

Digital DC 10x10A



- Fewer cables
- Lower weight
- More user-friendly
- Quicker installation
- Remote control

## The amazing comfort of Digital Switching



 **MASTERVOLT**

THE POWER TO BE INDEPENDENT

A photograph of a sailboat on the water, viewed from a low angle looking up the mast. The boat is white with blue accents. A person is visible on the deck. The background is a clear blue sky. A white, grid-like digital switching system overlay is visible on the left side of the image, extending from the top left towards the bottom right.

# Intelligent sailing with Digital Switching

Mastervolt's motto is 'The Power to be Independent'. As the leading manufacturer of complete, integrated systems for on-board power supplies, innovation is given a high priority. The maritime industry used to lag behind with regard to system integration compared to what is available in intelligent homes and cars. Now Mastervolt has developed a system that allows yachtbuilders, architects and installers to fight back with Mastervolt Digital Switching!

## **The market needs Digital Switching**

As owners demand ever higher levels of on-board luxury and comfort, yachts need to carry more equipment which in turn takes up more space. This makes it essential to arrange everything on-board more efficiently, and Digital Switching makes an enormous contribution to this goal. Mastervolt's latest innovation requires fewer cables, takes up less space and increases luxury. Digital Switching operates both DC and AC loads with the Mastervolt Digital DC 10x10A as the main element, switching every DC load. The Digital AC 1x6A switches AC users up to 6 A directly and larger users via a relay.

## **Easy and user-friendly**

The lives of guests and crew are made easier by Digital Switching and MasterBus. Safety and power information is available at a glance and the system has smart alarm functions. You will enjoy the benefits of standard options such as the 'follow me home' function (lights remain on until you have left the yacht) or an update via your phone of your battery status. You can even dim the lights with a delay and install warning signals when you exceed the programmed levels.

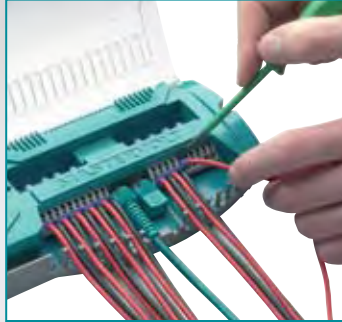
## **Saving time and costs**

Mastervolt's Digital Switching results in less working hours and installation materials, and fewer and thinner cables. The MasterBus control system also includes system integration and energy management, ensuring the best possible ratio between power generation, storage and consumption. When the air conditioning is turned on, the generator automatically starts if necessary. Another example is light dimming, which no longer requires a complex installation process thanks to the Digital DC 10x10A. So you can say goodbye to the dimmers!

## **Digital DC 10x10A: The height of intelligence**

Bathroom ventilation, refrigerator, navigation equipment, microwave, DVD player, electrical winches, bowthrusters or halogen lights in the master suite; Digital Switching 'ties' it all together with the intelligent MasterBus one-cable system. The Digital DC 10x10A consists of 10 output channels of 10 A, which can be connected in parallel to switch higher currents (up to 100 A). A wide scale of different functions can be configured and completely adapted to the boat owner's needs. Complete control and overview in your high-tech system and simply extendable. Custom build, flexible and state-of-the-art mega yacht functionality is now in reach for everyone.

# Digital Switching: The benefits



## Easier than ever

Working in ten languages, the Mastervolt system is exceptionally user friendly. The user interface for all (Mastervolt) products within the system is identical, whether you are monitoring battery chargers, converters, generators, batteries or digital switching. All control panels have an identical and logical layout, with or without PC software.



## Intelligent design

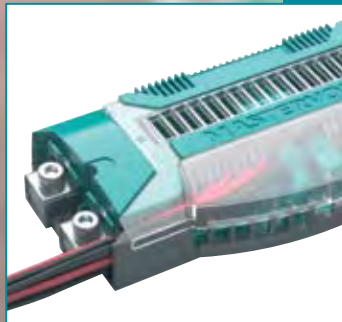
The Digital DC 10x10A has ten outputs with pre-defined modes, such as a 'Bilge Pump' or 'Light 12 V' and even 'Input Mode'. Every mode has its own adjustable settings like software fuse and startup state. When the module is powered up, the channel will be ON, OFF or have the LAST (same) state as powered down. The max. voltage option takes care of the stabilized output for lighting. When the charger charges the batteries at 14.4 V, the output can be stabilized on a voltage of 12 V.

