

POWER PRODUCTS LLC **System Integrators**



Providing Turn-Key Solutions

The Power Products Advantage

Every customer's needs are different. Power Products System Integrators will always tailor our service to ensure you get the best value possible and support. With the world's leading electrical brands under one roof, we provide a system solution that can fulfil every need.

Power Products Companies & Brands:



CZone® is the industry leader in digital control and monitoring.



Mastervolt engineers and designs power management systems for marine, mobile and industrial applications.



BEP is recognized as the global leader and innovator of the renowned CZone digital switching platform.



Blue Sea Systems is the global leader in battery management solutions and circuit protection for harsh environment marine and vehicle applications.



ProMariner is the leading brand of sealed battery chargers sold to marine OEM and aftermarket channels as well as selected automotive and specialty vehicle applications.



Marinco specializes in harsh environment cable solutions and electrical components.



ANCOR supplies harsh environment wire and cable, replacement lighting, tools and wire management solutions.

Power Products System Integrators is a division of



Providing more than products. Providing system solutions.

Power Product's extensive portfolio of electrical components and accessories ensures that we can provide the solution for all your electrical needs. Power Products System Integrators can guide from design to implementation, for the simplest or the most complex electrical systems.

MASTERVOLT

Power Conversion
Batteries
Lithium Ion Batteries
Battery Management
Transformers
Alternators & Regulators
Digital Switching

mastervolt.com



BLUE SEA SYSTEMS

Power Conversion
Battery Management
Circuit Protection & Switches
Connectors & Insulators
Power Distribution
Meters

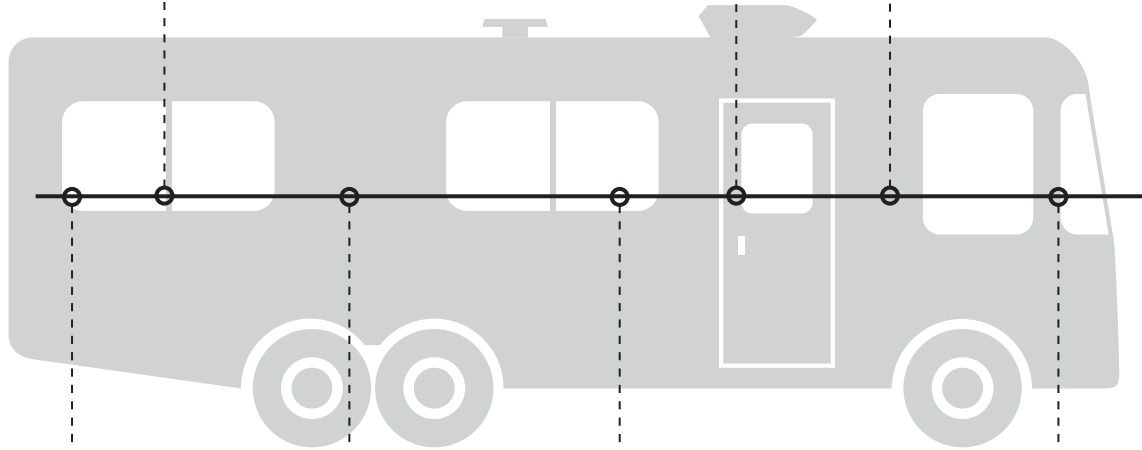
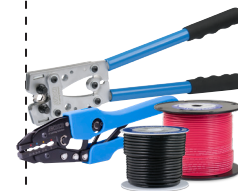
blueseas.com



ANCOR

Wire & Cable
Terminals & Lugs
Wire Management
Tools & Testers
Lighting

ancorproducts.com



BEP

Battery Management
Connectors & Insulators
Circuit Protection
Power Distribution
Panels
Custom Panel & Design
Services
Meters

bepmarine.com



ProMariner™

Waterproof Battery Chargers
Vented Battery Chargers
Inverters
Combis
Isolators
Accessories

promariner.com



CZONE

Digital Switching
Digital Monitoring
Accessories

czone.net



MARINCO

Shore Power
DC Power Connections
Power Conversion
Battery Management
Wiper Systems
Horns
Lighting
Ventilation

marinco.com



Complete Partnership

Power Products System Integrators provide customized electrical power, control and communication systems, and is your turn-key resource on everything from basic analog systems to full CZone Digital Control & Monitoring.

