

OPERATOR'S MANUAL

DYNAMIC TRIM CONTROL SYSTEM

SERIES S

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This product is protected by patents, design patents, patents pending, or design patents pending.

Declaration of conformity

This product conforms to the following Electromagnetic Compatibility (EMC) regulations and standards for use in marine environment.

CE	EN 60945
FCC	CFR 47, Part 15, Subpart B
DNV	Std No. 2.4
IACS	E10
GL	GL VI 7.2

Correct installation according to Zipwake documentation is required to ensure that EMC performance is not compromised.

The product follows ABYC recommended practices, E-11: AC and DC Electrical Systems on Boats and H-27: Seacocks, thru-hull fittings and drain plugs.

Documentation and technical accuracy

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Dispose of this product in accordance with the WEEE Directive.

 The Waste Electrical and Electronic Equipment (WEEE)

The WEEE Directive does not apply to some Zipwake parts, however we support its policy and ask you to be aware of how to dispose of this product.

Product Registration

Register your product online at www.zipwake.com/register. Registration enables access to available software upgrades etc.

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DYNAMIC TRIM CONTROL SYSTEM
SERIES S

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1 IMPORTANT INFORMATION

1.1 READING THE OPERATOR’S MANUAL

Make sure that you read and understand this Operator’s Manual before using the Dynamic Trim Control System. If you have trouble understanding any part of the manual, please contact your retailer for further information.

 **IMPORTANT**

Information presented as IMPORTANT may lead to system or property failure or damage if not paid extra attention to.

 **WARNING**

Information presented as WARNING may lead to personal injury if not paid extra attention to.


NOTE!

Information presented as NOTE! is important information about the trim control system’s operation and features.


1.2 GENERAL SAFETY INSTRUCTIONS

The Trim Control System is an accessory that delivers a more comfortable boat ride, better performance and improved fuel consumption. Keep in mind that it under no circumstances takes away the responsibility from the helmsman to maneuver the boat in a safe way.


Take your time to get familiar with the system and its functions in calm waters and get used to how it will make your boat behave before using it under normal conditions.

 **WARNING**


The Trim Control System may affect the course keeping of your boat. Always pay close attention to steering the boat.

 **WARNING**

Never force the Interceptor blades by hand. Watch out for sharp edges when being close to the Interceptors. Turn off the system when the boat is docked, at anchor or hauled out.



1.3 SPECIAL OPERATING NOTES

 **IMPORTANT**

The Dynamic Trim Control System should be the main system handling the running trim of the boat. If the boat has an outboard engine or a sterndrive, their respective trim (propeller shaft inclination) should be set to zero, except possibly at high speeds, or when automatically controlled added when necessary on top of the basic trim provided by the Interceptors.

2 SYSTEM OVERVIEW

The Dynamic Trim Control System Series S incorporates a state-of-the-art family of durable, fast-acting Interceptors and unique 3D controls which provide the driver with unmatched, user-friendly, intuitive and precise control of running trim, heel or heading. The system is fully automatic and significantly enhances the boat's performance, fuel economy, comfort and safety.

KEY FEATURES

AUTO PITCH CONTROL

The system will automatically adjust the trim or pitch angle of your boat, minimizing wave resistance for best performance and comfort at all speeds. (chapter 7)

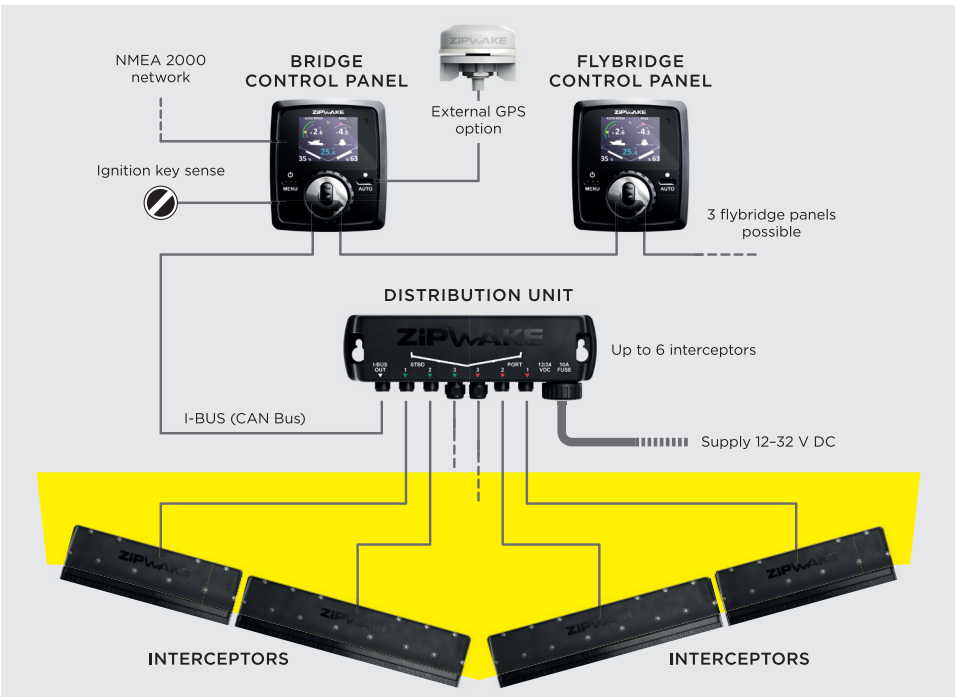
AUTO ROLL CONTROL

The system will automatically eliminate uncomfortable and dangerous roll of your boat. The system constantly works to keep the boat at level or to make balanced (banked) turns. (chapter 8)

MANUAL ATTITUDE CONTROL

The boat's running attitude (chapter 6.1) can be manually controlled by using the control wheels. The Pitch wheel controls the trim or pitch angle, while the Roll wheel normally controls the list or roll angle. In Steering Mode (chapter 6.2), the Roll wheel controls the boat's heading or yaw angle.

