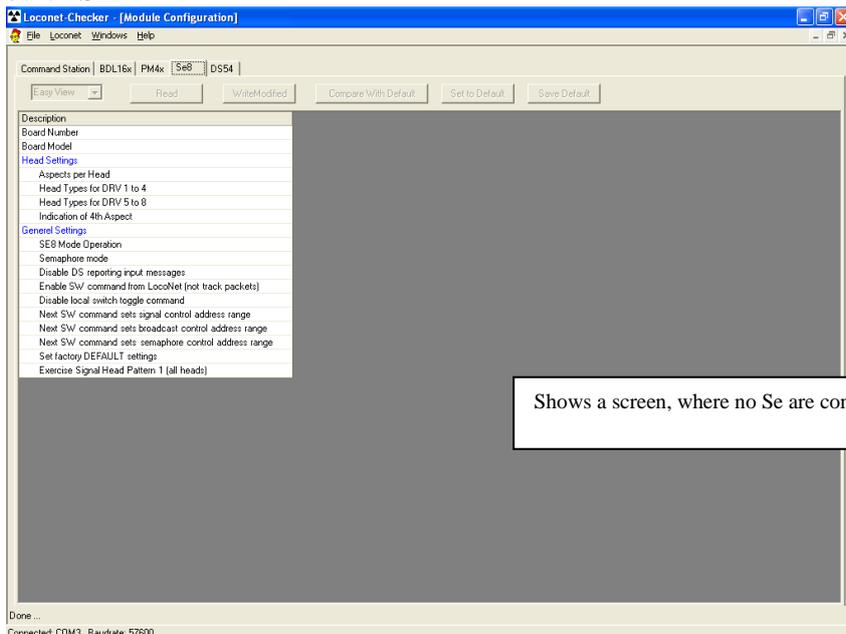
Green OPWS are different to saved default values

Shows a screen example of „Compare with Default“. The currents values are compared with the previous stored default values. With the button “Set to Default” the user could now set the OPWS to the saved default values.