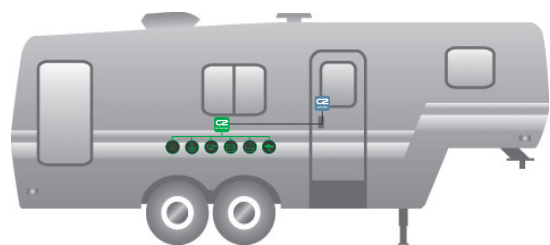
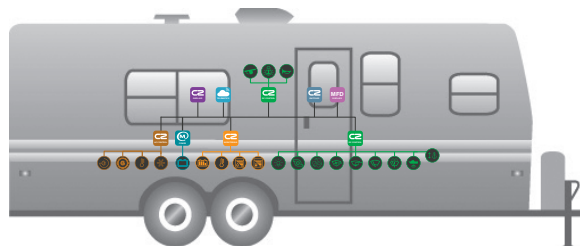
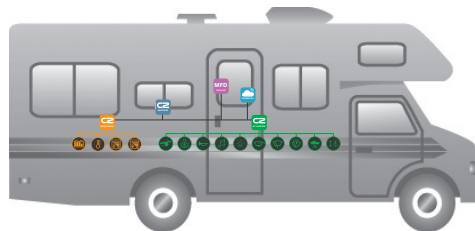
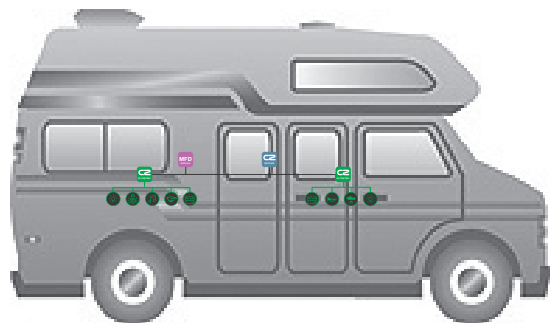
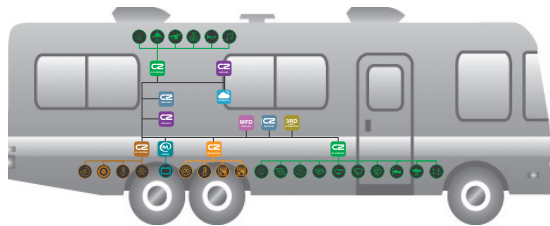
Our expert team of electrical engineers ensures optimum system requirements including hardware and wire harnessing. Working directly with our OEM partners, Power Products System Integrators helps identify key performance requirements of the electrical system, including:

- ✔ System Design
- ✔ System Configuration
- ✔ Production
- ✔ Commissioning & Support



Designed for your application

From simple stand-alone to fully networked systems, there's a CZone digital control and monitoring solution for every vehicle type



DC Control

Detailed control of all wired DC loads from 9-32V via a range of modules



Switches

CZone's flexibility allows for manual switches to be integrated into the system for critical functions such as horn, wipers, and bilge



MFD Integration

Monitor and control the onboard power system circuits directly from a partner MFD



Monitoring

Monitor critical on-board functions such as tank levels and battery levels



Telematics

Monitor your boat from anywhere in the world by utilizing telematics through one of CZone's partners



Power Integration

Mastervolt power sources easily integrate into the CZone system



Displays

CZone dedicated Touch 5" and Touch 10" screens can be positioned strategically on-board to control and monitor the electrical system



