Addendum for
Zeus Touch software updates

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**ZC1 Remote Controller**

With Zeus Touch RTM-2 you can connect a ZC1 to the network and remotely control the Zeus Touch.
A separate manual is included with the ZC1 unit.

**New chart features**

The Zeus Touch is delivered with different cartography depending on region. All units will support Navionics Platinum Plus, TurboView and C-Map (by Jeppesen) via micro-SD card or via the Ethernet network.

Charts can be shared over the Ethernet network, so only one chart card per boat is required.

**Selecting chart type**

Chart type is now selected from the chart options menu, and the selection is set individually for each chart panel.

If you have different chart types available - embedded, in the SD card slot or on the Ethernet - you can show two different chart types simultaneously in a split screen.

> **Note:** To show C-Map charts, you need to select Insight chart type in the menu.

If Insight chart is embedded and you have a C-MAP card in the slot or on the Ethernet network, the system will automatically select the chart with most chart details for your displayed region.

The same applies if you have two Navionics charts available.

**Easy View**

Magnifying feature increasing the size of chart items and text.

In the split screen image below the **Easy View** is turned ON in the right panel.

> **Note:** There is no indication on the chart showing that this feature is active.

**Rock Filtering**

Hides rock identification on the chart beneath a given depth.

This helps you to declutter charts in areas where there are many rocks located at depths well below your vessel draught.
**Depth highlight range**
Select a range of depths between which Navionics will fill with a different color.
This allows you to highlight a specific range of depths for fishing purposes. The range will only be as accurate as the underlying chart data, meaning that if the chart only contains 5 meter intervals for contour lines, the shading will round to the nearest available contour line.

![No Depth Highlight Range](image1.png)
![Depth Highlight Range, 6 m – 12 m](image2.png)

**Shallow water highlight**
Highlights areas of shallow water.
This allows you to highlight areas of water between 0 and the selected depth (up to 10 meters/30 feet).

![No Shallow water highlighted](image3.png)
![Shallow water highlight, 0 m – 3 m](image4.png)

**FLIR camera control**
If a FLIR camera is available on the Ethernet network, you can display the video and control the camera from the Zeus Touch.
A video panel can be set up as a single panel, or as one of the panels on a multiple panel page. Refer to the Zeus Touch Operator manual for more information about how to set up the panels.

![FLIR camera control](image5.png)
Establishing connection with the FLIR video camera

When a video panel is active, the Zeus Touch will automatically recognize a FLIR camera if this is available on the network.

> **Note:** When there is DHCP server present on the Ethernet network, FLIR camera will need to be configured and set to have Static IP Address before the connection can be established. For instructions on how to configure your specific FLIR camera model please refer to FLIR documentation.

> **Note:** Only one FLIR camera can be connected to the Ethernet network at a time.

When you activate a video panel, the system will start searching the network for a FLIR camera.

If the connection later is lost, this will be indicated by a panel key. Tap this key to re-establish the connection.

When the connection is established the menu will change to include access to FLIR camera control.

> **Note:** You can take over camera control from any Zeus Touch unit connected to the Ethernet network.

Panning and tilting the camera

When the connection to the FLIR camera is established, pan and tilt panel buttons appear on the video panel. The left and right arrows control the camera’s pan, while the up and down arrows tilt the camera.

Press one of the arrow buttons on the panel to control the camera. The camera will move as long as you press the button.

Zooming the video image

You zoom the video image by using the **IN/OUT** keys.

There are two different zoom options available, depending on selected FLIR camera source option. Refer The FLIR camera source options below.

**Digital zoom**

Only available when the camera is in Infrared mode.

In this mode the zoom is represented in levels (0, 2 and 4 times zoom). Each press on one of the **IN/OUT** keys will increment or decrement the zoom level.

**Optical zoom**

Available in daylight mode.