3.5.3 PM42

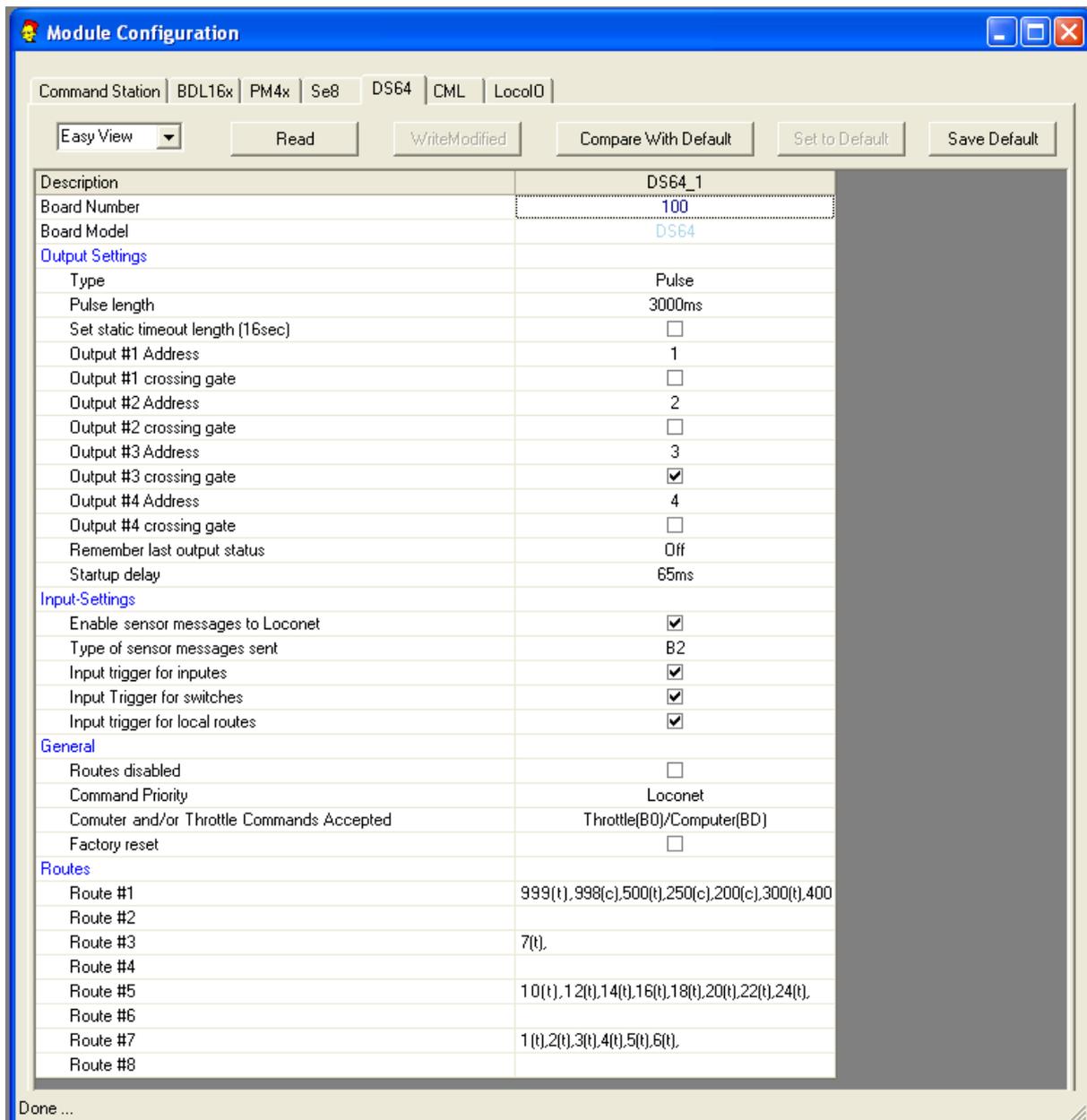


3.5.4 SE

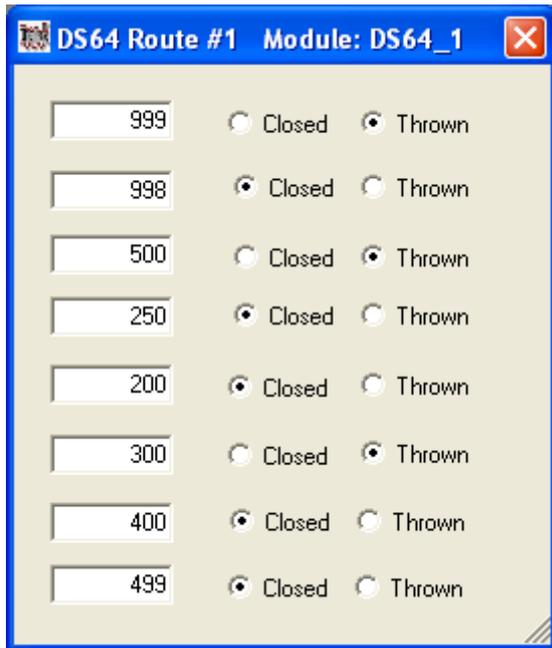


Shows a screen, where no Se are connected to the loconet

3.5.5 DS64

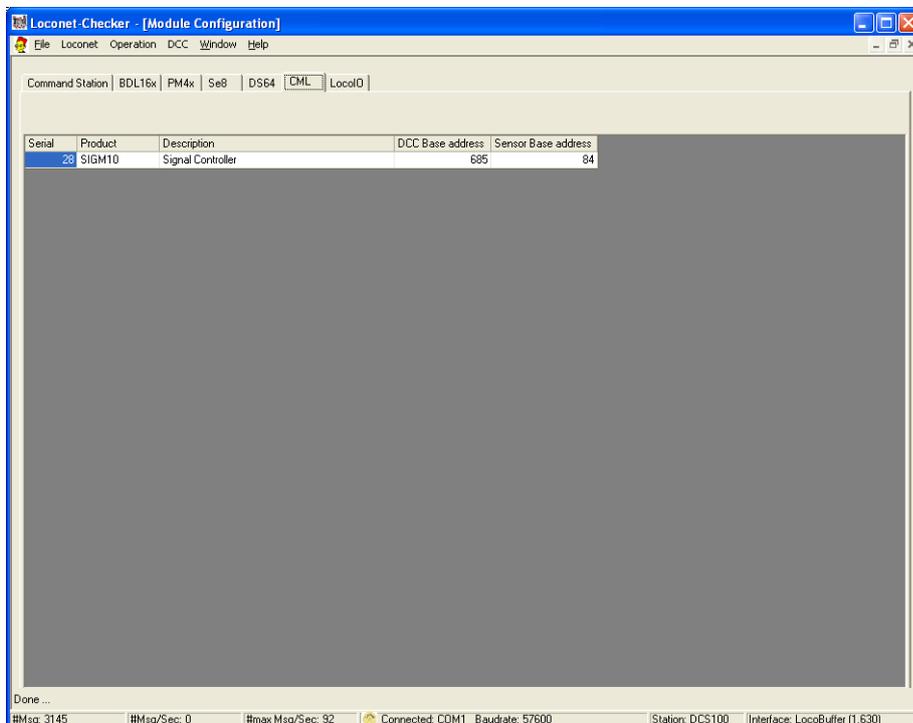


This screen will show the DS64 modules.

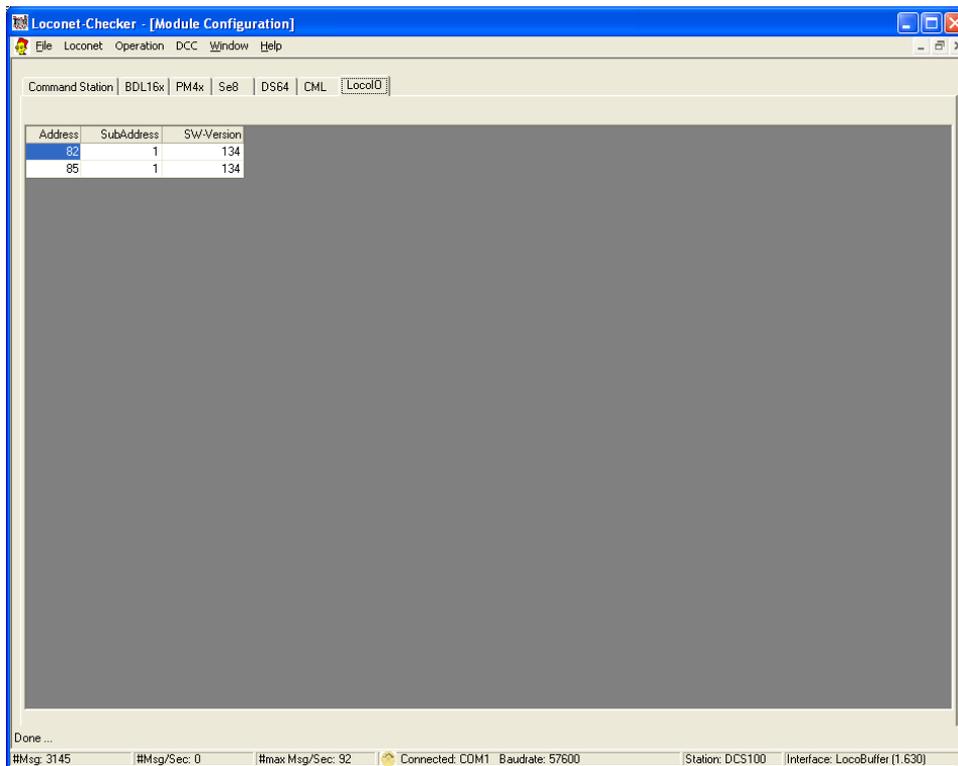


3.5.6 CML-Modules

This screen shows the basic data of the module from the company CML (<http://www.cmlelectronics.co.uk/index.html>). The SE messages itself are displayed in the BDL16x screen.



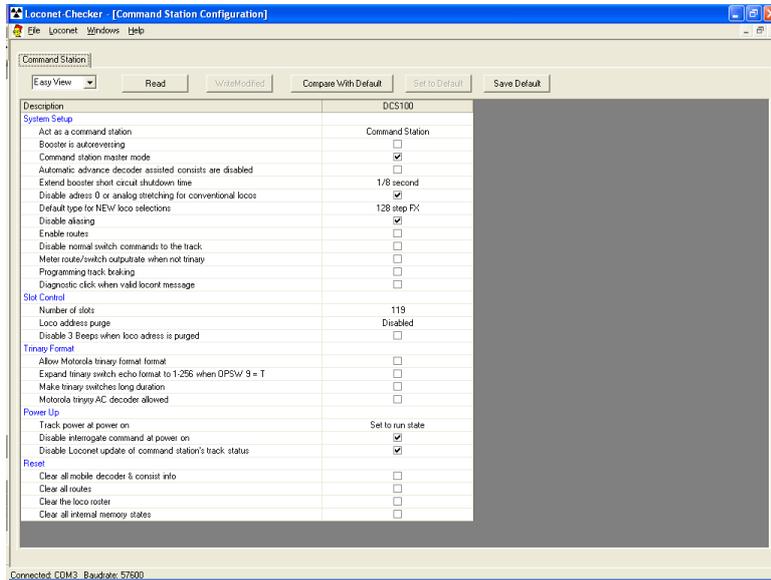
3.5.7 LocoIO-Modules



This screen shows the basic data of all LocoIO modules connected to the LocoNet.

