



MARINE
EMERGENCY VEHICLE
INDUSTRIAL
RV

2022



Your most trusted partner

Whether on water or on the road, delivering an optimal user experience is at the heart of ASG's business. It's why we are proud to be the world's leading supplier of products and integrated systems to the marine, RV, and Specialty Vehicle industries. Our broad portfolio of market leading brands in power management, digital control & monitoring, and networked devices are distributed globally to a diverse aftermarket and OEM customer base. ASG is driven, every day, to be the world's most trusted partner to the marine and mobile industries.



Wire
Wire Management
ancorproducts.com



Lighting
Marine Accessories
Water and Fuel Systems
attwoodmarine.com



Battery Management
Power Distribution
bepmarine.com



Battery Management
Circuit Protection
Power Distribution
blueseasystems.com



Digital Control
& Monitoring
Onboard
Offboard UX
czone.net



Metal Fabricated
Hardware
garelick.com



Trolling Motors
motorguide.com



Battery Chargers
promariner.com



Heating Systems
Pumps
whalepumps.com



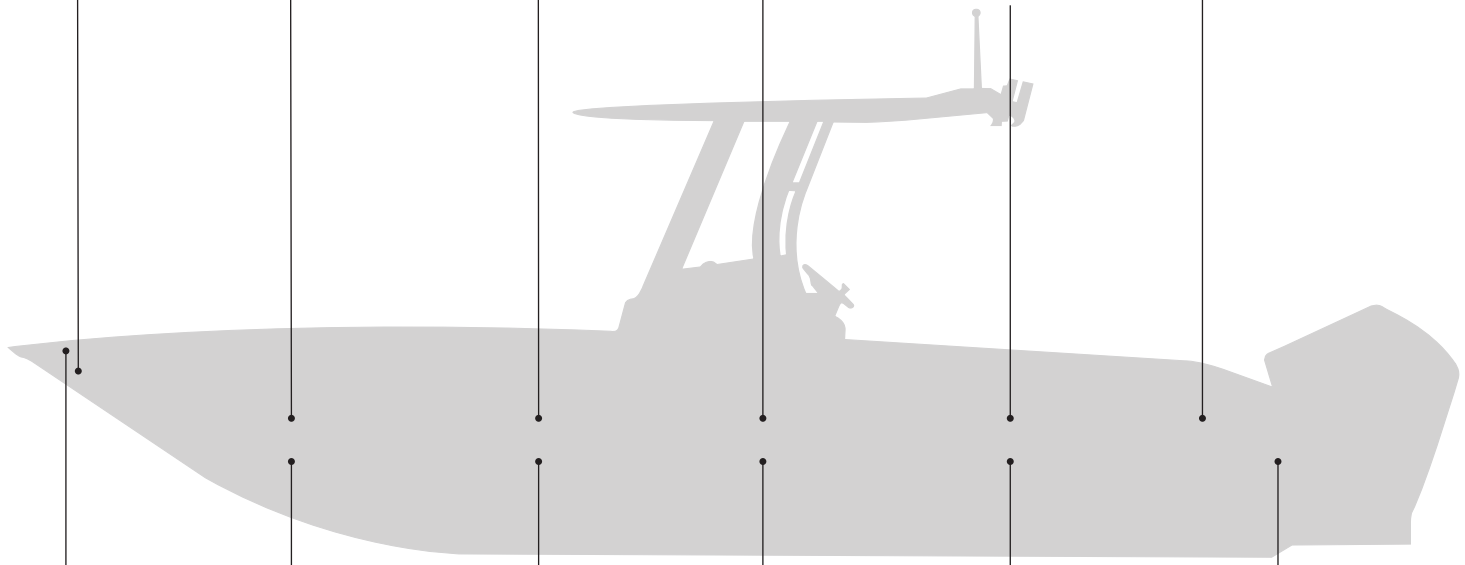
AC Shore Power
Marine Accessories
marinco.com



Batteries
Power Conversion
mastervolt.us



Actuators
Trim Tab System
lencomarine.com





What is CZone:

| Founder's Vision

For over 12 years industry leading digital control and monitoring technology from CZone has revolutionized the control and management of electrical systems in the recreational and light commercial vessel industry, and become established in recreational, specialty and emergency vehicle markets across the globe. CZone provides complete control and monitoring of all electrical circuits through dedicated touch screen interfaces, integrated marine navigation displays, wirelessly via iPad or key fob remote, or remotely via telematics integration.

| 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.

| Global Service & Support

CZone has a broad network of technical dealers and distributors to support the installation and servicing of CZone systems across the globe. Regionally located logistics and technical competency centers ensure the global network is well supported.



NEW Products



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CZONE Control X

Control X is the smartest and sleekest CZone module, and the first with a fully waterproof enclosure. Configurable input and output channels provides ultimate flexibility to optimize system design and installation.

- Part # 80-911-0230-00** Control X PLUS c/w Connectors
- Part # 80-911-0230-01** Control X PLUS Interface Only
- Part # 80-911-0231-00** Control X c/w Connectors
- Part # 80-911-0231-01** Control X Interface Only



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CZONE RV1

RV1 is CZone's first dedicated digital switching and integration module for recreational & specialty vehicles. RV1 features an impressive 76 input and output channels including 8 reversing motor channels for direct control of slide outs, awnings, shades and levelling systems. RV1 also includes the latest smart switching technology, built-in battery monitoring and multiple network interfaces for seamless 3rd party system integration.

- Part # 80-911-0221-00** CZone RV1 MID Spec Kit



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CZONE Touch 7

The Touch 7 features all new electronics with the fastest dual core processor ever in a CZone Touch display and built in Wi-Fi connectivity and Ethernet for tablet pairing. The Touch 7 has a wide 8-32V DC voltage range and uses the familiar and easy to use CZone 2.0 User Interface.

- Part # 80-911-0200-00** CZone Touch 7 Kit
- Part # 80-911-0201-00** Touch 7 Mounting Bracket Kit
- Part # 80-911-0202-00** Touch 7 1M NMEA2000 Drop Cable
- Part # 80-911-0203-00** Touch 7 Power Connector



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CZONE Touch 10 Generation 2

Touch 10 Generation 2 features all new electronics with an ultra-fast dual core processor, that ensures the CZone 2.0 user interface is faster and more reliable. The Touch 10 Gen 2 includes an IPS LCD Display, optically bonded to improve contrast and is viewable from every angle and in all lighting conditions.

- Part # 80-911-0216-00**



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CZONE Contact 6 PLUS

Utilizing 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.

Part # 80-911-0160-00



60

CZONE Waterproof Keypads

The CZone Waterproof Keypad range features dimmable RGB circuit backlighting in a robust IPX7 waterproof enclosure and is available in portrait and landscape orientations.

Part # 80-911-0163-00

6-way portrait

Part # 80-911-0162-00

6-way landscape

Part # 80-911-0164-00

12-way portrait

Part # 80-911-0165-00

12-way landscape

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RV-C Cabling & Adapters

RV-C specific cabling and adapters will work with existing and future CZone products with the aim of reducing the overall network cost for RV builders. RV-C cables service the increased demand of CZone installations in the RV market and offers RV builders an alternative to NMEA 2000 & Cable networks in applications where waterproofing is not required.

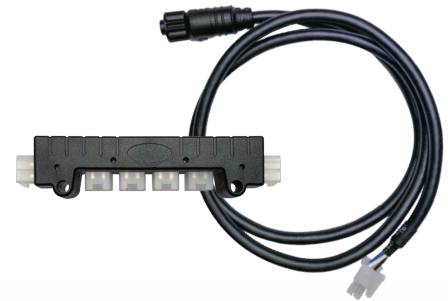




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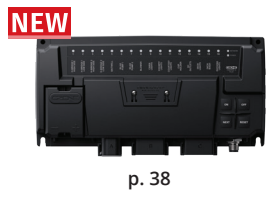
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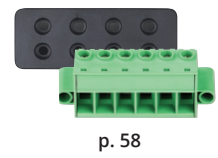
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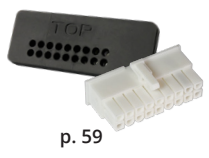
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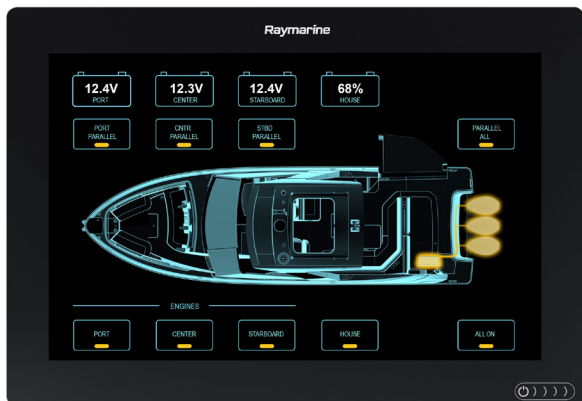
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**| The future of
boating is here.**



FUTURE PROOF YOUR BOAT OR RV WITH INTELLIGENT TECHNOLOGY

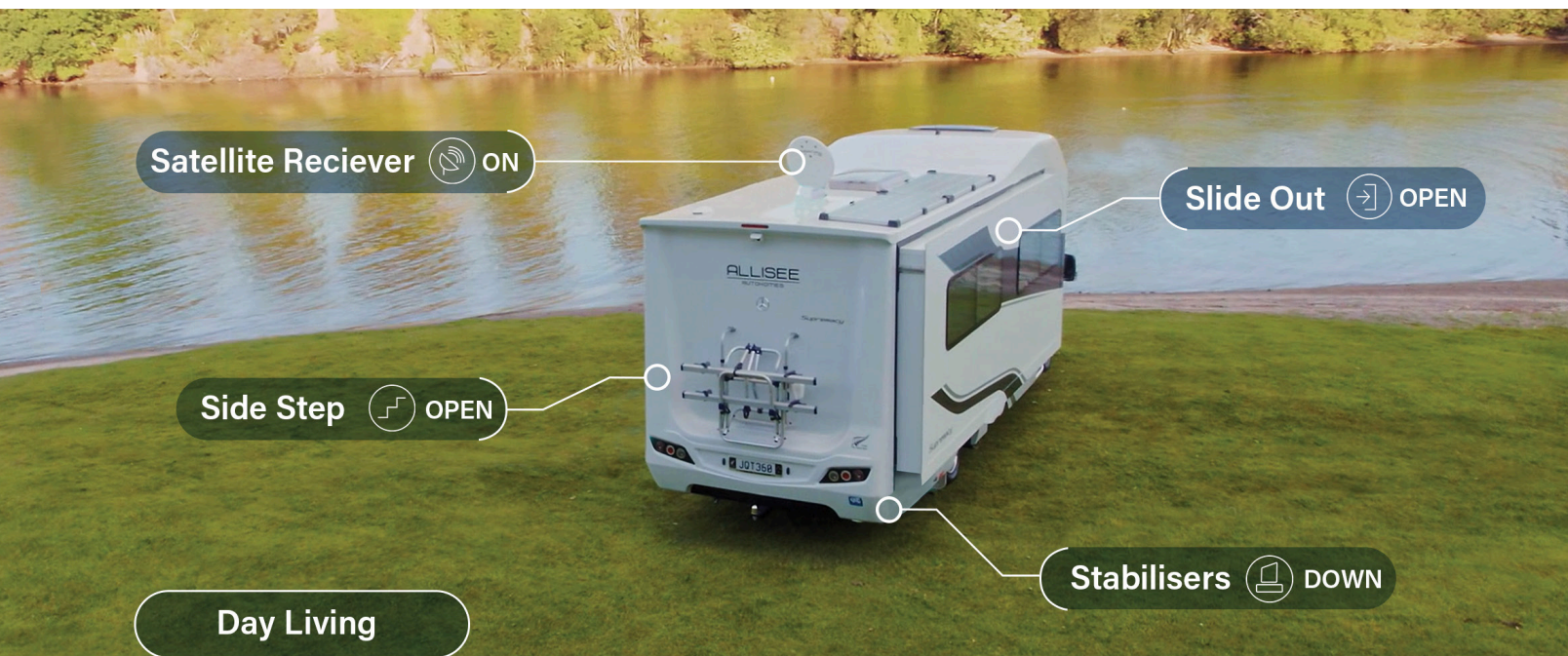
Ultimately expandable and flexible for your everyday boat and RV life.



Riviera photo provided courtesy of Riviera Australia Pty Ltd



Simplify your on-water and on-road adventures with smart control and monitoring that removes the complexity of onboard systems.



