Information Center User's Guide

ROTAX 4-TEC 150, 200, 250 (ECT)

ACE 60, 90 (ECT)

Rev. A

ROTAX®

Safety Information

This user's guide may contain the following safety messages:

⚠ DANGER

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

Indicates a hazardous situation which, if not avoided, could result in minor or moderate personal injury.

NOTICE

Indicates an instruction which, if not followed, could severely damage engine components or other property.

This user's guide contains information to prevent personal injury and damage to equipment. Use this guide in combination with the boat and outboard operator's guides. Always follow safety and operation information.

TABLE OF CONTENTS

Product Description

The *Rotax*® Information Center is a cluster of information gauges, indicator lights and a digital screen to display information to the operator.

Text messages can be displayed in English, French, or Spanish, and the units of measurement can be displayed in metric or imperial.

The operator can view several indications such as RPM, fuel level, and engine temperature. The information center can also be used to navigate through and select several functions, modes of operation, and change certain settings and system parameters.

Indicator lamps advise the operator of selected functions or warning indicators.

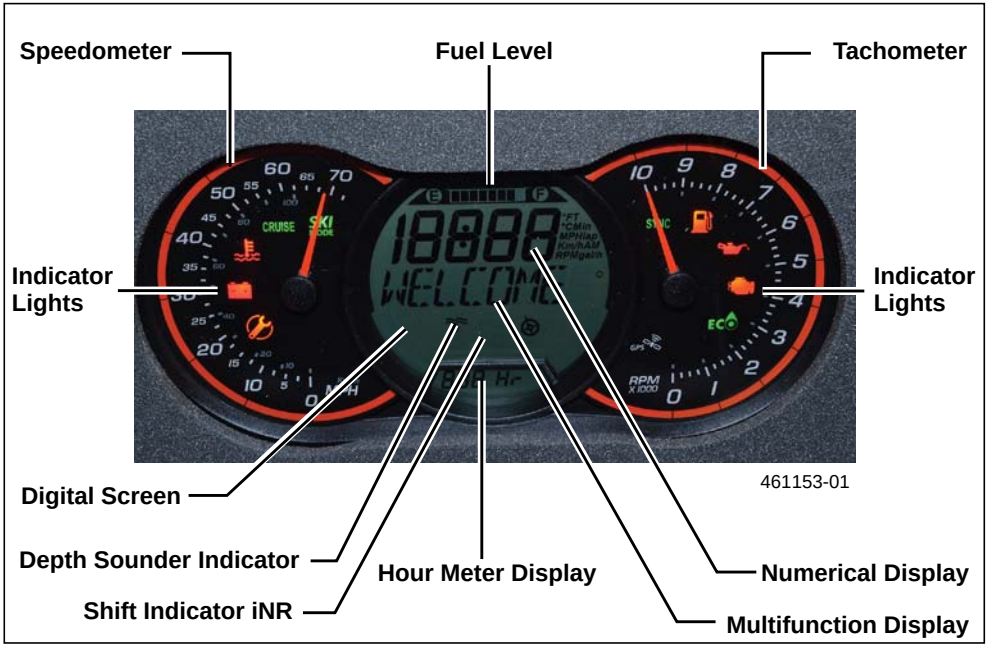
The information center incorporates a GPS (global positioning system) compass and speedometer indications, and provides signals to other systems as required.

If a fault is detected during the self-test function, an error message will be displayed, an indicator light may come on, and an audible signal (beep code) may be heard.

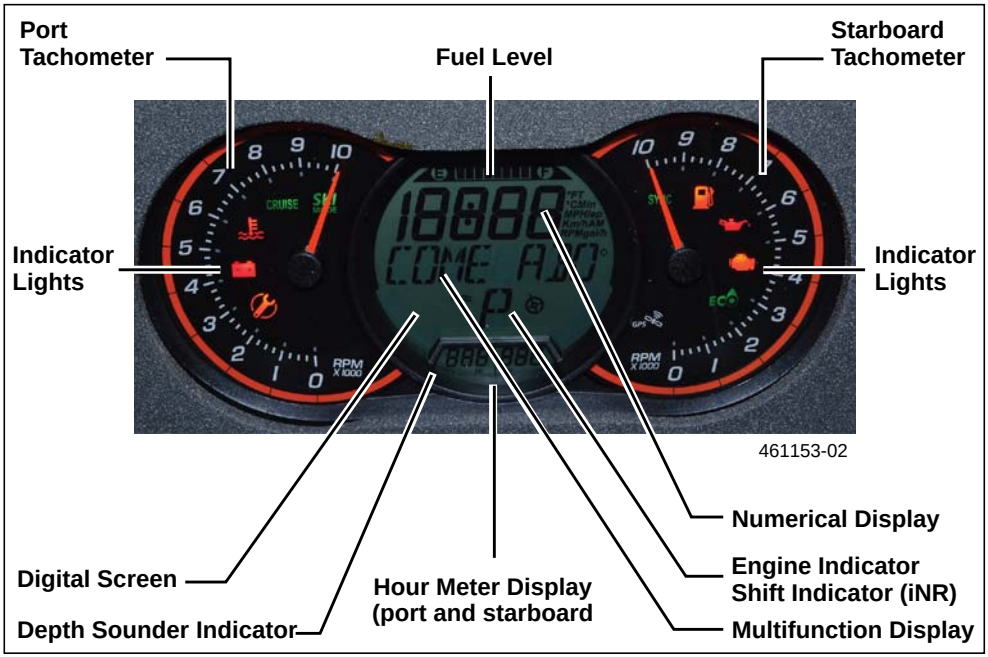
At start-up, all LCD segments and indicator lights will turn on for 3 seconds. This allows the user to validate proper operation.

