

LSS protocol

User's Manual 1.2

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Location H:\work\docs\lss_users_manual.sxw

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VERSION HISTORY

<i>Version:</i>	<i>Date:</i>	<i>Author:</i>	<i>Modifications:</i>
1.0	4.2.2004	Olli Vistbacka	Initial edition.
1.1	16.4.2004	OMV	Fixed invalid message length from 2.1
1.2	23.8.2004	OMV	Fixed invalid bit timing activation procedure from 2.1.

1. SETTING NODE-ID WITH LSS

Follow the steps bellow to configure module node-id with LSS protocol.

1.1 Setting Node-ID

- Set module to state LSS-config by sending the following message:

<i>Item</i>	<i>Value</i>
COB-ID	0x7E5
Length	2
Data 0	0x04
Data 1	0x01

- Set Node-ID by sending the following message:

<i>Item</i>	<i>Value</i>
COB-ID	0x7E5
Length	2
Data 0	0x11
Data 1	Node-ID

Where Node-ID the desired node-id as hexadecimal number.

- Module sends the following response (any other response is a failure):

<i>Item</i>	<i>Value</i>
COB-ID	0x7E4
Length	3
Data 0	0x11
Data 1	0x00
Data 2	0x00

- Save configuration by sending the following message:

<i>Item</i>	<i>Value</i>
COB-ID	0x7E5
Length	1
Data 0	0x17

- Module sends the following response (any other response is a failure):

<i>Item</i>	<i>Value</i>
COB-ID	0x7E4
Length	3
Data 0	0x17
Data 1	0x00
Data 2	0x00

- Set module to state LSS-operation by sending the following message (**NOTICE!** the module will reset itself):

<i>Item</i>	<i>Value</i>
COB-ID	0x7E5
Length	2
Data 0	0x04
Data 1	0x00

2. SETTING BAUDRATE WITH LSS

Follow the steps bellow to configure module baudrate with LSS protocol.

2.1 Setting Baudrate

- Set module to state LSS-config by sending the following message:

<i>Item</i>	<i>Value</i>
COB-ID	0x7E5
Length	2
Data 0	0x04
Data 1	0x01

- Set baudrate by sending the following message:

<i>Item</i>	<i>Value</i>
COB-ID	0x7E5
Length	3
Data 0	0x13
Data 1	0x00
Data 2	Baudrate index

Where Baudrate index is one of the following indices:

<i>Index</i>	<i>Baudrate</i>	<i>Index</i>	<i>Baudrate</i>
0x00	1000 kbps	0x04	125 kbps
0x01	800 kbps	0x06	50 kbps
0x02	500 kbps	0x07	20 kbps
0x03	250 kbps	0x08	10 kbps

- Module sends the following response (any other response is a failure):

<i>Item</i>	<i>Value</i>
COB-ID	0x7E4
Length	3
Data 0	0x13
Data 1	0x00
Data 2	0x00

- Activate bit timing parameters:

<i>Item</i>	<i>Value</i>
COB-ID	0x7E5
Length	3
Data 0	0x15
Data 1	<delay lsb>
Data 2	<delay msb>

There is a delay of <delay> milliseconds before bit timing is changed and after that, before enabling communications.

- Set module to state LSS-operation by sending the following message (**NOTICE!** the module will reset itself):

<i>Item</i>	<i>Value</i>
COB-ID	0x7E5
Length	2
Data 0	0x04
Data 1	0x00

- Set module to state LSS-operation by sending the following message:

<i>Item</i>	<i>Value</i>
COB-ID	0x7E5
Length	2
Data 0	0x04
Data 1	0x00