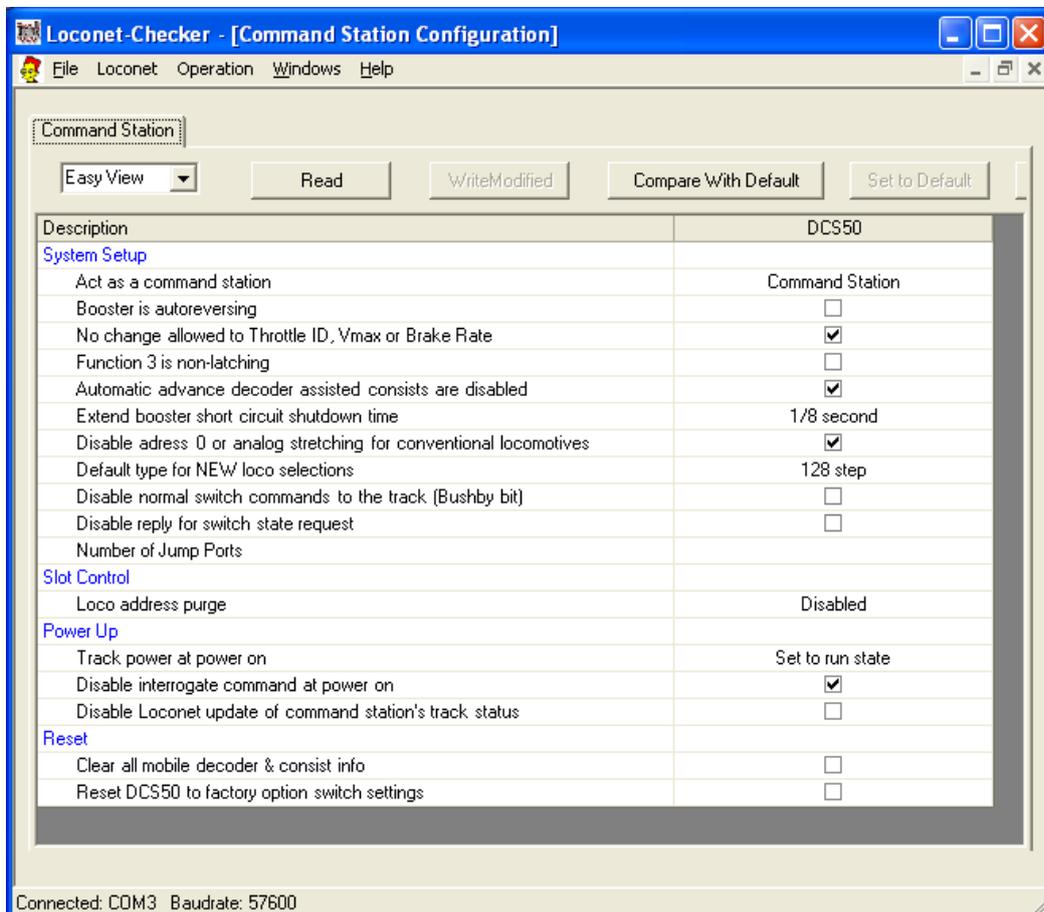
3.6 Command Station Configuration

3.6.1 Screen for a DCS100

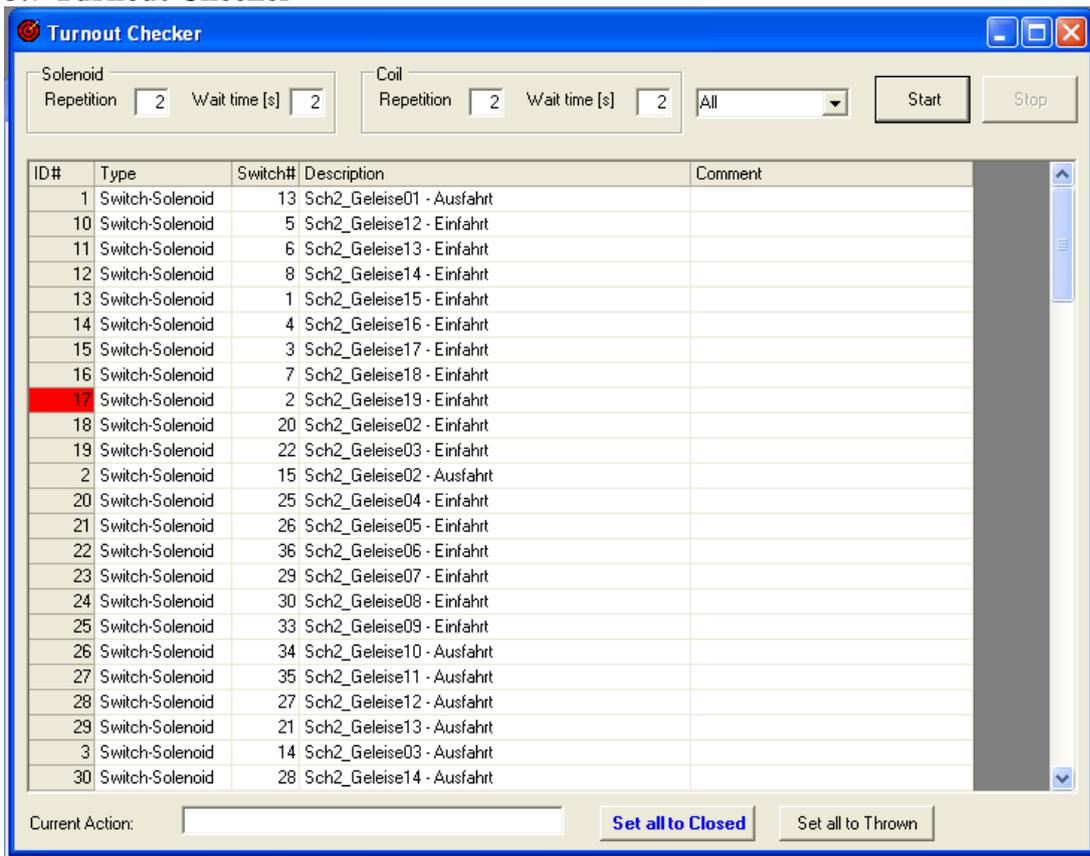


This menu entry only allows the changing of the command station configuration.

