Easy power management and extensive monitoring

Mastervolt delivers top-quality components which communicate with each other through an extensive network. Thanks to multiple remote panels and the possibility to integrate equipment by other brands, customers can control their energy system in whatever way they find suitable, at any time and in any place.

MASTERVOLT

In modern systems "open" communication is the standard. It is expected that the complete system from displays, chart plotters, fish finders to battery chargers and digital switches all communicate on the same common channel, without specific knowledge of the components.

The purpose of a common channel is to easily share information and facilitate a better user experience. To facilitate this sharing of information, Mastervolt devices will – next to the familiar MasterBus communication protocol – also feature CZone / NMEA 2000 communication. With the known infrastructure of CZone you can easily create configuration files that can be shared and multiplied in other systems.

MASTERBUS

The MasterBus platform automates your power system by facilitating seamless communication between all Mastervolt products, bringing advanced system functions easily within reach at reasonable cost, for perfect control!

82 DISPLAYS
The waterproof EasyView 5 system monitor makes operating your system personal and simple. The MasterView Read-out provides a clear overview of your batteries' charging status and any errors.

84 NETWORK COMPONENTS
Mastervolt offers various MasterBus components to further optimise your power system. Examples include MasterShunt, an intelligent battery monitor that enables system automation, and DC Distribution, the smallest DC distributor on the market.

86 INTERFACES
Seamless integration of products not equipped with a MasterBus interface, or communication standards such as NMEA 2000, CANopen, Modbus, FireCAN, PBUS and many others.

91 ACCESSORIES
MasterBus accessories such as MasterShunt fuses, cables and terminators, plus DIY packages.

RECOMMENDED FOR:

Manage & Monitor

CZONE

Decentralised switching results in smart systems, fewer cables and less installation work. The CZone operating and monitoring system offers decentralised digital switch modules for operating equipment such as lighting, pumps and navigation equipment.

BATTERY MONITORING

A Mastervolt battery monitoring system prevents unpleasant surprises.

96 DISPLAYS

The Touch 5 and Touch 10 touchscreen displays form the interface between the CZone network and the user.

100 COMPONENTS

The CZone operating and monitoring system offers a bespoke solution for any operating system including COI; DC input/output interface, ACOI for AC circuits or the ACMI; a grid voltage transfer system.

108 INTERFACES

The Wireless Interface enables safeguarding and monitoring of your on board system using an iPad. The CZone MasterBus Bridge Interface combines MasterBus and CZone into one compact operating and monitoring system.

110 ACCESSORIES

Accessories such as NMEA 2000 certified cables, remotes, cable glands and connector blocks complete your CZone system.

117 BATTMAN

Choose the easy-to-use BattMan Lite, or the complete BattMan Pro for indication of remaining time and historical data.

117 MASTERLINK BTM-III

The comprehensive BTM-III monitors three batteries, including indication of remaining time and capacity.
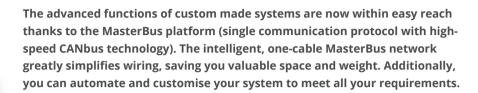
117 MASTERSHUNT + EASYVIEW 5

A MasterShunt and EasyView enable complete energy management in a personalised way.

RECOMMENDED FOR:

RECOMMENDED FOR:

The intelligent simplicity of MasterBus

The advanced functions of custom made systems are now within easy reach thanks to the MasterBus platform (single communication protocol with high-speed CANbus technology). The intelligent, one-cable MasterBus network greatly simplifies wiring, saving you valuable space and weight. Additionally, you can automate and customise your system to meet all your requirements.

As owners demand high levels of onboard luxury and comfort, professional and recreational applications 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 the MasterBus communication network of Mastervolt comes in.

The wide range of interfaces and modules allows you to connect any equipment you wish to your MasterBus system and manage, monitor or operate it locally, centrally or even from your home. The galvanic isolation of the MasterBus network ensures a safe and stable network.

Professional Perspective

MasterBus also makes life easier for designers, builders and installers of power systems with less material, less work, less fuss and an easy testing method. Additionally, it is available in ten languages and offers the same user interface for all (Mastervolt) products, such as battery chargers, inverters, Combis, batteries or other devices. All control panels have an identical layout, with or without PC software.

Easy Maintenance

Replacing a component can often lead to complex configuration problems. Not with Mastervolt. The MasterBus network '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.

QUOTE

"Mastervolt is the only manufacturer that designs & produces most of its products in-house. That is why all their products work together almost seamlessly, and the reason why we've been working exclusively with Mastervolt for the past 26 years!"

**MIGUEL SAS, MANAGING DIRECTOR
NAVEX ELEKTRO NV, BELGIUM**

CHECK THE MASTERVOLT SITE FOR
INTERESTING REAL-LIFE SYSTEMS:
MASTERVOLT.COM/REFERENCES
AND
EXTENDED *TECHNICAL BACKGROUND*
ON OUR PRODUCTS:
**MASTERVOLT.COM/TECHNICAL-
BACKGROUND**

MasterBus Displays: Monitor & control your MasterBus network

Fast and clear information about your electrical system is vital. Usually 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 by using a clear communication platform (MasterBus) and the smart EasyView 5 display.

EasyView 5
Waterproof System Monitor with intuitive touchscreen

The EasyView 5 features a sharp, waterproof display which is clearly readable in daylight. Thanks to the colour touchscreen and multi-language menu, the display is a pleasure to operate. Easily customizable favourite pages show all relevant system information at a glance.

The EasyView 5 completes any MasterBus system. With its handy functionality and compact size, the EasyView is ideal for yachts, vehicles and stationary systems. Controlling your Mastervolt system has never been easier!

FEATURES

- Water proof, 'daylight readable' colour display.
- Intuitive touch control.
- Customizable favourite pages.
- Log book for warnings and alarms.
- Buzzer and Home button.
- Easy mounting: front mount, wall mount or retrofit.
- MasterBus powered, or 12/24 V input.
- Easy updating through MasterBus and USB.

Some examples of the many possibilities:

Customize Favourites
Customize favourite pages to meet your specific needs for information and control, to show information in the most convenient way.

Adjust Parameters
Use the EasyView 5 to adjust frequently used settings, like the shore fuse or to switch on your inverter.

Modify System Settings
In the system page you will find every possible system setting.

Alarms and Logs
No surprises! The EasyView 5 helps to keep your system in top condition by assisting you with alerts. Logging of the alarms provides valuable insight in the operation of your system.

	EasyView 5
Product code	77010310
GENERAL SPECIFICATIONS	
Power supply	MasterBus powered, or 12/24 V input
Resolution	480 x 272 pixels
Colour depth	16 bits
Display/read-out	4.3 inch high contrast display with capacitive touch control
Languages on display	ENG, NL, DE, SP, IT, FRA, FIN, SWE, DEN, NOR
Mounting	panel mounting, flush mounting, MasterView Easy retrofit
Alarms	buzzer integrated
Dimensions, hxwxd	113 x 127 x 43 mm 4,4 x 5,0 x 1,7 inch
Weight	300 gr / 0.7 lb
Delivered with	UV protection cover, wall mount casing, MasterBus cable
TECHNICAL SPECIFICATIONS	
MasterBus connection	yes
Power consumption	< 160 mW (idle mode)
Connections	2x MasterBus, USB, 12/24 V
Protection degree	IP67; waterproof front

NEW

SmartRemote
Compact single-device display

The SmartRemote completes any MasterBus or CZone system. With its handy functionality and compact size, the SmartRemote is ideal as a remote panel in entry level power systems or as a local device readout in larger systems. Applications include boats, vehicles and stationary systems.

Easy to use
The new SmartRemote single-device display is unique in many ways. It communicates with Mastervolt devices*, shows key parameters, allows simple device settings and is fun to use. Checking your batteries, adjusting your shore fuse or controlling your Mastervolt charger/inverter has never been easier.

Easy of Installation
The SmartRemote display can be panel mounted or may be integrated into a Blue Sea Systems Custom 360 bezel. Connection is easy as 1-2-3: simply click the network cable into a Mastervolt device and off you go.

FEATURES

- Full color display for local device monitoring.
- Displays four key parameters.
- Control key device functions.
- CZone and MasterBus network compatible.
- Universal, easy mounting.
- Plug & Play – no configuration, no power supply needed.
- Blue Sea Systems Custom 360 integration.

* SmartRemote supports CombiMaster communication over the MasterBus network. Support for Mastervolt battery chargers, inverters, charger/inverters, MLI batteries and MasterShunt devices is under development. Wondering if your device is supported? Check the Downloads section for an overview of supported devices or contact your dealer.

NEW MODEL

SmartRemote

Product code	77010600 *(retail version)*
	77010500 *(OEM version)* *Includes 10 pcs. SmartRemote displays only, no MasterBus or Mastervolt-CZone drop cables are included. Please order the cables separately when needed.*
Interfaces	CZone, MasterBus
Power supply	bus powered, < 160 mW (idle mode)
Display/read-out	2.8 inch, 320 x 240 pixels, high colour
Mounting	panel mount (cutout: Ø 52 mm / 2 inch, 4 screws included); Blue Sea 360 panel mount (locking ring included)
Protection degree	IP20
Dimensions, hxwxd	72 x 72 x 29.4 mm 2.8 x 2.8 x 1.2 inch
Weight	0.075 kg 0.2 lb
Delivered with	MasterBus cable (6 mtr), Mastervolt-CZone drop cable (1 mtr), user's manual

MasterView Read-out

Remote panel for reading the charge status of your battery charger, including error notifications.

If your dashboard is full and does not offer space for the EasyView display, this module allows you to integrate the MasterView Read-out into your own control panel.

MasterView Read-out

Product code	77010050
Display	7 LEDs
Dimensions, hxw	60 x 65 mm / 2.4 x 2.6 inch
Weight	70 g / 0.15 lb
MasterBus connection	yes
Powered by	MasterBus
Power consumption	144 mW
Protection degree	IP21

MasterView Read-out OEM

Product code	77010030

MasterBus Network Components

NEW MasterShunt 500 CZONE

MasterShunt is the heart of every MasterBus energy system. This integrated battery monitor shares information about the battery bank with other MasterBus, CZone or NMEA 2000 enabled devices such as battery chargers, Combis, and displays. No surprises: allowing complete automation of your system, MasterShunt improves comfort, prolongs battery life and extends your runtime.

The MasterShunt 500 provides all information needed for monitoring your battery bank and control of your system, such as voltage, current, state of charge and time remaining. All information is made available to the system by a single MasterBus or CZone cable. Extremely accurate measurement of current flow over state of charge enables the MasterShunt to precisely determine the time remaining.

Programmable events and an integrated real time clock make it possible to fully automate your system. Examples are to start your generator automatically when the battery bank is low (or just delaying at night!), or to automatically generate a warning at a certain depth of discharge.

The proven MasterShunt design has been upgraded to obtain an even higher level of accuracy and control. Taking into account battery specific parameters, MasterShunt takes reading accuracy to a whole new level.

A new service mode prevents loss of valuable information, such as the state of charge, during system maintenance. A maximum Depth of Discharge (DOD) can be set and time remaining will be adjusted accordingly.

The MasterShunt allows freedom of choice with regards to fuse type, rating and location. The battery monitor is supplied with an internal bus bar, to be used in situations where an external fuse holder is selected. In case the MasterShunt is installed close to the battery, the bus bar may be replaced by either an ANL type or Class T main fuse, saving both space and cost.