**When you're 23 miles
offshore, you need
more than luck.**

**You need
complete control.**







Personalized Control

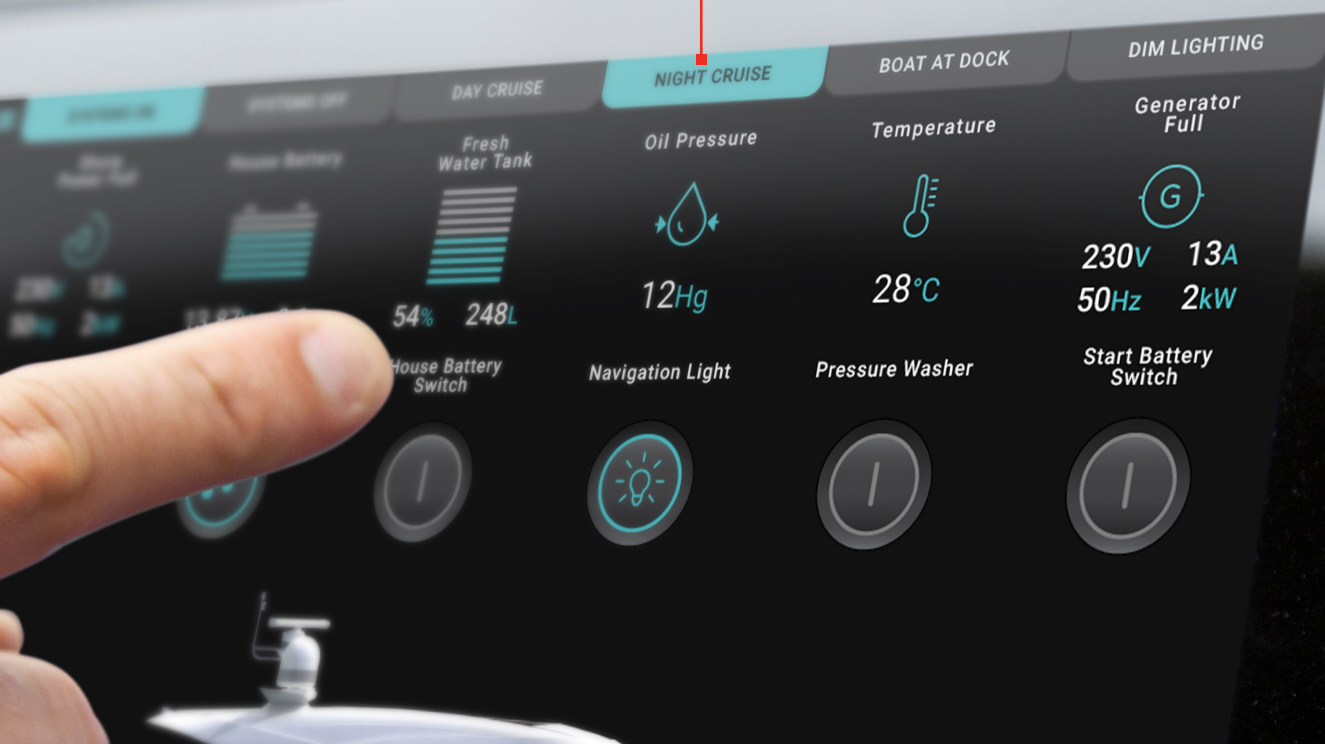
MODES

CZone gives you an entirely personalized experience. Set your boat or vehicle up with modes that can be activated with one touch via the screen, wireless key fob, ipad, or remotely through telematics.



CUSTOMIZABLE

Your CZone dealer can configure modes to suit your boating or RV needs.



MARINE MODES

EXAMPLES

Day Cruising

Engine room venting, hydraulic control and trim tab pumps primed.

Night Cruising

Correct navigation lights on, and cockpit lighting reduced, allowing for safe navigation of the vessel.

Night Anchor

Minimal interior lighting on exit points for safety. Silencing non-essential audible systems.

Night Entertaining

Mood lighting, underwater lights and music system powered up.

Night Fishing

Rear deck working lights sufficient for rigging bait and lures, with underwater lights illuminating the catch as it's boated.

Fishing

Tuna tubes flowing and live well tank pumps operating.



RV MODES

EXAMPLES

Away

All non-essential circuits and appliances off.

Driving

Awnings, slide outs, stabilizers in. Gas supplies shut off.

Night Entertaining

Lights dimmed, music on, exterior lights on.

Day Living

Exterior lights off, fridges and appliances on, power outlets active.



You do the fishing.
Let CZone do
the thinking.





Complete Awareness

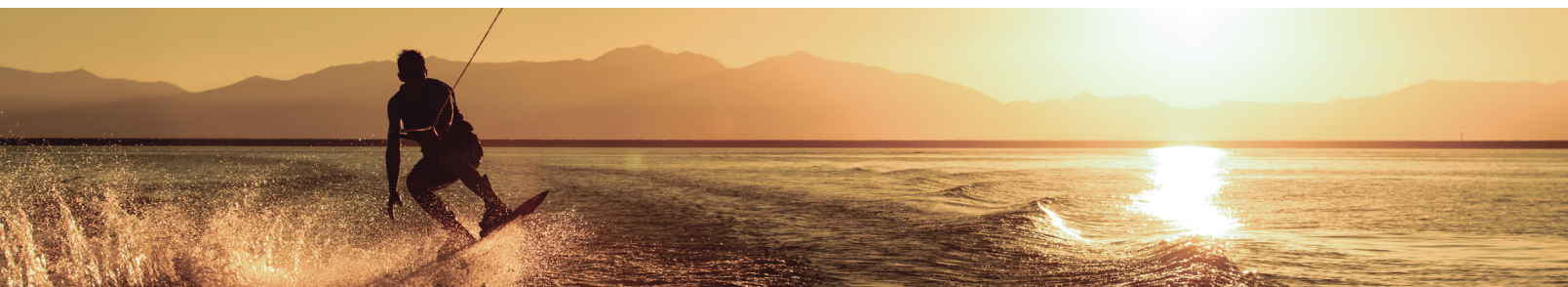
Take the guesswork out of boating

Advanced monitoring means nothing goes unnoticed, giving you ultimate peace of mind. Your network is continuously monitored and will notify you if things aren't right.



MONITOR

CZone displays will give you all system data including tank levels, battery data, and circuit status.

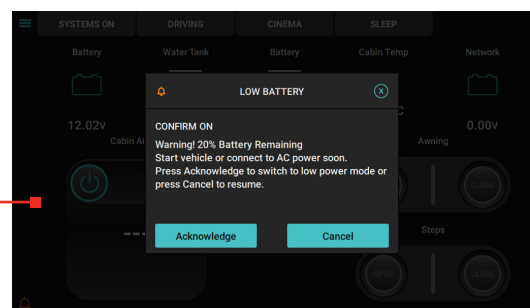


NOTIFY

Notifications can be configured to type and severity. Low level warnings indicate a minor issue, standard alarms require something to be investigated or critical alarms require immediate action.

Pop Ups

Send pop ups to your screen so you are prompted to take action to prevent damage to equipment or circuits.





PROTECT

Smart technology provides complete protection of your system. By automating key functions, CZone ensures your vessel/vehicle is easy, intuitive and safe to operate.

Motorized equipment such as hatches, slideouts and awnings can be locked out while driving to protect the equipment and any personnel.

Protect batteries and extend runtime by automatically shedding non-essential circuits and even trigger an auto generator start to start charging the battery when very low.

Protect water pumps from running dry by automatically switching off when tanks are empty.



A photograph of the interior of a school bus. In the foreground, the back of a blue upholstered seat is visible. In the middle ground, a young boy in a blue shirt is looking down, and a girl in a pink shirt is sitting next to him. In the background, another girl is smiling and holding a cup. The bus has wooden paneling and several framed pictures on the wall. Large windows on the right side show a bright, overcast day outside.

The most important connections have nothing to do with tech.

The way we see it, nature is not meant to be disturbed. With integrated power, you hear the sounds of the outdoors, not a generator.



Powerful System Integration

Mastervolt offers a market leading solution for complete power management from supply, storage and conversion. The CZone and Mastervolt relationship gives you complete visibility into your power system.



1 Touch 7

The Touch 7 features all new electronics with the fastest dual core processor ever in a CZone Touch display and built in Wi-Fi connectivity and Ethernet for tablet pairing.



2 RV1 NEW

RV1 features 76 input and output channels including 8 reversing motor channels for direct control of slide outs, awnings, shades and leveling systems. RV1 also includes the latest smart switching technology, built-in battery monitoring and multiple network interfaces for seamless 3rd party system integration.



3 Alpha Pro III

Maximizes the output of the Mastervolt Alpha Alternators by regulating the alternator in a way that the batteries receive the optimum charge



4 Alpha Alternator

Optimized to deliver continuous high-power output in energy storage applications. Combined with Alpha Pro Regulators they create a high performance plug and play charging solution, suitable for all battery types with a range of mounting options for different engine sizes.

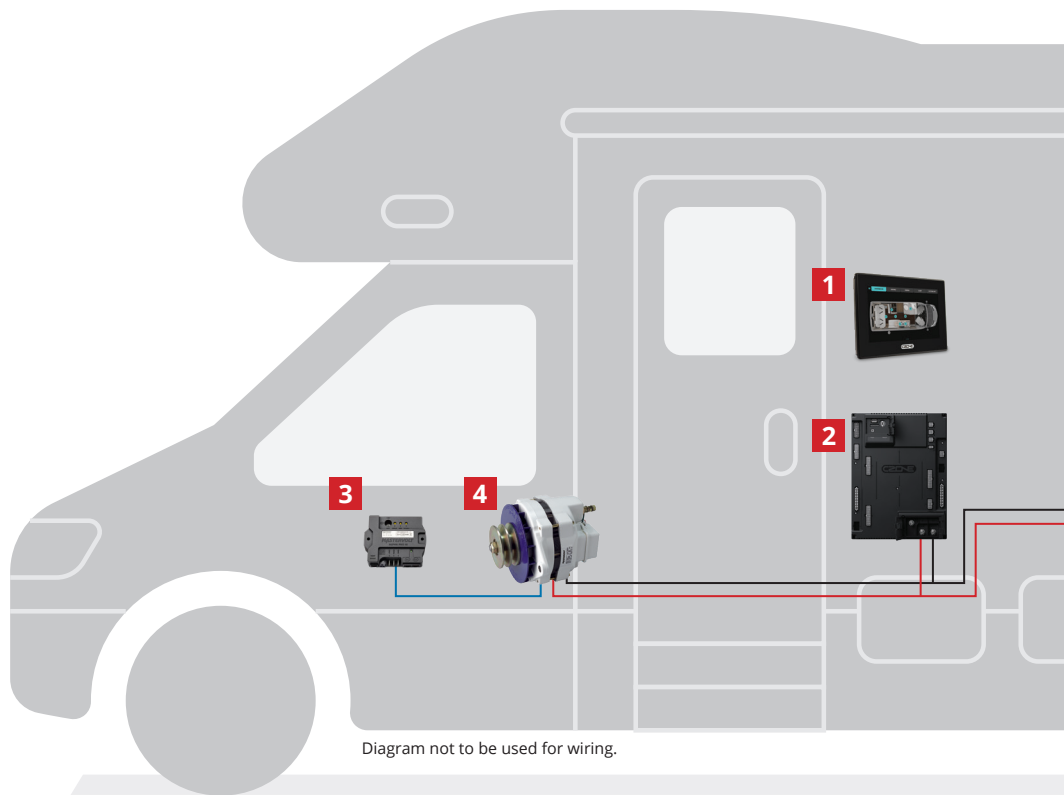
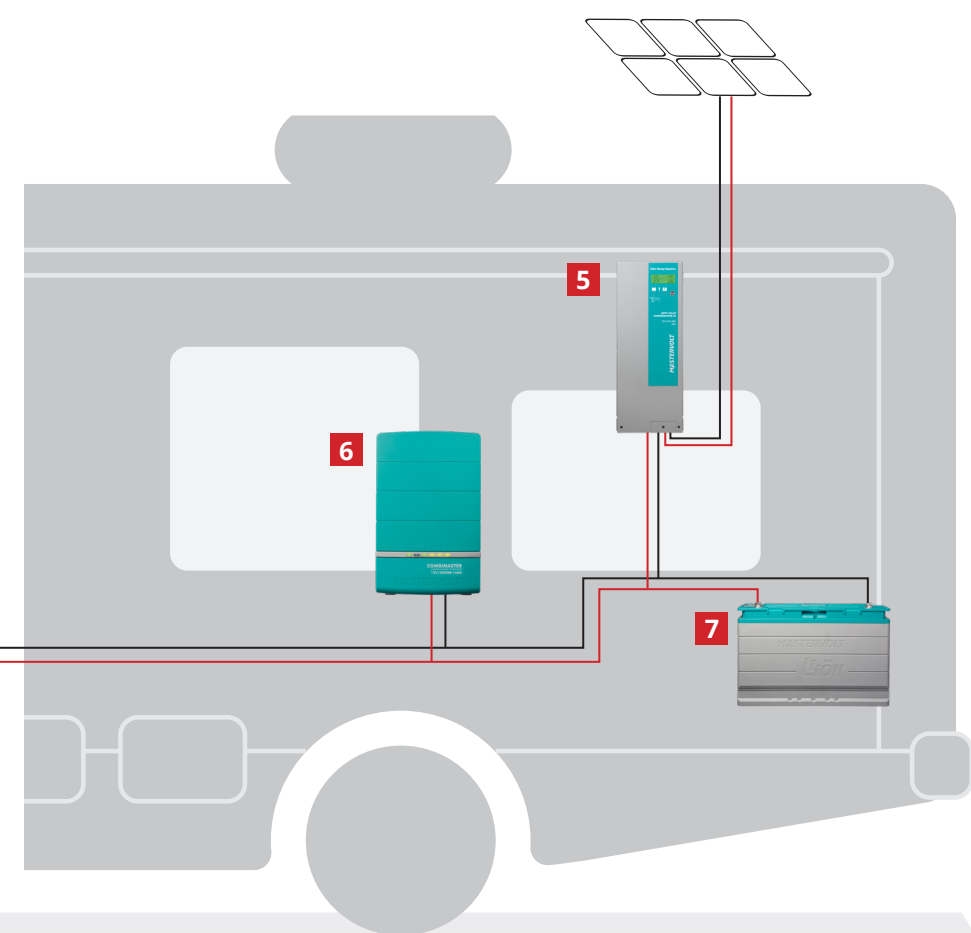


Diagram not to be used for wiring.



MASTERVOLT

5 Solar ChargeMaster

SCM60 MPPT-MB (Maximum Power Point Tracking) increases the efficiency of your solar panels and charges your batteries up to 30% faster than PWM regulators.

