LinMot®

CANTalk with WAP Extension
Quickstartguide
(v0.0.1b, 15.03.2004)

This is a short guide how to setup a LinMot System with CANTalk and WAP Extension.

1.) Commissioning of the system according the enclosures of the controller and the motors.

2.) Install the most recent release of LinMot Talk on your PC. Check www.linmot.com for the newest versions.

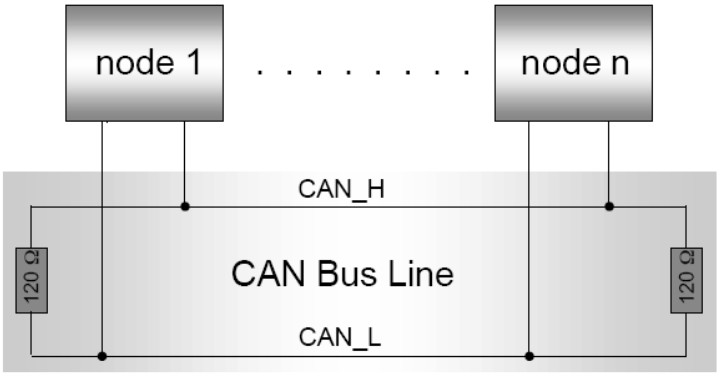
3.) Connect the COM-Port of your PC with a 1:1 connected cable to the COM Connector of the LinMot Controller.

4.) Start LinMot Talk, with the menu item “Special” -> “Install Package” the WAP extension can be loaded. The password is “NTI”. The Firmware File is in the subdirectory .\firmware\WAP. Select the File WPxx.IPK. After successful upgrading, the controller should be reset.

5.) Login into the LinMot Controller with the user-ID “service” (no password required).

6.) The following configuration settings should be checked with the Parameter inspector:
- Configure the motor: \Drives\Drive A\Type\P0x-23 or P0x-37
- Set Run Mode to serial: \Drives\Drive A\Set Value Generation\Run Mode\Serial
- Set Command interface to application: \System\Command Interface\Application
- Enable WAP extension: \WAP\Features\Enable WAP (the other options are application specific, and should only be activated when used)

7.) Connect the CAN Bus of the LinMot Controller to your CAN Master. The Baudrate of the CAN Master has to be set to 500kBit/s.

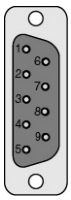


The cable should be a 120 Ohm shielded twisted pair with 2 signal lines and at least one ground line. Because there is no optical isolation on the LinMot Controller, there is an additional ground connection between the devices necessary (the shield of a cable is NOT a ground connection. The general rule is, that external ground connection should be at least 10 times lower impedance than the cable shield).

The CANBus is on the COM Connector of the controller.

Pinout of the COM Connector:

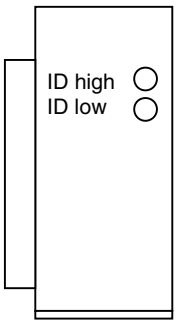
DSBU 9 male:



Pin 1	RS-485 Y	Pin 6	RS-485 B
Pin 2	RS-232 TX	Pin 7	RS-485 Z
Pin 3	RS-232 RX	**Pin 8**	**CAN L**
Pin 4	RS-485 A	**Pin 9**	**CAN H**
Pin 5	**GND**		

For debugging purpose it's quite useful to have a Y-Cable which splits the CAN Bus from the RS232.

The node-ID has to be set by the two rotary hex switches of the controller.



8.) Example for moving the motors:

Write the following variables with CANTalk or RSTalk:

Address	Value	Description
0xF70C	0x0002	Set the RUN REQUEST flag. The controller should now be in the state RUN. Bit 1 on the Address 0xF60E (STATUS) should be set.
0xF704	Pos A	The desired Set Position for motor A
0xF706	Pos A	The desired Set Position for motor B
0xF702	0x0303	GotoPos Command for motor A and B.
0xF70E	Status	shows the state of the controller.

For further information, please refer to the following documents:

- Wap_Extension_Manual
- Addendum to the Release 1.3.
- DevDoc CAN Talk