3.6.2 Screen for a DCS100



3.7 Turnout Checker

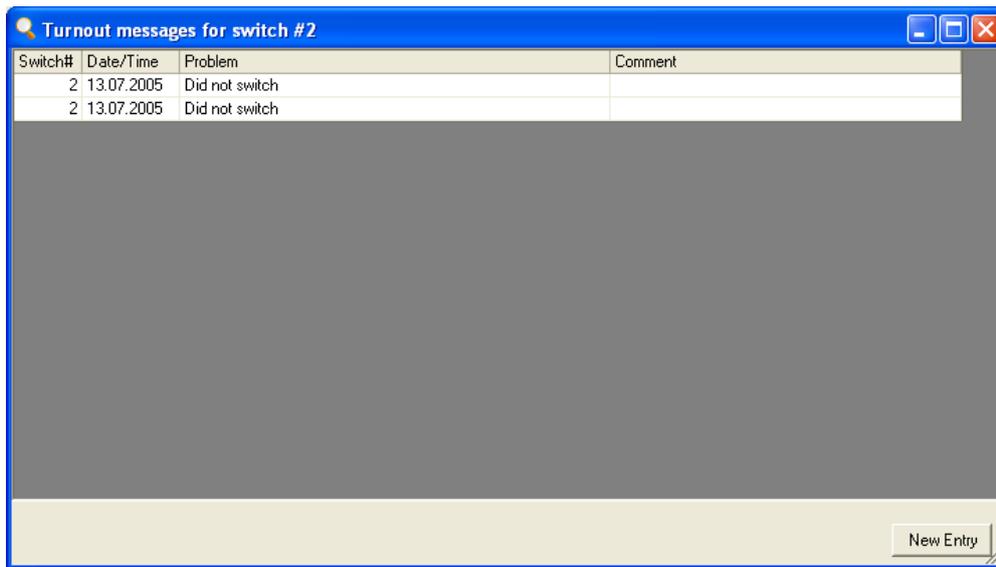


→ Turnouts with problems are marked “red”

Right Mouse click gives additional functions:



This screen shows the details for a switch (double click):

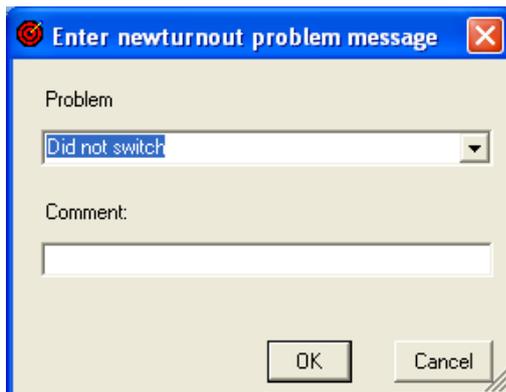


The screenshot shows a window titled "Turnout messages for switch #2". It contains a table with the following data:

Switch#	Date/Time	Problem	Comment
2	13.07.2005	Did not switch	
2	13.07.2005	Did not switch	

At the bottom right of the window, there is a button labeled "New Entry".

Enter a new problem for a turnout:



The screenshot shows a dialog box titled "Enter new turnout problem message". It contains the following fields and buttons:

- A "Problem" label above a dropdown menu with "Did not switch" selected.
- A "Comment:" label above an empty text input field.
- "OK" and "Cancel" buttons at the bottom.

3.8 Slot Monitor

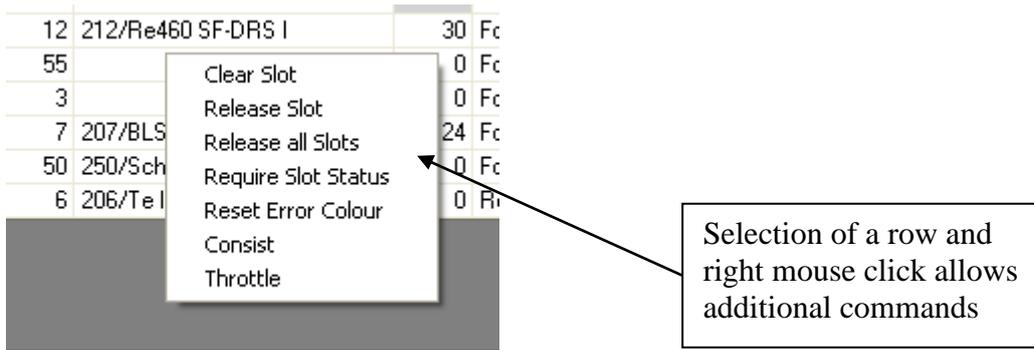
The screenshot shows the Slot Monitor application window. At the top, there are input fields for 'Active Slots#' (10), 'Free/Idle Slots#' (109), and 'Max used slots#' (10). Below these is a table of slot configurations. On the right side, there are several controls: a 'Slots displayed' dropdown menu set to 'Active + Idle', a 'Sort Order' dropdown menu set to 'Consist', a '#Slot relevant Messages' field showing '267', and a 'Refresh all Slots' button. Below these are checkboxes for 'F0-F8', 'F9-P15', 'Zone', and 'Spd.Stp'. At the bottom right, there is a 'Slot Stress Test' section with 'Start' and 'Stop' buttons, a 'Nr of slots' field set to '10', and buttons for 'Stop all Loks', 'Allocate Loc's', and 'Release Loc's'. A legend on the right side shows colored boxes for 'Value changed' (blue), 'Slot released' (red), 'Double Address' (yellow), and 'Speed <-> 0, slot is idle' (yellow).

Slot#	Status	Adr.	LocName	Speed	Direction	Consist	Throttle Id	Spd. Stp.	LastUpd	Zone
2	Common	396		0	Reverse	Consist	DT400 - 8755	DCC_128_SS_Adv	48.01.786	
4	Common	35		2	Forward	SubMember	DCS50 - 10880	DCC_128_SS	48.01.880	
6	Common	31		2	Forward	SubMember	DT400 - 8755	DCC_128_SS_Adv	48.01.974	
27	Common	393		2	Forward	SubMember	DT400 - 8755	DCC_128_SS_Adv	48.02.958	
5	Common	400		2	Forward	MidConsist		DCC_128_SS_Adv	48.01.927	
7	Common	45		5	Forward	SubMember	DCS50 - 10880	DCC_128_SS	48.02.200	
1	Common	12	212/Re460 SF-DRS I	30	Forward	NoConsist	DCS50 - 10880	DCC_128_SS	48.01.739	
3	InUse	55		0	Forward	NoConsist	DT400 - 8755	DCC_128_SS	50.21.302	
8	Idle	3		0	Forward	NoConsist	DCS50 - 10880	DCC_128_SS	48.02.670	
9	InUse	7	207/BLS Re465 Jungfrauojch	124	Forward	NoConsist	DT400 - 8755	DCC_128_SS_Adv	50.19.317	
10	Idle	50	250/Schleifwagen	0	Forward	NoConsist	DCS50 - 10880	DCC_128_SS	48.02.161	
11	InUse	6	206/Te III braun	0	Reverse	NoConsist	DCS50 - 10880	DCC_128_SS	50.16.911	

