

# MasterBus



Intelligent one cable  
system

Modular and flexible

Simplifies installation

Central, local and  
remote control

## Everything under control



**MASTERVOLT**  
THE POWER TO BE INDEPENDENT



A hand is holding a blue MasterBus cable with a circular logo featuring the letter 'M'. The background shows a white motorboat on a body of water with a rocky shoreline in the distance.

# The intelligent simplicity of MasterBus

MasterBus makes life easier for designers, builders and installers of power systems. This brilliantly simple platform for communication and connections ensures that all components 'speak' the same language. One communication protocol with high-speed CANbus technology. The optimum integration of power conversion and power storage now also includes digital switching. Control your system centrally or switch on a bunk light locally, all via MasterBus. The one-bus approach even allows control from your home. MasterBus helps realise an electrical system that combines remarkably easy installation with ultimate reliability; no matter how large or complex your system.

## Fewer cables

It all starts with MasterBus, a brilliantly simple one cable system for all communication between the various products. With MasterBus you need far fewer cables and all your system components will 'speak' the same language. Reap the benefits of a single communication protocol with high-speed CANbus technology that is fast, reliable, flexible and expandable.

## Easy maintenance

Replacing a component can often lead to complex configuration problems. Not with Mastervolt: The MasterBus system 'recognises' any replacement directly and automatically asks whether you want to keep the same or change your configuration. You stay well informed and with everything under control.

## Less is more!

- Less cables.
- Less components.
- Less time needed for installation.
- Less maintenance problems.
- Less unnecessary power consumption.
- More space.
- More uniformity.
- More functions for monitoring and control.
- More configuration comfort.
- More safety.
- More reliability.

## More information?

Contact your nearest dealer or see [www.mastervolt.com/masterbus](http://www.mastervolt.com/masterbus)

# The basic components of a MasterBus system



## MasterShunt 500

This ultra-modern battery monitor provides detailed information on the status of your batteries, including voltage, current, remaining time and used capacity in percentages so no more unpleasant surprises. With an intelligent connection system, the MasterShunt is easily connected to the DC Distribution. The integrated system clock combined with command-based events automates your system according to your needs. A good example of such system automation: The generator should start automatically when the batteries are almost depleted. The MasterShunt also has a built-in robust main fuse that can safely break short-circuit currents of 50,000 Amps.

<b>Product code</b>	<b>77020100</b>
Dimensions, hwxwd	150x150x65 mm / 5.9x5.9x2.5 inch
Weight	1 kg / 2.2 lbs
Battery types	gel, AGM, wet, Lithium Ion, spiral
Battery voltage	12, 24 or 48 V DC
Current	300 A continuous / 500 A for 5 minutes
MasterBus powering	yes
Main fuse	500 A T-fuse (300 A continuous at 40 °C)
System functionality	alarm, timers, auto start/stop for the generator
Programmable alarms	warning low voltage, warning low state of charge, high voltage
Protection degree	IP21
Delivered with	MasterShunt, temperature sensor, MasterBus Terminator, MasterBus cable, isolation cover for DC connections



## DC Distribution 500

The DC Distribution 500 is the smallest distribution model available. It connects up to four DC devices to the DC groups, such as a battery charger, inverter, alternators and solar panels. An included plug & play cable makes connection to the MasterBus network a breeze. The MasterView panel gives all fuses logical names (referring, for instance, to the connected equipment) to ensure you receive understandable error notifications (f.ex. battery charger fuse defect).

<b>Product code</b>	<b>77020200</b>
Dimensions, hwxwd	150x216x65 mm / 5.9x7.9x2.5 inch
Weight	1,2 kg / 2.6 lbs
Battery voltage	12, 24 or 48 V DC
Current	300 A continuous / 500 A for 5 minutes
MasterBus powering	no
Standard fuses	80, 80, 125, 160 A - ANL-type (deviating values can be ordered separately)
Spare fuse	125 A ANL-type
Alarm	fuse monitoring
Protection degree	IP21
Delivered with	5 fuses, hex tool, MasterBus Terminator, MasterBus cable, isolation cover for DC connections



# The intelligent logic of digital distribution

As owners demand ever higher levels of onboard luxury and comfort, yachts and vehicles need to carry more equipment which in turn takes up more space. This makes it all the more essential to intelligently install equipment in the available space - and that is where digital distribution by Mastervolt comes in. Digital distribution requires fewer cables, takes up less space and increases luxury.



