

Installation Guide for LinMot USB-CAN Converter Pro for Configuration of E1100/B1100 Drives by CAN Bus

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CAN-USB Converter Pro Installation Guide

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1 Introduction

The USB-CAN Converter Pro can be used to login from a PC with installed LinMot-Talk 6.0 software or higher to one or more E1100/B1100 drives over the CAN bus. It can help the user to debug and configure the system in case the serial communication port is occupied (for example if the active interface is LinRS).

Device Login	
Interface Type:	 RS232 RS485 CAN
COM Port:	COM1
Device MAC-ID:	2
Login Password:	
	OK Cancel

For E1100 drives, the MAC-ID is selected by the two rotary HEX switches S1 and S2.

For B1100 drive the MAC-ID is set via parameter. The default value is 63.



2 Technical Data

Unit:	USB interface
CPU:	Microprocessor Siemens SAB-C165
Memory:	256 Kbytes SRAM
CAN connector:	D-Sub 9
PC connector:	USB connector

2.1 CAN connector on USB-CAN Converter Pro – Pin assignment

The USB – CAN Converter Pro is equipped with a D-Sub connector which provides connection to the CAN bus conforming to the CAN High Speed Bus (ISO 11898). DSUB 9 male:

Pin	Signal
1	N.C.
2	CAN_L
3	GND
4	N.C.
5	Drain connected to connector shield
	(1M/10n to isolated GND)
6	GND
7	CAN_H
8	N.C.
9	N.C.

Table 2-1: Pinning of the CAN connector

2.2 CAN connector on LinMot Drive E1100 & B1100

2.2.1 Pin Description of the COM Connector:

DSBU 9 male:

Pin 5	GND		
Pin 4	RS-485 RX+	Pin 9	CAN H
Pin 3	RS-232 RX	Pin 8	CAN L
Pin 2	RS-232 TX	Pin 7	RS-485 TX-
Pin 1	RS-485 TX+	Pin 6	RS-485 RX



2.2.2 CAN Pin Description of the CMD and ME Connector:

2xRJ45 with 1:1 connected signals. Standard twisted pairs: 1/2, 3/6, 4/5, 7/8. Ethernet cables according standard

 CMD C	onnector	ME Co	nnector	
Pin 1	RS485 A	Pin 1	А	
Pin 2	RS485 B	Pin 2	/A	
Pin 3	RS485 Y	Pin 3	В	
Pin 4	Ground	Pin 4	Z	
Pin 5	Ground	Pin 5	/Z	
Pin 6	RS485 Z	Pin 6	/B	
Pin 7	CAN H	Pin 7	CAN H	
 Pin 8	CAN L	Pin 8	CAN L	



On E1100-GP Drive use the ME connector, on E1100-DP, E1100-RS and B1100 drives use the CMD connector.

2.2.3 CAN Termination

The CANbus must be terminated by two 120 Ohm resistors at both ends of the bus line according the following scheme:



For easy installation, the LinMot CANopen drive has built in termination resistors, which can be activated if the LinMot drive is at the end of the bus line and if there is no termination in the connector.

S3 <u>ON – OFF</u> 1 RS485/232 2 RS485 Term 3 CAN Term 4 Interface

1 2 3 4 4 S3 **E1100** drives: The built in termination resistor for the CAN bus can be activated by setting the dip switch "CAN Term" to "ON" If the dip switch "Interface" is set to "OFF", the CANopen Interface is deactivated.



B1100 drives: The built in termination resistor for the CAN bus can be activated by setting the dip switch "CAN Term" to "ON"

6/8

S4

<u>ON – OFF</u> 1 RS485/232

2 RS485

3 CAN Term

4 Bootstrap



3 How to install the USB-CAN Converter Pro

3.1 System Requirements

To run the USB-CAN Converter Pro your PC must meet the following requirements:

- 100% IBM-compatible
- At least one available USB port
- Windows 10, 11
- LinMot-Talk_V5S1_Build20130910_IM or higher.

3.2 Installation

Note: Before connecting the USB-CAN Converter Pro to the PC, download and install the actual driver software from our home page:

http://shop.linmot.com (drivers for Windows 10, 11)

Unzip and run the downloaded file to start the installation and follow the setup instruction as they appear.

After the driver has been installed successfully, connect the USB-CAN Converter Pro to the PC and follow the proposed actions and settings.

The USB-CAN Converter Pro run on LinMot-Talk_V5S1_Build20130910_IM or higher. Firmware update on the drive is not needed.



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