MASTERVOLT

6 CombiMaster

CombiMaster delivers unmatched performance, powering the heaviest or most sensitive loads with ease. The automatic AC transfer system switches between generator or main supply and inverter output, ensuring a constant power supply.

MASTERVOLT

7 MLI Ultra

Heavy duty, extreme performance. The MLI series delivers extreme Lithium Ion performance even under the harshest conditions.

The best tech,
is connected.







Riviera photo provided courtesy of Riviera Australia Pty Ltd

Powerful Partner Integrations

STAY CONNECTED

Today's boats and vehicles have a diverse range of complex systems on board. CZone brings smart technology to your boat or RV, connecting everything and giving you complete control of onboard equipment with ease. CZone integration benefits users by reducing complexity and automating systems commonly found onboard vessels and vehicles.





MASTERVOLT

Mastervolt is power solution focused, offering components that are designed to easily integrate into comprehensive systems. With CZone fully integrated into Mastervolt, you can get full visibility over your entire power system.

BEP

TRUSTED QUALITY

BEP offers a range of high quality electrical solutions designed for both marine and RV environments.

The Smart Battery Hub, a BEP product integrated with CZone, is a world first in intelligent battery management systems, allowing you to control all your batteries through the SBH.



WORKS WITH





WORKS WITH



Works with CZone gives you complete confidence knowing that any integration that carries the landmark, adheres to strict guidelines and is tested and validated by leading engineers.

DOMETIC

Control heating, ventilation, and air conditioning with the Dometic CZone integration. Shutdown via load shedding to conserve battery storage.

HMI SYSTEMS

HMI keypads intergate with CZone as a control option. Fully waterproof with multiple configurations HMI keypads broaden the control options for CZone in wet areas or harsh applications.

ISOTTA

ISOTTA manufactures high quality steering wheels with the control directly at your fingertips. This integration lets you select dedicated circuits to run through the steering wheel controls.



Integrate Sea Recovery production cycles to match surplus power generation to avoid unnecessary battery storage use. Trigger production when monitored freshwater tank levels become depleted.



SENTINEL Marine solutions

Control and monitor your system from your smart phone. Get bilge pump alerts, circuit activation, position movements or any other function you may need while away from your system.



Siren Marine allows you to control and monitor all circuits, including power and fluid levels, shore power connection, GPS, and receive instant warnings and alerts to your device.



Raymarine

The CZone and Raymarine collaboration is a fully customized solution that allows boat builders and system integrators to create intuitive and graphic rich CZone control pages that integrate seamlessly with Axioms Lighthouse 3 OS.

Garmin

The CZone and Garmin integration offers full integration and graphic customization, available for new GPSMAP and ECHOMAP MFD's. Put controls and monitoring directly on the home screen. Customizable by OEM.

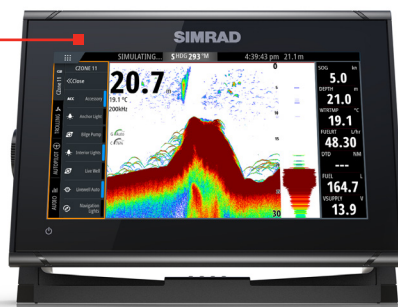


Lowrance

Lowrance offers full integration, including alarms, modes of operation and monitoring including side bar navigation with CZone RTM17 and later software. This will allow side bar navigation of all circuits, from any page, without needing to return home every time.

Simrad and B&G

Simrad and B&G, offer full integration, including alarms, modes of operation and monitoring including side bar navigation with CZone RTM17 and later software. This will allow side bar navigation of all circuits, from any page, without needing to return home every time.



Humminbird

Humminbird Solix supports one Contact 6 PLUS module and is a plug and play set up, once configured in the CZone configuration file. Manage your onboard circuits easily and conveniently with the side bar control panel.

Furuno

Furuno offers full integration into CZone range of digital switching modules, to create a fully integrated vessel solution. A fully customizable user interface, means that shortcuts to monitoring data and switches can be layered over any of the display options to allow for quick access.



DIGITAL CONTROL & MONITORING

CZone® Displays



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.

CZone® Wireless Interface



The CZone wireless interface allows your iPad® to interface with an onboard digital control and monitoring system for full monitoring and control of the electrical equipment via a clear and intuitive display.

CZone® Control X



Control X is the smartest and sleekest CZone module, and the first with a fully waterproof enclosure. Configurable input and output channels provides ultimate flexibility to optimize system design and installation.

CZone® RV1



RV1 is CZone's first dedicated digital switching and integration module for recreational & specialty vehicles. RV1 features an impressive 76 input and output channels including 8 reversing motor channels for direct control of slide outs, awnings, shades and levelling systems.



DIGITAL CONTROL & MONITORING

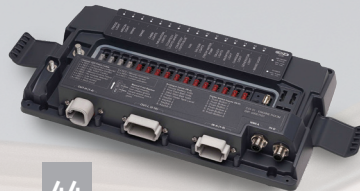
CZone® Control 1 Interface



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The Control 1 combines multiple input and output devices into a single rugged IPX5 module featuring industry leading CZone core functionality and complete mechanical fuse and bypass on each circuit.

CZone® Combination Output Interface (COI)



44

Digital control and monitoring systems just got easier to install with the new CZone Combination Output Interface (COI). This one box replaces up to five separate modules, with industry-standard Deutsch connectors and IPX5 water resistance.

CZone® DC Interfaces



46

CZone DC Interfaces provide an intelligent replacement for traditional circuit breaker panels as well as interfacing traditional mechanical switches & sensors with the CZone network.

CZone® AC Interfaces



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CZone AC Interfaces handle the complex management of multiple AC supplies to ensure AC circuits are powered from the appropriate source, along with providing control & monitoring of all circuits from the same intuitive CZone screen.





CZone® Displays

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).

Audible and visual alarms with systems diagnostics are also provided. The 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 the push of a button.



Touch 10 Generation 2 **NEW**

Premium touch interface with glass dash styling and low profile mounting

The generously sized Touch 10 provides excellent viewability and is the premium gateway into your integrated CZone system. Sleek and attractive, this display will complement the interior of any high-end application. But it's not all about looks - with the Touch 10, your CZone system is in good hands.

Capacitive high-bright touch display offers impressive daylight visibility with crisp graphic detail and elegant touch sensitivity. Full control offers an impressive wrap-sheet. Use mode selection to pick the right system configuration for you. Control and monitor key system functions and status, from tank level to current draw.

- Sleek glass dash styling
- Optically bonded IPS LCD provides excellent viewing angles
- 24 bit color for better color accuracy and contrast
- High resolution 1024 X 600 pixel for sharp and clear images
- 500nit brightness dimmable for night-time viewing
- NMEA 2000 compatible
- New dual core processor provides lightning fast performance
- Wide 8-32V DC range
- Consistent and familiar CZone 2.0 User Interface, customizable for any OEM

- 80-911-0216-00

Touch 10 Generation 2
- Accessories
- 80-911-0032-00

Touch 10 Power Cable, 2 pin, 6.5ft (2m)
- 80-911-0114-00

Touch 10 Mounting Bracket Kit



Slim
Side
Profile

Screen	10.1" LED-backlit Projected Capacitive Touch display with IPS Technology
Aspect Ratio	Widescreen 16:10
Resolution	1280 x 800 pixels
Protection	IPX6
Dimensions (WxHxD)	7.72" x 10.83" x 1.61" (196 x 275 x 41 mm)
Weight	4.0 lb / 1.8 kg
Brightness	500nit
Input voltage	8-32V
Power consumption	1A @ 12V, 500mA @ 24V
Interfaces	NMEA 2000, USB2.0, Ethernet

Related Products



Touch 10 Accessories
page 59



Touch 7 **NEW**

Introducing the CZone Touch 7. With an excellent 7" IPS LCD panel it can be viewed from any angle. The Touch 7 features all new electronics with the fastest dual core processor ever in a CZone Touch display and built-in Wi-Fi connectivity and Ethernet for tablet pairing. Installation is easy with front mount installation and screwless rear access, shallow 35mm mounting depths (including cable) and a wide 8-32V DC range. The Touch 7 also uses the familiar and easy to use CZone 2.0 User Interface, customizable for any OEM. The Touch 7 is primarily designed for RV applications, and any marine application should be reserved for parts of the vessel that remain dry.

- Easy to use touch interface
- Glass dash styling
- 24 bit color for better color accuracy and contrast
- 550 cd/m2 brightness dimmable for nighttime viewing
- Built in Wi-Fi connectivity
- NMEA 2000 compatible

80-911-0200-00 CZone Touch 7 Kit*

Accessories

- 80-911-0201-00** Touch 7 Mounting Bracket Kit
- 80-911-0202-00** Touch 7 1M NMEA 2000 Drop Cable
- 80-911-0203-00** Touch 7 Power Connector

*Kit includes mounting bracket, 1M Network drop and power connector



Screen	7" IPS
Resolution	1024 x 600 pixels
Protection	IPX0
Dimensions (WxHxD)	5.12" x 7.68" x 1.61" (130 x 195 x 41 mm)
Brightness	550 cd/m²
Operating Voltage	8-32V DC
Current Draw	430mA @ 12V (operating – backlight 100%) 130mA @ 12V (standby – backlight off)
Interfaces	USB 2.0, Ethernet, NMEA 2000, Wi-Fi

Related Products



Touch 7 Accessories
page 59



Touch 5

Built-in WiFi allows direct-connection of an iPad for wireless control and monitoring of the system

The compact Touch 5 is small but mighty, offering a powerful touch screen interface for CZone's powerful digital control and monitoring. With a compact sleek design, the Touch 5 complements nearly any vessel dash or vehicle space.

Built-in WiFi connectivity brings your CZone system into the wireless dimension, allowing full control of system functions—from mode selection, system monitoring and individual circuit control—straight to your fingertips, no matter where onboard you are.

- 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

- 80-911-0124-00** Touch 5
- 80-911-0135-00** Touch 5 retrofit plate 12V kit*
- 80-911-0136-00** Touch 5 retrofit plate 24V kit**

*Required for retrofitting CZone 3.5" Display Interface.
**Required for retrofitting CZone 3.5" Display Interface. Supplied with 3A 24/12V Converter.



Screen	5" LED-backlit Projected Capacitive Widescreen Touch
Resolution	800 x 480 pixels
Protection	IPX7
Dimensions (WxHxD)	5.98" x 4.72" x 2.28" (152 x 120 x 57.9 mm)
Brightness (cd/m2)	1200 cd/m²
Input voltage	12V DC
Power consumption	900mA @ 13.5v
Interfaces	NMEA 2000, Micro SD

Related Products



Touch 5 Accessories
page 59



CZone® Wireless Interface

The Wireless Interface (WI) is a digital control and monitoring interface module designed to connect your tablet to the CZone network over WiFi. Handling up to three devices, the WI can offer connectivity of its own internal access point or can interface with other WiFi network systems on your vessel.

Use the built-in Ethernet port for a better connection to an existing network.

- 80-911-0090-00 Wireless Interface
- 80-911-0095-00 WI MasterBus Connector (required for MasterBus connection)



Features:

- User-friendly homepage to monitor and control onboard circuits
- Integrated control and monitoring of power products including battery chargers and inverters
- Monitor AC/DC power and batteries
- Monitor tank levels
- Receive visible alarms
- Connect a maximum of three devices simultaneously
- Ability to personalize homepage to display favorite circuits, modes & monitoring
- Customize your layout
- Connects to CZone or MasterBus networks for control and monitoring of systems

Hardware:

- The Wireless Interface acts as the hub between MasterBus/CZone networks and local WiFi devices

NOTE: WI MasterBus connector required for MasterBus connection

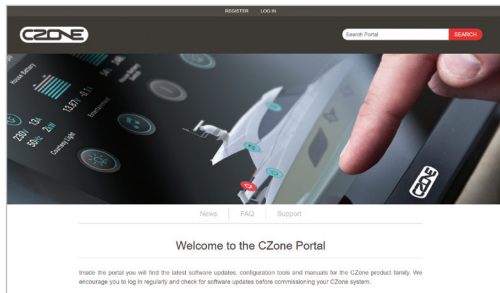
- Ethernet connection to connect to other LANs
- USB connection for configuration updates
- Tested to FCC, CE, EMC
- Power cable and aerial included

MasterBus powering	no
Dimensions, h x w x d	4.1" x 7.5" x 2.4" / 105 x 190 x 60 mm
Weight	1.5 lb / 0.685 kg
Protection degree	IP54
Delivered with	power cable, WiFi antenna, USB extension cable, user's manual



CZone® Design & Configuration Made Easy

CZone's leading configuration process is relatively easy and all technical customers are offered training so they can design and program CZone systems quickly. Generally generating a configuration and programming a system is both time consuming and complex. Most digital control and monitoring providers required highly trained technicians to program and commission installations, making them time consuming, inflexible and far more costly. Easy configuration with CZone means technical customers can provide this service themselves ensuring the system is setup quickly and the end customer receives industry leading service.



CZone Configuration Tool

The CZone Configuration Tool software is available to technical CZone customers from the CZone portal at downloads.czone.net



The CZone Configuration Tool then allows the programmer to upload the new configuration to the connected CZone system via USB Canbus Adapter (below). Each connected system module is updated simultaneously.

CZone configurations are setup, saved, duplicated and customized all from the programmer's PC using the CZone Configuration Tool.

CZone configurations can be programmed repeatedly to each new build in a manufacturing line making ongoing deployment efficient and stable. Setting up a new variation for a new vessel or vehicle is easy and simply involves duplicating the existing configuration as a base and then modifying the affected components and circuits as required.