Timer functionality can be achieved by setting the Delayed Off function. Functions like lights remain on (until you have left the yacht) or engine room fan remains on for 30 minutes (after you have stopped the engine), are just a configuration.

The right light atmosphere can be achieved by the 'Fade & Dimming' modes. With these functions you can control the light intensity so the light will fade in or fade out smoothly to the required intensity.

The minimum current setting will perform e.g. a wire or bulb fault check. When the channel is switched on, the real current must be higher than the minimum current setting. If not, an alarm will tell the user to exchange the bulb or check the wire connection.

The Digital DC 10x10A also features logical blocks to enable installing devices that otherwise would require a lot of additional hardware such as a PLC. Functions that need more than one condition can be added to 6 different types of blocks. For example a fuel pump can only pump fuel into the tank when the high level is not activated; otherwise the pump must be turned off immediately.



## Intelligent maintenance

Replacing a part anywhere in the system can require complex configurations. The MasterBus system automatically recognises every replacement, including that of the Digital DC 10x10A. The system will ask whether the same configuration applies to the new part or whether you would like to change the configuration.

## More information

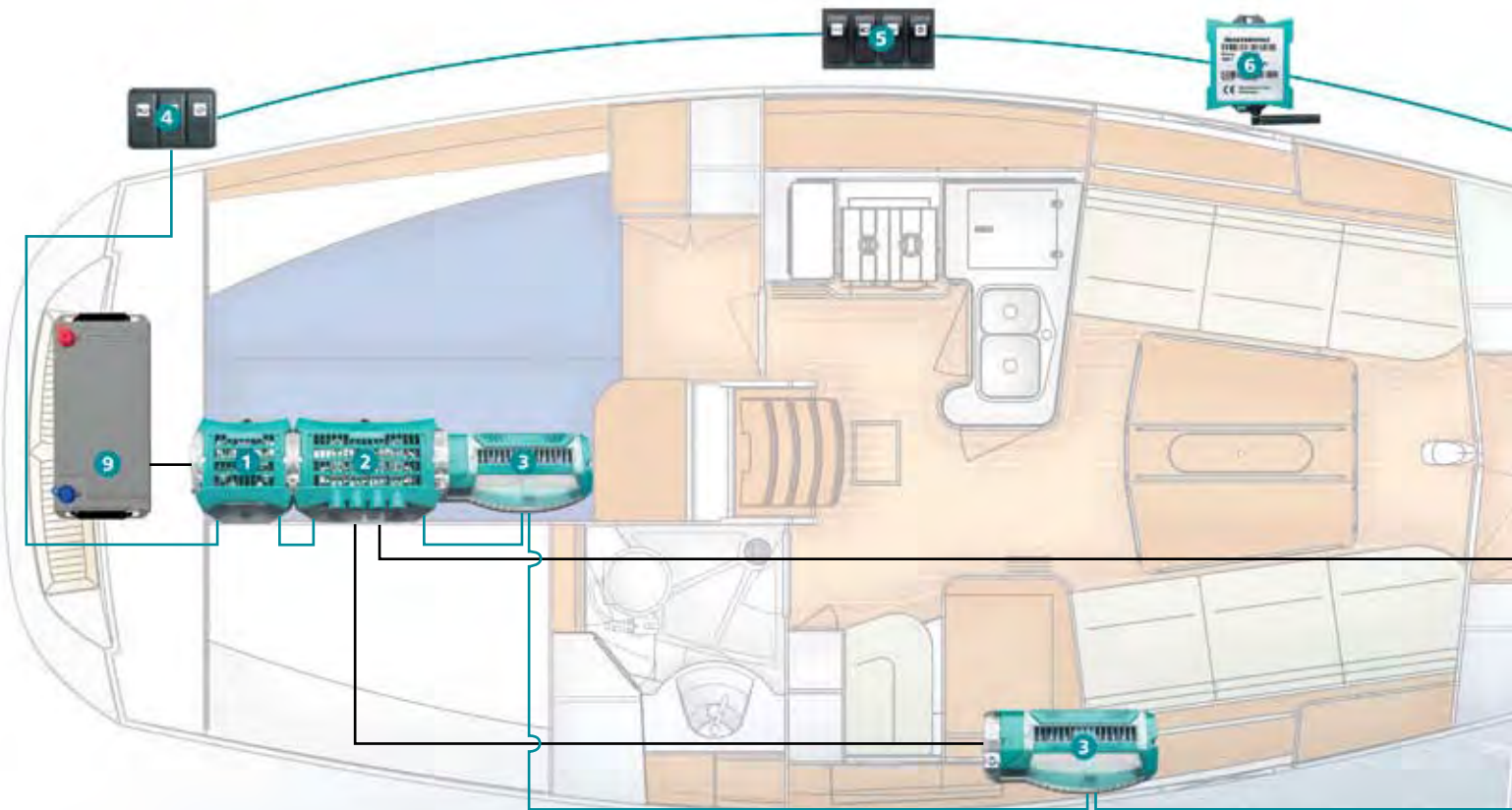
Contact your nearest sales agent or visit [www.mastervolt.com/digitalswitching](http://www.mastervolt.com/digitalswitching)