In this mode the camera will zoom as long as you press the **IN/OUT** keys.
The FLIR camera source options
The FLIR camera includes both daylight and infrared video sources. When the infrared source is selected, the following options are available:

- **Toggle color scheme**: Cycles through FLIR’s video output color scheme. Each of these schemes maps a different color to a different temperature.
- **Toggle polarity**: Inverts the color scheme. For example, instead of: White = Hot and Black = Cold, it will become Black = Hot and White = Cold.

The camera’s home position
You can set the current pan and tilt position as the camera’s home position. You can later quickly return to this camera position.

Fusion Link Support
FUSION-Link devices connected to the NMEA 2000 network can be controlled from the Zeus Touch. The integration is currently limited and not supporting the following features:

- Multiple FUSION-Link device connectivity
- VHF channel and Sirius weather controls via FUSION-Link devices
- DVD controls through the Zeus Touch

> **Note**: You must enable audio to control audio on your Zeus Touch.

Refer to the Audio section in the Zeus Touch Operator for information about audio control from the Zeus Touch.

A Fusion Link device connected to the NMEA 2000 network should automatically be identified by the Zeus Touch. If not, enable the feature from the advanced option in the system settings menu.
NMEA 0183 Data logging
All serial output sentences sent over the NMEA 0183 TCP connection are logged to an internal file. You can export and review this file for service and fault finding purposes.
The maximum file size is predefined. If you have added several other files to the system (sonar and/or StructureMap recordings, music, pictures, PDF files), this may reduce the allowed file size for the log file.
The system logs as much data as possible within the file size limitation, then it starts overwriting the oldest data.

Exporting the log file
The log file can be exported from the Files dialog.
When you select the Log database you are prompted to select a destination folder and filename. Once accepted the log file is written to the chosen location.

Damping
This feature is used for achieving a more stable reading on the display if there are fluctuations in the data received from the sensors.
The effect is accomplished by averaging the received data. A high value will cause delayed update of the data on the display.

➤ **Note:** This is an internal damping on the display only. It will not change the data on the network or on the NMEA 0183 output. It should be used when the sensor has no internal damping function.

➤ **Note:** If damping for Heading is high when using the autopilot, the captured heading might differ from the heading read on the display (heading capture function).
Configuring the ZG100 GPS Antenna

The ZG100 includes built-in sensors for both heading and position. When a ZG100 is connected to the system, this device will appear in the device list as both ZG100 Antenna and as ZG100 Compass. Both the antenna and the compass devices should be configured from the Zeus Touch.

1. Tap the ZG100 Antenna line in the device list to display the ZG100 Antenna device information dialog
2. Select the Configure button in the device information dialog to get access to the following settings

Enable WAAS/MSAS/EGNOS
Activates the Satellite Based Augmentation System (SBAS), which can further increase accuracy of a GPS fix to within approximately 1 m. Coverage is not worldwide, as currently WAAS covers North America, MSAS covers East Asia (primarily Japan) and EGNOS covers Europe. If you are outside these regions, this function may be turned off in case the SBAS signal is still received but actually worsens fix data.

Position update rate
Adjusted to suit the type of vessel the GPS receiver is fitted to and to minimise unnecessary NMEA 2000 data traffic. For high speed vessels and performance sail boats, the maximum update rate will be desired for measuring performance to the highest possible accuracy. On slower vessels and large networks with a lot of network traffic, high update rates may be of little value. Lower update rates may be preferable to reduce the network load, as well as reduce the visual distraction of constantly changing values.

COG/SOG Filter
This filtering smoothes the output data with averaging. The best setting will depend of type of vessel and user preference.

Instance
If more than one device of the same type exists in the network, the instance number may be changed to a unique number to allow easier identification.

GNSS
Global Navigation Satellite System (GNSS) is any satellite system that is used to pinpoint the geographic location of a user’s receiver anywhere in the world.