USB to CAN Adapter

Connects PC to the CZone network for configuration and system set up.
Note: Mastervolt USB Interface now compatible with CZone configuration tool.

Part # 77030100

Related Product



Mastervolt-CZone
Drop Cables
page 64



NEW CZone® Control X

Control X is the smartest and sleekest CZone module, and the first with a fully waterproof enclosure. Configurable input and output channels provides ultimate flexibility to optimize system design and installation.

Control X uses the latest smart MOSFET switching technology providing improved reliability, and silent operation. Features such as multiple RGB lighting control zones, reversing motor H-bridge outputs and wiper motor synchronization eliminates the need for 3rd party controllers giving installers complete flexibility to configure the modules to specific requirements.

Features

- Ignition protected, IPX7 waterproof enclosure
- RGB light controller
- Wiper motor control with synchronization
- Configurable I/O channels for ultimate flexibility
- Manual override touch panel
- Multiplex switch inputs
- Moulded in Deutsch receptacles

Part #	Description
80-911-0230-00	Control X PLUS w/ Connectors
80-911-0230-01	Control X PLUS Interface Only
80-911-0231-00	Control X w/ Connectors
80-911-0231-01	Control X Interface Only
Accessories	
80-911-0232-00	Control X PLUS Connector Kit
80-911-0233-00	Control X Connector Kit



RGB Lighting Control

CZone has incorporated an RGB light controller built into Control X for simplified and seamless lighting control. Independently control brightness of lights on the same color zone, smooth transition color effects and control lighting scenes from CZone circuits like party mode, and night-time navigation.

Automatic Bilge Pump Monitoring

Control X output channels have voltage backfeed detection used to monitor if a circuit has been turned on externally. This allows for features like notifying operators if automatic bilge pumps have been turned on and to use external voltage signals to trigger other CZone circuits.

Wiper Sync

Control X can synchronise up to 8 wiper motors on the same module and allows easy configuration of slow and high speed control as well as 3 unique intermittent timers.

Smart MOSFET Technology

CZone's latest 100% solid state MOSFET switching technology, eliminates the need for physical fuses with temperature monitoring and configurable overcurrent protection in smaller, more reliable components. Software fuse ratings are entered in the configuration file.

Specifications

	Control X PLUS	Control X
Channels	27	23
Monitoring	Battery voltage, house current draw, house state of charge, analog and digital inputs	
Power Consumption Max	200mA	200mA
Power Consumption Sleep	<5mA	<5mA
Circuit Bypass	Electronic via capacitive touch panel	
Bilge Pump Running Detection	All high side output channels	
Ingress Protection	IPX7	IPX7
NMEA 2000 Connectivity	1 x NMEA 2000 Micro-C port, 1 LEN	
NMEA 2000 PGN Output	Fluid level, pressure, temperature, battery volts, state of charge	
Operating Temperature Range	-5°F to +131°F (-15°C to +55°C)	
Compliance	Ignition protected, CE, RCM, NMEA 2000, UK-CA	
Nominal Voltage	9-32V	9-32V
Max Current Rating	120A	120A
Circuit Current Monitoring	All output channels	
RGB Zones	2	1
Reversing Motor Control	2	0
Dimensions W x H x D	9.70" x 5.41" x 2.13" 246.5 x 137.4 x 54.0mm	
Weight	1.79 lb / 810g	1.75 lb / 792g
Warranty Period	2 years	2 years



Bottom view showing moulded Deutsch receptacles

Related Products

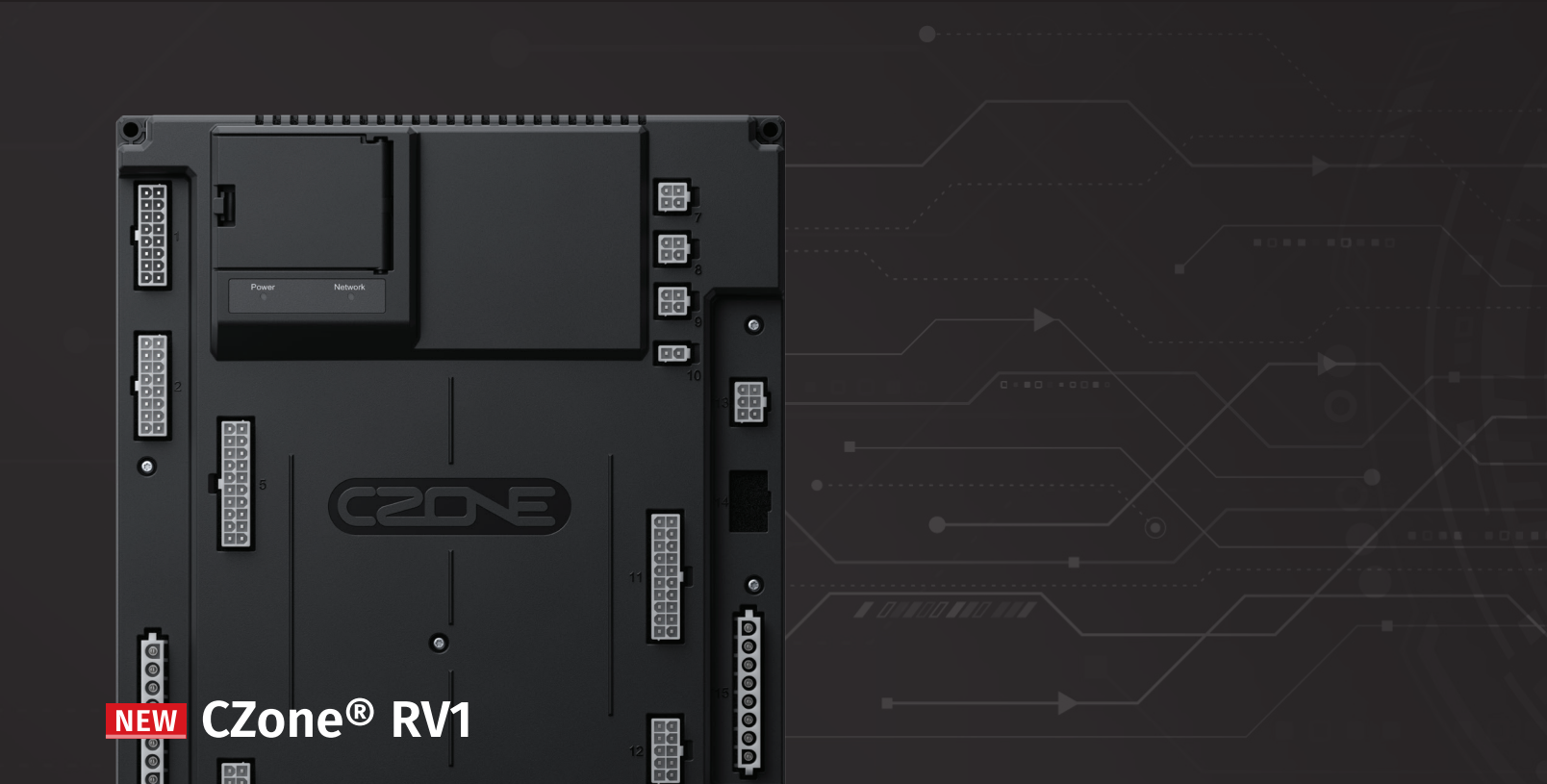


NEW Waterproof Keypads
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Touch 5 Display
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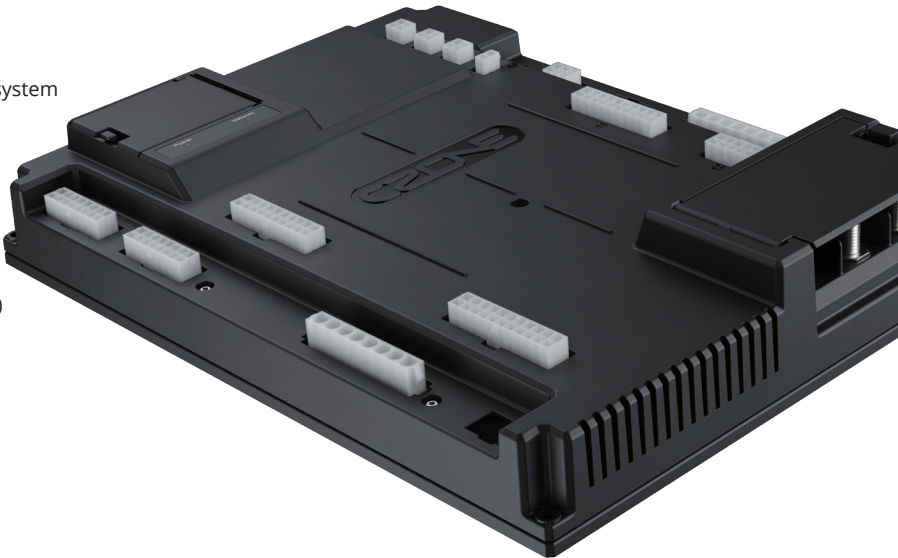




switching and integration module for recreational & specialty vehicles. RV1 features an impressive 76 input and output channels including 8 reversing motor channels for direct control of slide outs, awnings, shades and levelling systems. RV1 also includes the latest smart switching technology, built-in battery monitoring and multiple network interfaces for seamless 3rd party system integration. By consolidating the functionality of multiple CZone modules into one compact unit, RV1 reduces system cost, complexity and installation time. RV1 enables RV builders to meet customer expectations for smart, automated and connected systems at an affordable price point.

Features

- Compact footprint, 70% smaller than equivalent legacy CZone system
- 36 Output and 8 Reversing Motor (H-Bridge) channels
- 32 Signal Inputs for 0-32V, 0-1000Ω sensors and pos/neg switches
- PWM and smooth start on all outputs
- Current monitoring, software fusing and low/run current detection all outputs
- Internal battery monitoring (SOC, Volts, Amps, Time Remaining)
- 12/24V system support and sleep mode (<5mA)
- CZone, RV-C, CAN & LIN Bus network interfaces built-in
- Auto Generator Start and Load Shedding capabilities
- Automatic Climate Control



Part #	Description
80-911-0221-00	RV1 MID Spec Kit
Accessories	
80-911-0225-00	RV1 MID Spec Connector Kit
MSC-RV-KIT	RV1 Fastener Kit Spare



Compact Size

RV1 is 70% smaller than an equivalent legacy CZone system. The compact size ensures ease of installation on a wide range of RV/SV's where space is limited. The small footprint has been achieved with all new electronic design and removal of marine specific features.

Smart Switching Technology

RV1 uses the latest smart MOSFET switching technology. The new MOSFETS include switching, current monitoring and overcurrent protection on a single discreet component whilst providing superior reliability and silent operation. Save cost and time by entering fuse ratings in configuration file, no need to to purchase and install physical fuses.

Internal Battery Monitoring

RV1 includes internal Battery State of Charge monitoring, just connect battery to main studs no additional modules or shunts required. RV1 supports 12V and 24V systems and also has low power draw on sleep mode (<5mA).

Integration Ready

RV1 features 4 built-in network interfaces including RV-C for seamless integration with Works With CZone Partners. Control and monitor HVAC's and other 3rd party systems directly from a CZone Display, no other gateways or bridge's required.

Specifications

RV1	
Output Channels	36 (6 x 10A, 20 x 5A, 10 x 0.5A)
H-Bridge Channels	8 (4 x 35A, 4 x 5A)
Input Channels	16 x Switch Input (Pos or Neg) 16 x Sensor Inputs (0-32 Volt, 0-1000Ω, Pos or Neg Switch)
PWM	All 10A, 5A & H-Bridge Outputs
Additional Monitoring	1 x Volt, Amps & SOC sense on Main Stud
Circuit Protection	Software Configurable Fuse
Current Monitoring	All outputs including low & run current detection
Operating Voltage	9-32V (with Power Available LED)
Maximum Module Current	150A
Power Consumption Max	350mA
Power Consumption Sleep	<5mA
Communication	NMEA 2000, RV-C, Linbus (Future)
Operating Temperature Range	-5°F to +131°F (-15°C to +55°C)
Storage Temperature Range	-5°F to +131°F (-40°C to +85°C)
Dimensions W x H x D	9.17" x 12.09" x 2.28" 233 x 307 x 58mm
Weight	3 lb / 1.4kg
Compliance	CE, RCM, NMEA 2000, UK-CA

Related Products



NEW Waterproof Keypads
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Touch 7 Display
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CZone® Control 1

The Control 1 combines multiple input and output devices into a single module, minimizing installation time, interconnections and footprint. The Control 1 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 features the same rugged design as the fully featured COI with IPX5 water ingress protection and complete mechanical fuse and bypass on all circuits as required by ABYC/CE. Industry standard Deutsch connectors provide "plug and play" installation.