NOTE: The information center illuminates when the navigation lights are used.

Single Engine Information Center



Dual Engine Information Center



Tachometer

The tachometer(s) provide an analog indication of the revolutions per minute (RPM) of the engine(s).

Speedometer

The speedometer provides an indication of speed in miles per hour (MPH) or kilometers per hour (km/h).

On a single engine information center it is located on the left side of the analog gauge cluster. On a dual engine information center it is located in the digital display.

Indicator Lights

Indicator lights are located in the speedometer and tachometers and display a selected function, a normal condition, or a system anomaly.

An indicator light may be accompanied by a scrolling message in the multi-function display. See table below for usual indicator light information.

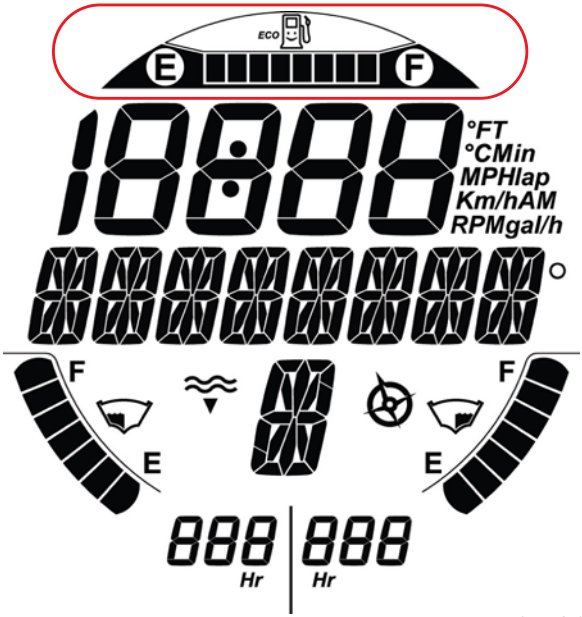
Indicator Light	Display Area		Message Display	Description
	Single Engine Information Center	Dual Engine Information Center		
	Speedometer	Left Side Tachometer	SKI MODE related messages	When ON: SKI MODE is engaged. When blinking: SKI MODE is selected but not engaged.
	Speedometer	Left Side Tachometer	CRUISE MODE related messages	CRUISE mode engaged.
	Speedometer	Left Side Tachometer	Engine or exhaust system overheating (H-TEMP). Audible alarm will sound and limp-home mode will activate.	
	Speedometer	Left Side Tachometer	Low/High battery voltage (12 V LOW/HI)	
	Speedometer	Left Side Tachometer	Maintenance required or Service Vehicle Soon (Fault)	Could be turned on by the maintenance counter or by a non-emission related fault that is active or has been in the system and not completed three healing drive cycles.

Continued on next page.

Indicator Light	Display Area		Message Display	Description
	Single Engine information center	**Dual Engine information center**		
	Tachometer	Right Side Tachometer	–	Indicates engine speed synchronization is requested to ECM's
	Tachometer	Right Side Tachometer	LOW FUEL	Low fuel level, approx. 25%
	Tachometer	Right Side Tachometer	Low Oil Pressure	Engine is in a low oil pressure condition.
	Tachometer	Right Side Tachometer	Check Engine	An emission related fault is active or has been active in the system and has not completed three healing drive cycles. Refer to the Fault Code menu.
ECO	Tachometer	Right Side Tachometer	–	Indicates engine is set to operate in most efficient range.

Fuel Level

A bar gauge located on the top of the digital screen indicates the amount of fuel.