AC Control

AC dedicated modules control the flow of AC power coming into the boat, then monitors and protects AC circuits



3rd Party Integration

CZone's adaptability allow for 3rd party's to integrate into a CZone system

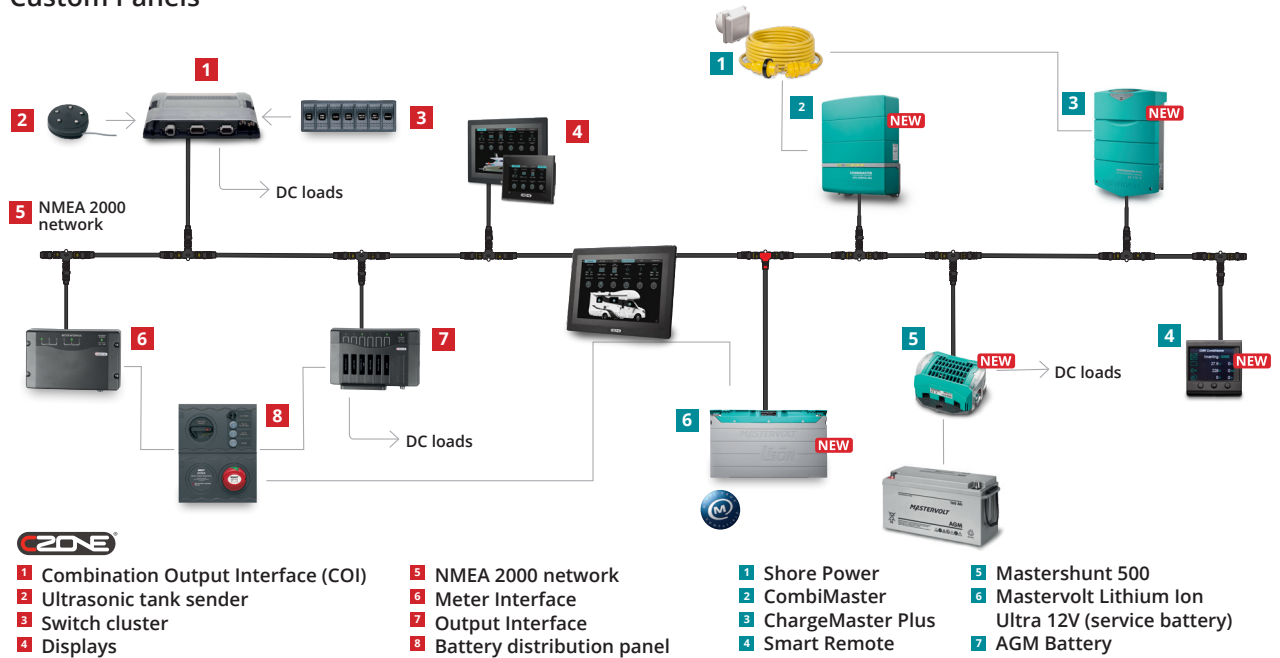
System Design

System Integrators offer comprehensive design services and support for everything from panel design and wiring layout through to full CZone system design and implementation. Our Systems Engineering team combine industry standard best-practice and training with an in-depth knowledge of our wide range of industry-leading products. The result is a manufacturer designed and supported solution based on the customer's project specific needs.