Part #	Description
80-911-0122-00	Control 1 Interface (connectors not included)

Control 1 Interface	
Channels	24
Output Channels High	4x 25A
Output Channels Low	12 x 10A dimmable
Analog Inputs	8x analog inputs: positive or negative switching, 0-32 volt, 0-1000 ohm resistance & 4-20mA current
Additional Monitoring	Volt sense on main positive stud
Current Sensing	Not available
Circuit Protection	Mechanical ATC fuse override with alarm
Digital Switch Breakout	Not available
Maximum Continuous Current	150A @ 104°F (40°C) - derating above 104°F (40°C)
Power Supply	M8 (5/16") stud positive, M6 (1/4") negative
Voltage	9-32V (with power available LED)
Power Consumption	Operating (all channels on) = 100mA @ 13.2V Operating (all channels off) = 75mA @ 13.2V
Circuit Bypass	Mechanical protection/bypass all output channels
Bilge Pump Circuits	4 x channels high: integrated manual control & pump running detection
Ingress Protection	IPX5 (mounted at 0°, +/-90°)
Communication	NMEA 2000
Certification	CE, ABYC, NMEA 2000, ISO8846/SAEJ1171 ignition protected
Weight	4.2lb / 1.9kg
NMEA 2000 PGN Output	Fluid level, pressure, temperature, battery volts
Connectors	Deutsch DTP and DT
Dimensions (including cover)	13.3" x 9.3" x 2.4" 338 x 235 x 62mm
Output Voltage	12/24V

Features

- High density 24 channel module delivering reduced cost per channel
- Designed for marine, recreational, and specialty vehicle applications
- Retains core functions available in Combination Output Interface
- Full mechanical fuse protection plus bypass on all circuits as required by ABYC/CE
- Proven, rugged CZone design includes IPX5 Water Ingress Protection and NMEA 2000 certification
- Integrated manual bilge pump control & pump running detection

Accessories

80-911-0131-00	Deutsch connector kit Includes all necessary Deutsch plugs, contacts, wafers & seals
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Related Products



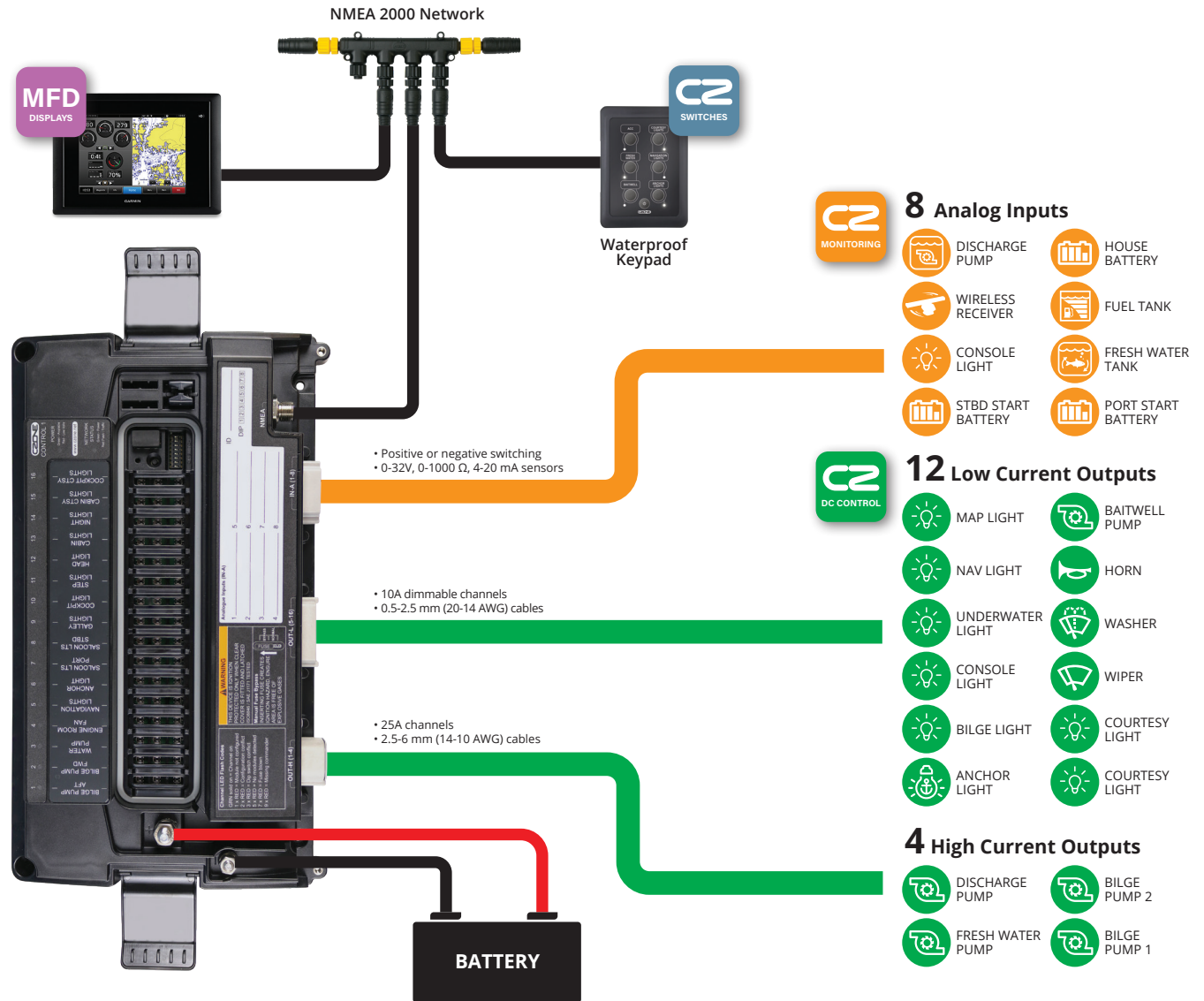
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Control 1 Accessories
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Control 1 System Example



CZone® Combination Output Interface (COI)

The Combination Output Interface (COI) combines multiple input and output devices into one (1) module, offering a compact and intelligent replacement for traditional DC fuse boxes and circuit breaker panels with digital control and monitoring technology.

Digital control and monitoring 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 (page 29), the Combination Output Interface heralds a new era in providing simple, intuitive control over the increasingly complex systems found on today's applications.



Combination Output Interface	
Channels	30
Output Channels High	4 x 25A
Output Channels Low	12 x 10A dimmable
Analog Inputs	8 x analog inputs: positive or negative switching, 0–32V, 0–1000 ohm resistance & 4–20mA current
Additional Monitoring	Volt sense on main positive stud & NMEA 2000
Current Sensing	All 16 output channels
Circuit Protection	Configurable digital software fusing & Mechanical ATC Fuse override with alarm
Digital Switch Breakout	Digital Switch Breakout adds 6 digital switch inputs
Maximum Continuous Current	150A @ 104°F (40°C) - derating above 104°F (40°C)
Power Supply	M8 (5/16") stud positive, M6 (1/4") negative
Voltage	9–32V (with power available LED)
Power Consumption	250 mA @ 12V 180 mA @ 12V standby
Circuit Bypass	Mechanical protection/bypass all output channels
Bilge Pump Circuits	4 x channels high: integrated manual control & pump running detection
Ingress Protection	IPX5 (mounted at 0°, +/-90°)
Communication	NMEA 2000
Certification	CE, ABYC, NMEA 2000, ISO8846/SAEJ1171 ignition protected
Weight	4.2lb / 1.9kg
NMEA 2000 PGN Output	Fluid level, pressure, temperature, battery volts
Connectors	Deutsch DTP and DT
Dimensions (including cover)	13.3" x 9.3" x 2.4" 338 x 235 x 62mm
Output Voltage	12/24V

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-n-play installation
- 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

Part #	Description
80-911-0119-00	COI with Connectors (includes 80-911-0131-00—COI Deutsch Connector Kit)
80-911-0120-00	COI No Connectors

Accessories

80-911-0123-00	COI cable cover Optional cover for clean finish, covers connectors and cables
80-911-0134-00	COI Digital Switch Breakout The COI Digital Switch Breakout (DSB) interfaces CZone digital switches with your CZone COI module. Including 2 mtr DSB to COI cable
80-911-0129-00	5m COI to DSB cable (16ft)
80-911-0131-00	COI Deutsch connector kit (delivered as standard with 80-911-0119-00) Includes all necessary Deutsch plugs, contacts, wafers & seals for COI
80-911-0133-00	Deutsch HDT-48-00 crimp tool Crimp tool for Deutsch contacts

COI Digital Switch Breakout (DSB)



The COI Digital Switch Breakout (DSB) is the interface between the Combination Output Interface (COI) and up to six CZone digital switches (push button or rocker). The digital switches include dimmable LED backlighting, systems on, fault codes and a plug and play harness simplifying installation.

Part #	Description
80-911-0134-00	DSB (Includes 2m COI to DSB Cable)

Digital Switch Breakout (DSB)

Connect up to six (6) digital switches to the COI

Support for single or double throw switches (up to 12 programmable switch points)

Uses existing SCI switch cables with options for rocker or push button plugs at various lengths

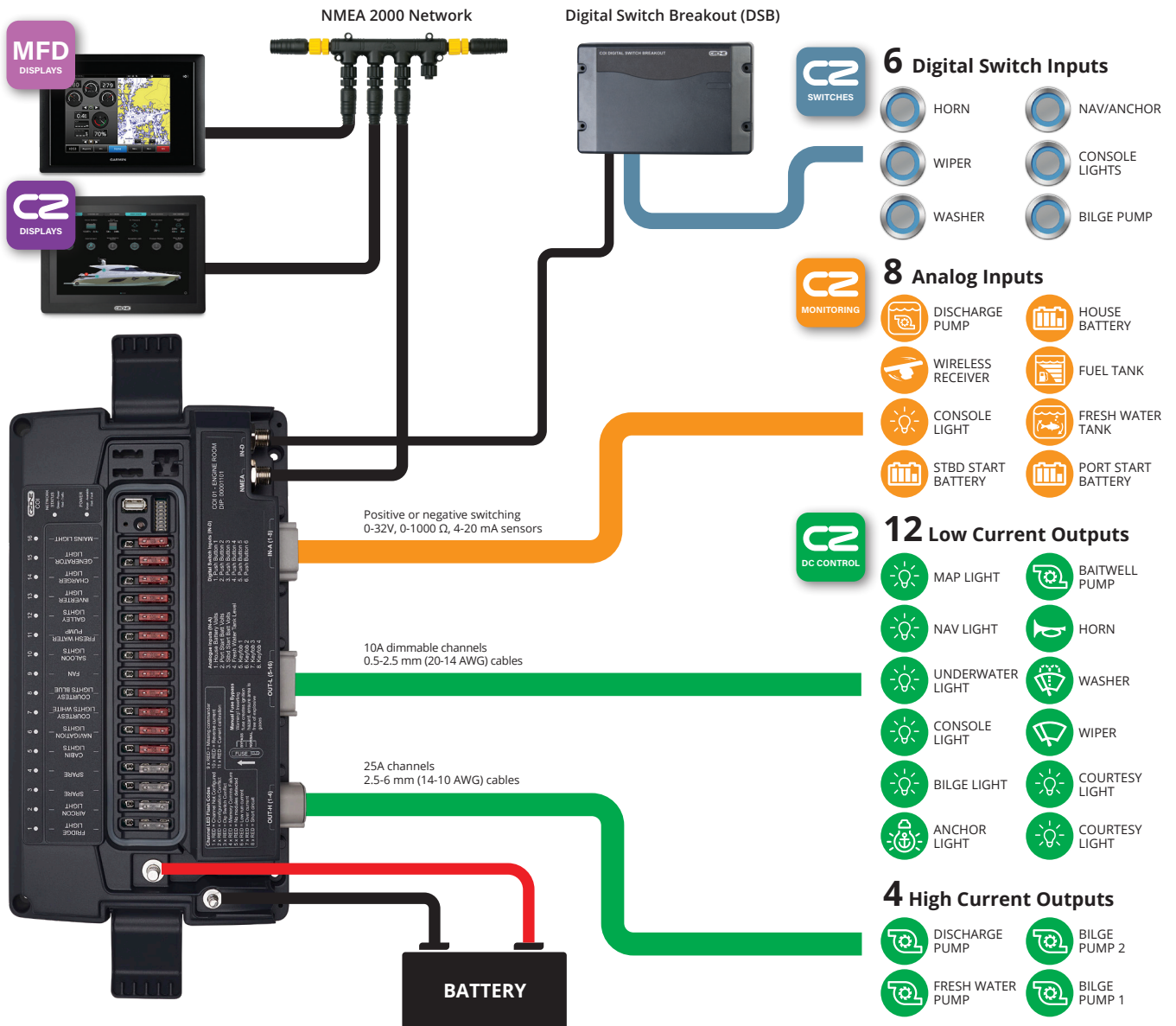
Digital switches include dimmable backlighting for 'systems on' and fault codes

Dimensions 3.9" x 6.1" x 1.7"
HxWxD 100 x 156 x 42 mm

IPX5 water ingress protection

Includes 2m DSB to COI cable

CZone® COI System Example



Contact 6 PLUS **NEW**

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.