SYSTEM COMPONENTS



3 INSTALLATION

Follow the steps in the Zipwake Series S Installation Guide for mounting and connecting Interceptors, Distribution unit, Control panel(s) and extra GPS on your boat.

3.1 CONNECTING A NMEA 2000 GPS

⚠ IMPORTANT The system's automatic control functions stay/turn off when no GPS speed signal is available.

Each Control panel has a built in GPS antenna, but additional GPS signals can be acquired from a NMEA 2000 network GPS source, e.g. a plotter or autopilot. The system will automatically use the source with the best reception. Refer to the Installation Guide wiring diagram for how to connect to a NMEA 2000 network.

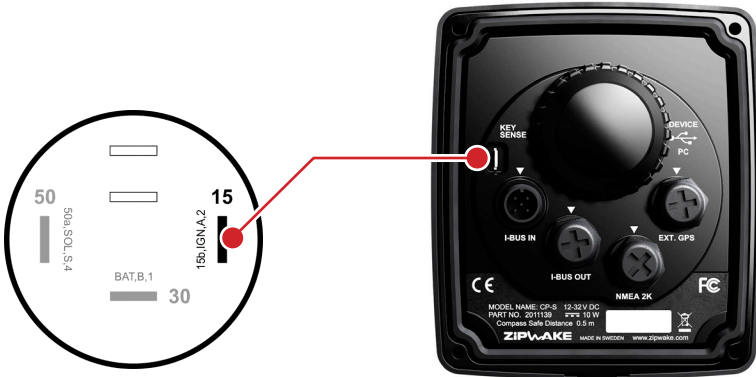
3.2 CONNECTING AN EXTERNAL GPS

In case of just one helm station with a shielding top (roof), and lack of other accessible GPS sources, an external GPS signal from a Zipwake External GPS Antenna (part.no 2011240) may be required. Refer to the Installation Guide wiring diagram for how to connect the external GPS.



3.3 IGNITION SWITCH INSTALLATION

Connect the boat's Ignition Switch to the Key Sense input on the back of the Control panel so that the system is automatically turned on/off when the ignition (engine) is turned on/off. Refer to the Installation Guide wiring diagram.



NOTE!

If an extra Control panel is installed (multiple helm stations, e.g. flybridge), connect the boat's Ignition Switch to the Key Sense input the same way as on the main Control panel.

4 CONTROL PANEL OVERVIEW



4.1 BASIC PANEL FUNCTIONS

- 1

Display
Sunlight readable 2.4" TFT transfective, 320 x 240 pixels, color display.
- 2

Light sensor
The light sensor automatically adjusts the display brightness and shifts between Day and Night Mode when the Display Mode is set to Auto.
- 3

POWER/MENU button
Press and hold for power on/off.
- 4

AUTO button
Press and hold for Auto Pitch Control on/off, then press for Auto Roll Control on/off.
- 5

Roll wheel
Turn for manual roll control. Turn to adjust the Roll Level in Auto Roll Control Mode. Turn to steer the boat in Steering Mode. Press down for special functions: e.g. save current trim and activate Steering Mode.
- 6

Pitch wheel
Turn for manual pitch control.

4.2 MENU NAVIGATION AND SOFTKEY FUNCTIONS

- 3

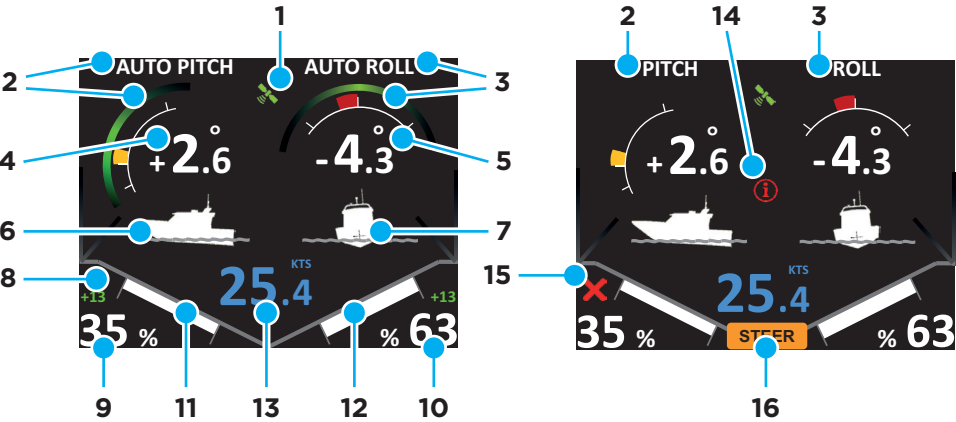
POWER/MENU button
Press to enter the menu.
Softkey for BACK, CANCEL.
- 4

AUTO button
Softkey for OK, NEXT, SELECT, RESET, EDIT, SAVE, START, DONE and all choices in pop-up windows.
- 5

Roll wheel
Turn to scroll between menu selections. Turn to adjust menu values. Turn to the desired speed when editing Auto Pitch Control Curve. Press to select (same as AUTO button SELECT).
- 6

Pitch wheel
Turn to scroll between menu rows. Turn to adjust menu values. Turn to adjust the Interceptor extension at a desired speed when editing Auto Pitch Control Curve.