CZone (Digital Switching) System

Electrical System

Custom Panels



CZone® (Digital Switching) System

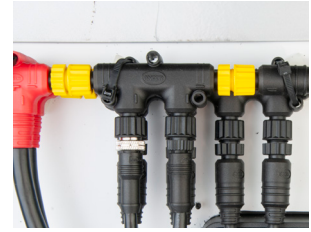
- Custom system design based on customer requirements
- Perform all configurations and logic programming
- Complete mode analysis and optimization



SYSTEM DESIGN

Electrical System

- Design of complete electrical system based on individual requirements
- Access to market-leading electrical brands
- Ability to design both simple and complex power conversion systems
- Full generator replacement by Lithium Ion battery systems
- 100 % integration with CZone digital switching and displaying solutions



Custom Panels

- Unique, customer specific panels for optimized power distribution
- Wide range of AC and DC panel functions
- Comprehensive line of digital monitors and meters



Production

System Integrators has the Design form Manufacturing expertise to assist production from start to finish. Depending on customer needs we can provide:

- System Components
- Plug & Play Component Boards
- Harnessing
- Installation Illustrations
- Custom Kitting
- Training

System Components

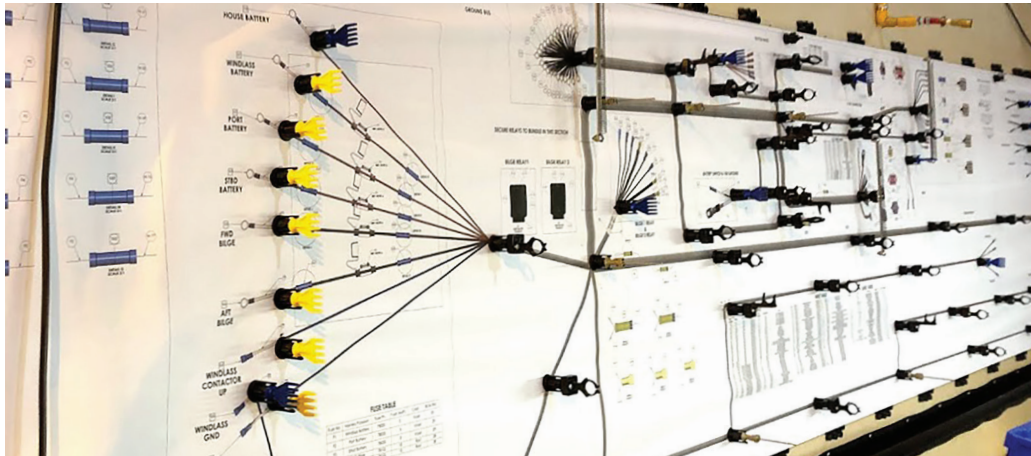
- Both AC and DC components plus all power conversion components
- Direct access to the leading marine and mobile electrical brands
- Products are designed to work together