## Digital DC 10x10A

As the pinnacle of system intelligence, the Digital DC 10x10A has ten output channels of 10 A for all functions including lighting, pumps or electronics. It comes standard with intelligent alarm functions and luxury options include:

- Follow me home; light stays on for a specific time.
- Dimming of lights.
- Alarm signal for overload.
- Every output includes a hardware and software fuse.
- Fuse reset option via the MasterBus network.
- Option of higher currents – up to 100 A – with parallel switching of multiple outputs.

<b>Product code</b>	<b>77020400</b>
MasterBus powering	yes
Power consumption	<2 mA @ 12 V / <2 mA @ 24 V
Protection degree	IP21
Weight	750 gr / 1.7 lbs
<b>DC OUTPUT</b>	
Connection	cable max. 4 mm <sup>2</sup>
Maximum software fuse current	10 A per channel
Hardware fuse current	15 A per channel
<b>DC INPUT</b>	
Connections	max. 95 mm <sup>2</sup> or directly connected to MasterShunt or DC Distribution
Maximum current	100 A
Supply voltage	8-30 V DC



# MasterView control panels: Everything under control

Fast and clear information about your onboard electrical system is vital. Usually a number of multiple panels are required to read the details of an expansive electrical system, and the interpretation of these panels and how they relate to one another is left to the user. Mastervolt puts an end to this undesirable situation with its intelligent MasterView panels.

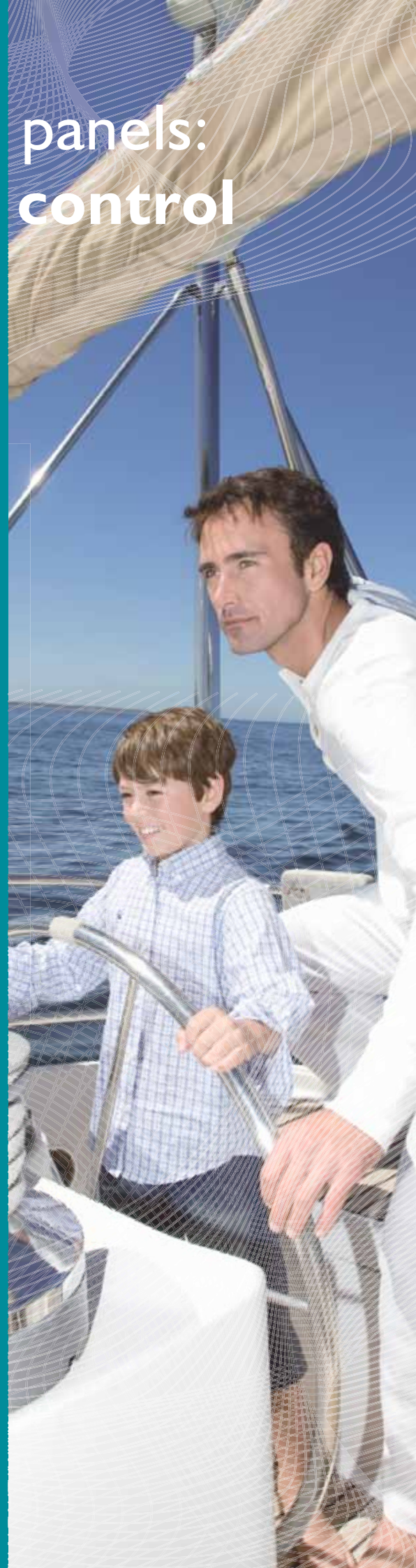


## **Multifunctional control panel: MasterView Easy**

This multifunctional touchscreen display can monitor every MasterBus product. Connected via the MasterShunt, the display functions as a battery monitor and is connected to the generator as a generator panel. The favourites screen can be custom designed to meet your specific needs for information and control.