4.3 MAIN DISPLAY OVERVIEW



- | | |
|----|---|
| 1 | GPS Status: Green – GPS fix ok Yellow – No GPS fix Red – No GPS connection |
| 2 | AUTO PITCH and Green Arc: Indicates that Auto Pitch Control is activated.
PITCH: Indicates manual pitch control - Auto Pitch Control turned off. |
| 3 | AUTO ROLL and Green Arc: Indicates that Auto Roll Control is activated.
ROLL: Indicates manual roll control - Auto Roll Control turned off. |
| 4 | Pitch Angle: Pitch angle indicator in degrees. |
| 5 | Roll Angle: Roll angle indicator in degrees. |
| 6 | Boat Pitch Indicator: Visualizes the current pitch angle of the boat. |
| 7 | Boat Roll Indicator: Visualizes the current roll angle of the boat. |
| 8 | Pitch Offset: Indicates manual pitch offset when Auto Pitch Control is activated. |
| 9 | Port Interceptor Position: Indicates port Interceptor(s) extension in percent. |
| 10 | Starboard Interceptor Position: Indicates starboard Interceptor(s) extension in percent. |
| 11 | Port Interceptor Feedback: Visualizes the current port Interceptor extension. |
| 12 | Starboard Interceptor Feedback: Visualizes the current starboard Interceptor extension. |
| 13 | Boat Speed: Current speed over ground. If no GPS signal - Speed numbers are not shown. |
| 14 | Error Information: Indicates a system error - Check System Information Menu. |
| 15 | Interceptor Error: Indicates an Interceptor error - Check System Information Menu. |
| 16 | STEER: Indicates that Steering Mode is activated. |

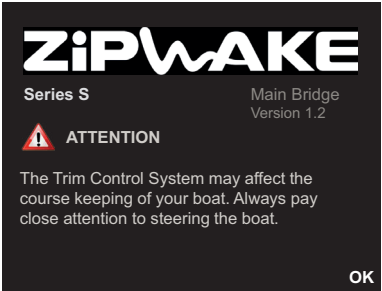
4.4 SPEED PROGRESSIVE CONTROL WHEELS

The Pitch and Roll wheels are speed progressive. A single “tick” on the Pitch or Roll wheel will move the Interceptor blades one percent (1 %). Turning a wheel faster equals more increments per “tick”. The amount of increments when turning a wheel faster depends on the current speed of the boat. Low boat speed equals more increments and higher boat speed less increments, making manual pitch and roll control effective and safe.

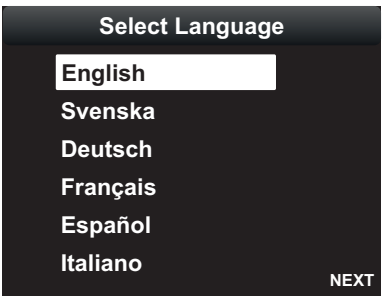
5 FIRST TIME START

5.1 SETTING UP THE SYSTEM

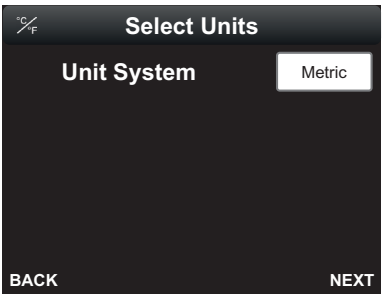
- 1. Press and hold the POWER button until the Zipwake logo appears on the display.
- 2. Read the ATTENTION text and press OK or wait (7 sec) for the next step.



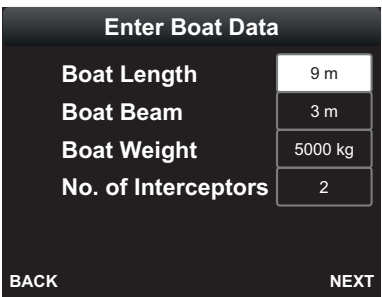
- 3. Select Language and press NEXT.



- 4. Select Units and press NEXT.
Metric: Kilograms, meters
Imperial: Pounds, feet



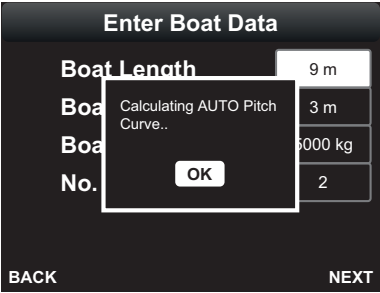
- 5. Enter Boat Length and press NEXT.
- 6. Enter Boat Beam and press NEXT.
- 7. Enter Boat Weight and press NEXT.
- 8. Enter the number of Interceptors installed and press NEXT.



NOTE!

In cases with one Interceptor installed centered on the transom’s centerline, the number of Interceptors will be odd. A center mounted Interceptor will only participate in pitch motions. Refer to the Installation Guide on how to connect a center mounted Interceptor to the Distribution unit

9. The system now calculates the Auto Pitch Control Curve, which tells the system how much the Interceptors shall be extended at each speed, when Auto Pitch Control (chapter 7) is activated. Press OK or wait until pop-up window is closed.