Part #	Description
80-911-0160-00	Contact 6 PLUS Interface
80-911-0160-01	Contact 6 PLUS Interface (interface only)

Accessories

80-911-0179-00	Contact 6 PLUS Connector & Seal Kit 1x 6-position Phoenix Plug (with screws) & 1x Gumboot Seal
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Contact 6 PLUS	
Circuit Protection	ATC fuse with blown fuse alarms
NMEA 2000 Connectivity	1 x CAN Micro-C port
Output Wire Range	24–8 AWG (0.5 - 6mm)
Output Channels	6 x 15A 12/24V
Maximum Current	60A total module current
Dimming	All channels, PWM @100Hz
Power Supply	M6 (1/4") positive terminal (9–32V)
Network Supply Voltage	9–16V via NMEA 2000
Circuit Bypass	Mechanical fuse bypass on all channels
Ingress Protection	IPX5 (mounted vertical)
Compliance	CE, ABYC, NMEA 2000, ISO8846/SAEJ1171 Ignition Protected
Power Consumption Max	75mA
Power Consumption Standby	0.3mA
Warranty Period	2 years
Operating Temperature Range	-5°F to +131°F (-15°C to +55°C)
Storage Temperature Range	-40°F to +185°F (-40°C to +85°C)
Dimensions WxHxD	7.97" x 5.06" x 1.77" (202.5 x 128.5 x 45mm)
Weight	1.32lbs/600g



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



Related Products



NEW Waterproof Keypads
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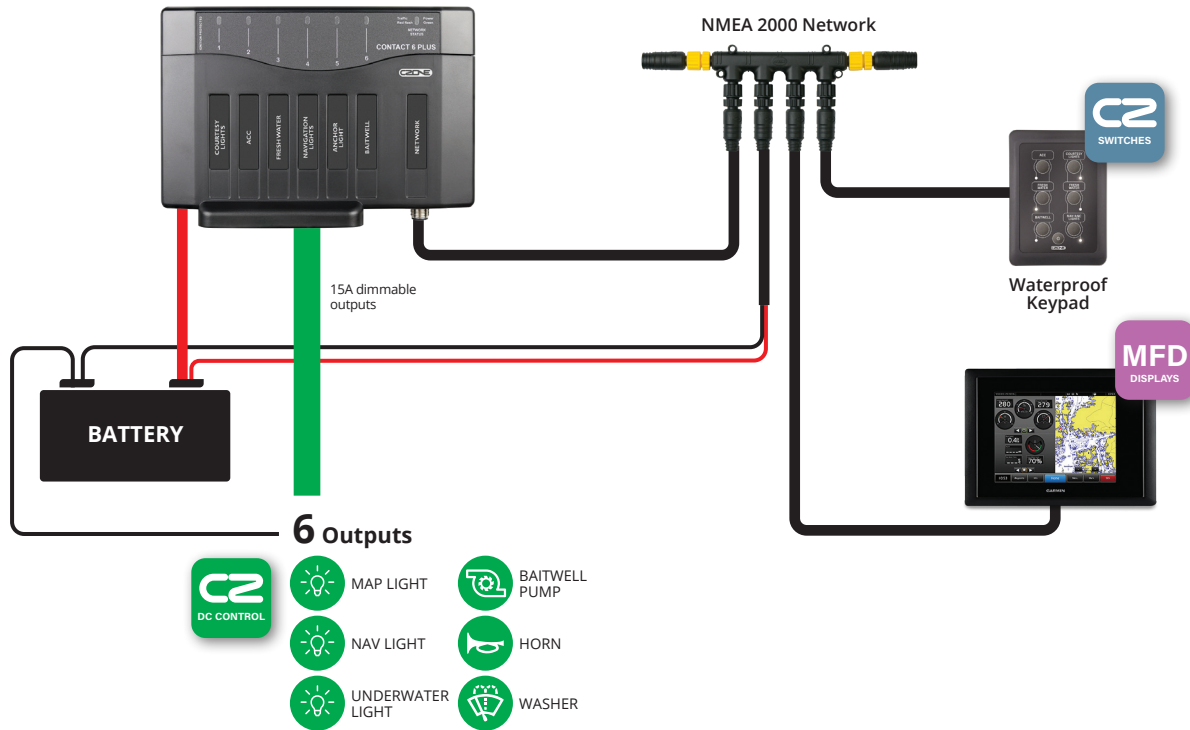


Smart Harnesses
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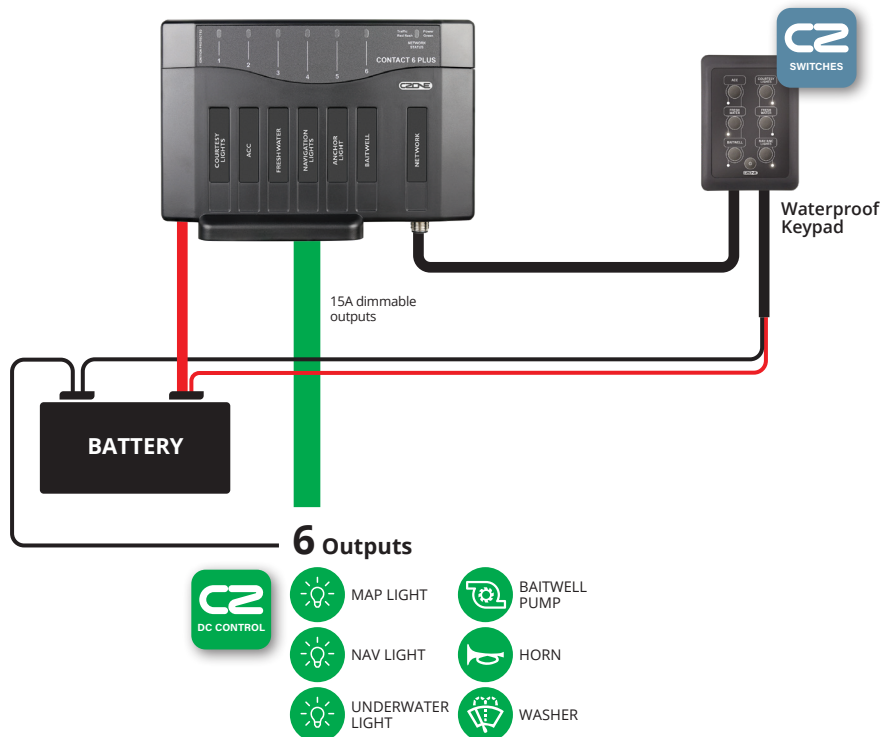


Contact 6 Plus Accessories
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Contact 6 PLUS Networked System Example



Contact 6 PLUS Standalone System Example



Contact 6

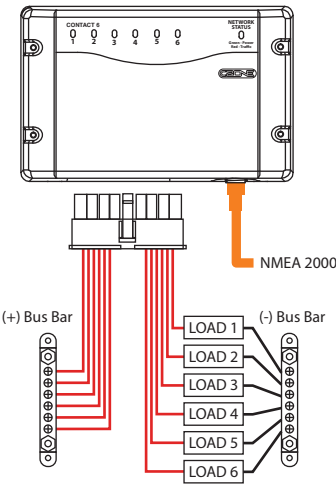
The Contact 6 is a digital control module that can be networked with other CZone products or stand alone. The Contact 6 has six independent channels that are positively or negatively switched and is ideal for smaller marine applications or recreational and specialty vehicles.

Part #	Description
80-911-0139-00	Contact 6 Fused Interface Only
80-911-0140-00	Contact 6 Fused with Seals & Plug
80-911-0155-00	Contact 6 Non Fused Interface Only
80-911-0156-00	Contact 6 Non Fused with Seals & Plug

Accessories	
80-911-0144-00	Plug Pack* for Contact 6
80-911-0145-00	Cable Gland for Contact 6

*Plug pack includes mating TE connector and contacts (TE part numbers listed in specifications)

Contact 6	Fused	Non Fused
Output Channels	6x Relay	6x Relay
Output Ratings	7.5A max per channel	9A max per channel
Output Voltage	up to 16V DC	up to 30V DC
LED Status indication	Yes	Yes
Parallel	Yes	Yes
Dimming	No	No
Current Sensing	No	No
Circuit Protection	Internal PTC Fuses (auto-reset)	None (must fuse externally)
Overcurrent Alarm	No	No
Circuit Bypass	Yes (electronic)	Yes (electronic)
Connector	Amp 18-way Connector	Amp 18-way Connector
Max Wire Size	16 AWG (1mm²)	16 AWG (1mm²)
Maximum Current	30A Continuous	30A Continuous
Power Consumption	35mA (standby)	35mA (standby)
NMEA Voltage	9-16V	9-16V
Ingress Protection	IPX5	IPX5
Communication	NMEA 2000	NMEA 2000
Operating Temp	5 °F to 131 °F (-15 °C to +55 °C)	
Certification	CE, NMEA 2000, ISO8846/SAEJ1171 ignition protected	



Related Products



Contact 6 Accessories
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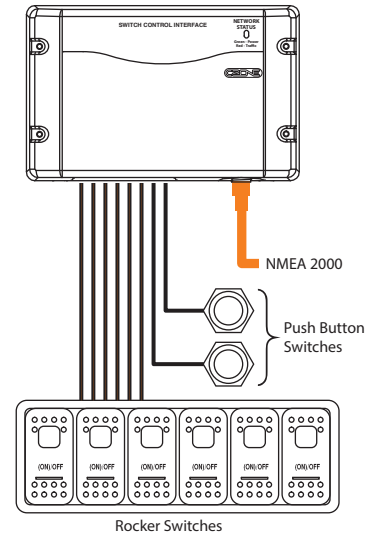
Switch Control Interface (SCI)

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.

Part #	Description
80-911-0011-00	Switch Control Interface with seal
80-911-0012-00	Switch Control Interface only

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)
Choice of push button or rocker style switch
Dimensions (HxWxD): 3.94" x 6.14" x 1.65" (100x156x42mm)
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



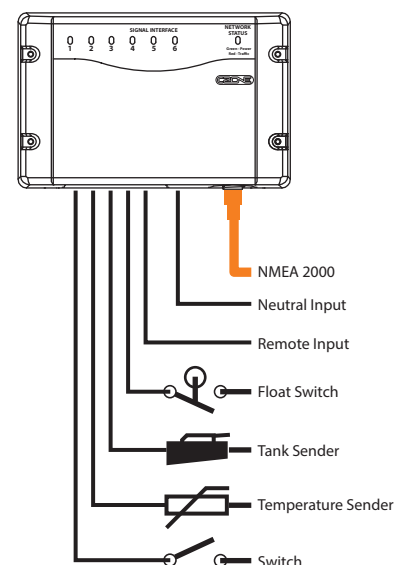
Signal Interface (SI)

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.

Part #	Description
80-911-0013-00	Signal Interface with seals, connector
80-911-0014-00	Signal Interface only

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 i.e. show a hatch is partially open
LED status indicators for each input
Dimensions (HxWxD): 3.94" x 6.14" x 1.65" (100x156x42mm)
IPX5 water ingress protection
Outputs standard NMEA 2000 fluid, temperature and pressure sentences
Resistive input range 0-1000 Ohms
Voltage sensing input range 0-34V DC



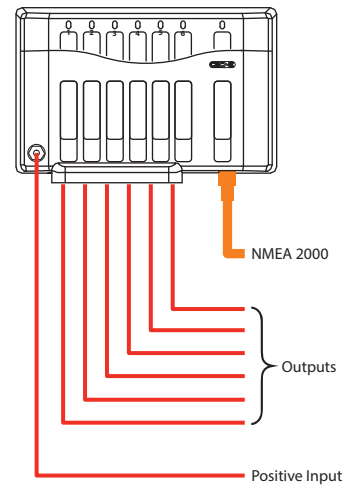
Output Interface (OI)

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 (6 AWG) in size, or multiple smaller conductors. No need for specialized 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.

Part #	Description
80-911-0009-00	Output interface with connector and protective boot
80-911-0010-00	Output interface only

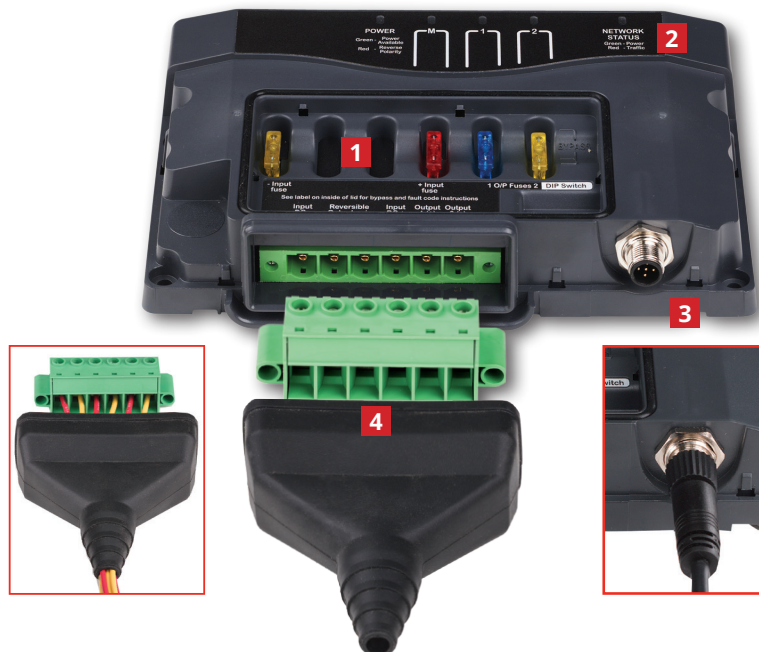
Output Interface (OI)

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 12V: 85 mA
Dimensions (HxWxD): 5" x 7.87" x 1.75" (128 x 200 x 45mm)
Small, non-metallic, easy to install case
IPX5 water ingress protection
6 x 20A circuits
Programmable software 'fuse' sizes
CE, ABYC, NMEA 2000, ISO8846/SAEJ1171 ignition protected



Output Interface Parts

- 1** Fuses for emergency circuit bypass
- 2** Network status indicator
- 3** NMEA 2000 connector
- 4** Connector and protective boot



Motor Output Interface (MOI)

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 OI.

Part #	Description
80-911-0007-00	Motor Output Interface with connector and protective boot
80-911-0008-00	Motor Output Interface only

Motor Output Interface (MOI)

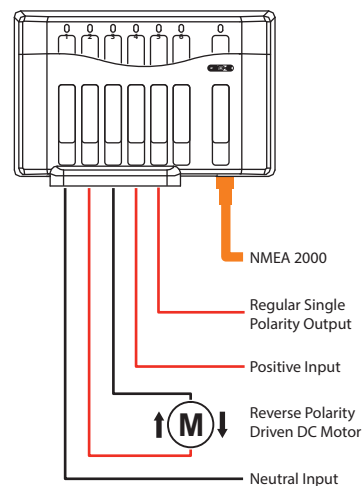
Single motor control and two normal channels per unit, 20A per output

Built-in circuit protection

IPX5 water ingress protection

Dimensions (HxWxD): 5" x 7.87" x 1.75" (128 x 200 x 45mm)

CE, ABYC, NMEA 2000, ISO8846/SAEJ1171 ignition protected



Meter Interface (MI)

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 percentage remaining. All with user definable high and low alarms.