## **The smartest solution: MasterView System**

Say goodbye to cluttered, unclear and excessive information with Mastervolt's intelligent MasterView System, based on in-house developed software combined with a user-friendly 10.4-inch colour touchscreen. The simple yet brilliant set-up of the MasterView System intelligently connects all the power sources and loads (generator, charger, bilge pump, engine, lighting, air conditioning, etc.) via the MasterBus. It provides all the information you need on your electric system in one clear overview on an organised, intuitively operated panel - the MasterView System.



# MasterView Easy: The control panel for all MasterBus products



This touchscreen control panel is easy to read and operate. The grey button turns the display on or off or locks it, while all other functions can be controlled using the touchscreen. The first of three control levels provides a short system overview with all the information you may need on a daily basis. The product overview and configuration screens show detailed information and options for changing your settings. The MasterBus cable is used for data transfer and as a power supply for the display.

## Benefits

- Clearly lit display.
- On/off button and lock to prevent unwanted activities.
- Touchscreen control of all functions.
- White background light – red for alarm functions or night lighting.
- Buzzer and alarm function.
- Requires only one MasterBus cable for data transfer and power supply.
- Low energy consumption.
- Easy to install (built-in or separate).





# MasterView System: Interactive touchscreen

This full color graphical display helps installers to configure the electrical onboard system, and is extremely easy to reproduce. Configuration, monitoring and operation becomes easier, cheaper, lighter, faster & good looking. The software makes complicated electrical systems understandable for ship owners. Electricity has become fun to operate!

## Home screen

The home screen provides a status overview of power sources like shore connections, inverters, generators and batteries. A basic form of control is possible, for example turning on and off your inverter.

## Digital switching screen

This screen shows the layout of your yacht, lights and selected pumps. You manage the loads by clicking the icons. The background image can be uploaded for full customisation. Alarm notifications are shown via eye-catching pop-ups.

## System overview

This screen gives a dynamic graphical overview of your electric system, answering any questions you have in an instant. Incorrect line voltages are shown in red, inactive circuits in grey: It couldn't be easier.

## Tank level screen

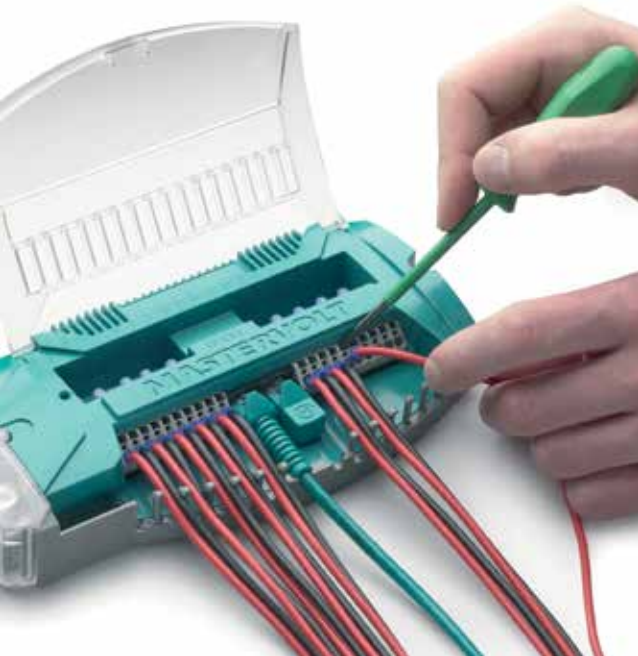
Stop guessing and know immediately the contents of up to 20 tanks. You can also install your own warning signals for full or (nearly) empty tanks. All you need to do is connect the MasterBus Tanklevel Interface to the MasterBus system.

## Favourites screen

The favourites screen can be custom designed to meet your specific needs for information and control. Any information that is available on the MasterBus network can be shown in the most logical way. Multiple pages can display information, for example, one overview page, one or two breaker pages, an engine information page and a NMEA2000 information page.



# Optimal user-comfort



## Benefits

- Less cables.
- Less weight.
- User-friendly.
- Faster installation.
- Remote control.

MasterBus and digital distribution makes life much easier, providing a clear overview of the status of the electrical installation.