1. Return to the ZG100 Antenna device information dialog
2. Select the GNSS panel button to access the GNSS setting

The GPS and GLONASS options may be enabled simultaneously, or one at a time. Generally GPS offers the highest accuracy, but in certain circumstances a better fix may be achieved with both or GLONASS only enabled. A basic indication of performance can be seen on the Satellites page. Once a fix is acquired, EPE and HDOP should be noted and compared - lowest values for each indicate the best position fix.
Compass calibration
Prior to configuring, the ZG100 compass must be calibrated. This is done as described in the GPS Antenna installation guide, or as described below.
Before the calibration is started, ensure that the compass is mounted securely in its permanent location.
The calibration should be done in calm sea conditions and with minimal wind to obtain good results. Follow the on-screen instruction, and use about 60-90 seconds to make a full circle.
1. Start the calibration by selecting the Calibrate button in the device information dialog
2. Follow the online instructions
During the calibration, the compass will measure the magnitude and direction of the local magnetic field.
• If the local magnetic field is stronger than the earth’s magnetic field (the local field is reading more than 100%), the compass calibration will fail
• If the local field is reading more than 30%, you should look for any interfering magnetic objects and remove them, or you should move the compass to a different location. The (local) field angle will guide you to the local interfering magnetic object.

Compass configuration
1. Tap the ZG100 Compass line in the device list to display the ZG100 Compass device information dialog.

Compass offset
The difference between the compass lubber line and the boat’s center line should be compensated for.
2. Find the bearing from the boat position to a visible object. Use a chart or a chart plotter
3. Steer the boat so that the center line of the boat is aligned with the bearing line pointing towards the object
4. Change the offset parameter so that the bearing to the object and the compass readout becomes equal

Note: Make sure that both the compass heading and the bearing to the object have the same unit (Magnetic or True).

HV Display configuration

Note: An H5000 CPU is required for this feature.
1. Tap the HV Display line in the device list to display the device information dialog
2. Select Configure in the device information dialog to get access to the following settings and information

Device
Name of the display. Edit the name via the device information page.

White backlight
Changes the HV display to white backlight mode.

Note: This option is not available for the 10/10 HV Display

Display group
All displays in the selected group will mirror each others settings. Default setting is ‘Default’

Select Data
Select the data type to be shown on the HV Display.

Note: When an HV Display is added to the network the default displayed will be boat speed. If no boat speed data source is available the display will show the word ‘OFF’.

Instance
Differentiate between displays by setting an instance number.
**Speed and sea temperature decimal places**

- **Note:** An H5000 CPU is required for this feature.
  Set the number of decimal places that boat speed and sea temperature will be shown in.

  **Speed decimal places**
  Set the decimal places speed will be displayed in. 1 or 2.

  **Sea Temperature decimal places**
  Set the decimal places sea temperature will be displayed in. 0 or 1.

**Use COG as Heading**

- **Note:** An H5000 CPU is required for this feature.
  If heading data is not available from a compass sensor it is possible to use course over ground from a GPS.
  When selected, COG will be used in the true wind calculations.

- **Note:** The autopilot cannot be operated using COG as the heading source. COG cannot be calculated when stationary.

**Use SOG as Boat Speed**

- **Note:** An H5000 CPU is required for this feature.
  If boat speed is not available from a paddle wheel sensor it is possible to use speed over ground from a GPS.

  When selected SOG will be used in the true wind calculations.

**Polar Tables**

- **Note:** An H5000 CPU with Hercules or Performance level software is required for this feature.
  The H5000 CPU has the ability to store a polar table in its memory. Multiple polar tables can be saved on the Zeus Touch and can be loaded from there onto the CPU.

- **Note:** Only one polar table can be used at any one time.
**Loading a polar table to Zeus Touch memory**

1. Insert a Micro SD card that contains a polar table into the card port on the front of the Zeus Touch.
2. Go to the Files menu to view the contents
3. Tap Memory Card to open the folder
4. Tap on the relevant polar table to select it
5. Tap Copy
6. Once you have copied the file from your portable memory, Tap on the polar directory on the Zeus Touch to save the file to the unit.