NOTE!

You can always start from the beginning again by doing a Factory Reset (chapter 12.1).

⚠ IMPORTANT The system's automatic control functions need correct boat data to work properly. Make sure to enter the correct data for your boat.

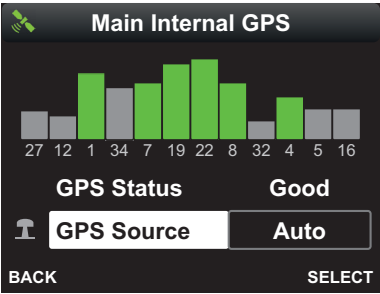
5.2 CHECK GPS SIGNAL

⚠ IMPORTANT When starting the system for the first time, it may take several minutes for the GPS to acquire satellite reception.


- 1. Press the MENU button.
- 2. Select GPS Source and press SELECT.



- 3. GPS Source is set to Auto by default. The system will automatically select the GPS with the best reception and show it in the Menu header.
- 4. GPS Status shall read Good or Excellent. If not, see trouble shooting (chapter 14).



5.3 RESET THE PITCH AND ROLL ANGLES

 **IMPORTANT**

When starting the system for the first time, the pitch and roll angle indicators must be reset for the system's automatic control functions to work properly. When resetting these indicators, the boat must be at level, on shore or in calm water at zero speed (at rest).

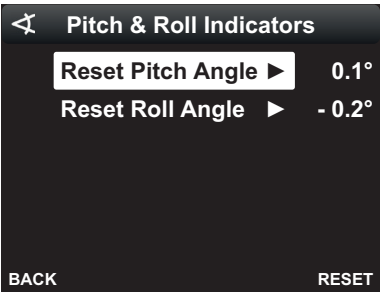
1. Press the MENU button.
2. Select Reset Pitch & Roll and press SELECT.



3. Select Reset Pitch Angle and press RESET. Press YES in pop-up window to confirm.
4. Select Reset Roll Angle and press RESET. Press YES in pop-up window to confirm.

NOTE!

Booth the pitch and roll angles should now read close to 0.0°.



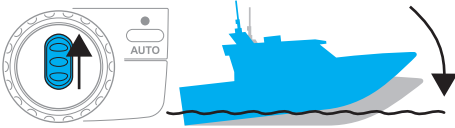
6 MANUAL ATTITUDE CONTROL

6.1 MANUAL PITCH AND ROLL

With the system in manual mode, the boat's running attitude can be manually controlled by using the control wheels. The Pitch wheel controls the trim or pitch angle, while the Roll wheel controls the list or roll angle.

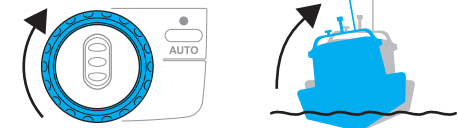
Bow down

Move the Pitch wheel forward



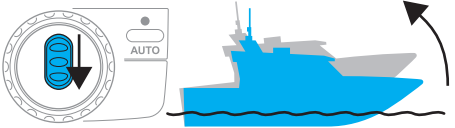
Correcting port list

Turn the Roll wheel clockwise



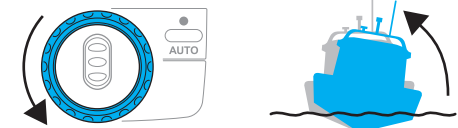
Bow up

Move the Pitch wheel backward




Correcting starboard list

Turn the Roll wheel anticlockwise

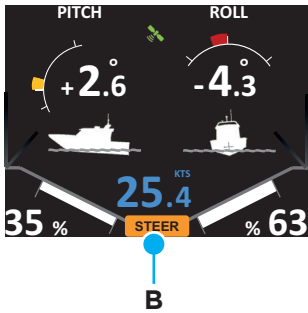
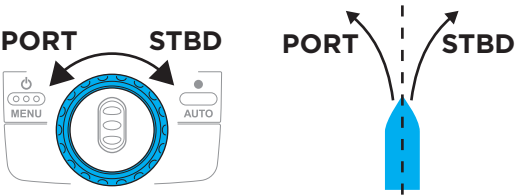
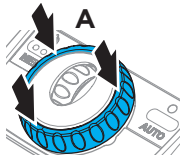


6.2 STEERING MODE

With Steering Mode activated the Roll wheel acts as a steering wheel and controls the boat's heading or yaw angle.

**IMPORTANT** Steering Mode should only be used to make sensible course corrections when running in relatively calm waters. Steering Mode stays/turns off if Auto Roll Control (chapter 8) is activated.

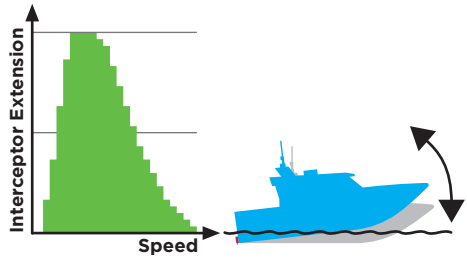
1. To activate Steering Mode, press and hold the Roll wheel (A) until STEER (B) appears on the display.
2. Turn the Roll wheel clockwise to steer to starboard (STBD).
3. Turn the Roll wheel anticlockwise to steer to port (PORT).
4. To turn off Steering Mode, press and hold the Roll wheel (A) until STEER (B) disappears from the display.