461153-03

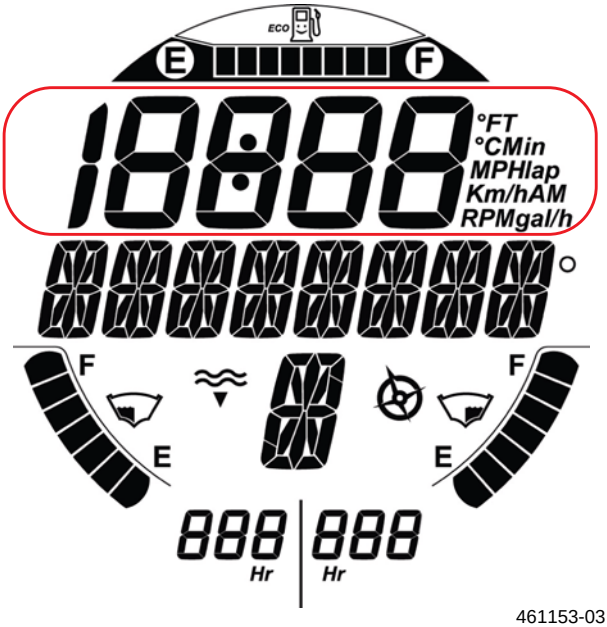
When the fuel tank is full, 8 segments (bars) of the indicator are turned ON. When two segments of fuel is indicated (approximately 25% fuel tank capacity) the low fuel indicator light will turn ON. An audible warning (one long beep) will be heard periodically when the low fuel indicator is ON.

Numerical Display

The numerical display provides indications based on the selection made from the DISPLAY menu. The data shown is:

Engine(s)	Fuel Consumption - Instant
Clock*	Engine(s) temperature
Fuel Consumption - Average*	Boat speed

*Requires input from a GPS antenna.



461153-03

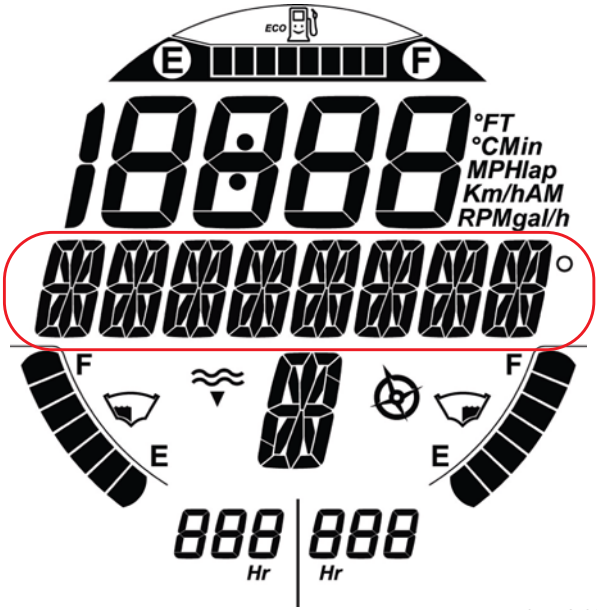
When the information center is turned ON, the numerical display defaults to the last function chosen by the operator.

The numerical display is also used to show Ramp speed when in the SKI MODE and Target speed while in the CRUISE MODE.

Multifunction Display

The multifunction display provides an indication of compass heading or scrolling messages.

It also displays a menu for the selection of various functions which, permits changing the numerical display indication, system modes of operation, settings, and displaying system fault codes.



461153-03

NOTE: The compass heading selection is only available if a GPS antenna is connected to the information center.

⚠ WARNING

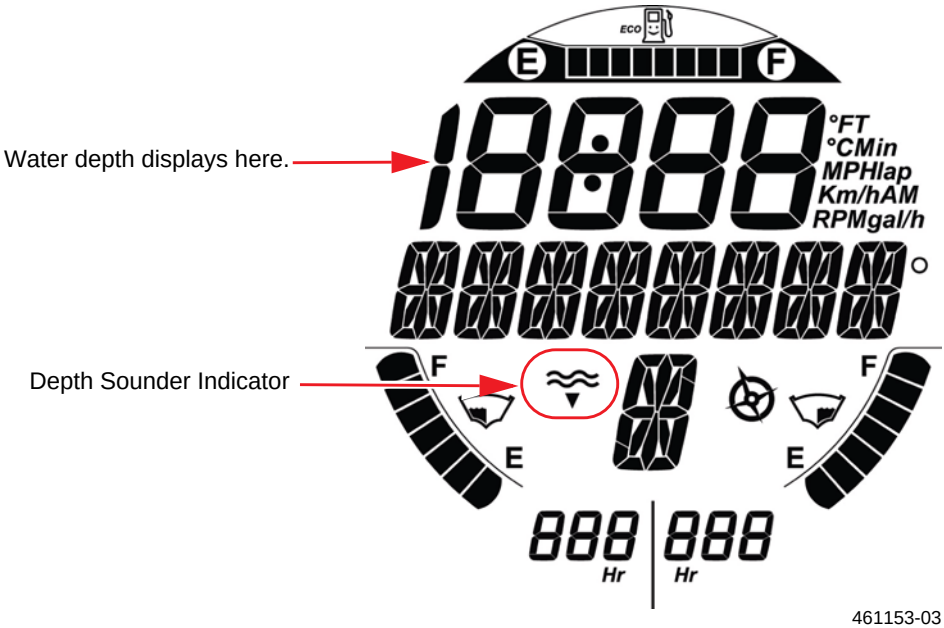
Do not configure the information center when the boat is underway. Configuring the information center when the boat is underway can result in a loss of situational awareness. A loss of situational awareness may result in death or serious injury to the occupants and operator.