FEATURES

- MasterBus, CZone and NMEA 2000 communication (CZone model only).
- Fits in a CZone system including setup tools and configuration file (CZone model only).
- Digital shunt providing the energy system with extensive information and historical data.
- Very accurate and reliable determination of State of Charge (SOC).
- Service mode prevents memory loss during system maintenance.
- Realistic and precise indication of the time remaining.
- Smart MasterBus powering mode reduces idle consumption to a bare minimum.
- For higher current, multiple MasterShunt models may be installed in parallel.
- MasterConnect system makes connecting to the DC Distribution product very easy.
- Straight forward, easy to install.
- Freedom of choice for fuse type, rating and location. Suitable for T-fuse and ANL-fuse (to be ordered separately).
- Robust housing with isolation of the DC connections.

	MasterShunt 500
Product code	77020115
Dimensions, hxwxd	150 x 150 x 65 mm 5.9 x 5.9 x 2.5 inch
Weight	0.7 kg / 1.54 lb
Battery types	Gel, AGM, flooded, Lithium Ion
Battery voltage	12, 24 or 48 V DC
Current	300 A continuously, 400 A for 10 min, 500 A for 5 min and 600 A for 2 min
MasterBus powering	yes, incl. Smart MasterBus Powering (switched off for CZone or NMEA 2000 communication)
Idle consumption	23 mA (normal operation), <1 mA (power saving, MasterBus off)
System functionality	alarm, timers, auto start/stop for the generator
System information	e.g. time remaining, voltage, current, state of charge
Programmable alarms	warning low voltage, warning low state of charge, high voltage
Protection degree	IP21
Main fuse	bus bar included in MasterShunt, Class T fuse or ANL fuse to be ordered separately
Delivered with	MasterShunt, temperature sensor, MasterBus terminator, isolation cover for DC connections, 1 mtr CZone-Mastervolt drop cable

DC Distribution 500

The DC Distribution 500 is the smallest distribution model available. It connects up to four DC devices, such as a battery charger, inverter, alternators and solar panels. With the plug & play cable it can be easily connected to the MasterBus network. The EasyView panel gives all fuses logical names, for instance, referring to the connected equipment, to ensure you receive understandable error notifications (for example: battery charger fuse defect).

Digital DC 10x10A

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

- Follow me home (light stays on for a specific time).
- Delayed dimming of lights (including ten built-in dimmers).
- Alarm signal for overload.
- Every output has a hardware and software fuse.
- Reset the fuses via the MasterBus network.
- Possibility of higher currents (up to 100 A) with parallel switching of multiple outputs.
- Logical Blocks.

DC Distribution 500	
Product code	77020200
Dimensions, hxwxd	150 x 216 x 65 mm 5.9 x 7.9 x 2.5 inch
Weight	1.2 kg / 2.6 lb
Battery voltage	12, 24 or 48 V DC
Current	300 A continuous / 500 A for 5 minutes
MasterBus powering	no
Standard fuses	80 A (2x), 160 A and 125 A - ANL type (deviating values can be ordered separately)
Spare fuse	125 A - ANL type
Alarm	fuse monitoring
Protection degree	IP21
Delivered with	four standard fuses and one spare fuse, hex tool, MasterBus terminator, MasterBus cable, cable protections for DC connections

Digital DC 10x10A	
Product code	77020400
Dimensions, hxwxd	40 x 229 x 110 mm 1.6 x 9.0 x 4.3 inch
Weight	750 gr / 1.7 lb
MasterBus powering	yes
Power consumption	< 2 mA at 12/24 V
Protection degree	IP21
DC OUTPUT	
Connection	cable max. 4 mm²
Maximum software fuse current	10 A per channel
Hardware fuse current	15 A per channel
DC INPUT	
Connections	max. 95 mm² or directly connected to MasterShunt or DC Distribution
Maximum current	100 A
Supply voltage	8-30 V DC

Integrate your MasterBus System: MasterBus Interfaces

Mastervolt offers a wide range of interfaces to increase the versatility of your MasterBus network. Connect multiple components to distribute information to your MasterBus products or connect products that require information from the MasterBus network, such as a NMEA 2000, CANopen or Modbus network, and vice versa.

All interfaces (and modules) can be installed in various ways, from DIN rails to surface mounting. MasterBus is available in ten languages: English, Dutch, German, French, Spanish, Italian, Norwegian, Swedish, Finnish and Danish.

NIEUW MODEL

MasterBus AC Master Interface

The MasterBus AC Master Interface is an addition to our range of MasterBus interfaces, allowing seamless integration of an AC Master inverter into every MasterBus network. Just as all other MasterBus interfaces, the AC Master Interface can be installed on DIN rails or as surface mounting.

By adding the AC Master Interface to your installation, you can now control your AC Master inverter via our MasterBus communication network. The AC Master Interface is suitable for all AC Master inverters with a RJ11 serial interface (all 700 W models and up). A communication cable is included in the delivery.

MasterBus AC Master Interface	
Product code	77032700
MasterBus powering	no
Dimensions, hxwxd	66 x 78 x 32 mm 2.6 x 3.1 x 1.3 inch
Weight	± 70 g / 0.18 lb
Protection degree	IP21
Delivered with	RJ11 connection cable (1 m), MasterBus cable (6 m), MasterBus terminator, user's manual

NIEUW MODEL

MasterBus LIN Bus Interface

The MasterBus LIN Bus Interface has been developed to enable the Volkswagen Crafter to communicate with the Mastervolt MLI Ultra Lithium Ion battery. The MasterBus LIN Bus Interface is designed for use in vehicles equipped with a LIN enabled (secondary) alternator option.
It will guaranty a seamless integration of the MLI Ultra battery into the vehicle's 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.

Just as all other MasterBus interfaces, the LIN Bus Interface can be installed on DIN rails or as surface mounting. The LIN Bus Interface can be used in combination with the Mastervolt MLI Ultra batteries (MLI Ultra 12/2500 or MLI Ultra 12/5000).

MasterBus LIN Bus Interface	
Product code	77032800
MasterBus powering	no
Dimensions, hxwxd	66 x 78 x 32 mm 2.6 x 3.1 x 1.3 inch
Weight	± 70 g / 0.18 lb
Protection degree	IP21
Delivered with	screw terminal, MasterBus cable (1 m), MasterBus terminator, user's manual

MasterBus FireCAN Interface

The MasterBus FireCAN Interface connects the vehicle's central communication system to the MasterBus network. FireCAN is a standardised CANbus protocol for electronic applications in fire fighting vehicles, that incorporates manufacturer-specific components.

MasterBus FireCAN Interface	
Product code	77032400
MasterBus powering	no
Dimensions, hxwxd	66 x 78 x 32 mm 2.6 x 3.1 x 1.3 inch
Weight (excl. cable)	70 g / 0.15 lb
Protection degree	IP21
Delivered with	FireCAN connection cable, MasterBus terminator, user's manual

MasterBus NMEA 2000 Interface

The MasterBus NMEA 2000 Interface provides the MasterBus network with NMEA 2000 information, and vice versa.

MasterBus NMEA 2000 Interface	
Product code	77031800
MasterBus powering	no
Dimensions, hxwxd	66 x 78 x 32 mm 2.6 x 3.1 x 1.3 inch
Weight (excl. cable)	70 g / 0.15 lb
Protection degree	IP21
Delivered with	NMEA connection cable, MasterBus cable, MasterBus terminator, user's manual

MasterBus Modbus Interface

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.

MasterBus Modbus Interface	
Product code	77030800
MasterBus powering	no
Dimensions, hxwxd	66 x 78 x 32 mm 2.6 x 3.1 x 1.3 inch
Weight	± 80 g / 0.18 lb
Protection degree	IP21
Delivered with	MasterBus cable, MasterBus terminator, user's manual

MasterBus CANopen Interface

The MasterBus CANopen Interface facilitates transparent, 2-way communication between MasterBus and the CANopen standard, which is adopted in many automotive and industrial automation applications.

MasterBus CANopen Interface	
Product code	77032600
Programmability	MasterAdjust conventional configuration or string-based mapping
Data communicated	all MasterBus information and control items
Power consumption	< 40 mA
MasterBus powering	no
Dimensions, hxwxd	66 x 78 x 32 mm / 2.6 x 3.1 x 1.3 inch
Weight (excl. cable)	70 g / 0.15 lb
Protection degree	IP21
Delivered with	CANopen adapter cable (100 mm, M12 5-pin connector) and MasterBus terminator, user's manual

MasterBus Philippi Interface

The MasterBus Philippi Interface makes it possible to view and control Mastervolt products on a Philippi PSM2 display. Mastervolt products use the CAN-based MasterBus protocol to communicate between products. Similar, the company Philippi uses the PBUS protocol. The MasterBus Philippi Interface connects these worlds.

MasterBus Philippi Interface	
Product code	77031850
Programmability	automatic & manual configuration
Data communicated	selection of most popular values per product
Power consumption	< 40 mA
MasterBus powering	no
Dimensions, hxwxd	66 x 78 x 32 mm / 2.6 x 3.1 x 1.3 inch
Weight (excl. cable)	70 g / 0.15 lb
Protection degree	IP21
Delivered with	connection cable (100 mm), MasterBus cable, MasterBus terminator, user's manual

MasterBus USB Interface

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

GPRS Module

Communicate with your system via mobile phone, allowing you to monitor current information or operate the system by remote control via a text message or easy shortcuts. Alarm notifications per text message are optional.

NOTE
Please note that in some countries (or specific network operators) the G2/GPRS networks are being switched off. For the Asia Pacific area and the Americas, this is already in progress, and the GPRS module will no longer be available in these areas.
For Europe, the GPRS module will remain available for the time being. It is expected that in Europe, end 2020, the G2/GPRS network will no longer be supported.

GPRS Module: Communicate with your system via mobile phone.

MasterBus USB Interface	
Product code	77030100
MasterBus powering	yes (when the PC is switched on)
Dimensions, hxwxd	66 x 78 x 32 mm 2.6 x 3.1 x 1.3 inch
Weight	± 80 g / 0.18 lb
Protection degree	IP21
Delivered with	USB connection cable, MasterBus cable, MasterBus terminator, user's manual

GPRS Module	
Product code	77031000
MasterBus powering	no
Dimensions, hxwxd	66 x 78 x 32 mm 2.6 x 3.1 x 1.3 inch
Weight	± 80 g / 0.18 lb
Protection degree	IP21
Delivered with	GPRS antenna, MasterBus cable, MasterBus terminator, user's manual. *SIM card not included*

MasterBus Inverter Interface

The MasterBus Inverter Interface integrates the Mastervolt Mass Sine inverter in a MasterBus network and allows it to be operated and monitored via EasyView 5 or PC.

MasterBus Serial Interface

Connect conventional Mastervolt products to MasterBus. Data becomes permanently available to allow configuration, operation and monitoring via EasyView 5 or PC. Suitable for Masterlink BTM-III, Mac and Magic DC-DC converters.

AC Power Analyser

The AC Power Analyser is a multifunctional measuring device which can visualise the AC current and AC voltage, frequency, Cos Phi and power inside the system. Can also be used as MasterBus interface for the Mass Sine series, and offers a free programmable potential-free contact.