7 AUTO PITCH CONTROL

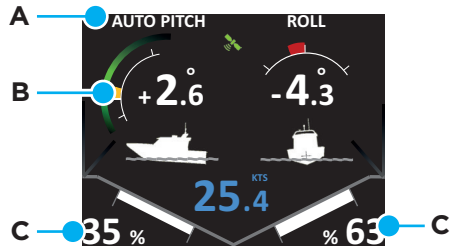
7.1 AUTOMATIC PITCH

With Auto Pitch Control activated, the system will automatically adjust the running trim of your boat, minimizing wave resistance for best performance and comfort at all speeds. The Auto Pitch Control Curve tells the system how much the Interceptors shall be extended at each speed, thereby adjusting the boat's pitch angle as function of speed.



IMPORTANT The system's automatic control functions stay/turn off when no GPS speed signal is available or if other system failure(s) appears. An error message is then shown (blinking) at the top of the main display.

1. To activate Auto Pitch Control, press and hold the AUTO button until AUTO PITCH (A) and the green arc (B) appears on the display.
2. To turn off Auto Pitch Control, press and hold the AUTO button until AUTO PITCH (A) and the green arc (B) disappears from the display.



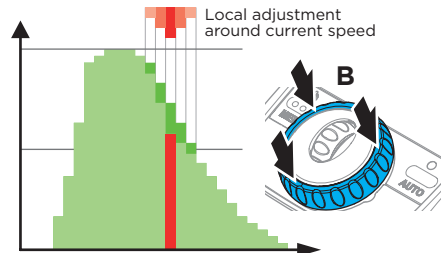
NOTE!

The extensions of the Interceptors (C) are shown in the lower corners of the display.

7.2 OFFSETTING THE AUTOMATIC PITCH

Despite that Auto Pitch Control is activated, you can manually offset the automatic pitch setting to compensate for different sea and loading conditions.

1. To trim the bow down, move the Pitch wheel forward to increase pitch offset (A). To trim the bow up, move the Pitch wheel backward to decrease pitch offset (A).
2. If the adjustment resulted in a better running trim, you may save it by pressing and holding the Roll wheel (B) until the pitch offset (A) disappears. The Auto Pitch Control Curve is adjusted locally around the current boat speed.



NOTE!

Saving preferred trim in this manner, at a few different boat speeds, is a very quick way to build the optimum curve for your boat with its specific loading. Details of the curve can be viewed and adjusted from the menu page (chapter 7.3).

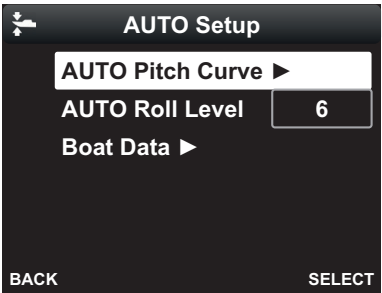
7.3 EDIT THE AUTO PITCH CONTROL CURVE

The Auto Pitch Control Curve tells the system how much the Interceptors shall be extended at each speed, thereby adjusting the boat's pitch angle as function of speed. When starting the system the first time (chapter 5), a default curve is calculated based on your boat data (length, beam, weight). The Auto Pitch Control Curve can be viewed and fine tuned from the menu page.

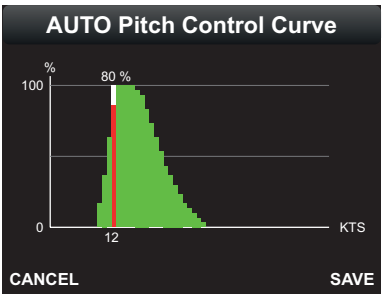
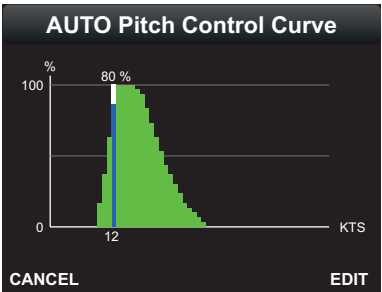
- 1. Press the MENU button.
- 2. Select AUTO Setup and press SELECT.



- 3. Select Auto Pitch Curve and press SELECT.



- 4. Press EDIT to enter edit mode.
- 5. Turn the Roll wheel to move to the desired speed.
- 6. A: Turn the Pitch wheel forward to increase Interceptor extension and lower the bow (decrease pitch angle).
or
B: Turn the Pitch wheel backward to decrease Interceptor extension and rise the bow (increase pitch angle).
- 7. Repeat steps 5-6 if more than one setting is to be adjusted.
- 8. Press SAVE to update the curve.



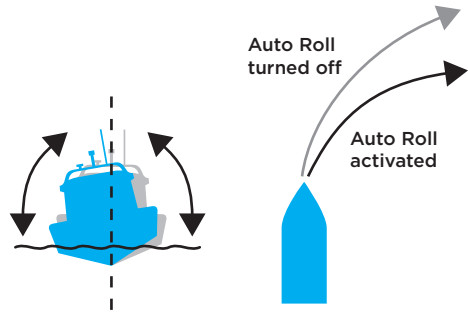
NOTE!


To reset the Auto Pitch Control Curve to the original (default), make a Factory Reset (chapter 12.1).

