

FURUNO

1. Introduction

1-1 What is CZone?

CZone is a brand of **BEP Marine** and offers a wide variety of digital switching technology. **TZT9F/12F/16F/19F** and **TZTL12F/15F/2BB v4.01+** has a digital switching solution with CZone by monitoring and controlling the CZone system from the TZT9F/12F/16F/19F and TZTL12F/15F/2BB screen. This document describes how to set up the CZone page and utilize the monitoring and control features on the TZTL12F/15F/2BB. For more information on CZone and BEP Marine, see their website http://www.bepmarine.com/en/czone.



1-2 System Overview

The CZone system has an NMEA2000 interface that can connect to your NMEA 2000 backbone. Compatible MFDs can monitor the status of battery(s) and control the lights that are connected to the CZone system.



2. Setting Up the CZone System

2-1 CZone System Configuration

Summary

First, the CZone system should be configured with a **PC** using <u>CZone System Configuration Tool</u>. This work is to be done by boat builders, authorized installers, or CZone representatives, so that the TZT9F/12F/16F/19F and TZTL12F/15F/2BB will be ready for CZone monitoring and control by users.

As shown in the following illustration, connect a PC to the NMEA2000 network via an NMEA2000/USB converter.



Preparation on TZT9F/12F/16F/19F and TZTL12F/15F/2BB – DIP Switch Assignment

According to CZone specifications, networked MFDs should be assigned with a <u>unique 8-digit figure</u>, called <u>CZone DIP switch</u>. The figure, which consists of the **combination of "1" and "0"**, should be entered on the TZT9F/12F/16F/19F and TZTL12F/15F/2BB screen.

Make sure that the MFD(s) and CZone system are networked via NMEA2000.

When multiple MFD units are networked, assign unique CZone DIP switch (8-digit figure) to each unit. Access

[Settings] – [Initial Setup] –

[Graphic Instrument Setup] – [CZone] –

[CZone DIP Switch Settings]



Note: The CZone menu is available only when the CZone system is detected in the network.

(1) The following setup page will appear, where you can assign a unique CZone DIP switch (8-digit figure). You can see [ON] or [OFF] settings on the screen. [ON] represents the figure "1", while [OFF] figure "0". In combination of [ON] and [OFF], an 8-digit figure is configured. Assign a unique setting to each unit.

In this example, there are two (2) TZTL12F/15F units. One unit is set to "10000000" and the other "10100010".





(2) Tap [Apply] to save the settings.

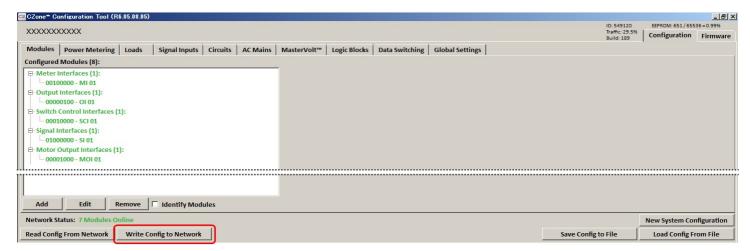
Setup on PC – CZone Configuration Tool

- (1) Make sure that the **CZone System Configuration Tool** is installed in a PC forsetup.
- (2) Execute [CZone System Configuration Tool.exe].



(CZone System Configuration Tool.exe)

- (3) Proceed to CZone system settings in detail.
- (4) After the setup, click [Write Config to Network].



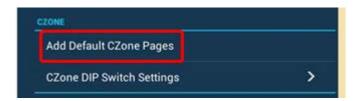
(5) The configuration data will be transferred to the NMEA2000 network. While the TZT2/3 read the data, the message [Receiving Configuration] will appear. Wait until the reading is complete and the message disappears.



2-2 NavNet TZtouch2/3 Configuration

If the message [Receiving Configuration] disappears from the TZT2/3 and the CZone system configuration has been written to the MFD(s). The remaining task is simple on the TZT2/3,

Access [Settings] – [Initial Setup] – [Graphic Instrument Setup] – [CZONE] and tap [Add Default CZone Pages].