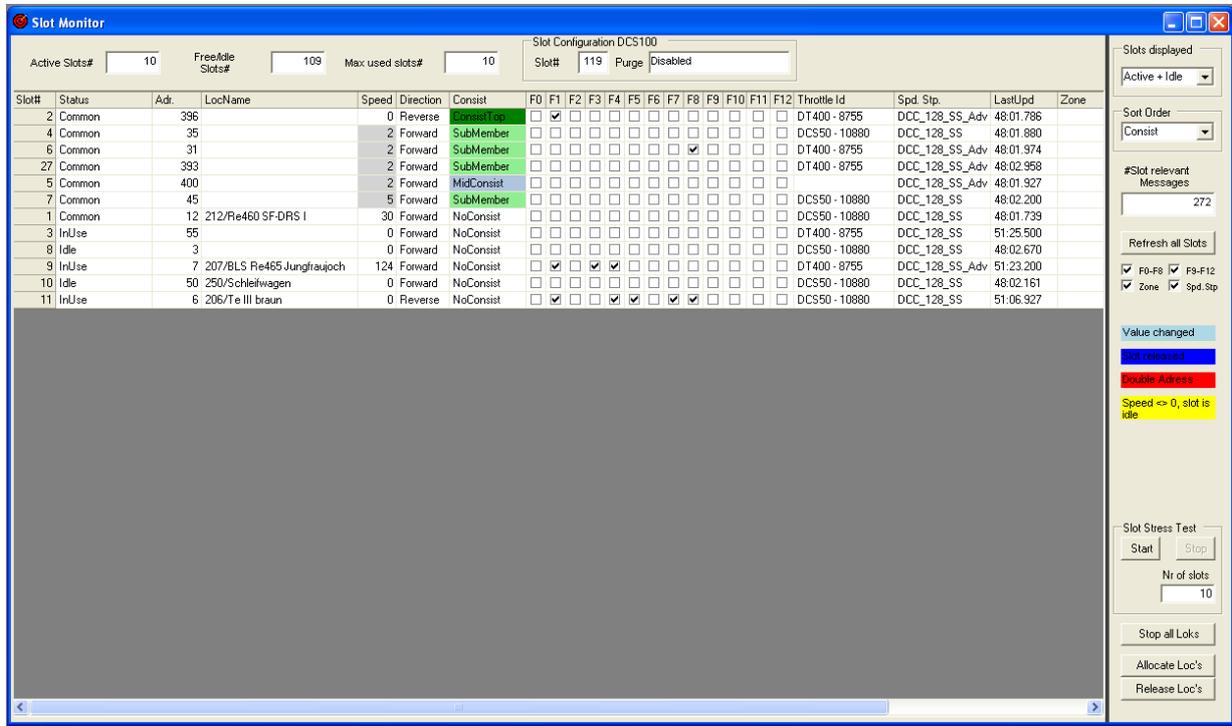
The screenshot shows the Slot-Messages for Slot 3 window. It contains a table with the following data:

Msg	Time	Opcode	Status	Adr	Speed	Direction	Consist	F0	F1	F2	F3	F4	F5	F6	F7	F8	Throttle-Id	Spd Stp.
1	47:32:310	OPC_RQ_SL_DATA																
2	47:32:320	OPC_SL_RD_DATA	InUse	41	64	Forward	NoConsist	Off	8755	DCC_128_SS								

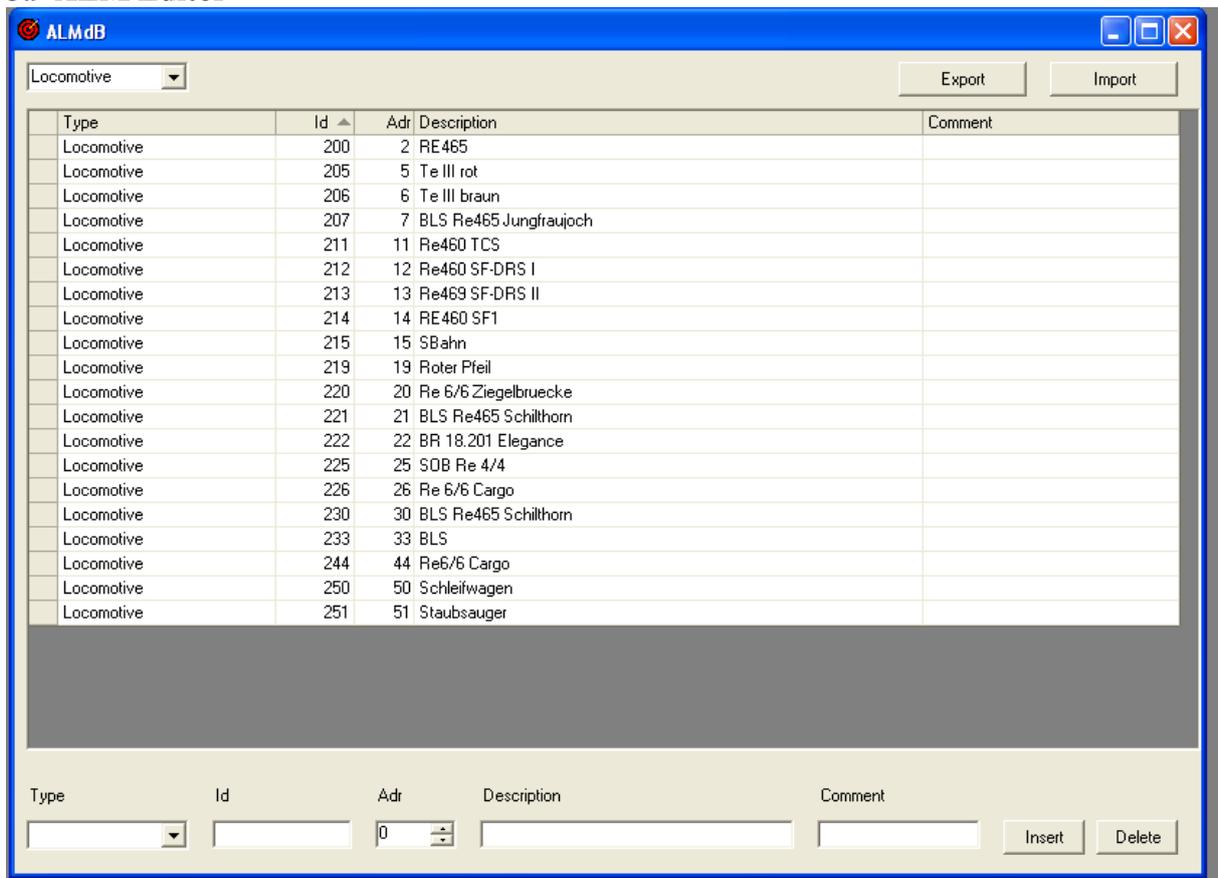
Detailed message for one specific slot (with double click)



This shows a slot screen, with the sorting for consists. Consisted slots are shown in a special colour.



3.9 ALM Editor



This editor allows the entering of “text” for switch numbers, zone number, locomotives, etc. The names are then displayed in the slot monitor or other screens.

3.10 DS54

This screen allows the manual entering of the connected DS54 boards.

SettingDS54

DS54 board address assignment

Note: Enter first switch number of each board
Empty = not used
New Settings need a restart of the application!