MasterBus Inverter Interface	
Product code	77030700
MasterBus powering	no
Dimensions, hxwxd	66 x 78 x 32 mm 2.6 x 3.1 x 1.3 inch
Weight	± 80 g / 0.18 lb
Protection degree	IP21
Delivered with	Interface connection cable, MasterBus cable, MasterBus terminator, user's manual

MasterBus Serial Interface	
Product code	77030450
MasterBus powering	no
Dimensions, hxwxd	66 x 78 x 32 mm 2.6 x 3.1 x 1.3 inch
Weight	± 80 g / 0.18 lb
Protection degree	IP21
Delivered with	Interface connection cable, MasterBus cable, MasterBus terminator, user's manual

AC Power Analyser	
Product code	77031200
MasterBus powering	yes
Dimensions, hxwxd	80 x 181 x 28 mm 3.1 x 7.1 x 1.1 inch
Weight	± 530 g / 1.17 lb
Protection degree	IP65
Delivered with	MasterBus cable, MasterBus terminator, current transformer 100:5, user's manual

Use it to connect AC power devices such as generators or isolation transformers to the MasterBus network.

MasterBus Power Interrupter

The MasterBus Power Interrupter switches off parts of the MasterBus network. This reduces the no-load consumption and is useful if a large system will not be used for an extended period. Communication remains possible.

MasterBus Power Interrupter	
Product code	77031550
MasterBus powering	no
Dimensions, hxwxd	66 x 78 x 32 mm 2.6 x 3.1 x 1.3 inch
Weight	± 80 g / 0.18 lb
Protection degree	IP21
Delivered with	user's manual

MasterBus Repeater

The MasterBus Repeater doubles the maximum length of your MasterBus network.

MasterBus Repeater	
Product code	77031100
MasterBus powering	yes
Dimensions, hxwxd	66 x 78 x 32 mm 2.6 x 3.1 x 1.3 inch
Weight	± 90 g / 0.20 lb
Protection degree	IP21
Delivered with	MasterBus cable, MasterBus terminator, user's manual

Multipurpose Contact Output

This potential-free programmable contact can be customised and programmed to give your MasterBus network unprecedented possibilities. Use it, for example, to control a ventilator, or to operate a generator.

Multipurpose Contact Output	
Product code	77030500
Potential free contact	NO-C-NC - 1 A / 30 V DC
MasterBus powering	no
Dimensions, hxwxd	66 x 78 x 32 mm 2.6 x 3.1 x 1.3 inch
Weight	± 80 g / 0.18 lb
Protection degree	IP21
Delivered with	MasterBus cable, MasterBus terminator, user's manual

MasterBus Tank Level Interface

This interface converts analogue sensor input signals to MasterBus data. Selectable input signals: 4-20 mA, 0-300 Ω, 8-70 V DC.
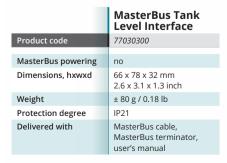
MasterBus Tank Level Interface	
Product code	77030300
MasterBus powering	no
Dimensions, hxwxd	66 x 78 x 32 mm 2.6 x 3.1 x 1.3 inch
Weight	± 80 g / 0.18 lb
Protection degree	IP21
Delivered with	MasterBus cable, MasterBus terminator, user's manual

Digital Input

Connect up to four switches to the MasterBus network. Delivery includes connection cables.

Digital Input	
Product code	77030900
MasterBus powering	no
Dimensions, hxwxd	66 x 78 x 32 mm 2.6 x 3.1 x 1.3 inch
Weight	± 80 g / 0.18 lb
Protection degree	IP21
Delivered with	cable with plug, MasterBus cable, MasterBus terminator, user's manual

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 an external relay.

Digital AC 1x6A	
Product code	77031500
MasterBus powering	no
Max. relay current	6 A (230 V AC single pole)
Dimensions, hxwxd	66 x 78 x 32 mm 2.6 x 3.1 x 1.3 inch
Weight	± 80 g / 0.18 lb
Protection degree	IP21
Delivered with	MasterBus cable, MasterBus terminator, user's manual

Switch Input 3 PCB

Switch Input 3 makes Carling switches compatible with MasterBus. Multiple functions can be easily linked with this module.

Switch Input 4 PCB

Provides LED indications for additional information. For example: The LED will blink when a connected lamp fails.

	Switch Input 3 PCB
Product code	77031300
MasterBus powering	no
Dimensions, hxwxd	54 x 86 x 58 mm 2 x 3.4 x 2.3 inch (incl. mounting frame)
Distance between switches	26.1 mm
Weight	35 g / 0.08 lb (incl. MasterBus terminator)
Protection degree	IP21
Delivered with	MasterBus terminator, user's manual. *Switches and mounting frame not included*

	Switch Input 4 PCB
Product code	77031400
MasterBus powering	no
Dimensions, hxwxd	56 x 120 x 65 mm 2.2 x 4.7 x 2.6 inch (incl. mounting frame)
Distance between switches	27.3 mm
Weight	45 g / 0.1 lb (incl. MasterBus terminator)
Protection degree	IP21
Delivered with	MasterBus terminator, user's manual. *Switches and mounting frame not included*

CZone MasterBus Bridge Interface

The CZone MasterBus Bridge Interface physically connects the MasterBus and CZone networks together, enabling the two networks to communicate and act as one. This provides seamless control and monitoring of Mastervolt power electronics from CZone displays or partner products.

FEATURES

- Control of Mastervolt inverters and chargers from CZone displays, switches or partner products.
- Display MasterBus acquired systems information such as tank and power levels on CZone displays.
- Transfer of alarms between both systems.

	CZone Masterbus Bridge Interface
Product code	80-911-0072-00
MasterBus powering	no
Dimensions, HxIxP	69 x 69 x 50 mm 2.7 x 2.7 x 2 inch
Weight	145 g / 0.32 lb
Protection degree	IP65
Delivered with	MasterBus cable adapter, MasterBus terminator, user's manual

Please contact Mastervolt or your local dealer for possibilities in your specific application.

Practical: MasterBus Accessories

Fuses

The MasterShunt standard comes with a bus bar. You can also choose a robust Class T fuse, suitable for high short circuit currents of the Lithium Ion batteries, or for ANL fuses.

Product code	
77049000	Class T fuse 500 A / 160 V DC, current limiting capability 20 kA
77020150	bus bar

The DC Distribution standard comes with five ANL fuses: 80 A (2x), 125 A and 160 A, and a 125 A spare fuse. Replacement fuses and other amperages:

Product code	ANL fuse	Product code	ANL fuse
77049020	20 A	77049175	175 A
77049040	40 A	77049200	200 A
77049050	50 A	77049250	250 A
77049063	63 A	77049300	300 A
77049080	80 A	77049400	400 A
77049100	100 A	77049425	425 A
77049125	125 A	77049500	500 A
77049160	160 A		

MasterBus Terminator

The terminators ensure interference-free operation, prevent reflection of data signals and ensure high communication speeds.

Product code	77040000

MasterBus DIY kit

Cut your own cables to length and finish, comprising:
- Professional RJ45 crimping tool.
- 50 x MasterBus RJ45 connectors.
- 50 x green MasterBus RJ45 protection boots.
- 100 m green MasterBus CAT5E UTP cable.

Product code	77050000

NEW

Mastervolt-CZone Drop Cable

Adapter cable for connecting Mastervolt devices with CZone support to the CZone or NMEA 2000 network.

Product code	
77060050	0.5 m
77060100	1 m
77060200	2 m
77060500	5 m

MasterBus Communication Cable

Suitable for data traffic and powering peripheral equipment in harsh environments, this is the only cable you need for your MasterBus network. MasterBus compatible products come standard with two ports, while other equipment requires an interface. A DIY kit is optional.
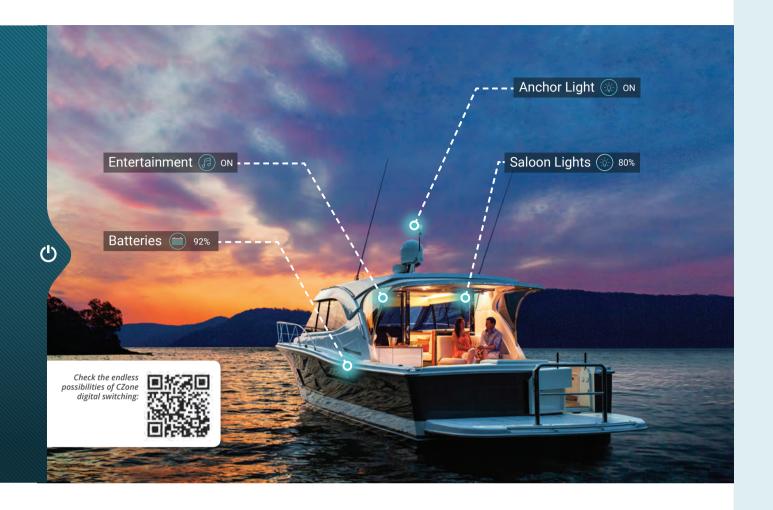
Product code	
77040020	0.2 m
77040050	0.5 m
77040100	1 m
77040300	3 m
77040600	6 m
77041000	10 m
77041500	15 m
77042500	25 m
77045000	100 m

Separately available:

Product code	
77040010	25 x MasterBus RJ45 connectors, 8-pole
77040015	25 x green isolation caps for RJ45 connector

Anchor Light ON

Entertainment ON

Saloon Lights 80%

Batteries 92%

Check the endless possibilities of CZone digital switching:

CZone® Digital Control and Monitoring

CZone digital control and monitoring simplifies installation of electrical systems through the replacement of complicated, cumbersome traditional wiring. CZone is perfect for Marine and Mobile applications and replaces switch and fuse panels with networked digital interfaces providing ultimate control of onboard electrical systems.

With one touch, CZone's intelligent management simplifies operation by combining multiple circuits through Mode selection and offers effortless Monitoring oversight of key systems and components while retaining advanced Control of specific circuits and functions.

CZone can take care of all the little things, leaving more time for the user to focus on what they value. Whether you are preparing the boat for the evening's entertaining, hitting the open road away from stable power, or focusing on getting the job done, let CZone do the thinking.

Simplicity
CZone simplifies your boat or vehicle's onboard electrical system making it easier and more enjoyable.

Innovation
CZone offers system-wide functionality of your onboard systems onto a single screen or wireless device, while offering industry leading integration with suppliers from marine navigation displays, power storage and generation, and appliances like air-conditioning and more.

Reliability
CZone has proven durability, with over 10 years of installations in harsh marine environments through over 200 dedicated boat builders and technical installers.

Modes

Modes offer a predefined system state at a single touch. Modes will turn on or off specified circuits based on the user's preference and the mode of operation required. Modes can introduce logic to handle functions based specifically for that mode of operation, whether it be integrated components like generator auto-start, or varied lighting configurations. If it needs power, Modes can take care of it in a single function.

Check the endless possibilities of CZone digital switching:

QUOTE

"CZone provides Riviera owners with reliable onboard power electronics. The integrated system gives our owners more functionality with less components, while straightforward and practical design make installation simple. In Mastervolt, we have a partner that understands our requirements and provides Riviera with the quality and reliability our owners demand."