PRODUCTION

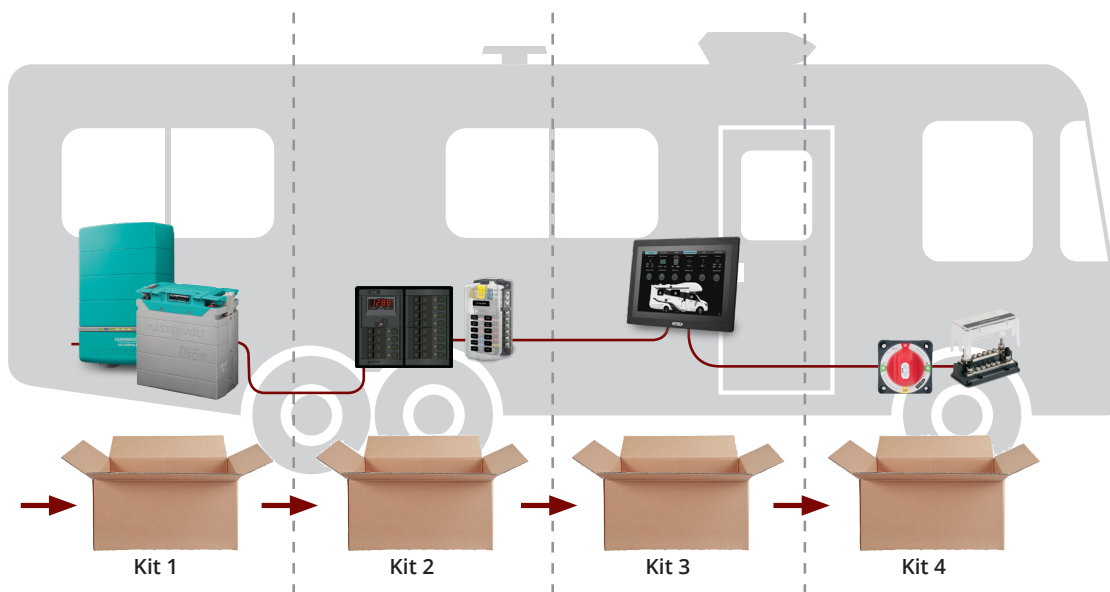
Harnessing

- Manufacture of pre-fabricated wiring harnesses
- Supplied complete or staged sub-assemblies
- All harnesses clearly labeled for ease of identification



Custom Kitting (Specifically designed to align with work stations)

- Simplified configuration and installation process
- Reduced error-rates due to categorization and simplicity
- Configuration file developed & installed
- All circuits and backbone harnesses clearly labeled



Configuration

Configuration is the backbone of CZone functionality. It is the code that tells CZone how to perform. It is critical that configuration codes are carefully written and input into the system. PPSI will manage all configuration writing and ensure that it is uploaded properly.

CZone Configuration

- Designed and built for customer specific application
- Defined feature sets and best use of modes
- Feature sets
- Best use of automatic and one-touch modes
- Perform all configurations and logic programming



Commissioning & Support

Commissioning: After the electrical system has been designed, built and installed, we will ensure everything is working properly. Our engineers will be on location to confirm functionality, and provide final sign-off on the system.

Support: Our global network of system engineers and technical staff are available to offer support for your system when you need it.

- On-site validation of system and configuration files
- Installation illustrations, instruction & assembly tools
- Continued factory support as needed

