



USER'S MANUAL

# MasterBus Philippi Interface

Show your MasterBus products on your Philippi display



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## 1 GENERAL INFORMATION

### 1.1 USE OF THIS MANUAL

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This manual serves as a guideline for the safe and effective operation of the MasterBus Philippi Interface, to be called *Philippi Interface* further in this manual.

Keep this manual at a secure place!

### 1.2 GUARANTEE SPECIFICATIONS

Mastervolt guarantees that this product was built according to the legally applicable standards and stipulations. If you fail to act in accordance with the regulations, instructions and stipulations in this user's manual, damage can occur and/or the product will not fulfil the specifications. This may mean that the guarantee will become null and void.

### 1.3 LIABILITY

Mastervolt can accept no liability for:

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



**CAUTION!**  
 Never remove the identification label.

### 1.4 CORRECT DISPOSAL OF THIS PRODUCT

#### (Waste Electrical & Electronic Equipment)



This product is designed and manufactured with high quality materials and components, which can be recycled and reused. When this crossed-out wheeled bin symbol is attached to a product, it means the

product is covered by the European Directive 2012/19/EU.

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 HOW IT WORKS

### 2.1 COMMUNICATION

This MasterBus-Philippi interface connects Mastervolt products with MasterBus to a Philippi network. MasterBus products can be monitored and configured from a Philippi display system monitor.

Chapter 3 describes the installation of the interface.

Chapter 4 describes the possibilities once installed.

The Philippi interface does not require any configuration in most cases. Chapter 5 shows how to do a manual configuration.

This might be needed when you have more than 6 MasterBus products in your network and want to select which MasterBus product is presented on the Philippi network.

**NOTE:** this manual is not designed to replace either the Philippi display manual or the manual of the specific MasterBus product. Read these to understand how the MasterBus products operate and how the display works.



Figure 1: Screen of Philippi PSM2 display showing information of Mass Combi Ultra

### 3 INSTALLATION

This interface is designed to connect a MasterBus network to a Philippi network (PBus). Most of the MasterBus products can now be monitored and controlled from a PSM2 Philippi display. See chapter 4 for a complete list of compatible MasterBus products.

The Philippi interface allows you to monitor and control up to 6 MasterBus devices.

The interface is connected as part of the MasterBus network and as part of the Philippi network. Both networks need to be powered separately.

Figure 2. shows a typical installation. Both networks can have more products as shown in the figure. There can only be one Philippi interface connecting the MasterBus to the Philippi network.

See figure 3 for the Philippi Interface connections.

NOTE: Notice the different configurations of the MasterBus and PBus. MasterBus products have two MasterBus connectors to daisy chain the MasterBus from product to product. The PBus uses a network backbone with T-Terminals to connect products to the backbone.

NOTE: Use a Philippi PSM2 display

NOTE: For the MasterShunt to start calculating battery information, set the battery capacity. This can be done via the Philippi display.