Part #	Description
80-911-0005-00	Meter Interface, with seal and plug
80-911-0006-00	Meter Interface only

Meter Interface (MI)

General

Dimensions (HxWxD): 6.14" x 3.94" x 1.65" (156 x 100 x 42mm)

IPX5 water ingress protection

Outputs standard NMEA 2000 power monitoring sentences

AC

3 x AC voltage inputs (multi voltage)

2 x AC current inputs

Calculates true RMS power

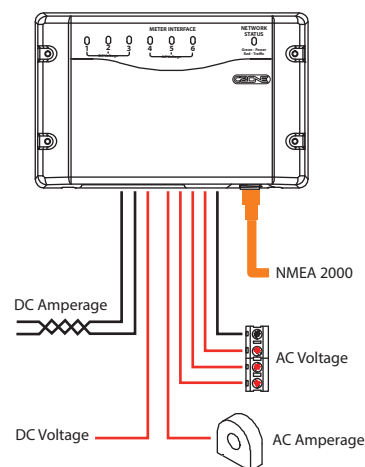
DC

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 0.1A



CZone® AC Output Interface (ACOI)

Simplify the way you network, monitor and control onboard AC circuits. The AC Output Interface does it all and provides circuit protection for all 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 running’ or ‘at anchor’ as well as control at multiple locations. It has eight outputs (up to 50A each), supports multiple pole designs and multiple separate buss feeds. To make it easy, status LEDs and manual bypass are located right at the enclosure.

ACOI is a custom ordered product. Each Customer's ACOI will vary based on their requirements. Contact your account manager for requirements.

AC Output Interface (ACOI)
Circuit status and run current displayed for each circuit
Customizable to suit installation requirements
Pre-wired for quick connection
Staggered start up of loads
110V, 240V, 110/220V
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



ACOI Standard

- 8 x 50A relays protected with 10A MCB's
- Pre-wired
- Current monitoring on each channel
- IPX5 enclosure
- Dimensions (HxWxD):
17" x 10.8" x 7.3" / 430 x 276 x 186mm

Part # 80-911-0069-00 This part number will change. This should only be used for quoting purposes.



ACOI Dinrail Mount

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

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

CZone® AC Mains Interface (ACMI)

A sophisticated source selector or transfer switch, the AC Mains Interface enables the user to specify which AC power source is actively supplying power to the ship (generator, inverter, or shore power). 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 100A 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 for easy installation.

ACMI is a custom ordered product. Each Customer's ACMI will vary based on their requirements. Contact your account manager for requirements.

AC Mains Interface (ACMI)
6 Source inputs up to 125A (eg. 2x shore power, 2x 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
110V, 240V, 110/220V
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
2 Outputs (load groups), allows for two separate load groups with parallel option for use with single source
Auto changeover (non-seamless)
Provision for RCD's
Load shedding
Status LEDs at enclosure
Pre-wired for quick connection
Timer controls
50 or 60 Hz



ACMI Standard

- Three (3) Inputs—1x 16A Shore Power, 1x 32A Shore Power, 1x 50A Generator with Parallel
- Two (2) Load Groups—40A
- 230V AC 50Hz
- Current, voltage, frequency and power monitoring incorporated
- Manual override panel on enclosure
- Dimensions (HxWxD):
17" x 21.3" x 7.3" / 430 x 540 x 186mm

Part # 80-911-0068-00

This part number will change. This should only be used for quoting purposes.

ACCESSORIES

NMEA 2000 Approved Cables & Connectors



56

NMEA 2000 approved cables and connectors for creating or expanding an NMEA 2000 network quickly and easily. Ends are color coded to make identifying the power cable or connector easy. Premium quality. Universal fit.

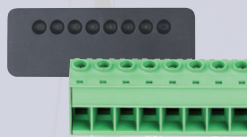
RV-C Cabling



58

RV-C cables service the increased demand of CZone installations in the RV market and offers RV builders an alternative to NMEA 2000 & Cable networks in applications where waterproofing is not required.

CZone Installation Accessories



58

Various components that are necessary to properly install a CZone digital control and monitoring system.

Waterproof Keypads



60

The CZone Waterproof Keypad range features dimmable RGB circuit backlighting in a robust IPX7 waterproof enclosure and is available in portrait and landscape orientations.



ACCESSORIES

Push Button Switches



62

3.5 volt switches designed to work exclusively with CZone® systems. Momentary and latched actuation options are available.

Wireless Interface



63

Allows your iPad® to interface with an onboard digital control and monitoring 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 digital control and monitoring protocols of MasterBus and CZone®.

CZone® Wireless Remote Kit



64

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



NMEA 2000 Network Components



Single Tee Connector

Connects a single device into the NMEA backbone.

Part # 80-911-0029-00



2 Way Tee Connector

Connects multiple devices into the NMEA backbone.

Part # 80-911-0047-00



4 Way Tee Connector

Connects multiple devices into the NMEA backbone.

Part # 80-911-0048-00



Terminating Resistors

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

Part # 80-911-0031-00 Male
Part # 80-911-0030-00 Female



90° Elbow Connector

Space saving connector for modules, displays and cabling connections.

Part # 80-911-0046-00



Power Isolator

Used for isolating power between two independent NMEA 2000 networks.

Part # 80-911-0137-00



Power Cable

Provides power to the NMEA 2000 network. 18 AWG/0.8mm² conductors meet ABYC/CE standard for minimum conductor size plus add connection to protect the network from electromagnetic interference.

Part # 80-911-0028-00 3.2 ft 1 m



Backbone Cable

Special low volt drop Backbone Cable ensures ultimate reliability for your NMEA 2000 network.

Part # 80-911-0026-00	1.6 ft	.5 m
Part # 80-911-0027-00	6.5 ft	2 m
Part # 80-911-0024-00	16 ft	5 m
Part # 80-911-0210-00	26.3 ft	8 m
Part # 80-911-0025-00	32 ft	10 m



Drop Cable

Thinner, more flexible Drop Cables connect individual devices to the NMEA 2000 network. New 3 ft/1m length adds convenience.

Part # 80-911-0116-00	1.6 ft	.5 m
Part # 80-911-0117-00	3.2 ft	1 m
Part # 80-911-0118-00	6.5 ft	2 m
Part # 80-911-0211-00	9.8 ft	3 m
Part # 80-911-0212-00	13.1 ft	4 m
Part # 80-911-0115-00	16 ft	5 m
Part # 80-911-0213-00	19.7 ft	6 m



Through Bulkhead Adaptor

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

- NMEA 2000 Network

Part # 80-911-0052-00



80-911-0054-00

80-911-0053-00

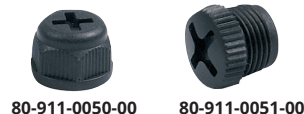
Field Serviceable Connectors

For terminating bare NMEA cable.

- NMEA 2000 Network

Part # 80-911-0054-00 Male

Part # 80-911-0053-00 Female



80-911-0050-00

80-911-0051-00

Blanking Caps

Protects unused Tee Connector from dust and water.

Part # 80-911-0050-00 Male

Part # 80-911-0051-00 Female

RV-C Cabling **NEW**

RV-C specific cabling and adapters will work with existing and future CZone products with the aim of reducing the overall network cost for RV builders. RV-C cables service the increased demand of CZone installations in the RV market and offers RV builders an alternative to NMEA 2000 & Cable networks in applications where waterproofing is not required. RV-C is a CAN based communication profile for recreational vehicles.

RV-C Cabling is for RV applications ONLY



RV-C Terminator **NEW**

- This standard RV-C connector provides termination resistance for one end of the backbone of the network.

Part # 80-911-0207-00



RV-C 4-Way Tee **NEW**

- Connects RV-C drop cables and backbone cables.
- Multiple drop cables to be connected without additional backbone cable.
- RV-C approved. Universal and compatible with other RV-C cabling products.

Part # 80-911-0206-00



RV-C to NMEA 2000 Drop Cable **NEW**

Part # 80-911-0202-00 3.2 ft 1 m

NMEA 2000 to RV-C Drop Cable **NEW**

Part # 80-911-0208-00 3.2 ft 1 m

Part # 80-911-0209-00 6.5 ft 2 m

RV-C to RV-C Backbone Drop Cable **NEW**

Part # 80-911-0241-00 1.6 ft .5 m

Part # 80-911-0242-00 3.2 ft 1 m

Part # 80-911-0243-00 6.5 ft 2 m

Part # 80-911-0244-00 16 ft 5 m

Part # 80-911-0245-00 26.3 ft 8 m

RV-C Power Isolator Cable **NEW**

Part # 80-911-0247-00 3.2 ft 1 m

RV-C Power Cable **NEW**

Part # 80-911-0246-00 3.2 ft 1 m

Terminal Blocks, Glands, Seals, & Hole Plugs



Cable Gland, MI

- Silicone

Part # 80-911-0033-00



Cable Gland for SCI

- Silicone

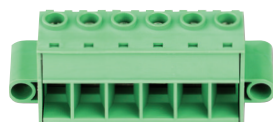
Part # 80-911-0035-00



Cable Gland SI

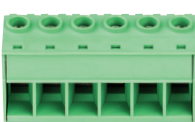
- Silicone

Part # 80-911-0036-00



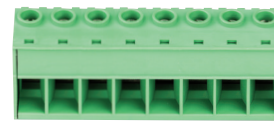
Terminal Block OI/MOI, 6 Way

Part # 80-911-0041-00



Terminal Block for MI, 6 Way

Part # 80-911-0042-00



Terminal Block SI/MI, 8 Way

Part # 80-911-0043-00



Seal Boot for OI/MOI, 6-Wire

- Black silicone

Part # 80-911-0034-00



Hole Plugs

- 3.2 mm for MI and SI cable glands
- 5 mm for SCI cable glands

Part # 80-911-0016-00 3.2 mm

Part # 80-911-0017-00 5 mm

Control 1, COI & DSB Accessories

Accessories & spares for Control 1, Combination Output Interface (COI) and Digital Switch Breakout (DSB).



COI Cable Cover

Part # 80-911-0123-00



COI/Control 1 Deutsch Connector Kit

Part # 80-911-0131-00



Deutsch HDT-48-00 Crimp Tool

Part # 80-911-0133-00



COI to DSB Cable, 5m

Part # 80-911-0129-00

Touch 5 Accessories



Sun Cover

Part # 80-911-0132-00



Bezel

Part # 80-911-0147-00



NMEA/Power Cable

Part # 80-911-0148-00

Touch 7 Accessories



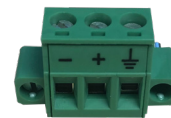
Mounting Bracket Kit

Part # 80-911-0201-00



1M NMEA 2000 Drop Cable

Part # 80-911-0202-00



Power Connector

Part # 80-911-0203-00

Touch 10 Accessories



Spare Power Cable

Supplies power for Touch 10 display

- 2 pin, 6.5 ft (2 m)

Part # 80-911-0032-00

Contact 6 Accessories



Cable Gland

Part # 80-911-0145-00



Plug pack

Part # 80-911-0144-00

Contact 6 PLUS Accessories

Connector & Seal Kit

This kit contains additional or replacement parts suitable for the Contact 6 PLUS Module (80-911-0160-00).