Depth Sounder Indicator

If the vessel is equipped with a depth sounder, the numerical display can be selected to provide an indication of the water depth. The selection of water depth is only available if a depth transducer is connected to the information center.

NOTE: Under certain conditions, the digital screen may stop displaying. The digital screen's ability to display the depth depends on the conditions of use.

To activate depth indication, refer to CHANGING NUMERICAL DISPLAY INDICATION.

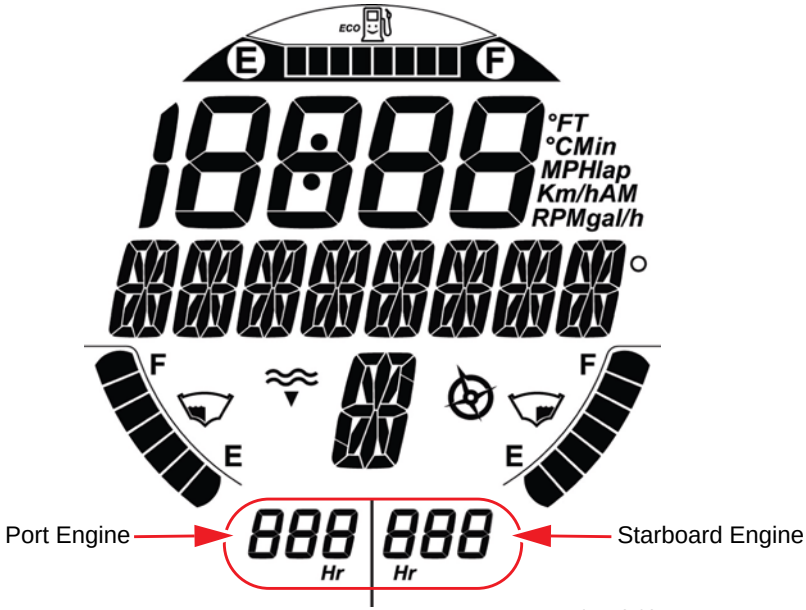


⚠ WARNING

Never use the depth sounder as a warning device to ride in shallow water.

Hour Meter Display

The Hour Meter continuously displays engine time in hours (Hr).



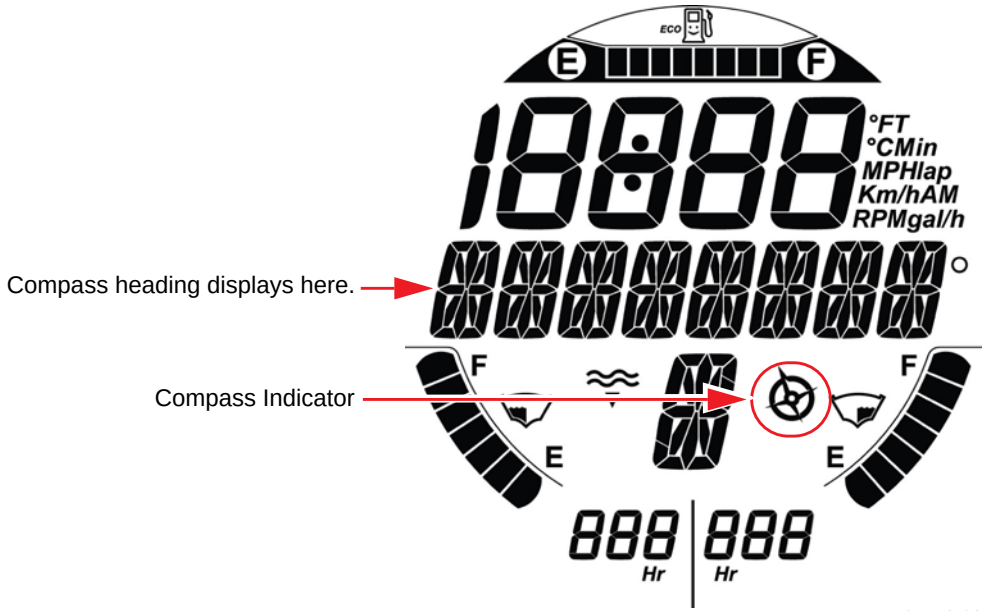
Compass

The compass heading selection is only available if a GPS antenna is connected to the information center.

A GPS incorporated in the information center provides the indication in the multifunction display.

The cardinal points, intermediate cardinal points, as well as the azimuth the boat is traveling are displayed in the multifunction display by default when the boat is moving.

For a compass indication to be displayed, the GPS must have a link with the navigation satellites.



461153-03

NOTE: The compass indication is only available above 5 km/h (3 MPH).

⚠ WARNING

Use the compass as a guide only, do not use for navigation purposes.

