

MasterBus LIN Bus Interface

Interface from MasterBus to LIN





USER AND INSTALLATION MANUAL

1 GENERAL INFORMATION

Use of this manual

This manual serves as a guideline for the safe and effective operation of the MasterBus LIN Bus Interface. Keep this manual at a secure place!

Warranty

Advanced Systems Group (ASG) assures the product warranty of the LIN Bus Interface during two years after purchase, on the condition that the product is installed and used according to the instructions in this manual. Installation or use not according to these instructions may result in under performance, damage or failure of the product and may void this warranty. The warranty is limited to the cost of repair and/or replacement of the product. Costs of labour or shipping are not covered by this warranty.



CAUTION!

Never remove the identification label.

Liability

ASG can accept no liability for:

- consequential damage due to use of the LIN Bus Interface;
- · possible errors in the manuals and the results thereof;
- use that is inconsistent with the purpose of the product.

Disclaimer

Our products are subject to continual development and improvement. Therefore, additions or modifications to the products may cause changes to the technical data and functional specifications. No rights can be derived from this document. Please consult our online Terms & Conditions of Sale.

Correct disposal of this product

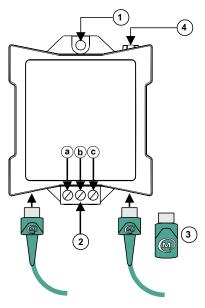


This product is designed and manufactured with high quality materials and components, which can be recycled and reused. Please be informed about the local separate collection system for electrical and electronic products. Please act according to your local rules and do not dispose of your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences to the environment and human health.

2 INSTALLATION

The LIN Bus Interface is designed for use in vehicles equipped with a LIN enabled (secondary) alternator option. For a complete list of supported vehicle brands and models, please visit the Mastervolt website: www.mastervolt.com.

The LIN Bus Interface can be used in combination with all current models of Mastervolt MLI batteries. It will guarantee a seamless integration of the MLI Ultra battery into the vehicles LIN Bus and provide the alternator and Engine Control Unit (ECU) with the necessary data from the MLI Ultra battery to monitor and charge the battery accordingly. Only one MLI Ultra battery is allowed to be present in the connected MasterBus network.



Steps:

- 1. Mount the LIN Bus Interface to any flat surface. The interface comes with a DIN rail mount option. Alternatively, use the two mounting holes (1).
- 2. Wire the screw terminal (2).
 - a. LIN Battery +
 - b. LIN Bus Line
 - c. LIN GND

Make sure that the power cable is fused with a 1A fuse.

- 3. Insert the MasterBus cable (included, 1m) to integrate the interface into the MasterBus network. Make sure that the MasterBus network is properly terminated at the two ends with a terminator (3).
- 4. A flashing LED (4) indicates that the MasterBus communication is working.
- 5. Use a MasterBus compatible remote control panel such, as the EasyView 5 or PC with MasterAdjust software, to monitor the battery.

See chapter 3 for the LIN Bus Interface MasterBus features. For more information refer to the user manual of the remote control panel.

3 OPERATION

The LIN Bus Interface requires no configuration. Once installed correctly, it will start operating automatically. The LIN Bus Interface, once powered from the LIN side, automatically starts polling the necessary data from the MLI Ultra battery via MasterBus. It will translate this data into vehicle conform LIN messages and respond to LIN requests received from the vehicle. In case of no active communication on the LIN Bus, the LIN Bus Interface will go to sleep mode (disappear from the MasterBus), until the LIN Bus communication becomes active again.

To maintain the optimal battery capacity, the battery should be charged to 100% every week.

The following table shows the LIN Bus Interface items displayed on a monitoring device connected to the MasterBus network.

Note: In case of clustered MLI Ultra units, only the cluster data will be transferred to the LIN bus. Individual batteries in a cluster cannot be monitored via the LIN Bus Interface.

MONITORING	DESCRIPTION	ADJUSTABLE RANGE
General		
MLI Status	MLI battery status, is the battery offline or online	(read only)
MLI Data		
SOC	Battery state of charge in %	(read only)
Time remaining	Time of battery use left at the actual load in hh:mm:ss	(read only)
Cap. consumed	Battery capacity consumed in Ah	(read only)
Cap. Remaining	Battery capacity remaining in Ah	(read only)
Voltage	Battery voltage in V	(read only)
Current	Current measured by the battery in A	(read only)
	Positive value: charging, Negative value: discharging	
Temperature	Internal temperature of the battery in °C	(read only)
Charge voltage	Current desired charge voltage in V communicated to the vehicle	(read only)
Nom. Capacity	Nominal battery capacity in Ah	(read only)
CONFIGURATION		
Device		
Language	Interface menu language on a monitoring device connected to the MasterBus network [default: English]	(read only)
Serial #	The serial number of the LIN Bus Interface	(read only)
Name	User defined device name, visible throughout the MasterBus network [default: LIN]	Up to 12 characters

SPECIFICATIONS

Model: MasterBus LIN Bus Interface

Product code: 77032800

Delivery also includes: - Screw terminal

> - MasterBus terminator - MasterBus cable (1m)

- User manual

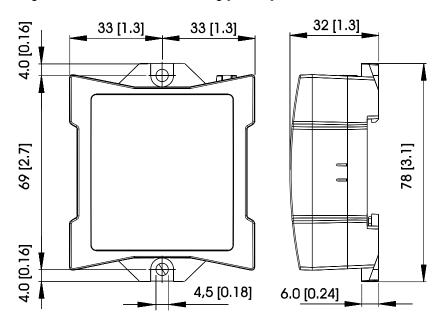
Languages available: English Current consumption: <30 mA MasterBus Powering: No

DIN rail mounting: Yes, DIN rail 30 mm [1.2 inch]

Protection degree:

Dimensions: 66 x 78 x 32 mm [2.6 x 3.1 x 1.3 inch]

Weight: 70 g [0.15 lb]



Dimensions in mm [inch]





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