GREIG PAYNE, ELECTRICAL MANAGER RIVIERA YACHTS, AUSTRALIA

Check out the complete CZone Digital Control & Monitoring product line in the CZone catalog or visit czone.net

Monitoring & System Alarms

CZone digital control and monitoring offers peace of mind by consolidating system information and pres-enting alarms when things aren't right. Monitor tank level senders, gas or temperature sensors, low power source voltage or reversed polarity. CZone's advanced monitoring ability means no irregularity in the system goes by without you knowing about it. Keep alerted to major system events with onboard alarm notifications.

Complete Control

CZone offers leading system control of onboard systems, from Modes selection that transforms the entire system at a single touch, wirelessly via iPad or Key fob, or remotely via satellite or data networks. Full direct control is accessible using intuitive touch screen interfaces or through integrated marine Chartplotter & Fishfinder displays, or programmable digital switches for individual or group functions.
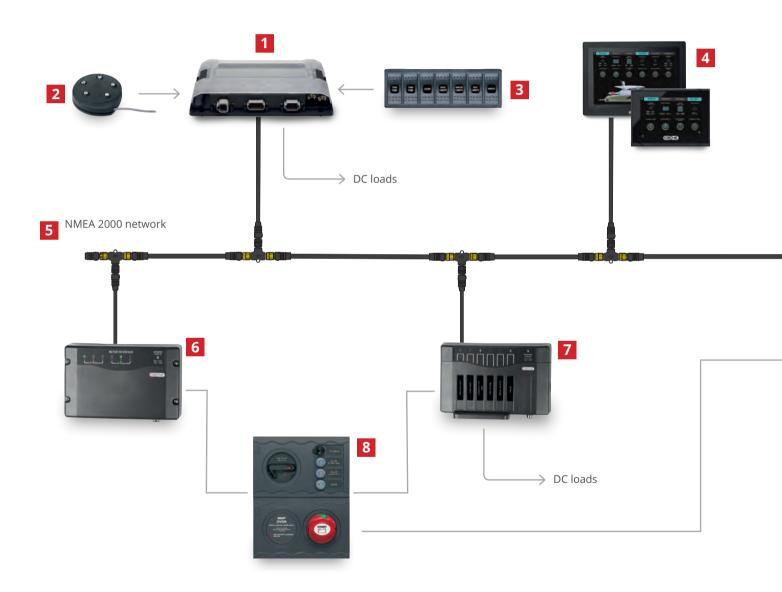
Fully Integrated CZone® MasterBus System

CZone and Mastervolt now work together on a common network to simplify the operation of your application

For years, CZone has operated on a dedicated network, and Mastervolt has operated on a separate network (Masterbus). The two networks could only be joined through a bridge interface that had to be purchased and installed separately. Now, the two technologies are coming together to operate on a single common network. This advanced integration allows for a single user interface and shared configuration files that simplify programming and installation. Now you can control and monitor all AC and DC loads, as well as the power conversion system from a single source.

DC loads

NMEA 2000 network

DC loads
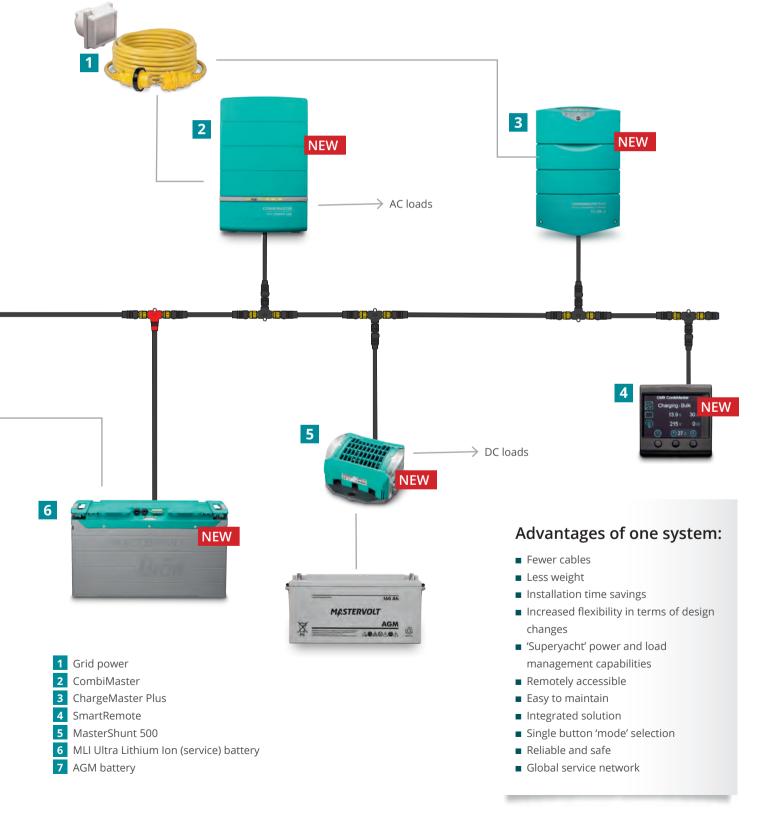
1	Combination Output Interface (COI)	**5**	NMEA 2000 network
2	Ultrasonic tank sender	**6**	Meter Interface
3	Switch cluster	**7**	Output Interface
4	Displays	**8**	Battery distribution panel

CZone Ready Products
Instant plug and play integration.
The following products have been updated for 2020 to directly integrate with CZone as well as MasterBus.

1

2   NEW

3   NEW

→ AC loads

4   NEW

5   NEW

→ DC loads

6   NEW

Advantages of one system:

- Fewer cables
- Less weight
- Installation time savings
- Increased flexibility in terms of design changes
- 'Superyacht' power and load management capabilities
- Remotely accessible
- Easy to maintain
- Integrated solution
- Single button 'mode' selection
- Reliable and safe
- Global service network

1 Grid power
2 CombiMaster
3 ChargeMaster Plus
4 SmartRemote
5 MasterShunt 500
6 MLI Ultra Lithium Ion (service) battery
7 AGM battery

CZone® Displays

The CZone® displays are designed with both the manufacturer and end-user in mind. The easy-to-use display screens put the control of all components directly at your fingertips. Multiple display interfaces can be used in the same system. The scroll and click interface is simple to use in the roughest of seas or bumpiest of roads.

CZone displays are the interface between the CZone network and the user. They offer full control of circuits as well as the ability to view important onboard system information, such as tank levels and power levels (for both AC and DC supplies). Audio and visual alarms with systems diagnostics are also provided.

CZone displays are extremely intuitive to use with simple controls and a menu structure that is easy to follow. The 'modes of operation' feature allows the control of multiple circuits with a single push of a button. For instance, 'night running' mode turns pre-selected lights on to dim levels. These modes can all be configured by the user.

Settings

Allows an OEM or technician access (via password) to the configuration of a system. No need for a computer to set or change configuration settings such as circuit labels, circuit breaker sizes, etc.

Modes

Ease of operation assured. With one press of the key users can turn on a group of circuits without having to scroll, search for, and turn on the individual circuits that they need for the operation of their vessel or vehicle. When leaving, simply press "systems off" to turn off all non-essential circuits. Entertainment mode allows preset activation of lounge lights, music, etc. All functions can be controlled remotely.

Control

Breaks down the circuits into easy to identify groups for quick control, i.e. to turn on fresh water pump the user can open the "pumps" group and make the appropriate selection. This screen also allows the user to monitor the status of the circuit i.e. on, off, fault and current draw.

Power Control
- Turn circuits on and off, including timer and light dimming control.
- Set modes of operation.

Monitoring

Allows user to easily monitor AC and DC power, tanks, data, alarms, and circuit status. Presents data in analogue and digital form.

DC Power Meter
- Displays voltages of multiple battery banks, includes low and high voltage alarms.
- Displays charge and discharge (amp) of multiple battery banks.
- Displays battery capacity in ampere hours and % charge/discharge, includes low ampere hour alarm.
- Logging of battery minimum and maximum voltage levels.
- Logging of minimum battery capacity level.

AC Power Meter
- Displays multiple line voltages (230 and 120 V), includes high and low voltage alarm.
- Displays AC line frequencies, includes high and low frequency alarm and AC power consumption in kW.
- Logging of minimum and maximum voltage and frequency levels.
- Logging of maximum AC current.

Tank Levels
- View tank level information for multiple tanks and fluid types.

Data
- Displays standard NMEA 2000 information.
- Displays temperature and pressure values.
- Monitors all circuits connected to the CZone network.

Alarms and Diagnostics
- Logging of circuit run time and on cycles.
- CZone network status reporting.
- Indicates alarms for onboard faults in audio and visual form (bilge pump operation, smoke alarm).
- Logging of alarms with date and time.

CZone® Displays

CZone Touch 10

The gateway to your CZone digital switching and Mastervolt power electronics system has just been transformed by the 'state of the art' Touch 10.

The sleek, attractive screen design will complement the interior of any high-end vessel or recreational vehicle, while offering the very latest generation capacitive touchscreen technology, high bright display for use in sunlight and high resolution providing a more crisp and detailed graphical user interface.

All of this has been packaged into an innovative, splash-proof marine mounting system to provide an outstanding 'human-machine' experience.

CZone Touch 5

The sleek Touch 5 adds a compact touchscreen option to your CZone installation. While offering many of the same features as its bigger brother, the Touch 10, this display module adds WiFi connectivity as well as the higher specification IPx7 waterproofing.

With a super bright widescreen display and the latest capacitive touchscreen technology, this compact unit outperforms perfectly in sunlight. It also suits smaller applications where space is at a premium, or on larger applications as a secondary display.

FEATURES

- Easy to use touch interface.
- Glass dash styling.
- Super bright widescreen display.
- Low profile flush mounting.
- Reduced system cost and complexity, combines display and Wireless Interface functionality into one unit.
- IPx7 water ingress protection.
- Built-in WiFi connectivity.
- Micro SD card slot.
- NMEA 2000 compatible.

Product code	
80-911-0100-00	**CZone Touch 10**
80-911-0101-00	**Retrofit plate** *(required for retrofitting old 10" Touch Screen)*
Screen	10.1" LED-backlit projected capacitive touchscreen display with IPS technology
Aspect ratio	widescreen 16:10
Resolution	1280 x 800 pixels
Protection degree	IP66
Brightness	500 cd/m²
Supply voltage	8-32 V
Power consumption	1 A at 12 V, 500 mA at 24 V
Interfaces	NMEA 2000, USB2.0, Ethernet
Dimensions, hxwxd	196 x 275 x 41 mm 7.7 x 10.8 x 1.6 inch
Weight	1.8 kg

ACCESSORIES			
	Power cable for Touch 10 2 pin, 2 m / 6.5 ft *80-911-0032-00*	*Supplies power for* *Touch 10 display*	

Product code	
80-911-0124-00	**CZone Touch 5**
80-911-0135-00	**Retrofit plate 12 V** *(required for retrofitting old 3.5" Display Interface)*
80-911-0136-00	**Retrofit plate 24 V** *(required for retrofitting old 3.5" Display Interface)*
Screen	5" LED-backlit projected capacitive widescreen touch
Resolution	800 x 480 pixels
Protection degree	IPx7
Brightness	1200 cd/m²
Supply voltage	12 V DC
Power consumption	900 mA at 13.5 V
Interfaces	NMEA 2000, Micro SD
Dimensions, hxwxd	120 x 152 x 58 mm 4.7 x 6.0 x 2.3 inch
Approvals	CE, RCM

Let CZone® do the thinking...