# 1/2	<input type="text"/>	<input type="text"/>	# 25/26	<input type="text"/>	<input type="text"/>	# 49/50	<input type="text"/>	<input type="text"/>	# 73/74	<input type="text"/>	<input type="text"/>
# 3/4	<input type="text"/>	<input type="text"/>	# 27/28	<input type="text"/>	<input type="text"/>	# 51/52	<input type="text"/>	<input type="text"/>	# 75/76	<input type="text"/>	<input type="text"/>
# 5/6	<input type="text"/>	<input type="text"/>	# 29/30	<input type="text"/>	<input type="text"/>	# 53/54	<input type="text"/>	<input type="text"/>	# 77/78	<input type="text"/>	<input type="text"/>
# 7/8	<input type="text"/>	<input type="text"/>	# 31/32	<input type="text"/>	<input type="text"/>	# 55/56	<input type="text"/>	<input type="text"/>	# 79/80	<input type="text"/>	<input type="text"/>
# 9/10	<input type="text"/>	<input type="text"/>	# 33/34	<input type="text"/>	<input type="text"/>	# 57/58	<input type="text"/>	<input type="text"/>	# 81/82	<input type="text"/>	<input type="text"/>
# 11/12	<input type="text"/>	<input type="text"/>	# 35/36	<input type="text"/>	<input type="text"/>	# 59/60	<input type="text"/>	<input type="text"/>	# 83/84	<input type="text"/>	<input type="text"/>
# 13/14	<input type="text"/>	<input type="text"/>	# 37/38	<input type="text"/>	<input type="text"/>	# 61/62	<input type="text"/>	<input type="text"/>	# 85/86	<input type="text"/>	<input type="text"/>
# 15/16	<input type="text"/>	<input type="text"/>	# 39/40	<input type="text"/>	<input type="text"/>	# 63/64	<input type="text"/>	<input type="text"/>	# 87/88	<input type="text"/>	<input type="text"/>
# 17/18	<input type="text"/>	<input type="text"/>	# 41/42	<input type="text"/>	<input type="text"/>	# 65/66	<input type="text"/>	<input type="text"/>	# 89/90	<input type="text"/>	<input type="text"/>
# 19/20	<input type="text"/>	<input type="text"/>	# 43/44	<input type="text"/>	<input type="text"/>	# 67/68	<input type="text"/>	<input type="text"/>	# 91/92	<input type="text"/>	<input type="text"/>
# 21/22	<input type="text"/>	<input type="text"/>	# 45/46	<input type="text"/>	<input type="text"/>	# 69/70	<input type="text"/>	<input type="text"/>	# 93/94	<input type="text"/>	<input type="text"/>
# 23/24	<input type="text"/>	<input type="text"/>	# 47/48	<input type="text"/>	<input type="text"/>	# 71/72	<input type="text"/>	<input type="text"/>	# 95/96	<input type="text"/>	<input type="text"/>

No complete checks for correct data entered!

3.12 Loconet-Viewer

This screen allows the display of the ongoing LocoNet messages. There is a possibility for filtering as well.

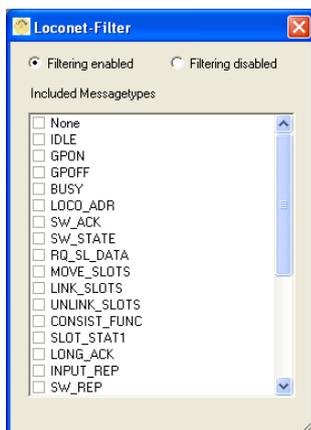
OpCode	Description	Parameters	BDL	Stat	Raw Hex	Msg#	Time
LOCD_SPD	Speed change	Slot=11 Spd=9			A0 0B 09 5D	3427	53:10.200
LOCD_SPD	Speed change	Slot=11 Spd=21			A0 0B 15 41	3428	53:10.208
LOCD_SPD	Speed change	Slot=11 Spd=2			A0 0B 02 56	3429	53:10.411
LOCD_SPD	Speed change	Slot=11 Spd=23			A0 0B 17 43	3430	53:10.599
LOCD_SPD	Speed change	Slot=11 Spd=2			A0 0B 02 56	3431	53:10.802
LOCD_SPD	Speed change	Slot=11 Spd=0			A0 0B 00 54	3432	53:10.989
SW_REQ	Switch change	Num=78 Dir=Closed Key=0			B0 4D 30 32	3433	53:11.817
SW_REQ	Switch change	Num=78 Dir=Closed Key=0f			B0 4D 20 22	3434	53:11.927
SW_REQ	Switch change	Num=78 Dir=Thrown Key=0			B0 4D 10 12	3435	53:12.520
SW_REQ	Switch change	Num=78 Dir=Thrown Key=0f			B0 4D 00 02	3436	53:12.192
SW_REQ	Switch change	Num=78 Dir=Closed Key=0			B0 4D 30 32	3437	53:12.333
SW_REQ	Switch change	Num=78 Dir=Closed Key=0f			B0 4D 20 22	3438	53:12.427
SW_REQ	Switch change	Num=78 Dir=Thrown Key=0			B0 4D 10 12	3439	53:12.536
SW_REQ	Switch change	Num=78 Dir=Thrown Key=0f			B0 4D 00 02	3440	53:12.645
SW_REQ	Switch change	Num=78 Dir=Closed Key=0			B0 4D 30 32	3441	53:12.786
SW_REQ	Switch change	Num=78 Dir=Closed Key=0f			B0 4D 20 22	3442	53:12.880

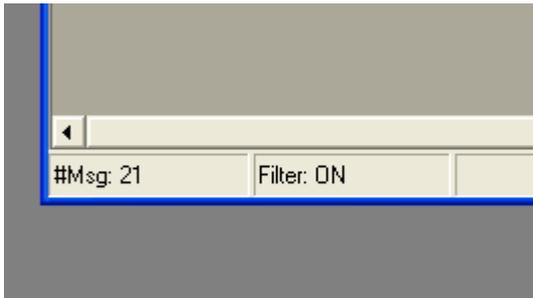
#Msg: 16 Filter: Off

This shows the additional commands available after a right mouse click:

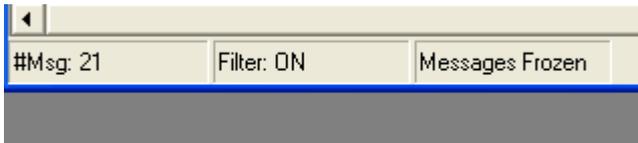


Here the detail screen for filtering:





The status bar indicates if filtering is enabled

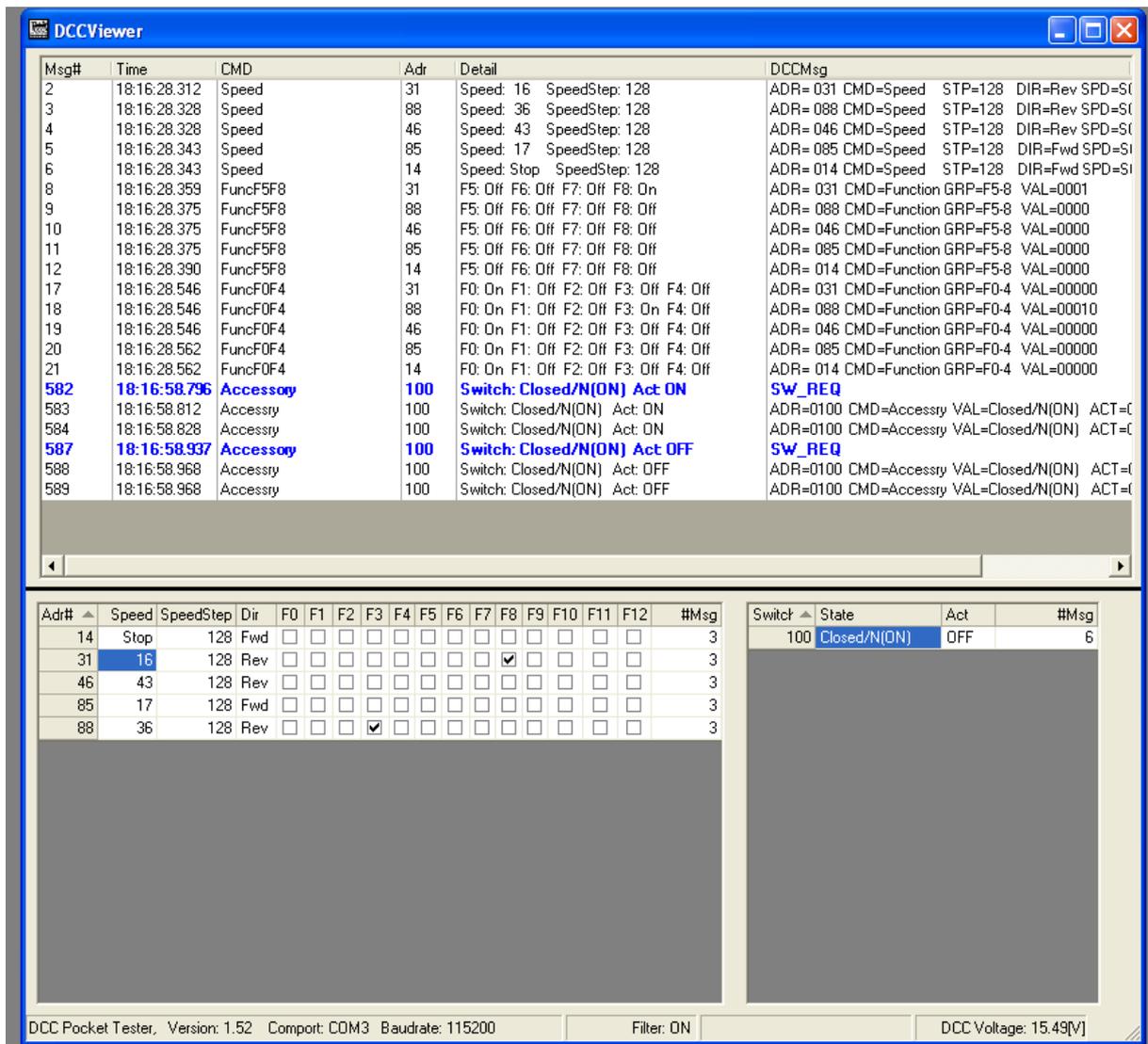


The status bar also indicates, if the LocoNet messages are frozen (no new messages are displayed)

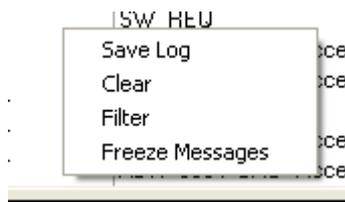
3.12 DCC-Viewer

Together with the DCC-Pocket Tester from PRICOM (<http://www.pricom.com/Trains/DCCTester.html>) the DCC messages are displayed as well. Even the LocoNet messages and the DCC messages can be displayed at the same time together.

The DCC-Viewer can run alone without a LocoNet-interface.



Note: There is detailed screen for “Decoder-Commands” and “Accessory-Commands”



These shows the detailed messages for a decoder (double click):

DCC Messages for Decoderaddress 7							
1	Time: 22:56:24.724	Msg#: 9	Command: Speed	Speed: 124	SpeedStep: 128	Direction: Fwd	Type: DCC
2	Time: 22:56:25.208	Msg#: 14	Command: FuncF0F4	F0: Off F1: On F2: Off F3: On			Type: DCC
3	Time: 22:58:32.645	Msg#: 76	Command: Speed	Speed: 125	SpeedStep: 128	Direction: Fwd	Type: DCC
4	Time: 22:58:32.864	Msg#: 77	Command: Speed	Speed: 126	SpeedStep: 128	Direction: Fwd	Type: DCC
5	Time: 22:58:33.192	Msg#: 78	Command: Speed	Speed: 125	SpeedStep: 128	Direction: Fwd	Type: DCC
6	Time: 22:58:33.239	Msg#: 79	Command: Speed	Speed: 124	SpeedStep: 128	Direction: Fwd	Type: DCC
7	Time: 22:58:33.520	Msg#: 80	Command: Speed	Speed: 125	SpeedStep: 128	Direction: Fwd	Type: DCC
8	Time: 22:58:33.552	Msg#: 81	Command: Speed	Speed: 126	SpeedStep: 128	Direction: Fwd	Type: DCC
9	Time: 22:58:33.739	Msg#: 82	Command: Speed	Speed: 125	SpeedStep: 128	Direction: Fwd	Type: DCC
10	Time: 22:58:33.802	Msg#: 83	Command: Speed	Speed: 124	SpeedStep: 128	Direction: Fwd	Type: DCC
11	Time: 22:58:34.200	Msg#: 84	Command: Speed	Speed: 125	SpeedStep: 128	Direction: Fwd	Type: DCC
12	Time: 22:58:34.670	Msg#: 85	Command: Speed	Speed: 126	SpeedStep: 128	Direction: Fwd	Type: DCC
13	Time: 22:58:34.255	Msg#: 86	Command: Speed	Speed: 125	SpeedStep: 128	Direction: Fwd	Type: DCC
14	Time: 22:58:34.333	Msg#: 87	Command: Speed	Speed: 124	SpeedStep: 128	Direction: Fwd	Type: DCC
15	Time: 22:58:39.989	Msg#: 88	Command: FuncF0F4	F0: Off F1: On F2: Off F3: On			Type: DCC
16	Time: 22:58:41.670	Msg#: 89	Command: FuncF5F8	F5: Off F6: Off F7: Off F8: On			Type: DCC
17	Time: 22:58:41.520	Msg#: 90	Command: FuncF9F12	F9: On F10: Off F11: Off F12: On			Type: DCC
18	Time: 22:58:42.849	Msg#: 91	Command: Speed	Speed: 125	SpeedStep: 128	Direction: Fwd	Type: DCC
19	Time: 22:58:42.895	Msg#: 92	Command: Speed	Speed: 126	SpeedStep: 128	Direction: Fwd	Type: DCC