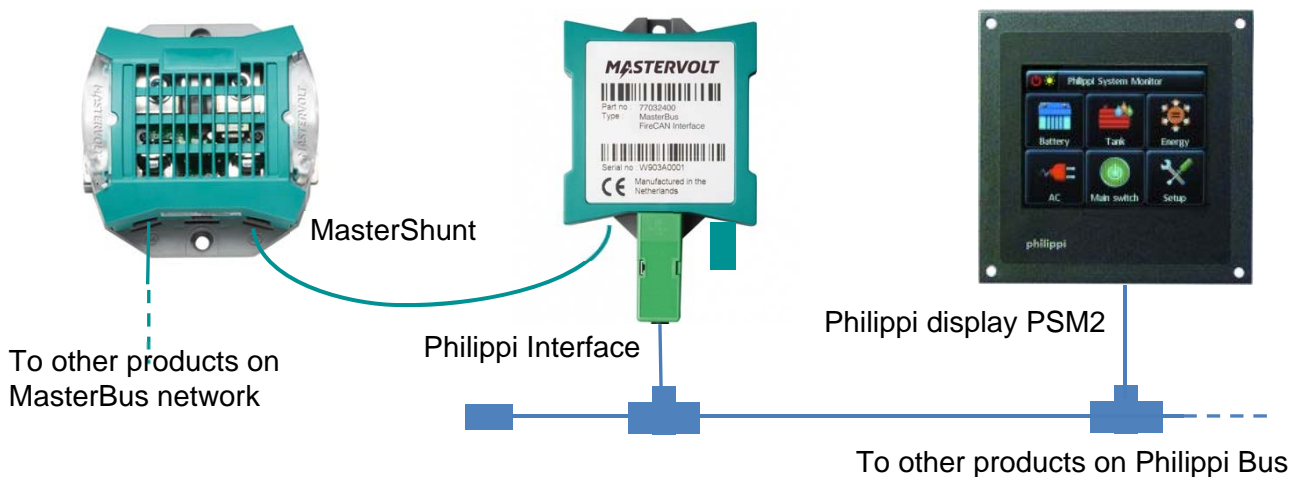


Figure 2: Installation example Philippi interface

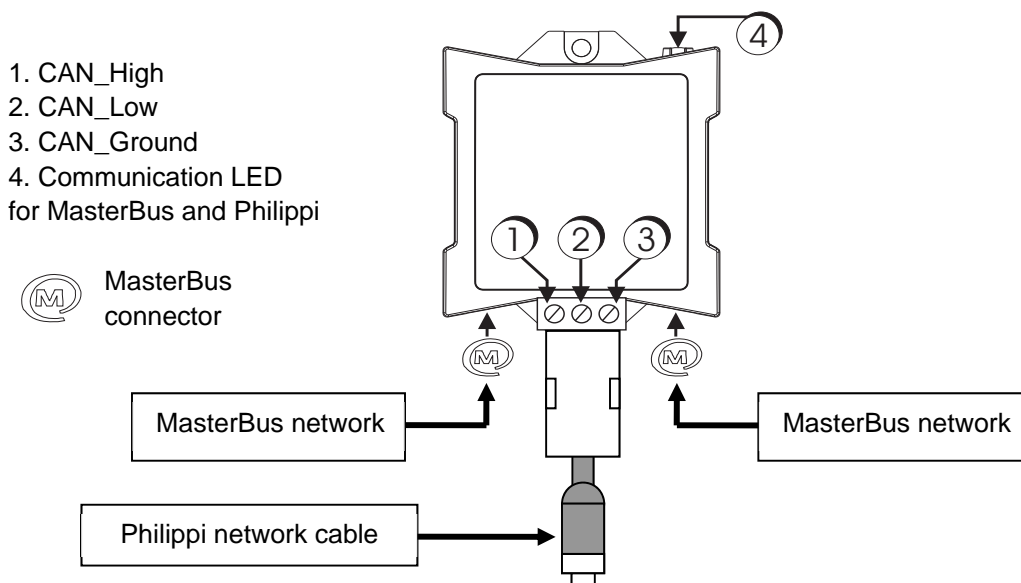


Figure 3: Overview of the Philippi Interface

## 4 OPERATION OF THE PHILIPPI DISPLAY

The Philippi display can be used to control many different products. The MasterBus products show up in the display just like other Philippi products.

### 4.1 MONITORING AND CONTROL OF MASTERBUS DATA

The following products can be monitored and controlled from the Philippi display.

#### MasterShunt

The following models can be monitored on the PSM2 display:

- *MasterShunt 500 (77020100)*
- *MasterShunt 500 (77020110)*

The following information can be monitored on the PSM2 display:

- Battery state of charge
- Battery voltage
- Battery current
- Battery temperature (if applicable)

The following configuration items can be set from the PSM2 display:

- Battery type\*\*
- Battery voltage\*\*
- Battery capacity\*\*

#### ChargeMaster

The following models can be monitored on the PSM2 display:

- *ChargeMaster 12/25 (44010250)*
- *ChargeMaster 12/35 (44010350)*
- *ChargeMaster 12/50 (44010500)*
- *ChargeMaster 12/70 (44010700)*
- *ChargeMaster 12/100 (44011000)*
- *ChargeMaster 24/12 (44020120)*
- *ChargeMaster 24/20 (44020200)*
- *ChargeMaster 24/30 (44020300)*
- *ChargeMaster 24/40 (44020400)*
- *ChargeMaster 24/60 (44020600)*
- *ChargeMaster 24/80 (44020800)*
- *ChargeMaster 24/100 (44021000)*
- *ChargeMaster Plus 12/75 (44310750)\**
- *ChargeMaster Plus 12/100 (44311000)\**
- *ChargeMaster Plus 24/40 (44320400)\**
- *ChargeMaster Plus 24/60 (44320600)\**

The following information can be monitored on the PSM2 display:

- Battery 1 voltage
- Battery 2 voltage
- Battery 3 voltage (if applicable)
- Total battery current
- Battery temperature

The following configuration items can be set from the PSM2 display:

- Set charger On/Off
- Set Battery type
- Set current in Amps (is Input current for small ChargeMasters and output current for larger ChargeMasters).