The system also includes several intelligent alarm functions and luxury options such as 'follow me home' (light stays on for a specific time), and the standard option of requesting your battery status by text message.

Other examples of standard options include (delayed) dimming of lights or overload warning signals.

### **Saves time and costs**

By using less material and thinner cables, Mastervolt's digital distribution saves considerable time and costs for installation. And because system integration and system management are built-in as standard, you are assured of an optimal balance between energy generation, storage and consumption.

If required the generator will start automatically when you turn on the air conditioning.

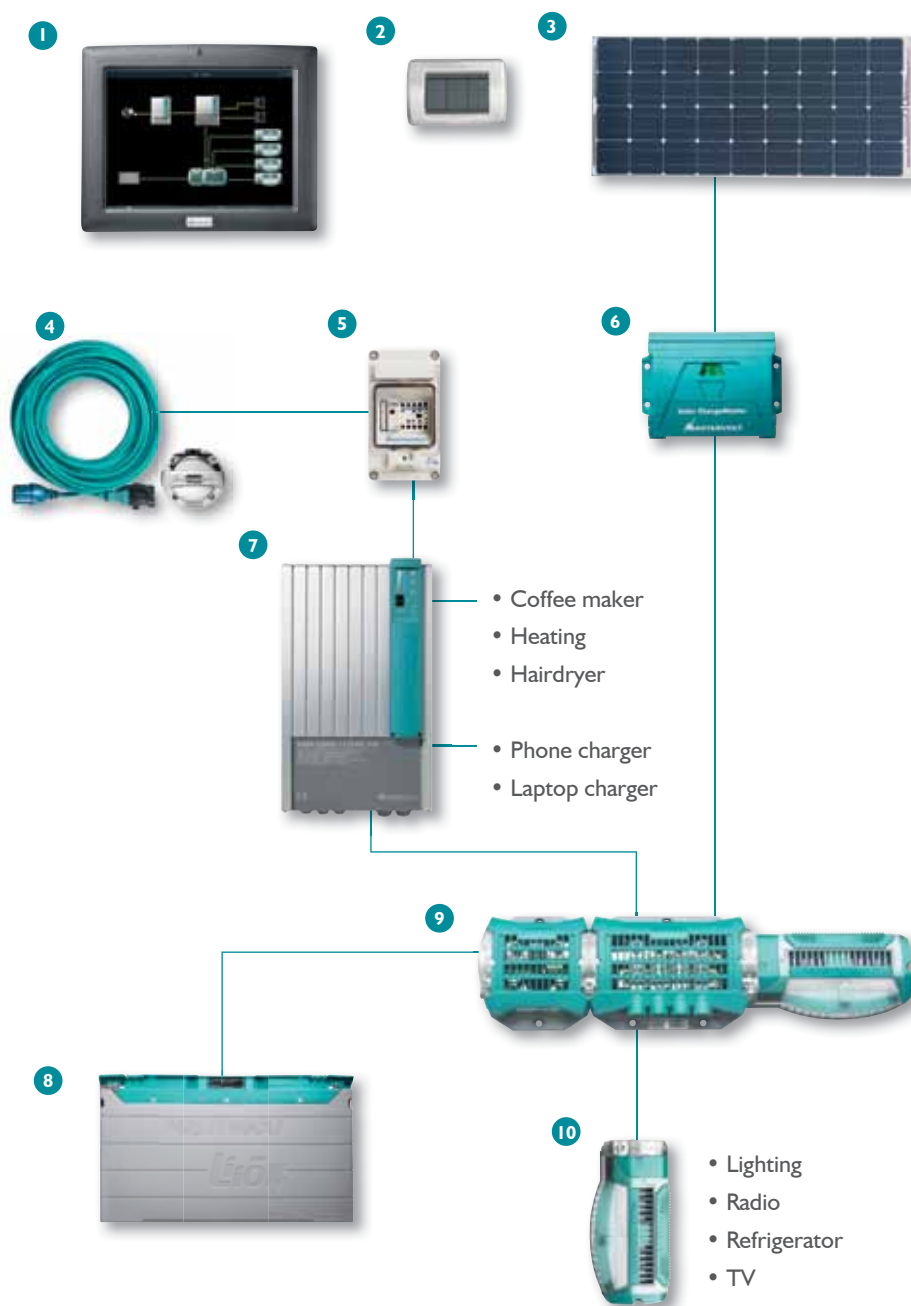
Dimming the lights is no longer a complex operation as the Digital DC 10x10A makes dimmers obsolete!