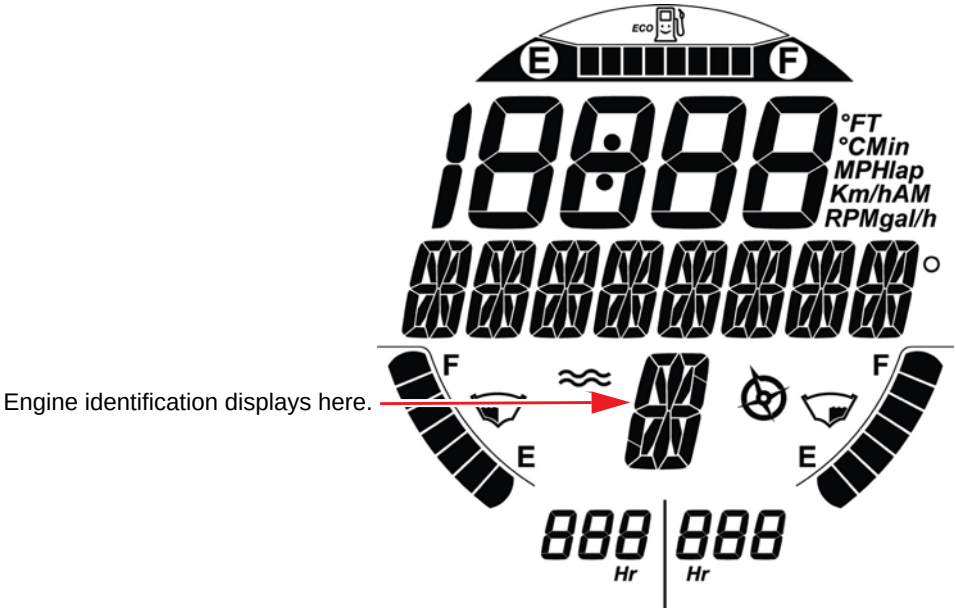
Engine Identification

This indication identifies which engine is associated with the information from the numerical display.

P = Port Engine

S = Starboard Engine

This indication will not display on a single engine information center.



461153-03

Selecting Functions

When operating at speed, the multifunction display normally provides an indication of the compass direction and azimuth the boat is traveling (if the embedded GPS antenna received the proper satellite signals).

To select the various functions, press the MODE button repeatedly until the desired menu is visible. The menu options are:

DOCKING MODE	DISPLAY
SKI MODE	SETTINGS
CRUISE MODE	FAULT CODES (only available when faults are active)
ECO Mode	

Press the SET button to enter the selected option.

NOTE: The fault code function is available only when there is an active fault. The settings function is available at idle or when the engine is OFF.

Boat functions are enabled through a CAN Configuration Key (CCK) Module which is added into the CAN network.

CCK, P/N 461337, includes SKI, CRUISE, DOCKING & ECO modes.

CCK, P/N 461340, includes CRUISE & DOCKING modes.

Changing The Clock

1. Press the MODE button repeatedly until SETTINGS is displayed.

461153-04

2. Press the SET button to validate your choice. The hour and the message CLOCK will be displayed.

461153-05

3. Press the SET button again, the message CHANGE CLOCK will be displayed.

461153-06

4. Use UP / DOWN switch to adjust the clock. Only the hour indication and be changed.

5. Press MODE or SET button to save the clock setting and return to the main display.

461153-07

Changing Numerical Display Indication

To change the indication in the numerical display, press the MODE button repeatedly until DISPLAY is visible in the multifunction display. Press SET to select the Display menu.

Display Menu Sequence:

- Depth (when available)
- RPM
- Speed
- Engine Temperature
- Instant Fuel Flow
- Average Fuel Flow
- Clock

Move the Up / Down switch until the preferred indication is visible in the multifunction display.

Press the SET button to select and save the preferred indication, or wait for the display function to time out. The last indication visible will be automatically saved. The numerical display will then switch to the new indication with a small abbreviation of the indication type to its right:

FT or M	°F or °C
RPM	Gal/h or L/h
MPH or km/h	AM or PM

For example, to display the SPEED information:

- Press the MODE button repeatedly until DISPLAY is displayed, then press SET button once
- Lift up the UP and DOWN switch until SPEED is displayed
- Press the SET button to confirm and save the selection

Main Menu

Main menu selections:

461153-11

Docking Mode

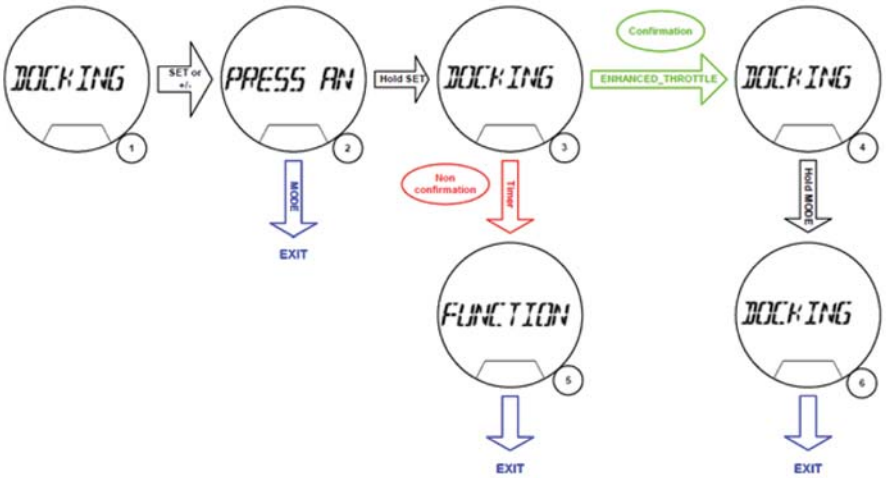
To activate the Docking Mode:

- Reduce throttle speed to idle
- Press the Mode button until Docking is displayed
- Press the Set button once, the following message will be displayed: “Hold Set To Activate Or Mode To Exit”
- Press and hold the Set button until Docking reappears

To cancel Docking Mode

- Press and hold the Mode button
- Move the throttle/shifter handle to the NEUTRAL position

Docking mode selections:



461153-12

SKI Mode

The SKI Mode selection is only available if a GPS antenna is connected to the information center.

The SKI Mode allows the driver to adjust the launch intensity and set target speed for different rider skill levels and tow sports while maintaining a constant speed.

The SKI Mode offers 5 acceleration curves with the slowest at Ramp 1 increasing to setting Ramp 5. For each Ramp, a predetermined speed range is available.

RAMP	Approximate Speed (km/h)	Approximate Speed (mph)
1	10 to 35	6 to 22
2	15 to 45	9 to 28
3	15 to 55	9 to 34
4	15 to 65	9 to 40
5	15 to 65	9 to 40

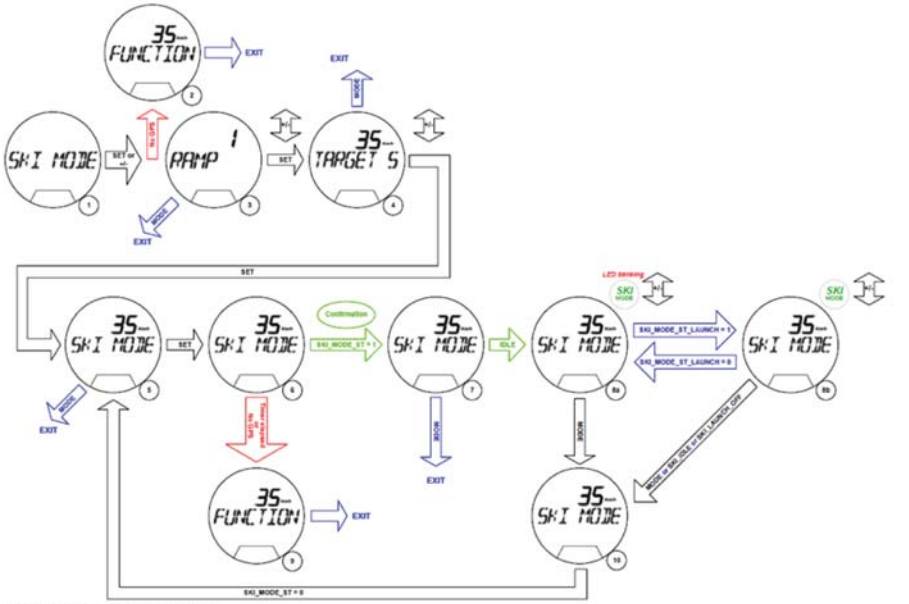
To activate the SKI Mode:

- While operating at idle, press the Mode button until SKI Mode is displayed.
- Press the Set button once to enter the SKI Mode.
- Using the UP & Down button/switch, select the desired Ramp.
- Press the Set button to accept the selection.
- Using the UP & Down button/switch, select the desired target speed
- Press the Set button to confirm the target speed. The SKI Mode indication will be displayed at the desired target speed.
- Press the Set button again to activate the launch sequence, the SKI Mode indication will be blinking.
- Move the throttle lever to the wide open throttle position, the SKI Mode will be activated and the SKI Mode indication with turn ON.
- To readjust speed set point, use the up and down button.

To deactivate the SKI Mode:

- Move the throttle lever to the NEUTRAL position and press the Mode button, or, throttle at idle speed for longer than four seconds.
- The SKI Mode indication will blink, an audible alarm (double beep) will sound, and the throttle lever can be used without restriction.
- To completely exit the SKI Mode, press the Mode button a second time.
- The SKI Mode indication will turn OFF.

