

CAN Interface Manual LX449 Automatic Voltage Regulator

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| Classification | |
| Date | 02-03-11 |
| Author | R. van Beekum |
| Signature for release | |

Revision History

| Revision No. | Author | Date | Description |
|--------------|--------|----------|----------------------|
| V1.0 | RBE | 02-03-11 | First Draw |
| V1.1 | RBE | 03-03-11 | Minor update |
| V1.2 | EBL | 17-03-11 | Software name change |

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1.0 Requirements:

1.1 Hardware:

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|--|--------------------|
| Windows 2K/XP pc with free USB port | |
| USB to Serial (RS232) converter | (order nr AC35101) |
| Null-Modem Serial cable (pins 2 and 3 crossed) | (order nr AC34107) |
| CAN to Serial (RS232) converter | (order nr HD67216) |
| 12V Power Supply for CAN converter | (order nr AC34001) |

1.2 Software:

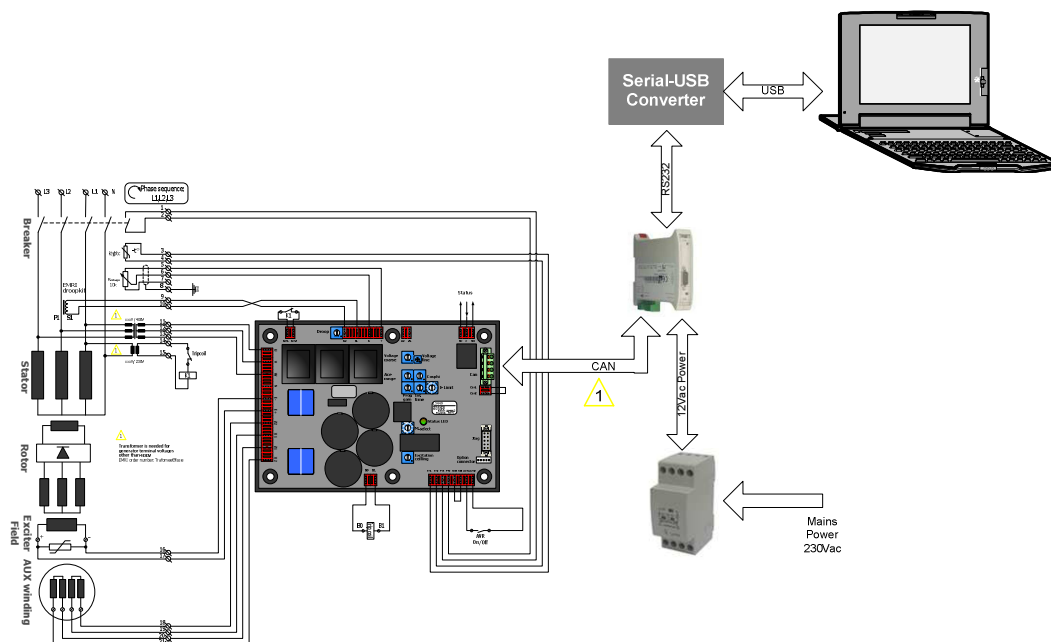
AVR_viewer.Zip
Unzip utility

2.0 Hardware connection:

2.1 Connection Diagram:

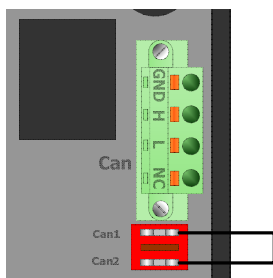
Connect the hardware as shown in the diagram below.

- 1 If the LX449 is the only node on the CAN bus, the bus should be terminated at both ends by 120 Ohm. The AVR end is terminated by placing a bridge between CAN1-CAN2. (see picture 2) The CAN converter end is terminated by placing jumper 1 on the converter. (see picture 3)

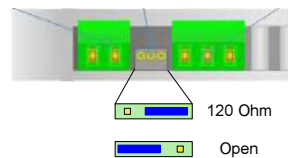


Picture 1: Connection Diagram

2.2 CAN bus termination:



Picture 2: LX449 CAN bus termination resistor

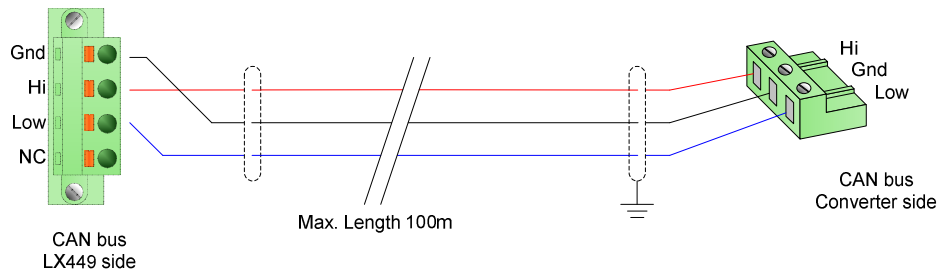


Picture 3: Analyzer CAN bus termination resistor

2.3 Cable definitions:

CAN cable:

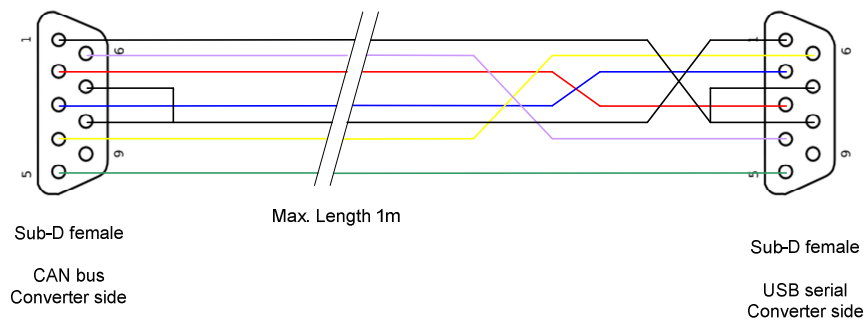
The CAN cable must be of 3*0,75mm² shielded type



Picture 4: CAN bus Cable

Serial cable (RS232):

The Serial cable must be of Null-Modem type

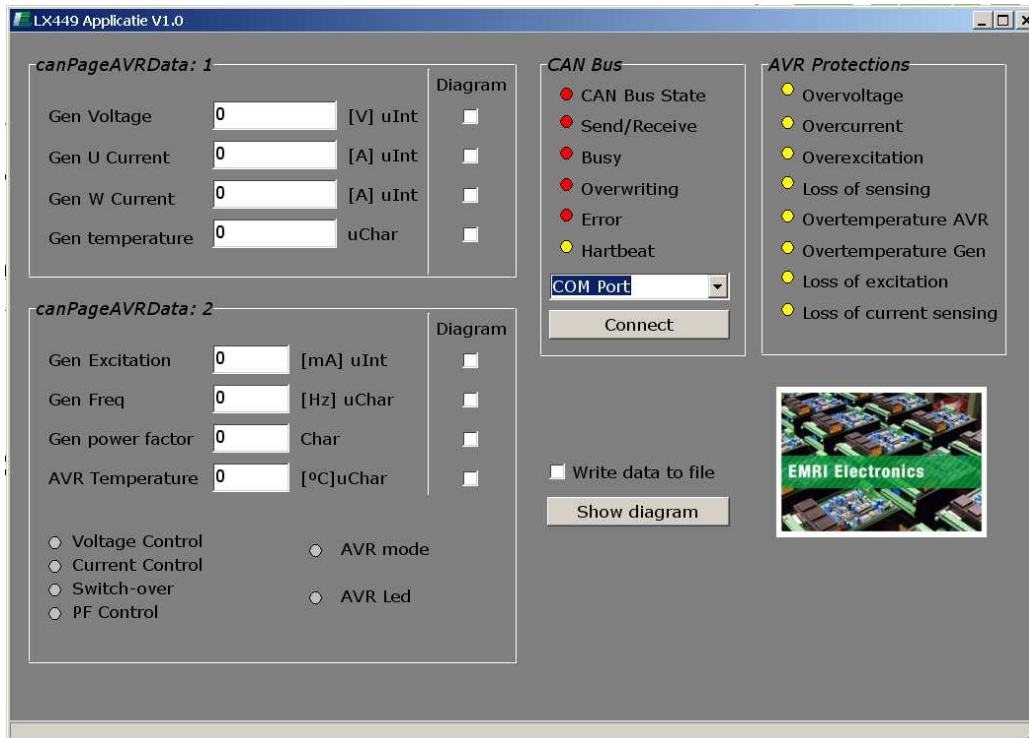


Picture 5: Serial Cable

3.0 Software:

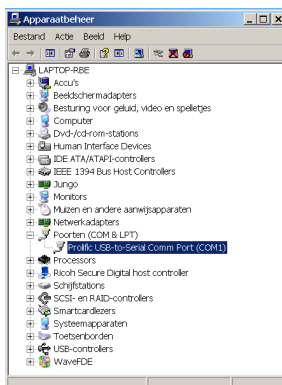
3.1 Starting:

Unpack the zip file containing the firmware and programming application to a local destination maintaining the folder structure. After all hardware connections have been made, run the AVR viewer by opening "AVR_viewer.exe". After opening the following window will appear.



3.2 Connecting:

To connect to the LX449 select the correct Com port and click "connect". The correct com port can be found by viewing the windows "DeviceManager"



After "connect" has been clicked, the heartbeat led should blink and the data should be displayed and updated. If this is not the case, check the hardware connections and make sure all hardware is powerup.

3.2 Software options:

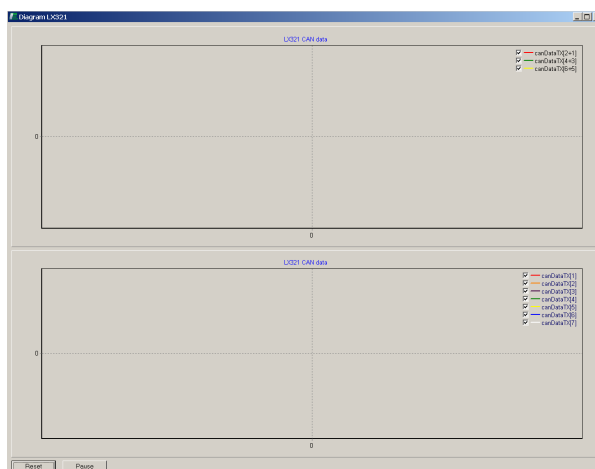
Write data to file:

By selecting "Write data to file" the data received from the LX449 is saved to a data file. At the moment you select "Write data to file" the software will ask you to select a location to save the data.



Data trend:

The LX449 data can be display in a trend. If you select any of the checkboxes the corresponding data is written to a trend. By clicking "Show diagram" the trend is displayed.



Closing the trend does not affect the trend, it can be display again by clicking "Show diagram" again. To reset the trend click "Reset" in the trend view. Clicking "Pause" will hold the trend data.