8 AUTO ROLL CONTROL

8.1 AUTOMATIC ROLL

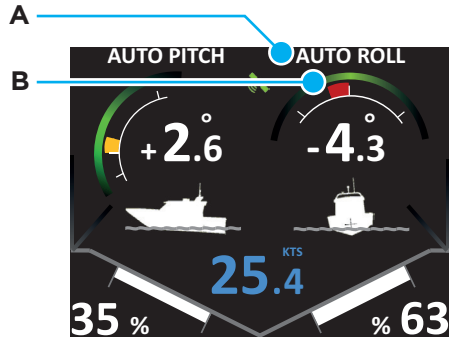
With Auto Roll Control activated, the system will automatically eliminate uncomfortable and dangerous roll of your boat. The system constantly works to keep the boat at level or to make balanced (banked) turns. For boats that tend to heel to much inward in turns, the system will help the boat to make sharper turns.



**IMPORTANT**

Auto Roll Control can only be activated if Auto Pitch Control is activated and it is only active at speeds above 8 knots. The system's automatic control functions stay/turn off when no GPS speed signal is available.

1. Activate Auto Pitch Control (chapter 7)
2. To activate Auto Roll Control press the AUTO button. AUTO ROLL (A) and the green arc (B) appears on the display.
3. To turn off Auto Roll Control press the Auto Button. AUTO ROLL (A) and the green arc (B) disappears from the display.



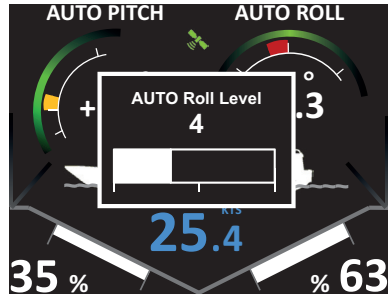
8.2 AUTO ROLL LEVEL

With Auto Roll Control activated the activeness can be adjusted from level 1-10. Increase or decrease the Roll Level depending on sea and loading conditions.

1. Turn the Roll wheel clockwise to increase the Roll Level.
Turn the Roll wheel anticlockwise to decrease the Roll Level.
2. The Roll Level indicator times out after a few seconds and the Roll Level is saved.

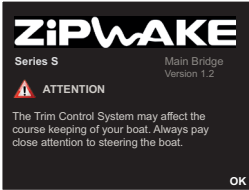
NOTE!

Roll Level 5 equals normal (default) activeness. Try different Levels until you are satisfied. The selected Roll Level is saved until you select a new Level.



9 TURN ON THE SYSTEM

- 1. Press and hold the POWER button until the Zipwake logo appears on the display.
- 2. Read the ATTENTION text and press OK or wait (7 sec) for Main Display.



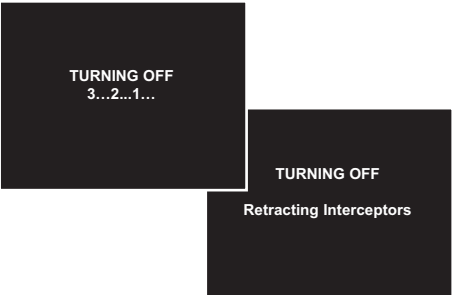
NOTE!

When the boat’s Ignition Switch is connected to the Key Sense input on the back of the Control panel (chapter 3), the system is automatically turned on when the Ignition Switch (engine) is turned on.

10 TURN OFF THE SYSTEM

10.1 TURN OFF - SINGLE CONTROL PANEL

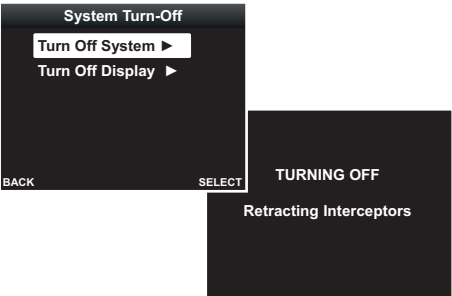
- 1. To turn off the system press and hold the POWER button.
- 2. A countdown appears on the display.
- 3. Keep the POWER button pressed until the countdown reaches 1 or the system will resume to the main display.
- 4. The system is turned off and the Interceptors are automatically retracted.



10.2 TURN OFF - MULTIPLE CONTROL PANELS

If more than one Control panel is installed, choose to either turn off the system or only turn off the current display.

- 1. Press and hold the POWER button until System Turn-Off menu appears.
- 2. A: Select Turn Off Display and press SELECT to turn off the display. Press the POWER button to reactivate the display or
B: Select Turn Off System and press SELECT to turn off the system. The system is turned off and the Interceptors are automatically retracted.



10.3 IGNITION SWITCH INSTALLATION

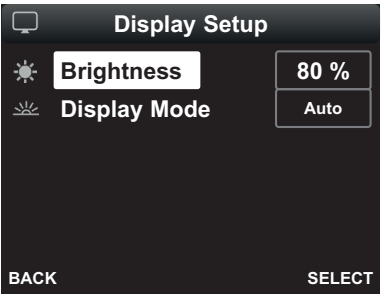
When the boat’s Ignition Switch is connected to the Key Sense input on the back of the Control panel (chapter 3), the system is automatically turned off when the Ignition Switch (engine) is turned off.

11 DISPLAY SETTINGS

- 1. Press the MENU button.
- 2. Select Display Setup and press SELECT.