### **Easier than ever**

Choose one of the ten available languages to operate your MasterBus system and access from the same user interface for all (Mastervolt) products. Whether you want to control your battery charger, inverter, generator, battery or other equipment, all control panels have the same organised layout, with or without PC software.



# Fully integrated system



- 1 MasterView System (option: MasterView Easy)
- 2 Switch
- 3 Solar panel
- 4 Mains voltage
- 5 Earth leakage protection

- 6 Solar ChargeMaster charge regulator
- 7 Mass Combi
- 8 Lithium Ion 12 V (service battery)
- 9 MasterShunt, DC Distribution, Digital DC
- 10 Digital DC



# Operate & control your



Mastervolt offers a wide range of interfaces to connect other systems to your MasterBus network. These interfaces ensure a safe and reliable energy system and complete cooperation between all MasterBus products. All interfaces can be installed in various ways, from DIN rails to surface mounting.



**1 MasterBus USB Interface** (product code 7703100)

The MasterBus USB Interface enables you to read and configure your MasterBus system via your PC.



**2 MasterBus Modbus Interface** (product code 77030800)

The MasterBus Modbus interface can provide all information from the 'closed' MasterBus network for other monitoring and operating systems by means of the Modbus protocol.



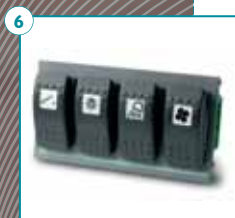
**3 MasterBus Serial Interface** (product code 77030450)

The MasterBus Serial Interface connects conventional Mastervolt products to the MasterBus. Data becomes permanently available to allow configuration, operation and monitoring via MasterView panels.



**4 GPRS Module** (product code 77031000)

Communicate with your system via mobile phone, monitoring current information or operating the system by remote control via a text message or easy shortcuts.



**5 Switch Input 3 PCB** (product code 77031300)

Switch Input 3 makes Carling switches suitable for MasterBus and helps you by easily linking various functions to the switch.



**6 Switch Input 4 PCB** (product code 77031400)

Switch Input 4 has LED indication for extra information. For example: The LED will blink when a connected lamp fails.

**7 MasterBus NMEA2000 Interface** (product code 77031800)

The MasterBus NMEA2000 Interface provides the MasterBus network with NMEA2000 information, and vice versa.



# MasterBus network

## 8 Digital Input (product code 77030900)

Mastervolt's Digital Input connects up to four switches to the MasterBus network. Standard delivered with connection cables



## 9 Digital AC 1x6A (product code 77031500)

Digital AC 1x6A switches all AC loads, no matter where they are. Loads up to 6 A can be directly switched, higher loads should be switched via a relay.



## 10 Multipurpose Contact Output (product code 77030500)

Mastervolt's potential-free contact can be customised and programmed to give your MasterBus network unprecedented possibilities. Use it, for example, to control a ventilator or operate a generator from a different brand.



## 11 MasterBus Tanklevel Interface (product code 77030300)

This interface converts analogue sensor input signals to MasterBus data. Selectable input signals: 4-20 mA, 0-300  $\Omega$ , 8-70 V DC.



## 12 AC Power Analyser (product code 77031200)

The AC Power Analyser is a multifunctional measuring tool that provides the MasterBus with insight into AC voltage and power, frequency, Cos Phi and system capacity. The device also functions as an 'inverter control' and has a programmable potential-free contact.



## 13 MasterBus Repeater (product code 77031100)

Double the maximum length of your MasterBus network.



## 14 CZone MasterBus Bridge Interface

(product code 80-911-0072-00)

The CZone MasterBus Bridge Interface physically connects the MasterBus and CZone networks together enabling the two networks to communicate and act as one, providing seamless control and monitoring of devices on both networks from either MasterBus or CZone displays.





More information? Check out  
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