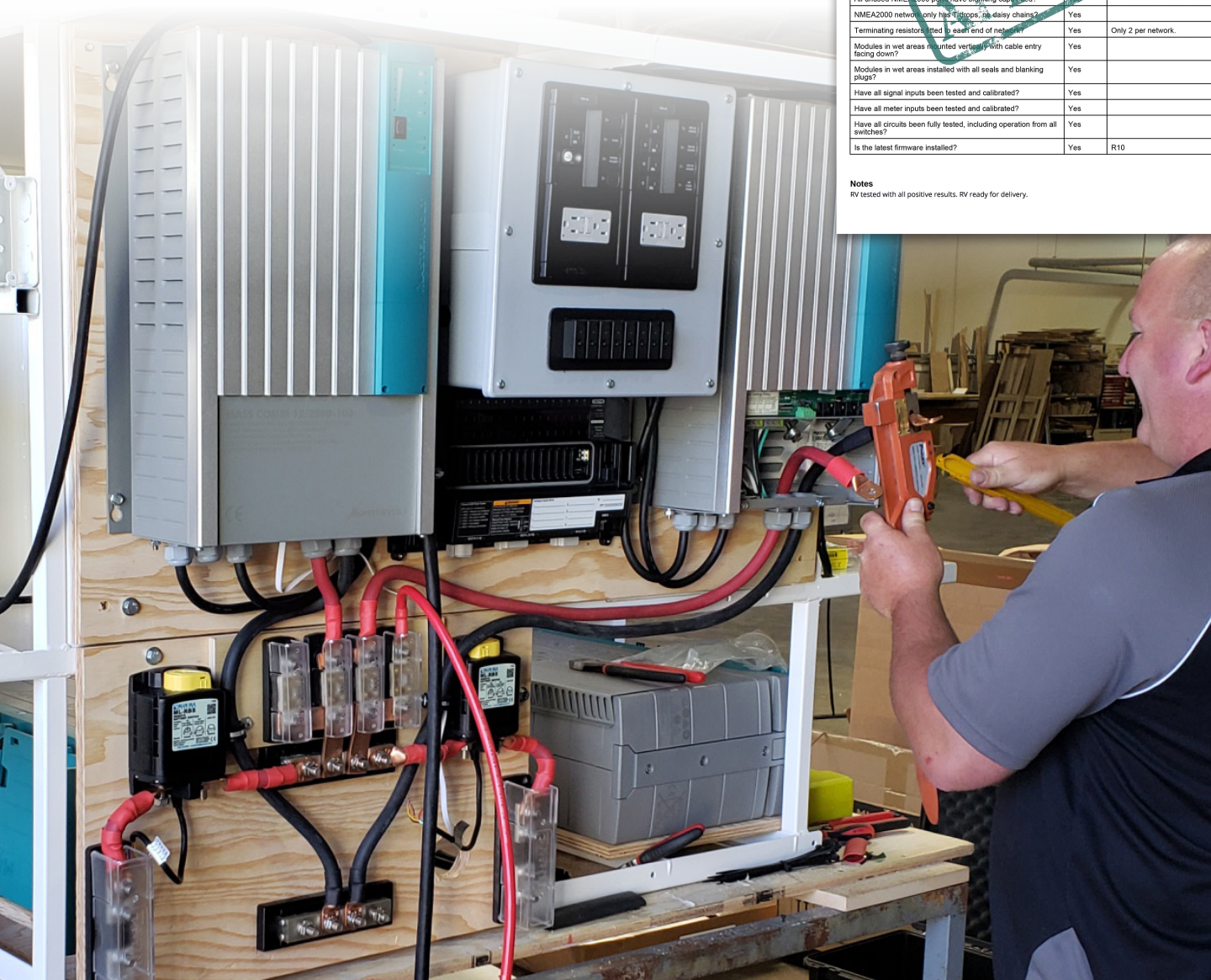


Commissioning Report

Configuration File	CZone COI Suitcase 2016
Manufacturer	XYZ Company
Model	Large RV
Build Number	123456
Destination	U.S.
Inspected By	Mr. Inspector
Date Inspected	Wednesday, May 17, 2017
Tool Version	R10 (6.11.63.0)

Requirement	Yes/No	Comments
NMEA 2000 network voltage is within acceptable limits? (Minimum 10.5V at any point on the network)	Yes	
All NMEA2000 connections are tight?	Yes	
All NMEA2000 tee's are screwed securely to metal surface?	Yes	
All NMEA2000 cables have adequate strain relief?	Yes	
All NMEA2000 connections located in wet areas have cables facing downwards?	Yes	Terminators all pointed down
All unused NMEA 2000 ports have lightning caps fitted?	Yes	
NMEA2000 network only has 1 drop, no daisy chains?	Yes	
Terminating resistors fitted to each end of network?	Yes	Only 2 per network.
Modules in wet areas mounted vertically with cable entry facing down?	Yes	
Modules in wet areas installed with all seals and blanking plugs?	Yes	
Have all signal inputs been tested and calibrated?	Yes	
Have all meter inputs been tested and calibrated?	Yes	
Have all circuits been fully tested, including operation from all switches?	Yes	
Is the latest firmware installed?	Yes	R10

Notes
RV tested with all positive results. RV ready for delivery.



SUPPORT

Total RV Integration

The careful selection and design of a reliable electrical system is a time-consuming task. Systems are becoming increasingly complex, customers demand more and more comfort, and network communication makes virtually any form of integration possible.

Power Products System Integrators focuses on solutions and delivering components designed for system integration. From a battery connected to efficient conversion products with quality wiring to complete digital switching technologies for control and monitoring, all our components are perfectly matched to each other and meet the highest quality requirements.

Power Products System Integrators offers you the certainty of a reliable, tailor-made system comprised of strong links that can be used for any application.



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