**Loading a Polar Table from Zeus Touch into H5000**


   ➤ **Note:** The file entitled ‘H5000 Polar Data’ will always be your current file loaded on the H5000 CPU.

To load a new polar file from the Zeus Touch memory.

1. Select the polar file you want to load from the available polars listed.
2. Tap Load to load the file into H5000 CPU. This will overwrite the current polar stored in the H5000 CPU.

   ➤ **Note:** We recommend you backup your polar files.
**Editing a Polar Table**

It is possible to edit a polar table via Zeus Touch to match the performance of your boat to improve the consistency of the data and performance of your instrument system. You can edit the polar numbers by row or by cell.

1. Select the table you wish to edit via the H5000 Calibration menu.
2. Tap on any cell you wish to edit
3. Use the rotary knob to adjust the number up or down as desired
   To edit an entire row by the same percentage
   1. Tap the cell to the far left of the row under the TWS header.
   2. Tap Edit row
   3. Enter a percentage to adjust the row by.
   4. Tap OK to close the dialog
   5. Close the polar page once complete.

**Backup a Polar Table**

To backup the current polar data being used by the H5000 CPU.

1. Tap H5000 Polar Data in the polars dialog.
2. Tap Backup
3. Name the file
4. Tap Enter to save and close. The file will now be saved to the Polar directory
TWA Correction Table

The TWA Correction table receives its information from the H5000 CPU and does not store this information on the Zeus Touch.

⇒ Note: Any changes made to this table via Zeus Touch will automatically change the H5000 instruments and be stored on the H5000 CPU.

Editing the TWA Correction Table

1. Tap on the cell you wish to edit
2. Use the rotary knob to adjust the number.
3. Change all cells accordingly. When complete exit the page to save changes

TWS Correction Table

The TWS Correction table receives its information from the H5000 CPU instrument data and does not store this information on the Zeus Touch.

⇒ Note: Any changes made to this table via Zeus Touch will automatically change the H5000 instruments and be stored on the H5000 CPU.

Editing the TWS Correction Table

1. Tap on the cell you wish to edit
2. Use the rotary knob to adjust the number.
3. Change all cells accordingly. When complete exit the page to save changes
Heel Correction

- **Note:** An H5000 CPU with Hercules or Performance level software is required for this feature. Edit the heel correction table to improve the accuracy of boat speed data when the boat is heeled over.

Adjust each cell to compensate for the difference in speed when heeling over at differing angles.

1. Tap on the cell you wish to edit
2. Use the rotary knob to adjust the number.
3. Change all cells accordingly. When complete exit the page to save changes.

Measured sources

- **Note:** An H5000 CPU is required for this feature.

Set the quantity and type of boat speed sensor and wind sensor via the Measured Sources dialog. As default the number of sources will be set to 1 for each sensor.

- **Note:** Maximum quantity of each sensor is 2.

Boat speed

To enable dual boat speed sensors.

1. Tap 'Number of boat speed sources' and change it to 2.
2. Tap 'Port boat speed'. Select the Port side sensor from the list.
3. Tap 'Starboard boat speed'. Select the Starboard side sensor from the list.
Wind

Note: An H5000 CPU with Performance level software is required for this feature.
To enable dual wind sensors.
1. Tap ‘Number of wind sources’ and change it to 2.
2. Tap ‘Wind 1’. Select the first wind sensor from the list.
3. Tap ‘Wind 2’. Select the second wind sensor from the list

Dual boat speed calibration - Port / Starboard
1. Insure a Port and Starboard speed sensor is installed.
2. Set the number of boat speed sources to 2 via the Measured sources dialog.
3. Select and allocate the correct sensor to Port & Starboard
4. Select calibration, boat speed via network settings
5. Follow the standard boat speed calibration procedure for each sensor Port & Starboard.