CZone removes the one-to-one relationship between each physical switch and the item being controlled, and allows multiple devices to be controlled by a single touch.

This simplifies the display and ensures critical items are not forgotten, like navigation lights when running at night. The combinations can also overlap, allowing the same device to be controlled in different ways by different modes.

Modes

So for example a mode for "Daytime Running" might turn on the fridge, fresh-water pump, toilet pump and bilge blower.

A "Night Running" mode might add navigation lights to this and dim the instrument lights, while a "Night Anchor" mode would turn these off and replace them with the anchor light, interior lights and underwater lights. In this way a small number of programmed modes could cater for all the combinations required during normal operation.

Creating modes is done using the CZone configuration software, and this can incorporate suitable graphics. Modes can then be programmed to display graphically which devices are enabled for each mode, ensuring immediate understanding of what the state is of each device is in the current mode.

CZone® DC Interfaces

CZone Combination Output Interface (COI)

The Combination Output Interface (COI) combines multiple input and output devices into one module, offering a compact and intelligent replacement for traditional DC fuse boxes and circuit breaker panels with digital switching technology.

Digital switching systems just became more cost effective and easier to install with the CZone Combination Output Interface (COI). This one box replaces up to five separate units, with convenient Deutsch connectors and IPx5 water resistance, providing a complete CZone system for smaller applications. The COI's high continuous power output (150 amps), plus space, installation time and cost savings also make it the perfect building block for larger systems.

Quick Access and Overview

Partnered with either a dedicated CZone display, or with a multi-functional display from one of our integration partners (B&G, Furuno, Garmin, Lowrance, Simrad), the Combination Output Interface heralds a new era in providing simple, intuitive control over the increasingly complex systems found on today's applications.

Product code	
80-911-0119-00	**CZone COI with connectors**
80-911-0120-00	**CZone COI without connectors** *(for refit or service purposes)*
Communication protocol	NMEA 2000
Channels	30
Output channels (high)	4 x 25 A
Output channels (low)	12 x 10 A (dimmable)
Analogue inputs	8 (positive or negative switching, 0-32 V)
Additional monitoring	2 voltage sensors (on main positive stud and NMEA 2000 power)
Circuit current monitoring	all 16 output channels
Circuit protection	configurable electronic fuse + mechanical fuse and bypass
Digital switch inputs	6 digital input switches with backlight via digital breakout
Max. continuous current	150 A at 40 °C (derating > 40 °C)
NMEA 2000 power consumption	250 mA at 12 V 180 mA at 12 V standby
Connectors	Deutsch
Power supply	M8 (5/16") stud positive, M6 (1/4") stud negative
Supply voltage	9-32 V (with power available LED and voltage monitoring)
Bilge pump circuits	4 high current channels: integrated manual control and 'pump running' detection
Protection degree	IPx5 (mounted at 0° +/- 90°)
Dimensions (incl. optional cable cover), hxwxd	338 x 235 x 62 mm 13.3 x 9.3 x 2.4 inch
Weight	1.9 kg / 4.2 lb
Approvals	CE, ABYC, NMEA

FEATURES

- High density 30 channel module minimizes installation, interconnections and footprint, while delivering best value per circuit.
- Full mechanical fuse protection plus bypass on all circuits as required by ABYC/CE.
- Industry standard Deutsch connectors provide fast, plug & play installation. A Deutch connector kit is delivered as standard with product code 80-911-0119-00.
- Optional cable cover offers improved aesthetics and greater mounting flexibility.
- Proven, rugged CZone design includes IPx5 water ingress protection and NMEA 2000 certification.
- High power bilge pump channels allow manual control plus 'pump running' feedback from a single channel – without additional wiring.
- USB port provides easy system update from USB flash drive.

ACCESSORIES

COI cable cover
80-911-0123-00
Optional cover for clean finish, covers connectors and cables.

COI Digital Switch Breakout
80-911-0134-00
The COI Digital Switch Breakout (DSB) interfaces CZone digital switches with your CZone COI module. Including 2 mtr DSB to COI cable.

COI DSB cable, 5 mtr
80-911-0129-00

COI Deutsch connector kit *(delivered as standard with 80-911-0119-00)*
80-911-0131-00
Includes all necessary Deutsch plugs, contacts, wafers & seals for COI.

Deutsch HDT-48-00 crimp tool
80-911-0133-00
Crimp tool for Deutsch contacts.

NEW

CZone Control 1 Interface

The Control 1 Interface combines multiple input and output devices into one module. This minimizes time and effort during installation by reducing connections between multiple modules and the footprint required. The Control 1 Interface incorporates many of the core features and benefits of the fully featured Combination Output Interface (COI), but has been re-engineered to offer improved cost-per-channel value.

The Control 1 Interface features the same rugged design as the fully featured COI with IPx5 water ingress protection and complete mechanical fuse and bypass on all circuits. Industry standard Deutsch connectors provide reliable plug and play installation.

Control 1 Interface builds onto CZone's portfolio of leading digital control and monitoring products. Delivering only the essential features required for small systems, the Control 1 Interface increases affordability and ensures the benefits of CZone are accessible to a wider range of applications than ever before.

FEATURES

- Complete CZone Control and Monitoring system in a single box.
- Modular design provides system options for wide range of vessels and RV's.
- Compatible with marine multi-function and black box chartplotter / fishfinders.
- Equipped with advanced core CZone feature set.
- Competitive price point for cost sensitive applications.
- ABYC compliant ATC fusing and mechanical bypass for redundancy.
- PWM (pulse-width modulation) light dimming capability & smooth start.
- Monitor tank levels, battery voltage, temperature and pressure using industry standard sensors.
- Bilge Pump Run Detection allows pump control and monitoring from a single wire.
- Status LEDs for all outputs, DC supply and NMEA 2000.
- Additional volt monitoring on main DC connection and NMEA 2000.
- In-built load shedding allows non-necessary loads to be turned off to preserve battery life.
- USB port allows full system firmware and configuration updates (no PC or adapters required).

NEW MODEL

Product code	
80-911-0122-00	**CZone Control 1 Interface**
Communication protocol	NMEA 2000
Output channels (high)	4 x 25 A
Output channels (low)	12 x 10 A (dimmable)
Analogue inputs	8 inputs (positive or negative switching, 0-32 V), 0-1000 Ohm resistance, 4-20 mA current
Additional monitoring	1x voltage sense on main positive stud
NMEA 2000 PGN output	fluid Level, pressure, temperature, battery voltage
Circuit current monitoring	no
Circuit protection	ATC fuse with fuse tripped & fuse in bypass alarms
Circuit bypass	mechanical protection / bypass all output channels
Max. continuous current	150 A at 40 °C / 104 °F (derating > 40 °C / 104 °F)
Power consumption	operating (all channels On) = 100 mA at 13.2 V / operating (all channels Off) = 75 mA at 13.2 V
Connectors	Deutsch
Power supply	M8 (5/16") stud positive, M6 (1/4") stud negative
Supply voltage	9-32 V (with power available LED)
Bilge pump circuits	4 high current channels: integrated manual control and 'pump running' detection
Protection degree	IPx5 (mounted at 0° +/-90°)
Dimensions (incl. optional cable cover), hxwxd	339 x 194 x 65 mm 13.3 x 7.6 x 2.6 inch
Weight	1.9 kg / 4.2 lb
Approvals	CE, ABYC, NMEA, ISO8846/SAEJ1171 Ignition Protected

CZone® DC Interfaces

NEW

CZone Contact 6 PLUS

Utilising proven CZone digital switching technology the Contact 6 PLUS is a robust and affordable digital switching solution. Featuring 6x 15A solid state ignition protected fused outputs with circuit bypass for system redundancy.

The Contact 6 PLUS can be networked into an existing CZone system or installed stand-alone with the CZone Waterproof Keypads or compatible multi-function displays. The Contact 6 PLUS integrates with all major marine chart plotter and multi-function display manufacturers for direct control of electrical systems from your display, including fault warning notifications and circuit status indication.

FEATURES

- Circuit dimming & smooth start capability.
- Status LED's for all outputs.
- Ultra low current draw.
- Built-in timer functions for circuits like live bait tanks.
- Voltage monitoring on the NMEA 2000 network.
- Built-in Load Shedding allows non-essential loads to be turned off to preserve battery life.
- Built-in default configurations selectable via dip switch.
- Affordable add-on module to larger CZone systems.
- Blown fuse detection and warning.

**CHECK THE MASTERVOLT SITE FOR *INTERESTING REAL-LIFE SYSTEMS*:
MASTERVOLT.COM/REFERENCES
AND
EXTENDED *TECHNICAL BACKGROUND*
ON OUR PRODUCTS:
MASTERVOLT.COM/TECHNICAL-
BACKGROUND**

NEW MODEL

Product code	
80-911-0160-00	**CZone Contact 6 PLUS**
Output wire range	0.5 -6 mm (24 AWG – 8 AWG)
NMEA 2000 connectivity	1 x CAN Micro-C port
Output channels	6 x 15 A – 12/24 V
Dimming	all channels, PWM at 100 Hz
Circuit protection	ATC fuse with blown fuse alarms
Circuit bypass	mechanical fuse bypass on all channels
Max. current	60 A total module current
Power supply	M6 (1/4")
Supply voltage	9-16 V via NMEA 2000 network
Protection degree	IPx5 (mounted vertical)
Power consumption	max. 75 mA / standby 0.3 mA
Temperature range (ambient temp.)	-15 °C to 55 °C 5 °F to 131 °F
Temperature range (storage/non operating)	-40 °C to 85 °C -40 °F to 185 °F
Dimensions, hxwxd	128.5 x 202.5 x 45 mm 5.1 x 8 x 1.8 inch
Weight	0.6 kg / 1.3 lb
Approvals	CE, ABYC, NMEA, ISO8846/SAEJ1171 Ignition Protected

ACCESSORIES

CZone 2 Module Smart Harness
80-911-0171-00
CZone utilizes the industry standard NMEA 2000 network for its communication protocol. The 2 Module Smart Harness replaces the need for a complete network backbone in a small system, meaning a robust, simpler and more cost-effective installation. The Smart Harness can also be fitted independent to any CZone installation where a small network comprising 2 devices is required.

CZone 3 Module Smart Harness
80-911-0134-00
The 3 Module Smart Harness replaces the need for a complete network backbone in a small system. 3 Module Smart Harness connects two 6-button Waterpoof Keypads to the Contact 6 PLUS Module. Not required when connecting to NMEA 2000 network. The Smart Harness contains internal network terminations and will compromise a standard backbone.

CZone Waterproof Keypad (portrait)
80-911-0163-00
CZone Waterproof Keypad (landscape)
80-911-0162-00
The CZone Waterproof Keypad range features dimmable RGB circuit backlighting in a robust IPx7 waterproof enclosure and is available in portrait and landscape orientations.