- 1x 6-position Phoenix Plug (with screws)
- 1x Gumboot Seal

Part # 80-911-0179-00



CZone Waterproof Keypads **NEW**

- IPX7 waterproof low profile keypads
- Status LEDs with blown fuse fault indication
- Dimmable RGB circuit back lighting
- Available in portrait or landscape with 3 mounting options—front, rear and flush mount
- Easy to install with a single plug connection



80-911-0162-00
6-way landscape



80-911-0165-00
12-way landscape



80-911-0163-00
6-way portrait



80-911-0164-00
12-way portrait

Label Set for Waterproof Keypad

Part # SET-KEYPAD-1

ACC	COURTESY LIGHTS	FISHING LIGHTS	MODE 1	RAW WATER	TRIM TABS
AERATOR	CUP HOLDER	FLOOD LIGHTS	MODE 2	SOUNDER	TROLLING MOTOR
ANCHOR LIGHT	DC OUTLETS	FLYBRIDGE	NAV LIGHTS	SPARE 1	TUNA TUBES
AUTO PILOT	DECK LIGHTS	FRESH WATER	NAV/ANC LIGHTS	SPARE 2	U/WATER LIGHTS
BAITWELL	DECK WASH	GPS	ON/OFF	SPOT LIGHTS	UP
BILGE PUMP 1	DOCKING LIGHTS	HORN	PORT LIGHTS	SPREADER LIGHTS	VHF
BILGE PUMP 2	DOWN RIGGER	INST. LIGHTS	PUMP 1	STBD LIGHTS	WASH DOWN
BLOWER	DOWN	INVERTER	PUMP 2	STEREO	WASHER
CABIN LIGHTS	ELEC. TRONICS	LIGHTS	PUMPOUT	TIMER	WINCH
COCKPIT LIGHTS	ENGINE ROOM	LIVEWELL	RADIO	TOILET	WIPERS

Label Set for RV Keypad

Part # SET-KEYPAD-RV

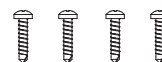
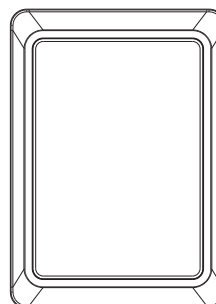
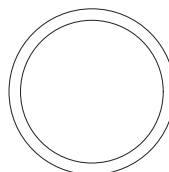
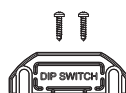
A/C	BED LIFT	ENSUITE LIGHTS	KITCHEN LIGHTS	ROOF VENTS	STEP LIGHT
ANTENNA DOWN	BED LIGHTS	EXTERIOR LIGHTS	LOCKER LIGHTS	SATELLITE	STEREO
ANTENNA POWER	BENCH LIGHTS	FRESH WATER	LOUNGE LIGHTS	SHOWER FAN	STORAGE MODE
ANTENNA UP	BOX LIGHTS	FRIDGE	MAIN WATER	SLEEP MODE	TOILET TRANSFER
AWNING IN	CABIN FANS	FRONT TOOL BOX	NIGHT MODE	SLIDE OUT IN	TRAVEL MODE
AWNING LIGHT	CABIN HEATER	GREY WATER	OUTDOOR POWER	SLIDE OUT OUT	TUNNEL LIGHT
AWNING LT D/S	CAMP MODE	HEATER	OVERHEAD LIGHTS	SPOTLIGHT FRONT	TUNNEL POWER
AWNING OUT	CEILING LIGHTS	JACK DOWN	RANGE HOOD	SPOTLIGHT REAR	TV/DVD
BATH LIGHT	DC ACC.	JACK UP	READING LIGHTS	STEP DOWN	USB PORTS
BBQ	DOWN LIGHTS	KICK PANEL LIGHTS	REAR BOX LIGHTS	STEP UP	WATER HEATER



Waterproof Keypad Spare Parts Kit

Part # 80-911-0174-00 6-way

Part # 80-911-0175-00 12-way





Custom Keypad Label Options

CZone waterproof keypads can be customized to suit any installation environment. From simple circuit labels to 100% customizable overlays. Custom graphical overlays can be designed to mimic the panels they will be mounted into, making the waterproof keypads seamlessly integrate into any installation.

Editable templates will be provided to OEM's so their graphic designers have the exact dimensions and button layout.

Contact your CZone agent for instructions on how to order keypads with custom overlays



CZone Smart Harnesses

2 & 3 Module Smart Harness

CZone utilizes the industry standard NMEA 2000 Network for its communication protocol. The new 2 & 3 Module Smart Harnesses replace the need for a complete network backbone in a small system, meaning a robust, simpler and more cost-effective installation. The Smart Harness is designed for Contact 6 PLUS, but can also be fitted independent to any CZone installation where a small network comprising 2 or 3 devices is required.

- All in one smart-harness for straight forward plug and play installation
- 3 Module Smart Harness connects two 6-button Waterproof Keypads to the Contact 6 PLUS Module
- Not required when connecting to NMEA 2000 Network

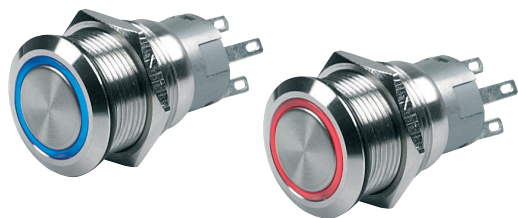


80-911-0171-00



80-911-0172-00

Push Button Switches & Accessories



Push Buttons

For use with CZone systems only (3.5V)

- 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

Part #	80-911-0060-00	Momentary (ON)OFF	red LED
Part #	80-911-0063-00	Latching ON/OFF	red LED
Part #	80-911-0062-00	Momentary (ON)OFF	blue LED
Part #	80-911-0061-00	Latching ON/OFF	blue LED



Push Button Cable Assembly

Suitable for Switch Control Interface (SCI) and Digital Switch Breakout (DSB) compatible with push buttons.

Part #	80-911-0085-01	.5 meter
Part #	80-911-0086-01	1 meter
Part #	80-911-0087-01	2 meter
Part #	80-911-0088-01	5 meter
Part #	80-911-0089-01	8 meter

Rocker Switches & Accessories



Multiple rocker labels available upon request



Custom Rocker Switches

Red or blue systems in operation and backlighting LED's.

Part #	80-911-0037-00	ON/OFF	red LED
Part #	80-911-0038-00	mom ON/OFF	red LED
Part #	80-911-0039-00	ON/OFF/ON	red LED
Part #	80-911-0040-00	mom ON/OFF/mom ON	red LED
Part #	80-911-0066-00	mom ON/OFF	blue LED
Part #	80-911-0071-00	mom ON/OFF/mom ON	blue LED

Rocker Switch Cable Assembly

Suitable for Switch Control Interface (SCI) and Digital Switch Breakout (DSB) compatible with rocker switches.

Part #	80-911-0018-00	.5 meter
Part #	80-911-0019-00	1 meter
Part #	80-911-0020-00	2 meter
Part #	80-911-0021-00	3 meter
Part #	80-911-0022-00	4 meter
Part #	80-911-0023-00	5 meter

Contura and Rocker Switch Mounting Brackets

- Mount multiple Contura or Rocker style switches in one opening
- Provides a neat, finished appearance on dash or panel surfaces



1001718
Plug



1001717
Single



1001703
End (L or R)



1001702
Double



1001701
Triple (plug included)

Network Interfaces



CZone® Network Bridge Interface

For isolating sections of an NMEA 2000 network to decrease standby current draw. Isolation when bridging between two CAN networks, (eg 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.

Part # 80-911-0057-00



MASTERVOLT

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 integrated products
- Display MasterBus acquired systems information such as tank and power levels on CZone displays
- Transfer of alarms between both systems

Part # 80-911-0072-00

More info
on page 36



MASTERVOLT

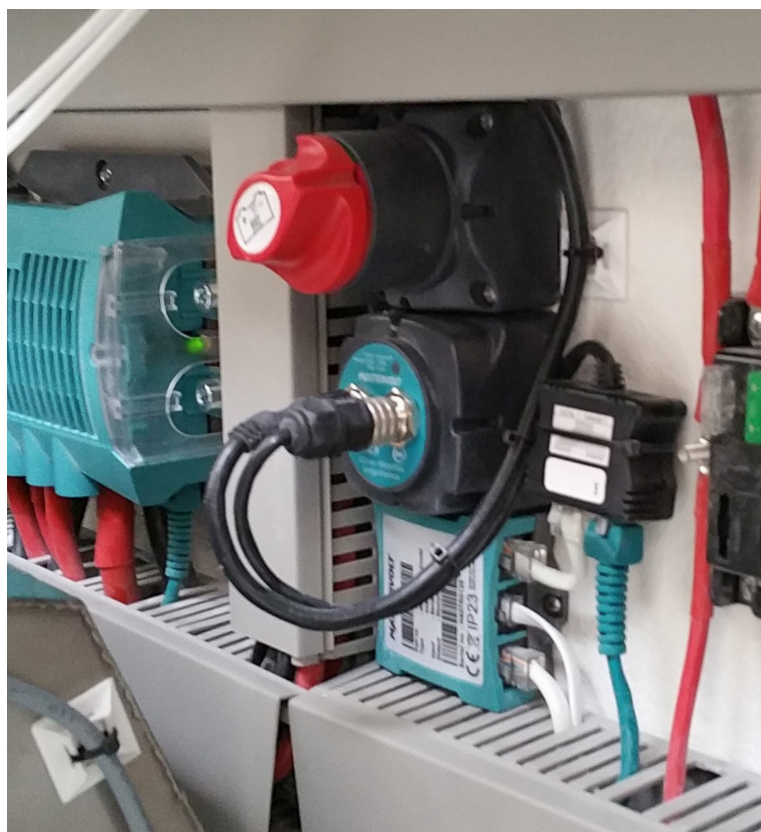
Wireless Interface

Wireless monitoring and control of onboard systems from your tablet. Allows your tablet to interface with an onboard digital control and monitoring 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.

Part # 80-911-0090-00 Wireless Interface

Part # 80-911-0095-00 WI MasterBus connector
(required for MasterBus connection)

Dimensions (hwxwd)	2.7" x 2.7" x 2" / 69 x 69 x 50 mm
Weight	0.32 lb / 145 g
Protection	IP65
Includes	Cable adapter, Terminator, User's manual



Misc Accessories



CZone® Wireless Remote Kit

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

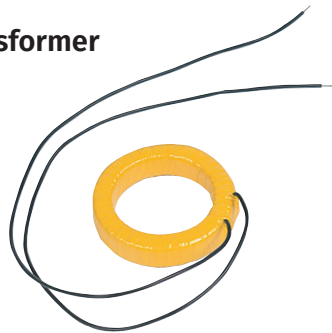
- 250 ft (80 m) operating range
- Kit includes two key fobs and a receiver box
- Rolling code
- Key fob available separately (80-911-0070-00)

Part # 80-911-0045-00

Heavy-duty Current Transformer

- Maximum current 150A AC
- CT-HD is available for systems with large mains cables, too large for CT-10-3 (ordered separately)
- CT-HD dimensions: Ø 1.85 x 0.4" (Ø 47 x 10.5 mm)
- Hole size: 1.25" (32 mm)

Part # CT-HD



AC Transducer

- Includes 3 voltage transformers for up to 3 voltage inputs
- 2.75" x 5.5" x 2" (69 x 140 x 50 mm)
- Used for AC voltage measurement

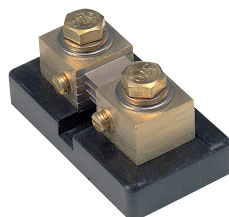
Part # AC-VSEN-4



DC Current Shunt

- 450A / 50 mV shunt supplied with 80-600-0021-00
- 3.25"L x 2.8"W x 2.75"H (83L x 45W x 44H mm)

Part # LB-450-50



Current Transformer

- Maximum current 150A AC
- One CT-10-3 current transformer is supplied with ACSM. If a twin line system is in use, a second CT must be ordered.
- Dimensions: 1.5" x 1.55" x .55" (37.5 x 39.2 x 13.7mm)
- Hole size: 0.5" (12mm)

Part # CT-10-3



Surge Protection Module

Protect your electronics from becoming 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.

Part # 80-707-0004-00 12V DC

Part # 80-707-0005-00 24V DC



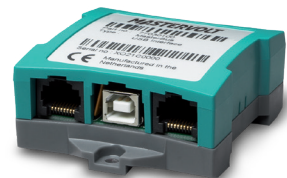
MASTERVOLT

USB to CAN Adapter

Connects PC to the CZone network for configuration and system set up.

Note: Mastervolt USB Interface now compatible with CZone configuration tool.

Part # 77030100



MASTERVOLT

Mastervolt-CZone® Drop Cables

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

Part # 77060050 0.5 m

Part # 77060100 1 m

Part # 77060200 2 m

Part # 77060500 5 m





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Ingress Protection (IP) Ratings Guide



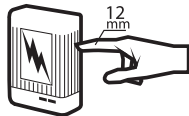
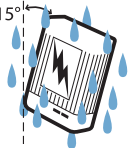
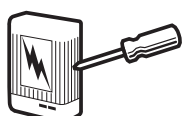









Example:

An IP65 rating can be determined using the adjacent table and example:

- The first number of the rating example, 6, in the gray column means the enclosure is dust tight
- The second number of the rating example, 5, in the blue column means the enclosure is protected against jets of water

The IP rating system was established by the International Electrotechnical Commission (IEC), an organization for international standards and conformity assessment. The IEC collaborates closely with the International Organization for Standardization (ISO). A complete description of the IP ratings and associated tests is found in IEC Publication 529. Although these ratings were initially developed as a way to classify enclosures, they now provide a convenient, practical way to compare levels of sealing. Many electrical products have an Ingress Protection (IP) rating which identifies the environmental factors needing consideration prior to the product's installation.

This is important when deciding when to mount products in a dry and clean environment versus a wet and/or dusty environment. The IP rating indicates the degree of protection provided. The numbers following IP represent levels of sealing and can range from no protection to full protection against dust and water. The table provides a description of the protection at each level.

SOLIDS		WATER	
1	 <p>Protected against a solid object greater than 50 mm such as a hand.</p>	1	 <p>Protected against vertically falling drops of water. Limited ingress permitted.</p>
2	 <p>Protected against a solid object greater than 12 mm such as a finger.</p>	2	 <p>Protected against vertically falling drops of water with enclosure tilted up to 15 degrees from the vertical. Limited ingress permitted.</p>
3	 <p>Protected against a solid object greater than 2.5 mm such as a screwdriver.</p>	3	 <p>Protected against sprays of water up to 60 degrees from the vertical. Limited ingress permitted for three minutes.</p>
4	 <p>Protected against a solid object greater than 1 mm such as a wire.</p>	4	 <p>Protected against water splashed from all directions. Limited ingress permitted.</p>
5	 <p>Dust Protected. Limited ingress of dust permitted. Will not interfere with operation of the equipment. Two to eight hours.</p>	5	 <p>Protected against jets of water. Limited ingress permitted.</p>
6	 <p>Dust tight. No Ingress of dust. Two to eight hours.</p>	6	 <p>Water from heavy seas or water projected in powerful jets shall not enter the enclosure in harmful quantities.</p>
		7	 <p>Protection against the effects of immersion in water between 15 cm and 1 m for 30 minutes.</p>
		8	 <p>Protection against the effects of immersion in water under pressure for long periods.</p>

Rating Example:



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CZN_CAT_003_0821