## Mass Combi (Ultra)

The following models can be monitored on the PSM2 display:

- *Mass Combi Ultra 12/3000 (38013000)*
- *Mass Combi Ultra 24/3500 (38023500)*
- *Mass Combi Ultra 48/3500 (38043500)*
- *Mass Combi Pro 12/3000 (38513000)*
- *Mass Combi Pro 24/3500 (38523500)*
- *Mass Combi via Serial interface (77030450)*
- *Mass Combi via Combi interface (77030475)*

The following information can be monitored on the PSM2 display:

- Battery voltage
- Battery charge current
- Mains input voltage
- Mains input current
- AC output 1 voltage
- AC output 1 current
- Generator input voltage (if applicable)
- Generator input current (if applicable)
- AC output 2 voltage
- AC output 2 current

The following configuration items can be set from the PSM2 display:

- Set mains fuse
- Silent mode power %(if applicable)
- Charge method main battery
- Maximum charge main battery
- Battery type of main battery
- Charge method secondary battery (if applicable)
- Maximum charge secondary battery (if applicable)
- Battery type of secondary battery (if applicable)
- Inverter voltage (if applicable)
- Inverter frequency (if applicable)
- Ground relay On/Off (if applicable)
- Energy saving mode (if applicable)
- Input = Genset On/Off (if applicable)
- Input 1 policy (if applicable)
- Input 2 policy (if applicable)

## MLi Battery

The following models can be monitored on the PSM2 display:

- *MLi Ultra 12/2500 (66012500)*
- *MLi Ultra 12/5000 (66015000)*
- *MLi Ultra 24/5000 (66025000)*

The following information can be monitored on the PSM2 display:

- Battery state of charge
- Battery time remaining
- Battery voltage
- Battery current
- Battery temperature

The following configuration items can be set from the PSM2 display:

- Event battery low threshold
- Event battery pre low threshold
- Event battery full threshold
- Event battery over voltage threshold
- Switch MasterBus power On and Off

NOTE: the most often used settings of the Mass Combi can be opened in the display by pressing the middle square on the monitoring page of the Mass Combi, see figure 1.

On the monitoring page of the Philippi interface you find the most recent data which is ready for sending to the PBus network. If your monitoring page shows "- -" for fields, it indicates that no requests have been received for some time from the PBus network and no data is prepared.

\*) Might require software update

\*\*\*) Changing these values might impact your system warranty

## 6 MANUAL CONFIGURATION

In most cases it will not be necessary to do a manual configuration of the Philippi Interface. Only when you have more than six MasterBus devices that can be presented on the PBus, you might want to select yourself which six products are presented on the PBus. As this interface can show up to six products on the PBus. At the moment it is not possible to show more MasterBus products on the PBus. Only one MasterBus-Philippi interface is allowed on the PBus.

- **MasterAdjust via configuration**

You can manually select the devices to be shown on the Philippi network on the configuration tab page. First make sure you uncheck the “Auto config” checkbox. Once this checkbox is unchecked you can edit the 6 device fields. These 6 selected devices will be visible on the Philippi network.

NOTE: The dropdown lists will only show products which can be shown on the Philippi display.

NOTE: Selected devices will move up the list (Device 1 to Device 6) if there are empty selections above them so that the selected devices are all together and starting at “Device 1”.

For example, given the example in Figure 4, if you select a new product as Device 5, it will move up to Device 4.

NOTE: By changing the sequence of similar products in this list, you influence the sequence on the Philippi display.