CZone Contact 6 Plus Connector & Seal Kit
80-911-0179-00
The CZone Contact 6 PLUS Connector & Seal Kit contains additional or replacements, suitable for the Contact 6 PLUS Module.
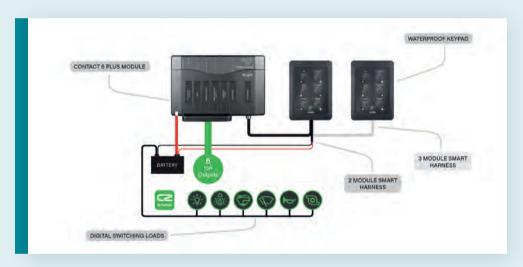
CZone Contact 6 PLUS System

Combine Contact 6 PLUS with the Waterpoof Keypad and Smart Harness to achieve a very affordable digital switching system, that reduces installation time, network component cost and delivers a robust electrical system with fewer connection points than a conventional installation. The CZone Contact 6 PLUS System provides an ultra-low current draw state to reduce demand on small electrical systems yet still delivers features such as timer functions and Load Shedding to preserve critical battery life by turning off non-essential loads as voltage drops.

- Low cost digital switching system.
- Simple installation.
- Greater reliability with fewer connections.
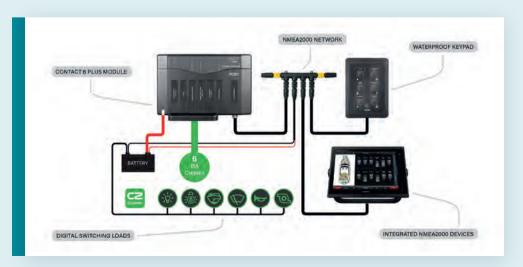
System examples

STANDALONE

The Contact 6 PLUS and Waterproof Keypad can be networked using the Smart Harness without the need for a full NMEA 2000 network backbone. The Smart Harness is available in 2 and 3 module versions which are perfect for a Contact 6 PLUS Module and one or two Waterproof Keypads providing six or twelve switch positions.

- No NMEA 2000 network backbone required.
- Cost effective and simple installation.
- More reliable with less connection points.

NETWORKED

The Contact 6 PLUS and Waterproof Keypad are fully NMEA 2000 compatible and can be used as low cost components of a larger CZone installation with a full network backbone. In a networked installation the NMEA 2000 backbone replaces the Smart Harness.

- Low cost addition to a larger installation.
- Compatible with most Marine multi-function displays.

CZone® Network Components

NEW

CZone Contact 6 Interface

Product code	**NEW MODEL**
80-911-0140-00	
Delivered with gland and plug pack	

The CZone Contact 6 is an entry level digital switching module. It offers six independent channels of positively or negatively switched output channels and is ideal to standalone on smaller marine or recreational vehicle applications, or as part of a larger network. The Contact 6 can be networked via NMEA 2000 and controlled using a CZone Touch display, wirelessly using a CZone Wireless Interface, networked Multifunction Display or digital push or toggle switch.

CZone Contact 6 Interface

Entry level digital switching module for 12 V marine and RV applications.

Stand alone or networked with other CZone products.

Compatible with CZone integrated Multifunction Displays (MFD's).

Six independent dry contact relays allow positive, negative and reversing motor control.

Dimensions, hxwxd:
100 x 156 x 42 mm / 3.9 x 6.1 x 1.7 inch

IPx5 water ingress protection.

Conform NMEA 2000.

Proven CZone technology.

Internal auto-resetting fuses.

Electronic relay bypass switch.

Status LEDs/fault codes for all channels.

CZone Switch Control Interface (SCI)

Product code	Product code
80-911-0011-00	*80-911-0012-00*
Switch Control Interface with seal	**Switch Control Interface only**

The Switch Control Interface provides an interface between the CZone network and the traditional mechanical switches with which manufacturers and users are familiar. The SCI simplifies your wiring, supports your existing choice of switches, protects against failures and allows for more installation options.

CZone Switch Control Interface (SCI)

Single switch position can control multiple OI channels.

Attaches to switch panels via custom SCI cable.

Multiple SCI switches can control single OI channel.

Output for backlighting of switch labels (dimmable).

Outputs systems on and function/fault codes to systems on LED of switches (dimmable).

Dimensions, hxwxd:
100 x 156 x 42 mm / 3.9 x 6.1 x 1.7 inch

IPx5 water ingress protection.

Programmable switch types.

8 inputs per module (16 individual controls).

Sequential button press functionality.

Choice of push button or rocker style switch.

ACCESSORIES

Cable gland for SCI, silicone
80-911-0035-00

Hole plugs for SCI cable glands, 5 mm
80-911-0017-00

CZone Signal Interface (SI)

Product code	Product code
80-911-0013-00	*80-911-0014-00*
Signal Interface with seal and connector	**Signal Interface only**

The Signal Interface connects the CZone system to your external sensors, alarms and switching devices. The SI allows intelligent, automated operation of circuits depending on the state of the input.

CZone Signal Interface (SI)

Accepts inputs from traditional switch types being used to control outputs.

Accepts inputs from switches to trigger alarm i.e. high water float switch.

Accepts inputs from industry-standard tank senders (0-5V, 10-180 Ohm, 240-33 Ohm).

Accepts inputs from general voltaic or resistive signals, can be used for controlling outputs or to display a physical position, e.g. show a hatch is partially open.

LED status indicators for each input.

Dimensions, hxwxd:
100 x 156 x 42 mm / 3.9 x 6.1 x 1.7 inch

IPx5 water ingress protection.

Outputs standard NMEA 2000 sentences.

Resistive input range 0–1000 Ohms.

Voltage sensing input range 0–34 V DC.

ACCESSORIES

Cable gland for SI, silicone
80-911-0036-00

Terminal block for SI, 8-way
80-911-0043-00

Hole plugs for SI cable glands, 3.2 mm
80-911-0016-00

NOTE: *High and low alarm levels can be set for all inputs.*

CZone Meter Interface (MI)

Product code	Product code
80-911-0005-00	80-911-0006-00
Meter Interface with seal and plug	Meter Interface only

The Meter Interface accepts inputs from external AC and DC power metering sensors such as: AC and DC voltage and amps, AC kWatts, and DC battery capacity in amp hours and % remaining. All with user definable high and low alarms.

CZone Meter Interface (MI)

AC

3 x AC voltage inputs (multi voltage).

2 x AC current inputs.

Calculates true RMS power.

DC

3 x DC voltage inputs (multi voltage).

2 x DC current inputs.

Calculates battery capacity as ampere hours and percentage charge remaining.

Resolution for current metering down to 0.1 A.

GENERAL

Dimensions, hxwxd:
100 x 156 x 42 mm / 3.9 x 6.1 x 1.7 inch

IPx5 water ingress protection.

Outputs standard NMEA 2000 power monitoring sentences.

ACCESSORIES

Cable gland for MI, silicone
80-911-0033-00

Terminal block for MI, 8-way
80-911-0043-00

Terminal block for MI, 6-way
80-911-0042-00

Hole plugs for MI cable glands, 3.2 mm
80-911-0016-00

CZone Motor Output Interface (MOI)

Product code	Product code
80-911-0007-00	80-911-0008-00
Motor Output Interface with connector and protective boot	Motor Output Interface only

The Motor Output Interface has an output pair for controlling DC motors which require a reversal of polarity to change the direction of their mechanical operation. For example, a DC motor for an electric window mechanism will move the window up or down depending on the polarity of the feed to the motor. The MOI also incorporates two standard output channels as found on the Output Interface (OI).

CZone Motor Output Interface (MOI)

Single motor control and two normal channels per unit, 20 A per output.

Built-in circuit protection.

IPx5 water ingress protection.

Dimensions, hxwxd:
128 x 200 x 45 mm / 5 x 7.9 x 1.8 inch

ACCESSORIES

Terminal block for MOI, 6-way
80-911-0041-00

Seal boot for MOI, 6-wire, silicone
80-911-0034-00

CZone Output Interface (OI)

Product code	Product code
80-911-0009-00	80-911-0010-00
Output Interface with connector and protective boot	Output Interface only

The Output Interface provides an intelligent replacement for traditional circuit breaker and fuse panels. It has six high power, robust output channels which provide the power supply, control and fusing for a circuit as well as integrating many other features such as timers and dimmers. Connection to the unit is simple: a large 6-way plug allows connections to cables of up to 16 mm² (6AWG) in size, or multiple smaller conductors. No need for specialised crimp terminals and expensive crimp tools to be carried for terminations to CZone, just a blade screwdriver. A protective flexible boot offers protection to the connections from harsh environment conditions.

CZone Output Interface (OI)

4 levels of backup fusing including manual override (as required by ABYC).

Multiple channels can be bridged together to offer higher current switching.

Power consumption 12 V: 85 mA (standby 60 mA).

Dimensions, hxwxd:
128 x 200 x 45 mm / 5 x 7.9 x 1.8 inch

Small, non-metallic, easy to install case.

IPx5 water ingress protection.

6 x 20 amps circuits.

Programmable software 'fuse' sizes.

ACCESSORIES

Terminal block for MOI, 6-way
80-911-0041-00

Seal boot for MOI, 6-wire, silicone
80-911-0034-00

CZone® Network Components

AC Output Interface (ACOI)

Searching for a simplified way to network, monitor and control onboard AC circuits? The AC Output Interface does it all and provides circuit protection for onboard AC devices. It is easy to install, configure and operate the digital control system with pre-wired components for quick connections.

This gives you a customizable solution to suit unique installation and application needs, including 'night operation' as well as control at multiple locations. It has eight outputs (up to 50 A each), supports multiple pole designs and has two separate buss feeds. To facilitate things, status LEDs and manual bypass are located right at the enclosure.

FEATURES

- Circuit status and run current displayed for each circuit.
- Customizable to suit installation requirements.
- Pre-wired for quick connection.
- Staggered start up of loads.
- 110 V, 240 V, 110/220 V.
- Supports multiple pole designs, i.e. double, triple, four pole.
- Utilizes standard DIN rail mounted components for circuit protection and control.
- Can support two separate buss feeds (i.e. 2 load groups) in one box.
- Delay before circuits come on to allow generators to come up to speed.
- Provides circuit protection and control.
- Status LEDs at enclosure.
- Manual bypass at enclosure.
- Provision for MCB/RCDs.
- Timers.
- 50 or 60 Hz.

Sample AC control screen.

Product code	80-911-0069-00
	For quotation purposes only, contact Mastervolt for custom requirements.

ACOI standard

8 x 50 A relays protected with 10 A MCB's.
Pre-wired.
Current monitoring on each channel.
IPx5 enclosure.
LED status indicators for each input.
Dimensions, hxwxd: 430 x 276 x 186 mm / 17 x 10.9 x 7.3 inch

Product code	
80-911-0082-00	Brown tails (APAC/Europe)
80-911-0096-00	Black tails (US)

ACOI DIN rail mount

8 x 50 A relays.
Fitted with 600 mm tails.
Cost effective solution, own enclosures and MCB's can be sourced.
Current monitoring on each channel.
Dimensions, hxwxd: 77 x 160 x 60 mm / 3 x 6.3 x 2.4 inch

AC Mains Interface (ACMI)

A sophisticated source selector or transfer switch, the AC Mains Interface enables the user to specify the AC power source (generator, inverter, mains).
Developed for use with the CZone digital control system, but may also be used as a stand-alone device.

The ACMI can be programmed to automatically change the supply source when the current rating is exceeded, and includes a manual override and user-friendly display screen that ensures easy current, voltage, frequency, and power monitoring. Other features include six monitored, over-current protected main power inputs of up to 100 A each, as well as two outputs, which enables two separate load groups and a parallel option for use with a single source. To simplify installation, the ACMI comes pre-wired.