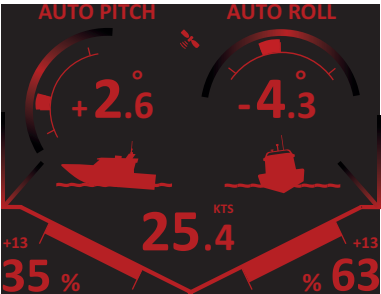


- 3. Select Brightness and press SELECT to adjust the display brightness 1-100%.
The menu choice is not available if Display Mode is set to Auto.
- 4. Select Display Mode and set it to Auto (default), Day or Night.



NOTE!


With the Display Mode set to Auto, the Display automatically adjusts the Brightness depending on the ambient light and switches between Day Mode (normal screen) and Night Mode (red screen).



12 ADVANCED SETUP

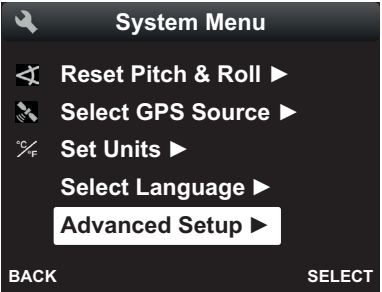
12.1 FACTORY RESET

To reset the settings and the Auto Pitch Control Curve to default, make a Factory Reset.

 **IMPORTANT**


A Factory Reset resets all values and settings in the system. You can make a backup (chapter 12.2) and reinstall either the settings or the Auto Pitch Control Curve after a Factory Reset has been made.

1. Press the MENU button.
2. Select Advanced Setup and press SELECT.
3. Select Factory Reset and press SELECT.
4. Press OK in pop-up window to confirm.
5. The system will now reset all the settings and turn off.
6. Start the system and make a new setup (chapter 5).

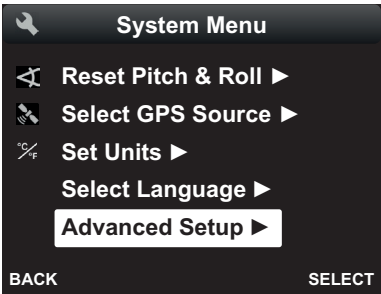


12.2 IMPORT/EXPORT DATA

Make a backup of the Auto Pitch Control Curve and settings to a USB memory stick for reinstallation and/or to transfer settings between Control panels/boats.

 **IMPORTANT** A USB memory stick with FAT32 formatting must be connected to the system when importing/exporting data.

- 1. Press the MENU button.
- 2. Select Advanced Setup and press SELECT.



- 3. Remove the USB (A) connector cover on the back of the Control panel and connect a USB memory stick to the DEVICE connector before export/import.



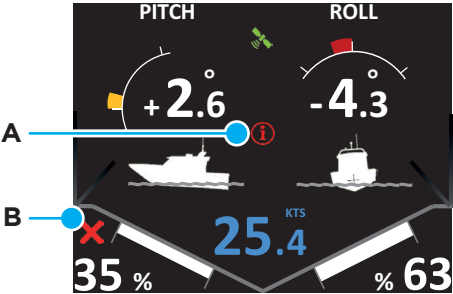
- 4. Select Pitch Curve Imp/Exp or System Config Imp/Exp, press SELECT and follow the steps.
- 5. Remember to remove the USB memory stick and attach the connector cover when done.



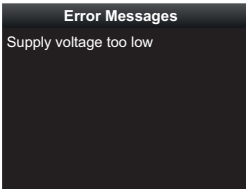
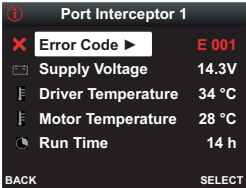
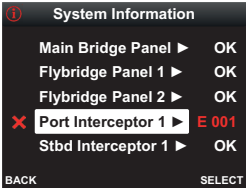
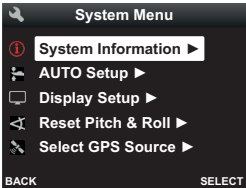
14 TROUBLESHOOTING

14.1 SYSTEM ERROR INFORMATION

A blinking error symbol (A) indicates system errors that need attention.
An Interceptor error symbol (B) indicates an error with one or more Interceptors.
For a complete list of error descriptions and Corrective actions see chapter 14.3.

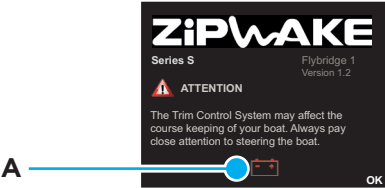


1. Press the MENU button.
2. Select System Information and press SELECT.
3. Select a row with an error code and press SELECT.
4. Select the error code and press SELECT.
5. Read the error message(s) and go to chapter 14.3 for Corrective actions.



14.2 BATTERY WARNING

Check the battery condition if the battery error symbol (A) is shown when the system is turned on.



14.3 ERROR CORRECTIVE ACTIONS

Check the Corrective actions below to resolve problems. Visit www.zipwake.com for latest product information, software upgrades and error Corrective actions. If the problem remains, contact your retailer for support and/or replacement units.

Control Panel Error Messages

Supply voltage too low

- Check battery supply voltage (>12V).
- Check the power cable connection to the battery.

Supply voltage too high

- Check the Distribution unit power cable.
- Check battery supply voltage (12-32V).

Button/wheel failure

- Check if any buttons or wheels are stuck.
- Use fresh water to spray and remove any dirt on the Control panel front.

Acc/gyro error

- Turn off the system for 10 minutes, then restart.