The instrument page design will then be preset based on the CZone system configuration made in **Section 2-1**.

3. Monitoring and Controlling CZone

After the setup in **Section 2** is complete, the TZT2/3 is ready to monitor and control the CZone system in the **Instrument** page, **Data Box**, and **Universal Setting** screen. The following table shows available CZone functions from the TZT2 or TZT3.

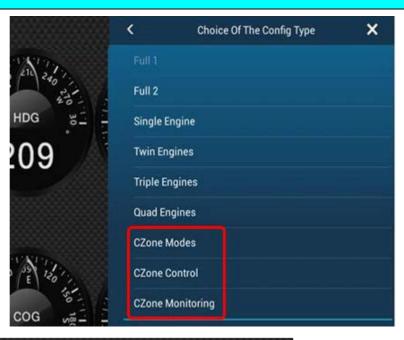
Function	Descriptions
CZone Modes	With the CZone Configuration Tool, multiple operation flows can be customized. As an example, one tap on the "Day Mode" icon changes all the lights onboard, instead of turning on/off individually.
CZone Control	For individual operation such as lighting at a specific spot
CZone Monitoring	For status indication only such as battery, not operational

The CZone display is available in both full and 1/4-sized Instrument pages.

In the example shown on the right, three (3) pages are preset after performing the [Add Default CZone Pages] in Section 2-2.

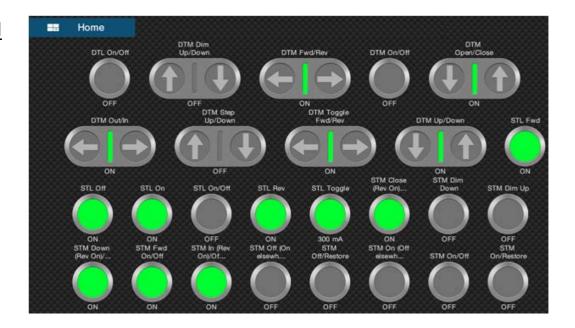
Some example shots screens are shown below.

CZone Monitoring





CZone Control



A beneficial feature with CZone and general NMEA2000 data, is it can be displayed on the same screen. For example, engine information from NMEA2000 sensors can be shown in combination with fuel and battery status on the CZone page.

Combination Samples

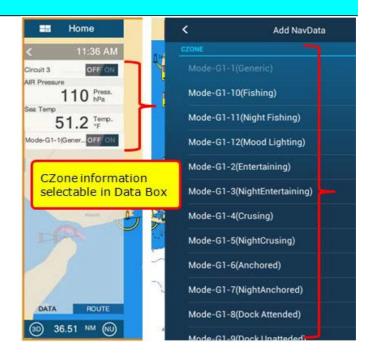




3-2 Data Box

When a simpler layout is required, the **Data Box** can be utilized.

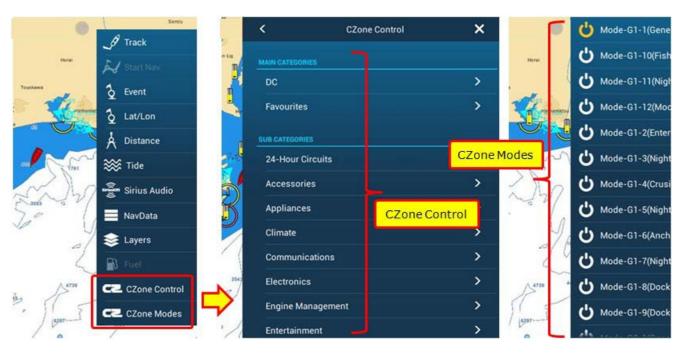
In this example, modes and some sources from CZone are indicated in the Data Box. Mode ON/OFF setting is also available from the Data Box.



3-3 Quick Access to CZone

The Instrument page and data box are not the only options to access CZone. When you do not want to show the CZone screen all the time but operate it sometimes, here is how you can get quick access to CZone.

Swipe the screen from the right edge, you have access to [CZone Control] and [CZone Modes] in the Universal Setting menu. You can temporarily control the CZone and close the page to come back to the original screen.



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