Product code	80-911-0068-00
	For quotation purposes only, contact Mastervolt for custom requirements.

ACMI standard

Three inputs: 1 x 16 A mains, 1 x 32 A mains, 1 x 50 A generator parallel.
Two load groups: 40 A.
230 V AC 50 Hz.
Current, voltage, frequency and power monitoring incorporated.
Manual override panel on enclosure.
Dimensions, hxwxd: 430 x 540 x 186 mm / 17 x 21.3 x 7.3 inch

FEATURES

- Six source inputs up to 100 A (e.g. 2 x mains, 2 x generator).
- Monitoring of channel status (on/off/fault).
- Provides circuit protection and control.
- Manual override at enclosure and via remote panel.
- Customizable to suit installation requirements.
- Supports multiple pole designs, i.e. double, triple, four pole.
- 110 V, 240 V, 110/220 V.
- IPx5 enclosure.
- Utilizes standard DIN rail mounted components for circuit protection and control.
- Current, voltage, frequency and power monitoring incorporated (six channels).
- Physical and software lockouts between source controls (prevents two sources from becoming connected).
- Reverse polarity and bad power supply alarms including auto disconnect and lockouts.
- Two outputs (load groups), allows for two separate load groups with parallel option for use with single source.
- Auto changeover.
- Provision for RCD's.
- Load shedding.
- Status LEDs at enclosure.
- Pre-wired for quick connection.
- Timer controls.
- 50 or 60 Hz.

Sample AC mains screen.

Wireless Interface

Monitor and control your onboard systems from your iPad

iPad® is a trademark of Apple Inc.

**The Wireless Interface allows your iPad to interface with the onboard CZone®
system for full monitoring and control of the electrical equipment via a clear and
intuitive display. The interface acts as a hub for the seamless connection between
the two popular communication networks of MasterBus and CZone®.**

FEATURES

- User-friendly homepage to monitor and control onboard circuits.
- Integrated control and monitoring of Mastervolt power products including battery chargers and inverters.
- Monitor AC/DC power and battery data.
- Monitor tank levels.
- Receive visible alarms.
- Connect a maximum of three devices simultaneously.
- Ability to personalise homepage to display favourite circuits, modes and monitoring.
- Connects to CZone or MasterBus network for control and monitoring of systems.
- Customise your layout.
- The Wireless Interface acts as the hub between MasterBus/CZone networks and local WiFi devices.
- Ethernet connection to connect to other LANs.
- USB connection for configuration updates.
- Power cable and aerial included.

NOTE: WI MasterBus connector required for MasterBus connection.

Product code	
80-911-0090-00	**Wireless Interface**
80-911-0095-00	**WI MasterBus connector** *(required for MasterBus connection)*
MasterBus powering	no
Dimensions, hxwxd	105 x 190 x 60 mm 4.1 x 7.5 x 2.4 inch
Weight	0.685 kg / 1.5 lb
Protection degree	IP54
Delivered with	power cable, WiFi antenna, USB cable, user's manual
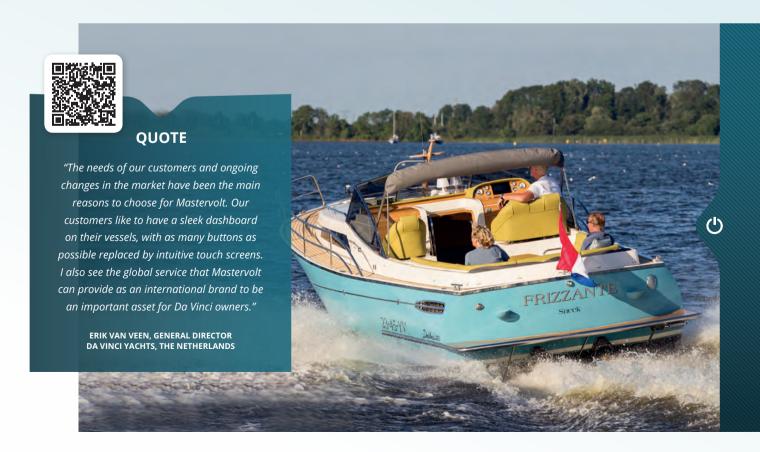
Wireless Interface Configuration Tool

User-friendly configuration tool for PC.

- Allows full customization of CZone app home page.
- Import multiple images for your own layout.
- Easy drag and drop of circuits and alarms onto application image.
- Configure network settings on wireless server.
- Create user profiles for logging into the CZone app.

QUOTE

"The needs of our customers and ongoing changes in the market have been the main reasons to choose for Mastervolt. Our customers like to have a sleek dashboard on their vessels, with as many buttons as possible replaced by intuitive touch screens. I also see the global service that Mastervolt can provide as an international brand to be an important asset for Da Vinci owners."

**ERIK VAN VEEN, GENERAL DIRECTOR
DA VINCI YACHTS, THE NETHERLANDS**

CZone® Accessories

Single T-connector
Connects a single device into the NMEA 2000 backbone.

Product code
80-911-0029-00

2 Way T-connector
Connects multiple devices into the NMEA 2000 backbone.

Product code
80-911-0047-00

4 Way T-connector
Connects multiple devices into the NMEA 2000 backbone.

Product code
80-911-0048-00

Blanking Caps
Protects unused T-connectors from dust and water.

	Product code
Male	80-911-0050-00
Female	80-911-0051-00

Terminating Resistors
Use at either end of the NMEA 2000 backbone.to complete the network. Each network must have a male and female terminator.

	Product code
Male	80-911-0031-00
Female	80-911-0030-00

90° Elbow Connector
Space saving connector for modules, displays and cabling connections.

Product code
80-911-0046-00

NMEA 2000 Power Isolator
NEW MODEL

Used for isolating power between two independent NMEA 2000 networks. Reduce battery current draw by powering one bus off while the other remains operational, or can be used to assist with voltage drop issues on long networks.

Product code
80-911-0137-00

Backbone Cable
Special low voltage drop backbone cable ensures ultimate reliability for your NMEA 2000 network.

	Product code
0.5 m / 1.6 ft	80-911-0026-00
2 m / 6.5 ft	80-911-0027-00
5 m / 16 ft	80-911-0024-00
10 m / 32 ft	80-911-0025-00

Network Cable
Thinner, more flexible cables connect individual devices to the NMEA 2000 network.

	Product code
0.5 m / 1.6 ft	80-911-0116-00
1 m / 3.2 ft	80-911-0117-00
2 m / 6.5 ft	80-911-0118-00
5 m / 16 ft	80-911-0115-00

NMEA 2000 Power Cable
Provides power to the NMEA 2000 network. 0.8 mm² (18 AWG) conductors meet ABYC standard to protect the network from electromagnetic interference.

	Product code
1 m / 3.2 ft	80-911-0028-00

Mastervolt-CZone Drop Cable
NEW MODEL

Adapter cable for connecting Mastervolt devices with CZone support to the CZone or NMEA 2000 network.

	Product code
0.5 m / 1.6 ft	77060050
1 m / 3.2 ft	77060100
2 m / 6.5 ft	77060200
5 m / 16 ft	77060500

CZone Wireless Remote Kit

Simple to set up, wireless remote control. Buttons are configurable for momentary on or latching control of circuits.

- 80 m (250 ft) operating range.
- Includes (2) key fobs and a receiver box.
- Rolling code.

Product code
80-911-0045-00

AC Transducer

- Includes 3 voltage transformers for up to 3 voltage inputs.
- Dimensions: 69 x 140 x 50 mm / 2.75 x 5.5 x 2 inch.
- Used for AC voltage measurement Meter Interface.

Product code
AC-VSEN-4

Cable Assembly

Suitable for Switch Control Interface and Digital Switch Breakout, to suit push buttons.

	Product code
0.5 metres	80-911-0085-01
1 metres	80-911-0086-01
2 metres	80-911-0087-01
5 metres	80-911-0088-01
8 metres	80-911-0089-01

Cable Assembly

Suitable for Switch Control Interface and Digital Switch Breakout, to suit Rocker switches.

	Product code
0.5 metres	80-911-0018-00
1 metres	80-911-0019-00
2 metres	80-911-0020-00
3 metres	80-911-0021-00
4 metres	80-911-0022-00
5 metres	80-911-0023-00

USB CAN Adapter

Connects your PC to the CZone network for configuration and system setup.

Product code
80-911-0044-00

DC Current Shunt

- 450A / 50mV shunt supplied with DC Systems Monitor (DCSM), product code 80-600-0027-00.
- Dimensions, hxwxd: 83 x 45 x 44 mm / 3.25 x 2.8 x 2.75 inch.

Product code
LB-450-50

Current Transformer

Max. current 150 A AC.
One CT-10-3 current transformer is supplied with the AC Systems Monitor (**product code 80-600-0023-00**). A second current transformer must be ordered if a twin line system is in use.
Dimensions: 37.5 x 39 x 14 mm / 1.5 x 1.55 x .55 inch.
Hole size: 12 mm / 0.5 inch.

Product code
CT-10-3

Through Bulkhead Adaptor

For use on the backbone to transition through a waterproof bulkhead or to connect removable equipment such as a computer interface.

- NMEA 2000 network.

Product code
80-911-0052-00

Female Field Service Connector

To make your own NMEA cables.

- NMEA 2000 network.

Product code
80-911-0053-00

Male Field Service Connector

To make your own NMEA cables.

- NMEA 2000 network.

Product code
80-911-0054-00

CZone® Accessories

Push Buttons

For use with CZone systems only (3.3 V).

- Momentary and latched actuation options available.
- Blue and red circuit status indication LED options.
- 19 mm mounting hole.
- IP67 environmental protection.
- Stainless steel components.
- Maximum 5 amps each.

	Product code
Momentary (ON)/OFF, red LED	80-911-0060-00
Latching ON/OFF, red LED	80-911-0063-00
Momentary (ON)/OFF, blue LED	80-911-0062-00
Latching ON/OFF, blue LED	80-911-0061-00

Custom Rocker Switches

Red or blue systems in operation and backlighting LEDs. *Multiple Rocker labels available upon request.*

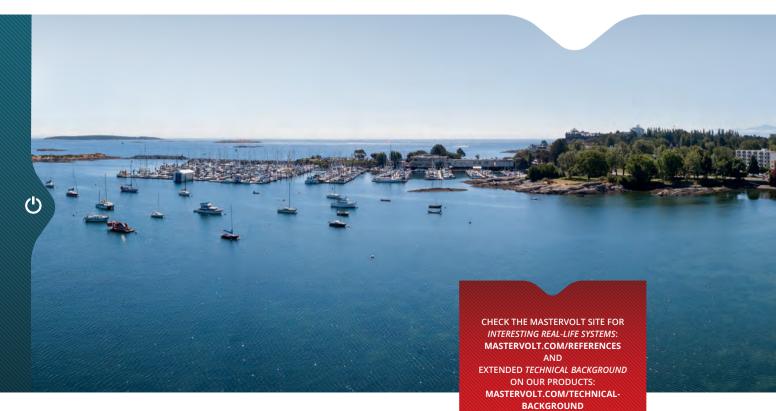|	Product code
ON/OFF, red LED	80-911-0037-00
Mom (ON)/OFF, red LED	80-911-0038-00
ON/OFF/ON, red LED	80-911-0039-00
Mom (ON)/OFF/(ON), red LED	80-911-0040-00
Mom (ON)/OFF, blue LED	80-911-0066-00
Mom (ON)/OFF/(ON), blue LED	80-911-0071-00

Wireless Interface

Wireless monitoring and control of onboard systems from your iPad. Allows your iPad to interface with an onboard digital switching system for full monitoring and control of the electrical equipment via a clear and intuitive display. The interface acts as a hub for the seamless connection between MasterBus and CZone.