Panel temperature too high

- Check if the panel is mounted close to any heat source.
- Try mounting the panel in another (cooler) location.

Program error

- Restart the system.
- Visit www.zipwake.com for upgrades resolving the issue.

Interceptor not connected

- Check the servo cables for damage.
- Clean and reattach the connectors on the Distribution unit.

Communication error

- Check the system cables for damage.
- Clean and reattach connectors on the Distribution unit and Control panels.

No GPS signal

- Check GPS source and GPS status on the Select GPS Source menu page (normally set to Auto).
- If an external GPS or NMEA 2000 GPS is installed, check the cables for damage.
- Check that the NMEA 2000 GPS source is turned on.
- Clean and reattach the Control panel connectors.

Interceptor/Servo Unit Error Messages

Supply voltage too low

- Check battery supply voltage (>12V).
- Check the power cable connection to the battery.
- Check the Distribution unit power cable.

Supply voltage too high

- Check battery supply voltage (12-32V).

Interceptor stroke too small

- Restart the system.
- Remove the Interceptor front and check that the blades are moving correctly. Remove any growth, dirt or paint.
- Reinstall the front, run the Interceptor and check that the blades are moving correctly.

Interceptor stroke too big

- Restart the system.
- Remove the Interceptor front and check that the blades are moving correctly. Remove any growth, dirt or paint.
- Reinstall the front, run the Interceptor and check that the blades are moving correctly.

Electronics failure

- Restart the system.
- Visit www.zipwake.com for upgrades resolving the issue.

Overload, interceptor stuck

- Check excessive growth, dirt or paint on the Interceptor and between blades.
- Remove the Interceptor front and check that the blades are moving correctly.
- Reinstall the front, run the Interceptor and check that the blades are moving correctly.

Motor drive temperature high

- Turn off the system for 10 minutes, then restart.

Motor temperature high

- Turn off the system for 10 minutes, then restart.

Motor HALL sensor failure

- Turn off the system for 10 minutes, then restart.

Motor drive failure

- Turn off the system for 10 minutes, then restart.

14.4 OTHER ERRORS

The system's automatic control functions stay/turn off or turn on/off intermittently

(Can happen if there is a system error or if the GPS speed signal is missing)

- Check error message blinking when turning on Auto Pitch Control.
- Check System Information Menu and error messages above to resolve the problem.

Auto Pitch Control turns on/off intermittently


(Can happen if the GPS has a weak signal or poor satellite coverage)


- Check GPS status in the Select GPS Source Menu. Set GPS Source to Auto.
- Connect a NMEA 2000 GPS source if available. Refer to the Installation Guide.
- Install Zipwake external GPS if the Control panel is mounted under a shielding top (roof). Refer to the Installation Guide.

The boat list to port when the roll wheel is turned to starboard (clockwise) at speed

- Check how the Interceptors are connected to the Distribution unit. Refer to the Installation Guide for correct connection.

15 MAINTENANCE


 **WARNING** Never force the Interceptor blades by hand. Watch out for sharp edges when being close to the Interceptors.

 **IMPORTANT** Always use the controls to move the inteceptor blades. Never force the Interceptor blades by hand.


15.1 LAUNCH

Paint the Interceptors with anti-fouling paint before launching your boat. If possible use spray paint (recommended). When the paint is dry, remove excessive paint between the Interceptor blades. Before launching the boat, move the Interceptor blades full strokes using the controls to ascertain that they move freely and correctly. Refer to the Installation Guide for more information.

15.2 HAUL-OUT

 **IMPORTANT** When your boat is hauled out, do not place any supporting blocks pushing against the Interceptors or blocking the Interceptor blades.

After your boat is hauled out, use a pressure washer to remove any growth or dirt on the Interceptors. Fully extend the Interceptor blades using the controls and pressure wash them. Check the blades for damage. When finished washing, retract the Interceptor blades by turning off the system. Check that the cable covers are in place and not damaged. When the boat is hauled out after being in the water for extended time, it is recommended that the Interceptor fronts are temporarily removed and the inside of the Interceptors are pressure washed thoroughly.

 **IMPORTANT** When cleaning the Control panel:

- Only use fresh water and wipe with a soft towel when cleaning the front of the Control panel(s).
- Do not wipe the display/screen with a dry cloth, as this could scratch the screen coating.
- Do not use abrasive, acid or ammonia based products.
- Do not use a pressure washer.

16 SYSTEM UPGRADE

The Dynamic Trim Control System software can be upgraded.
Visit www.zipwake.com to check for new software releases.

⚠ IMPORTANT The software upgrade file must be saved to the root of an USB memory stick with FAT32 formatting when upgrading the system.

1. Download a software upgrade file from www.zipwake.com.
2. Copy the software upgrade file to the root of the USB memory stick.
3. Remove the USB (A) connector cover on the back of the Control panel and connect the USB memory stick to the DEVICE connector.
4. Restart the system and follow the instructions on the display.
5. Remember to remove the USB memory stick and attach the connector cover when done.



NOTE!

Your System Configuration (user settings) and Auto Pitch Control Curve will not be erased when you upgrade to another software version. You can also downgrade to a previous software release.

Visit www.zipwake.com for additional information such as:

- Operator's Manual and Installation Guide in different languages
- Product specification, including list of accessories and spare parts
- Application examples and Interceptor mounting options
- Drawings and 3D models of system components
- Software upgrades for your Dynamic Trim Control System

ZIPWAKE

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