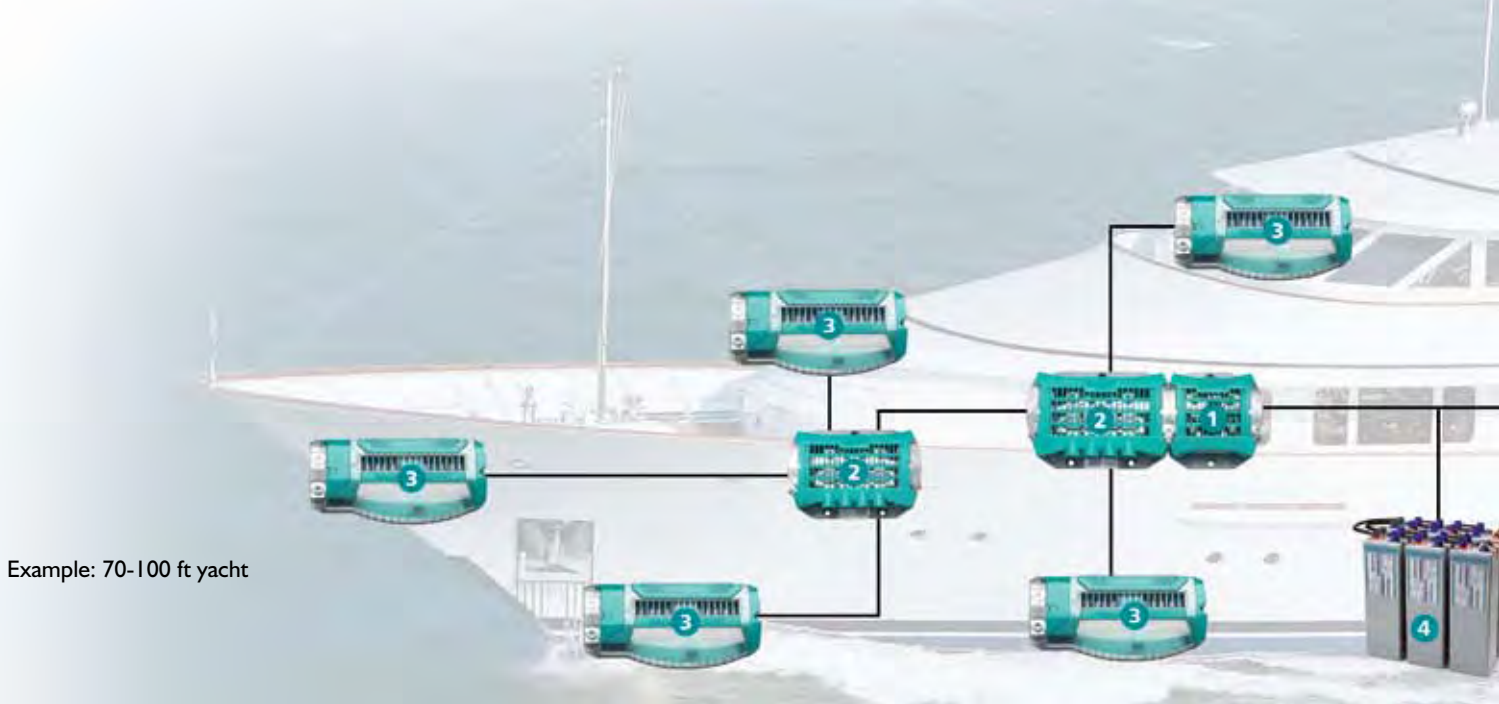
THE POWER TO BE INDEPENDENT

# Digital Switching: In all sizes

Mastervolt's Digital Switching simplifies the increasingly complex on-board systems. Spread throughout the boat, the Digital DC 10x10A operates all nearby users, resulting in a shorter power cable. Switches connected via a digital bus allow all users to be operated from multiple locations: Local, central and via mobile phone. This type of system used to require numerous additional components. Now advanced functions can be directly and easily activated.