	Product code
Wireless Interface	80-911-0090-00
WI MasterBus connector *(required for MasterBus connection)*	80-911-0095-00

CHECK THE MASTERVOLT SITE FOR
INTERESTING REAL-LIFE SYSTEMS:
MASTERVOLT.COM/REFERENCES
AND
EXTENDED *TECHNICAL BACKGROUND*
ON OUR PRODUCTS:
MASTERVOLT.COM/TECHNICAL-BACKGROUND

Heavy Duty Current Transformer

Max. current 150 A AC.
CT-HD is available for systems with large mains cables, too large for CT-10-3 (order separately).
Dim.: Ø 47 x 10.5 mm / 1.85 x 0.4 inch.
Hole size: 32 mm / 1.25 inch.

Product code
CT-HD

CZone Network Bridge Interface

For isolating sections of a NMEA 2000 network to decrease standby current draw. Isolation when bridging between two CAN networks, (e.g. connecting CZone to Simrad Simnet). For expansion of the NMEA 2000 network when the maximum node limit for the network has been reached *(node = any device connected to the NMEA 2000 network)*. Once fitted, 40 additional nodes can be added.

Product code
80-911-0057-00

Surge Protection Module

Protect your electronics from being damaged by harmful high voltage spikes. When fitted to the battery supply, these modules look for sudden increases in voltage then switch into protection mode to absorb and suppress the high energy spike.

	Product code
12 V DC	80-707-0004-00
24 V DC	80-707-0005-00

CZone MasterBus Bridge Interface

The CZone MasterBus Bridge Interface physically connects the MasterBus and CZone networks together, enabling the two networks to communicate and act as one. This provides seamless control and monitoring of Mastervolt power electronics from CZone displays or partner products.

FEATURES

- Control of Mastervolt inverters and chargers from CZone displays, switches or partner products.
- Display MasterBus acquired systems information such as tank and power levels on CZone displays.
- Transfer of alarms between both systems.

	CZone Masterbus Bridge Interface
Product code	80-911-0072-00
MasterBus powering	no
Dimensions, hxwxd	69 x 69 x 50 mm 2.7 x 2.7 x 2 inch
Weight	145 g / 0.32 lb
Protection degree	IP65
Delivered with	MasterBus cable adapter, MasterBus terminator, user's manual

Please contact Mastervolt or your local dealer for possibilities in your specific application.

CZone® Integration Partners

CZone has partnered with leading manufacturers of multifunctional displays, such as Navico (Simrad, B&G, Lowrance), Mercury, Volvo Penta, Garmin and Furuno. This makes it even easier to monitor and check energy systems and circuits on board.

CZone technology is integrated with easy-to-read graphics into chartplotters and multi-function displays. View CZone monitoring data, tank levels and battery capacity alongside radar, fish finder, video and chart plotter information or navigate to the CZone page to operate any circuit from the intuitive control page.

Integrate various sonar technologies, autopilot, connectivity, apps, engine data and multimedia.

CZone mode controls, visible on the touchscreens, allow multiple circuits to be turned on and off with a single touch, all customisable to your needs.

With CZone technology, control and monitoring is available at your fingertips, at the helm or flybridge, at desired locations on the boat or vehicle, programmed into the remote key fob, or from an app on your tablet.
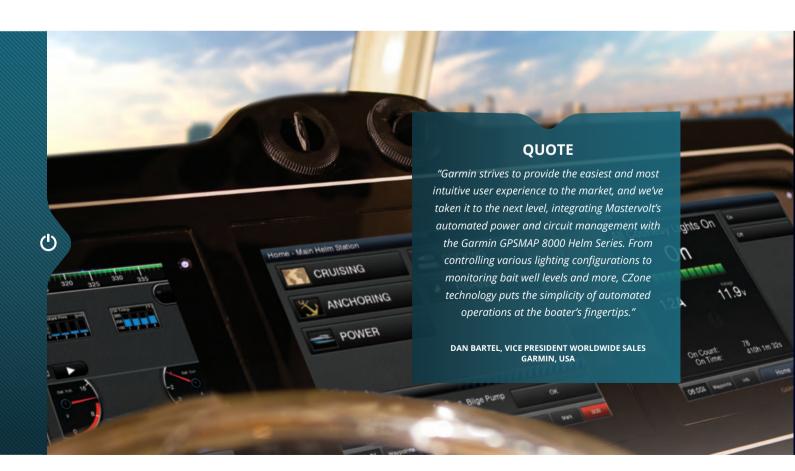
QUOTE

"Garmin strives to provide the easiest and most intuitive user experience to the market, and we've taken it to the next level, integrating Mastervolt's automated power and circuit management with the Garmin GPSMAP 8000 Helm Series. From controlling various lighting configurations to monitoring bait well levels and more, CZone technology puts the simplicity of automated operations at the boater's fingertips."

DAN BARTEL, VICE PRESIDENT WORLDWIDE SALES GARMIN, USA

Mastervolt Monitoring:
A window into the life of
your batteries

Unexpected flat batteries are never a good start to the day. A Mastervolt battery monitoring system brings an end to nasty surprises. A clear display shows performance, consumption and available battery capacity. Management of larger, complex systems is also available. This includes monitoring and operation of multiple functions such as AC and DC power provision via the generator, mains or main engine. The choice is yours.

A choice of instruments for different needs

Measuring the actual amount of energy remaining in a battery is a complex task, different to simply checking the level in a water or fuel tank. Many factors influence how much energy the battery can still supply, including its age, the surrounding temperature and the intensity of the loads connected to the battery. Although a voltmeter can give a rough indication of the battery's condition, there is a more accurate and reliable way to obtain information - via one of Mastervolt's battery monitors.

Available in four different models:

MASTER TIP

A Mastervolt battery monitor can also function as an active warning system. A potential-free contact can give a signal to an acoustic alarm or even an automatic start/stop system for the generator.

■ **BattMan Lite**
An affordable battery monitor that does exactly that: providing critical information about the status of your battery bank under all circumstances. Additionally it will warn you when your battery bank is empty.

■ **BattMan Pro**
Also displays the remaining time until your battery needs to be charged and stores special battery status events.

■ **Masterlink BTM-III**
Provides an accurate indication of the voltage, current, amp-hours, remaining time and remaining capacity of battery bank 1, and the actual and estimated capacity of battery banks 2 and 3. The built-in microprocessor calculates the remaining capacity and stores historic data.

■ **MasterShunt + EasyView 5**
MasterBus integrated battery monitor collecting detailed information on the status of your batteries. The MasterBus remote panel with touchscreen control provides information on the charge process as well as other system information.

RELIABLE COST SAVING EASY INSTALL WATERPROOF

Specifications Battery Monitoring

	BattMan Lite	BattMan Pro	Masterlink BTM-III	MasterShunt + EasyView 5
Product code	*70405060*	*70405070*	*70403163*	*77020115 + 77010310*
Application	Battery monitor, 12/24 V DC with large, splash proof display (IP65) and power bar.	Battery monitor, 12/24 V DC with large, splash proof display (IP65) and power bar. Displays remaining time and stores special battery status events.	Battery monitor, 12/24 V DC with LCD display and LED bar.	The MasterShunt in combination with an EasyView 5 panel is the most advanced battery monitor you can find. Touchscreen control of all functions.
GENERAL SPECIFICATIONS				
Number of battery outlets	2; service (fully), starter (voltage)	2; service (fully), starter (voltage)	3; service, starter & bowthruster	one battery set per MasterShunt
Display/read-out	voltage, current, amp-hours, battery capacity in %	voltage, current, amp-hours, time remaining, battery capacity in %, special battery status events	voltage, current, amp-hours, time remaining, battery capacity in %, special battery status events	voltage, current, amp-hours, time remaining, battery capacity in %, inverter & charger operation, Power Sharing, special battery status events
Dimensions, hxwxd	Ø 64 mm, diepte 79 mm Ø 2.5, diepte 3.1 inch	Ø 64 mm, diepte 79 mm Ø 2.5, diepte 3.1 inch	65 x 120 x 40 mm 2.6 x 4.7 x 1.6 inch	113 x 127 x 43 mm / 4.5 x 5 x 1.7 inch
Dimensions shunt, hxwxd	87 x 45 x 35 mm - M8 3.3 x 1.7 x 1.4 inch - M8	87 x 45 x 35 mm - M8 3.3 x 1.7 x 1.4 inch - M8	84 x 44 x 44 mm - M8 / 3.3 x 1.7 x 1.7 inch - M8	150 x 150 x 65 mm / 5.9 x 5.9 x 2.5 inch
Built-in depth	72.5 mm 2.8 inch	72.5 mm 2.8 inch	40 mm / 1.6 inch (55 mm / 2.2 inch incl. cover and cable)	surface mount
Weight (excl. shunt)	0,1 kg / 0.22 lb	0,13 kg / 0.29 lb	0.25 kg / 0.6 lb	1 kg / 2.2 lb
TECHNICAL SPECIFICATIONS				
Max. Ah capacity	999 Ah	9999 Ah	9999 Ah	9999 Ah
Supply voltage	9-35 V	9-35 V	8-50 V	8-60 V
Voltage range	0-35 V	0-35 V	7-35 V	0-60 V
Current consumption (backlight off)	8 mA / 12 V 6 mA / 24 V	8 mA / 12 V 6 mA / 24 V	28 mA / 12 V 16 mA / 24 V	32 mA /1 2 V 17 mA / 24 V
Current consumption (backlight on)	30 mA / 12 V 18 mA / 24 V	30 mA / 12 V 18 mA / 24 V	100 mA / 12 V 50 mA / 24 V	100 mA / 12 V 50 mA / 24 V
Voltage resolution	0.1 V	0.01 V	0.1 V	0.1 V
Voltage accuracy	± 0.3 %	± 0.3 %	± 0.6 %	± 0.6 %
Shunt specification	500 A / 50 mV (service set)	500 A / 50 mV (service set)	500 A / 50 mV (service set)	digital shunt
Current measurement range	0-500 A	0-500 A	0-500 A (option incl. 1000 A)	0-500 A
Current accuracy	± 0.4 %	± 0.4 %	± 0.8 %	± 0.8 %
Battery alarm contact	yes, potential free	yes, potential free	yes, open collector	yes, via MasterBus alarm interface
Remaining time indication	no	yes	yes	yes
Historical data	no	yes	yes	yes
MasterBus compatible	no	no	no	yes
Connection cable (6-wire) necessary	yes	yes	no	no
Modular cable necessary	no	no	no	MasterBus cable included
Languages on display	universal	universal	English, Dutch, French, Spanish, German, Danish, Finnish, Norwegian, Italian, Swedish	English, Dutch, French, Spanish, German, Danish, Finnish, Norwegian, Italian, Swedish