These shows the detailed messages for a switch (double click):

Line	Msg#	Time	Status	Act	Type
1	22	56:49.864	Thrown/R(OFF)	Act:ON	Type: LocoNet
2	35	22:56:52.224	Thrown/R(OFF)	Act:ON	Type: DCC
3	36	22:56:52.239	Thrown/R(OFF)	Act:ON	Type: DCC
4	37	56:52.317	Thrown/R(OFF)	Act:OFF	Type: LocoNet
5	38	22:56:52.333	Thrown/R(OFF)	Act:OFF	Type: DCC
6	39	22:56:52.333	Thrown/R(OFF)	Act:OFF	Type: DCC
7	40	56:52.505	Closed/N(ON)	Act:ON	Type: LocoNet
8	41	22:56:52.520	Closed/N(ON)	Act:ON	Type: DCC
9	42	22:56:52.520	Closed/N(ON)	Act:ON	Type: DCC
10	43	56:52.599	Closed/N(ON)	Act:OFF	Type: LocoNet
11	44	22:56:52.614	Closed/N(ON)	Act:OFF	Type: DCC
12	45	22:56:52.630	Closed/N(ON)	Act:OFF	Type: DCC
13	46	58:01.411	Closed/N(ON)	Act:ON	Type: LocoNet
14	47	22:58:01.442	Closed/N(ON)	Act:ON	Type: DCC
15	48	22:58:01.474	Closed/N(ON)	Act:ON	Type: DCC
16	49	58:01.536	Closed/N(ON)	Act:OFF	Type: LocoNet
17	50	22:58:01.552	Closed/N(ON)	Act:OFF	Type: DCC
18	51	22:58:01.567	Closed/N(ON)	Act:OFF	Type: DCC
19	52	58:01.833	Thrown/R(OFF)	Act:ON	Type: LocoNet
20	53	22:58:01.849	Thrown/R(OFF)	Act:ON	Type: DCC
21	54	22:58:01.864	Thrown/R(OFF)	Act:ON	Type: DCC
22	55	58:01.989	Thrown/R(OFF)	Act:OFF	Type: LocoNet
23	56	22:58:02.500	Thrown/R(OFF)	Act:OFF	Type: DCC
24	57	22:58:02.200	Thrown/R(OFF)	Act:OFF	Type: DCC
25	58	58:02.255	Closed/N(ON)	Act:ON	Type: LocoNet
26	59	22:58:02.270	Closed/N(ON)	Act:ON	Type: DCC
27	60	22:58:02.270	Closed/N(ON)	Act:ON	Type: DCC
28	61	58:02.380	Closed/N(ON)	Act:OFF	Type: LocoNet
29	62	22:58:02.395	Closed/N(ON)	Act:OFF	Type: DCC
30	63	22:58:02.411	Closed/N(ON)	Act:OFF	Type: DCC
31	64	58:02.599	Thrown/R(OFF)	Act:ON	Type: LocoNet
32	65	22:58:02.614	Thrown/R(OFF)	Act:ON	Type: DCC
33	66	22:58:02.614	Thrown/R(OFF)	Act:ON	Type: DCC
34	67	58:02.724	Thrown/R(OFF)	Act:OFF	Type: LocoNet
35	68	22:58:02.755	Thrown/R(OFF)	Act:OFF	Type: DCC
36	69	22:58:02.770	Thrown/R(OFF)	Act:OFF	Type: DCC
37	70	58:02.895	Closed/N(ON)	Act:ON	Type: LocoNet
38	71	22:58:02.911	Closed/N(ON)	Act:ON	Type: DCC
39	72	22:58:02.927	Closed/N(ON)	Act:ON	Type: DCC

Description	Value	Previous Value	Change	Description	Value	Previous Value	Change
Bit Statistics				Packet Error Statistics			
Total Good Bits (good)	28317486	28214273	103213	Total Packet Count (good)	580254	578206	2048
One Bit Count(good)	17944544	17879130	65414	Number of Packets with Bad Check Byte	0	0	0
Zero Bit Count (good)	10372970	10335179	37791	Number of Packtes with preamble to short	8	8	0
Bits too Short (bad)	3	3	0	Number of Packtes that where to short	0	0	0
Bits too Long (bad)	0	0	0	DCC Tester Ring Overflow Counter	0	0	0
Bits between One and Zero (bad)	3	3	0	Address Summary Statistics			
Preamble and Packet Summary				Total Address Count	580256	578222	2034
Current Preamble length in bits	15	15	0	Number of Valid Addresses	499075	497331	1744
Shortest Preamble length since reset	12	12	0	Number of Idle Packets	81181	80891	290
Longest Preamble length since reset	19	19	0	Number of Accessory Packets	269	269	0
Number of packets with preamble too short	8	8	0	Number of Broadcast Packets	0	0	0
Total Packet Count	580244	578145	2099	Number of Unknown Packets	0	0	0
Packet Count with GOOD Check Byte	580242	578142	2100	Lowest Mobile Address Received	14	14	0
Timing Statistics				Highest Mobile Address Received	88	88	0
Current Packet Duration Time	29.3496 ms	29.3568 ms	-0.0072	Packet Type Statistics			
Shortest Packet Duration Time	16.0768 ms	16.0768 ms	0	Total Packet Count	579992	577981	2011
Longest Packet Duration Time	33.7792 ms	33.7792 ms	0	Number of Speed Packets	374148	372855	1293
Current Inter-Packet Gap Time	27.648 ms	27.648 ms	0	Number of Function Packets	124662	124232	430
Shortest Inter-Packet Gap Time	27.4432 ms	27.4432 ms	0	Number of Analog Packets (playable whistle)	0	0	0
Longest Inter-Packet Gap Time	42.396 ms	42.396 ms	0	Number of Decoder Reset Packets	0	0	0
Packet Length Statistics				Number of Idle Packets	81182	80894	288
Total 2-Byte Packets	206109	205373	736	Number of Decoder Idle Packets	0	0	0
Total 3-Byte Packets	374140	372810	1330	Bit Timing Statistics			
Total 4-Byte Packets	0	0	0	Current One Bit Time	109 us	109 us	0
Total 5-Byte Packets	0	0	0	Shortest One Bit Time	56 us	56 us	0
Total 6-Byte Packets	0	0	0	Longest One Bit Time	123.6 us	123.6 us	0
Total 7-Byte Packets	0	0	0	Current Zero Bit Time	220.4 us	220.2 us	0.2
				Shortest Zero Bit Time	186.4 us	186.4 us	0
				Longest Zero Bit Time	518.2 us	518.2 us	0

DCC Pocket Tester, Version: 1.52 Comport: COM3 Baudrate: 115200 RefreshRate: 15[s] Last Refresh: 18:15:13.828 DCC Voltage: 15.49[V]