Example: 30-50 ft yacht

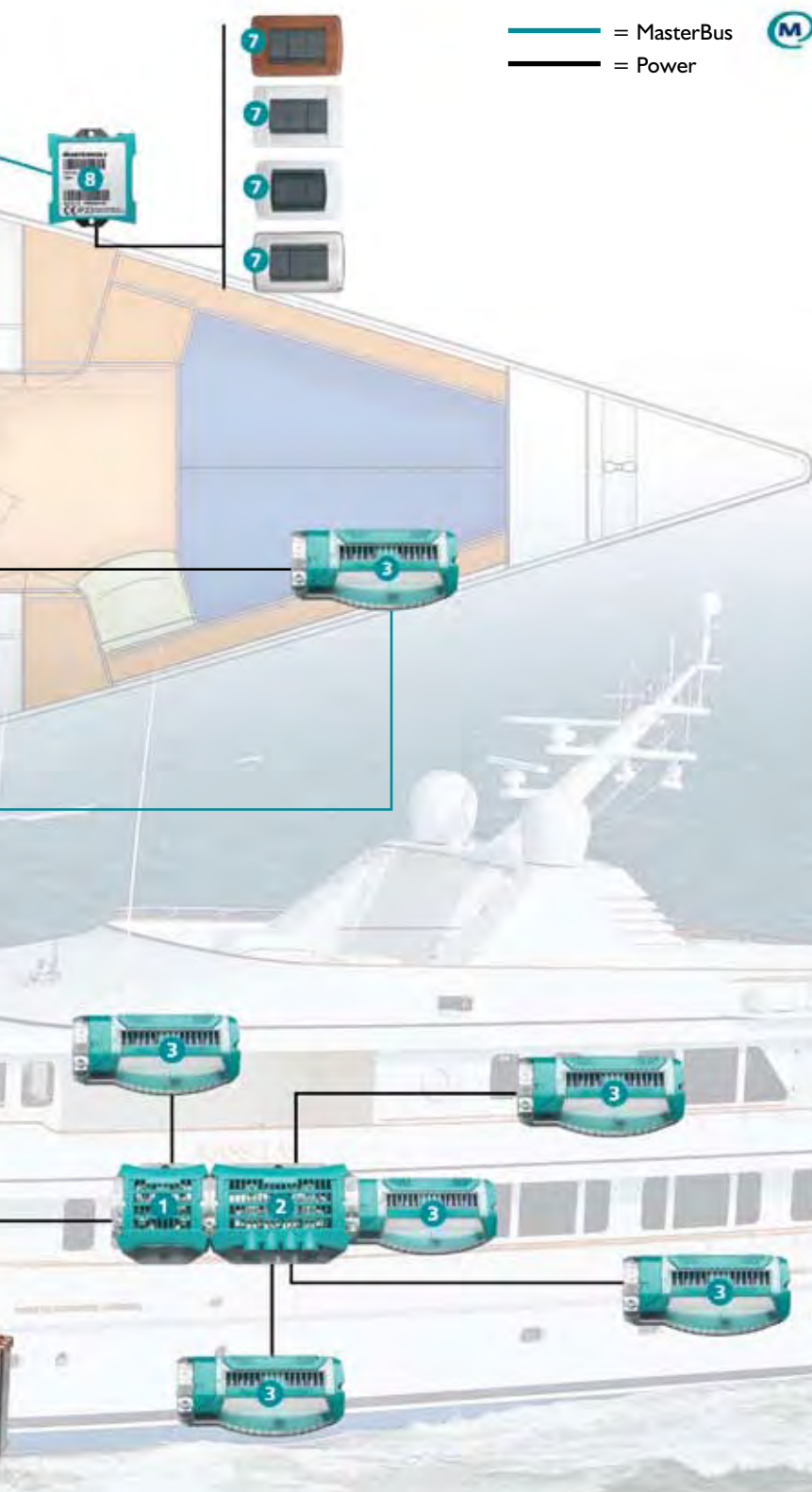


Example: 70-100 ft yacht

## Fully integrated system

### Examples:

- Easy configuration: Keep the ventilation running while the engines are off without a time relay;
- Automatic alarm when the bilge pump is active for over an hour;
- Keeping deck lights on for 10 minutes or more makes easier disembarking.



### 1. MasterShunt 500

Easy to install battery monitor communicates via the MasterBus network, incl. main fuse.

### 2. DC Distribution 500

Distributor with ANL fuses that can be mounted directly to other MasterConnect products such as the MasterShunt 500 and Digital DC 10x10A. Also for use as an individual unit.

### 3. Digital DC 10x10A

The ten outputs are suitable for all DC users including lights, pumps and electronics.

Operation via the MasterBus network or other products such as the Switch Input 3.

### 4. Switch input 3

Makes the watertight Carling switches compatible with MasterBus. Multiple functions can be linked to the switches.

### 5. Switch input 4

LED in the switch provides status feedback of the equipment. For instance, the LED starts flashing (4 and 5) should a light breaks down.

### 6. GPRS Module

Communicate with your boat via your mobile phone. Request information and operate equipment via text messages. If desired, this interface informs any mobile phone in case of alarm.

### 7. Switch

Various switching equipment communicates with MasterBus via the Digital Input (8).