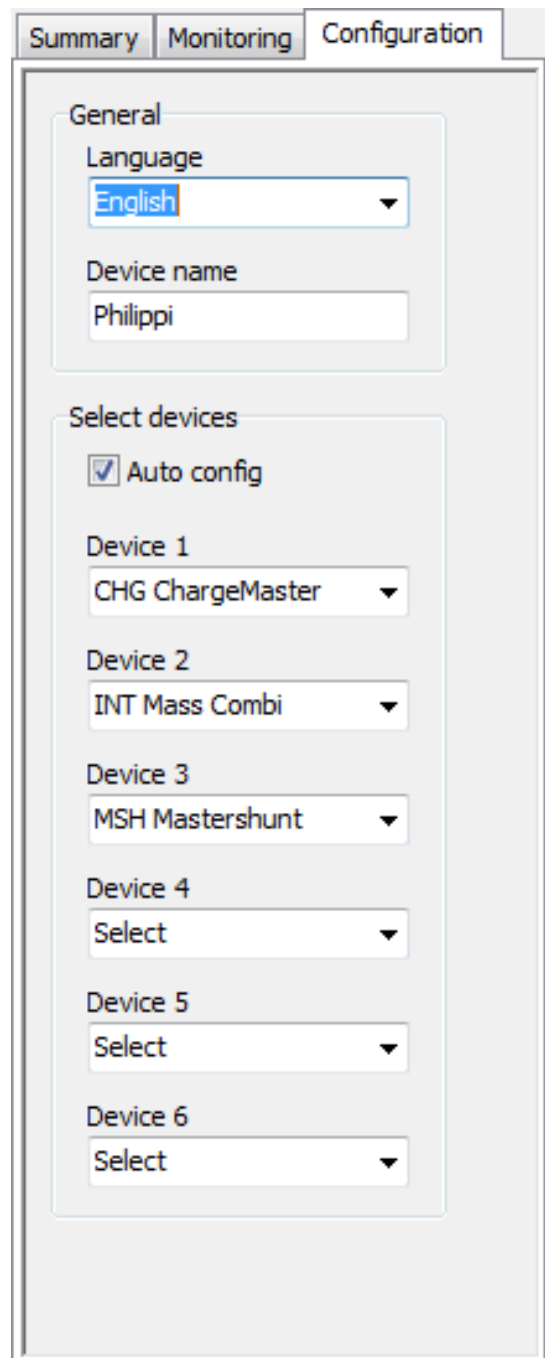


Figure 3:  
Configuration page of Philippi interface

## 8 SPECIFICATIONS

Model:	MasterBus – Philippi interface
Article number:	77031850
Delivery also includes:	Philippi network compatible cable (length: 100mm), MasterBus Terminating device, MasterBus cable (1 meter) User's manual
Function of instrument:	Interface between MasterBus network and Philippi network
Language:	English
Current consumption:	<40 mA
MasterBus Powering:	No
Din rail mounting:	Yes, Din rail 30 mm [1.2 inch]
Protection degree:	IP 21
Dimensions:	66 x 78 x 32 mm [2.6 x 3.1 x 1.3 inch]; see Figure 5
Weight:	Approx. 70 gr [0.15 lb] excluding cables
Event Sources	0
Events to be configured	0
Event targets	0
Maximum number of interfaces	1, this is the maximum number of Philippi interfaces on the PBus

Compatible products See chapter 4, "Operating the Philippi display"

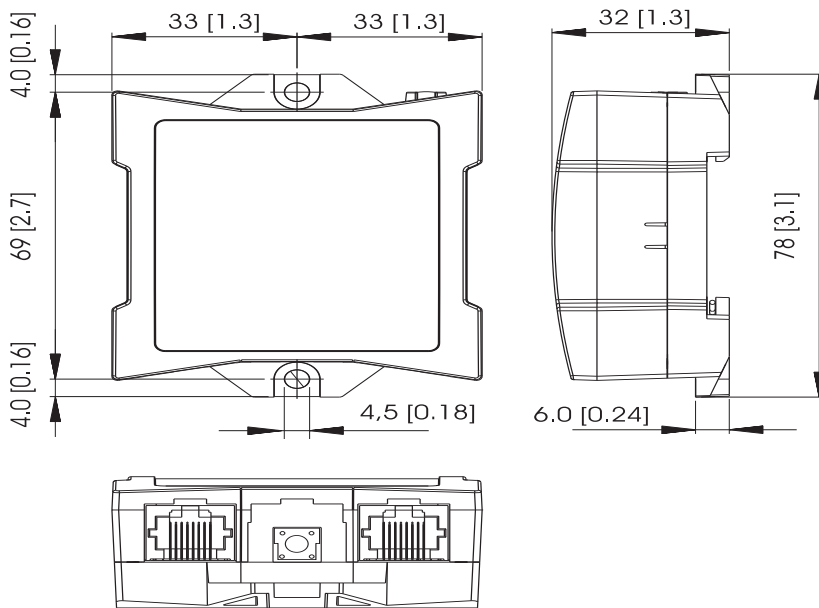


Figure 5: Dimensions in mm [inch]

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