SKI mode selections:

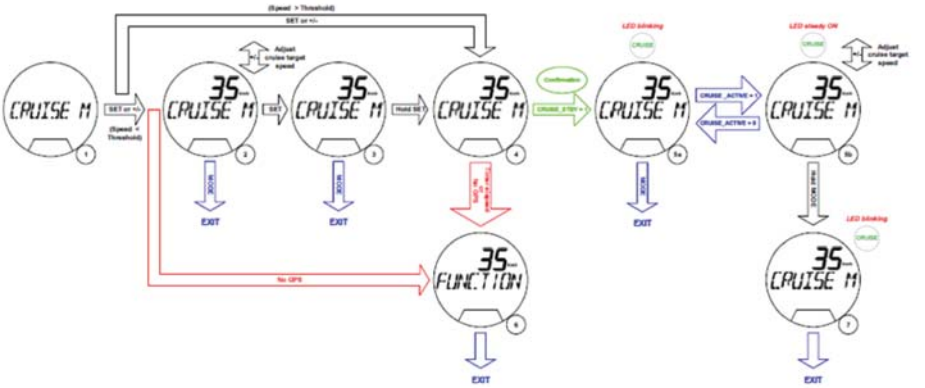


Ski mode submenu items

461153-14

Cruise Mode

Cruise mode selections:



461153-15

ECO Mode

The *iTC* (Intelligent Throttle Control) system allows the operator to maintain a steady speed and constant RPM to reduce fuel consumption.

To engage the fuel economy mode:

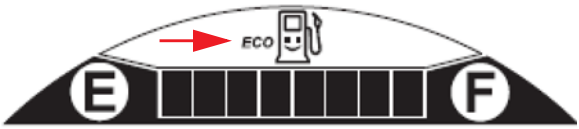
1. Press MODE button repeatedly until ECO MODE is displayed.

461153-09

2. Press the SET button once, the following message will be displayed “ECO MODE - HOLD SET to activate or MODE to exit”.

3. Press and hold the SET button until ECO MODE reappears.

To confirm the ECO MODE is active, the symbol ECO is displayed on the left side of the fuel tank indicator and the ECO indicator light is illuminated.



461153-10

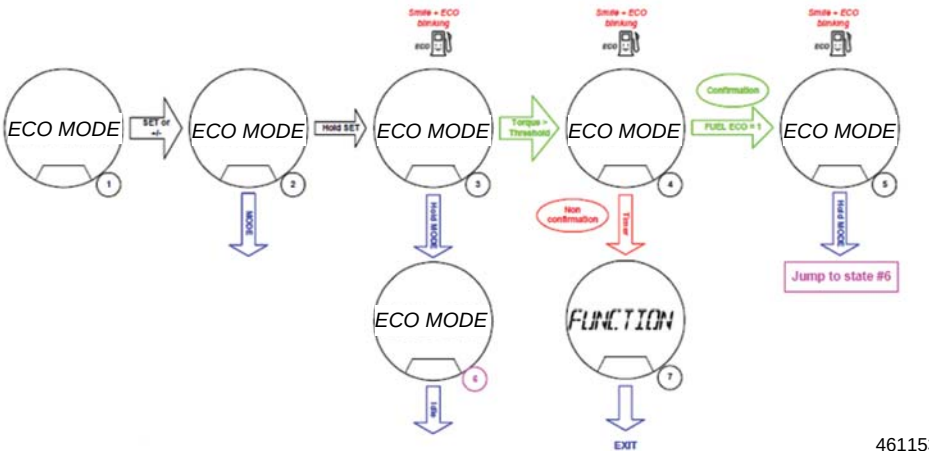
To cancel the ECO MODE:

1. Move the throttle/shifter handle to the NEUTRAL position.

2. Press the MODE button.

ECO Mode

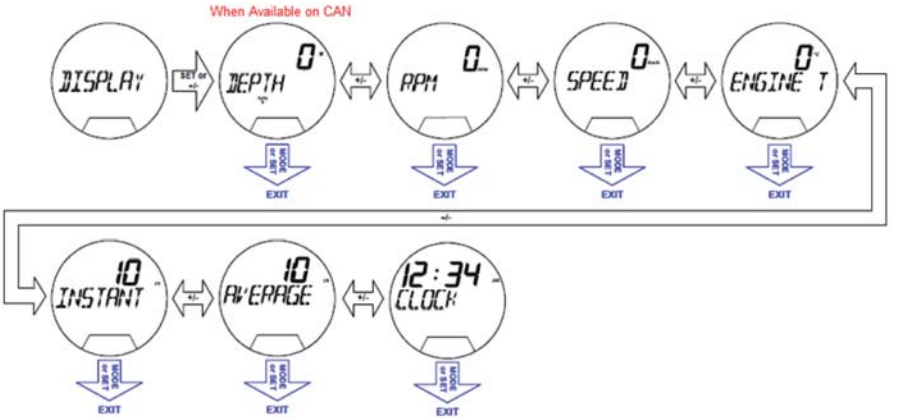
ECO mode selections:



461153-16

Display Mode

Display mode selections.