### 8. Digital Input

Connects each switch to the MasterBus network. The feed for the input modules (4, 5 and 8) comes from the MasterBus network. The Digital Input has four input channels so you can connect up to four switches on one box.

### 9. AGM gel battery

## Easy to extend

### 1. MasterShunt 500

An elaborate system in which multiple shunts are parallel switched, creating smaller subsystems and resulting in thinner cables and faster installation. The high quality T-fuse in the MasterShunt guarantees extra safety, also when using powerful batteries.

### 2. DC Distribution 500

Provides connections with multiple Digital DC 10x10As and direct connections with large users.

### 3. Digital DC 10x10A

A press of the button activates and deactivates subsystems/areas from the central control panel.

### 4. 2 V gel batteries

## All components for a complete system



Switch Input 3  
Article no. 77031300



Switch Input 4  
Article no. 77031400



MasterView Easy MKII  
Article no. 77010305



MasterView System  
Article no. 77010400



Digital Input  
Article no. 77030900



Digital AC 1x6A  
Article no. 77031500



Multipurpose Contact Output  
Article no. 77030500



MasterBus USB Interface  
Article no. 77030100



MasterBus Modbus Interface  
Article no. 77030800



GPRS Module  
Article no. 77031000



MasterBus Repeater  
Article no. 77031100



MasterShunt 500  
Article no. 77020100



DC Distribution 500  
Article no. 77020200



Digital DC 10x10A  
Article no. 77020400

Subject to change. For a complete overview of our products see [www.mastervolt.com/digitalswitching](http://www.mastervolt.com/digitalswitching)