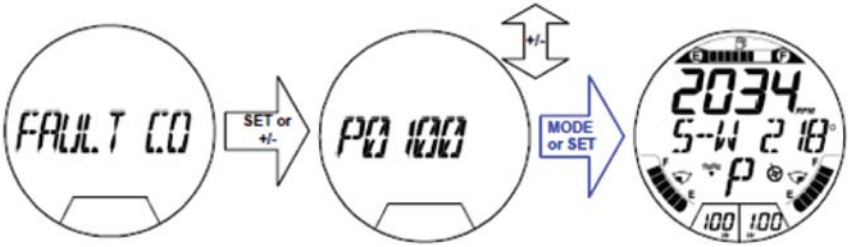


461153-17

Fault Code Menu

Fault code selection is only available if faults are active in the system.

Fault code selections:



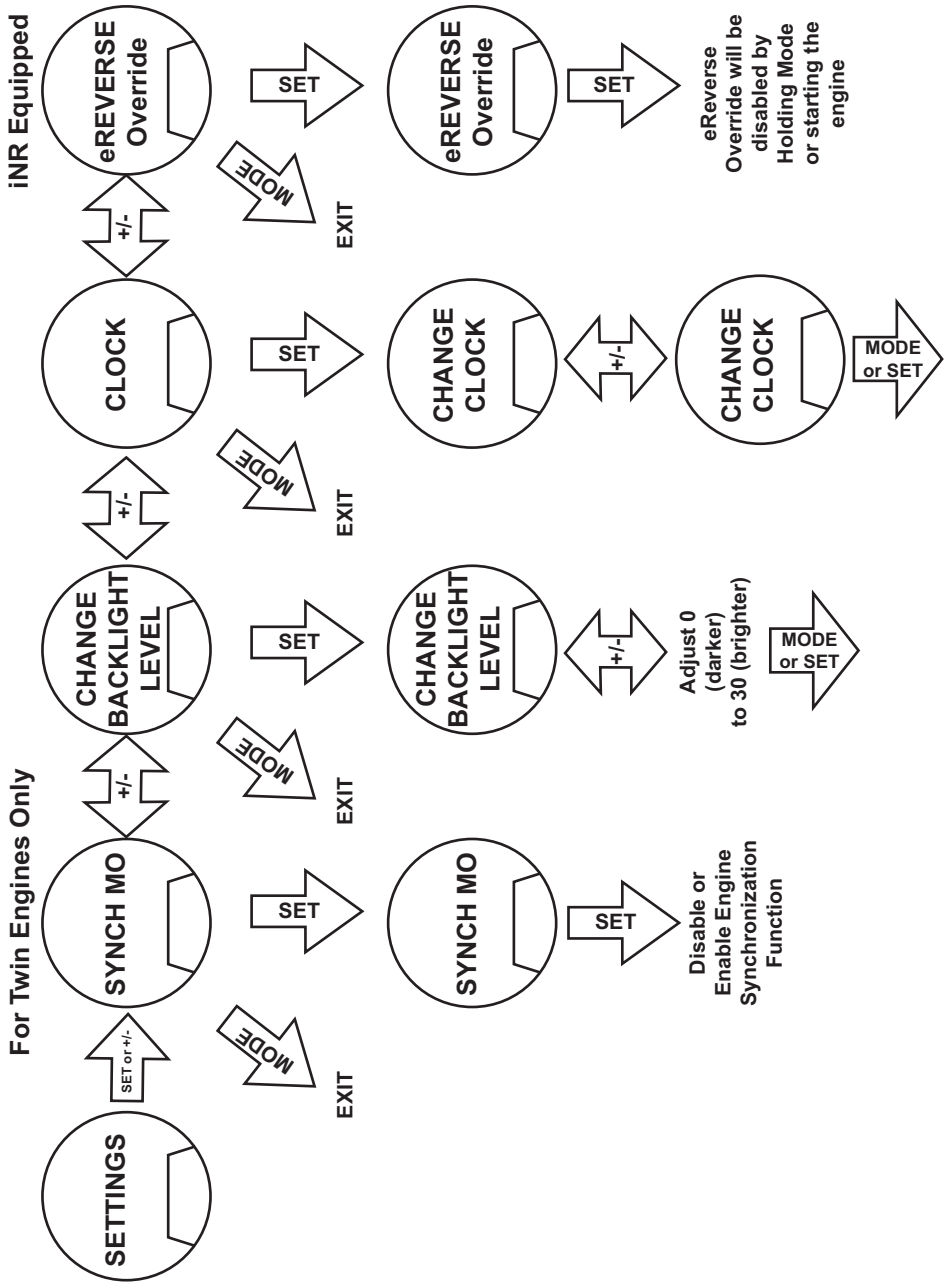
461153-18

IMPORTANT: If a fault code is present for more than three consecutive driving cycles, contact your dealer.

NOTE: The check engine light will activate on the second consecutive driving cycle when a fault is active in the engine management system.

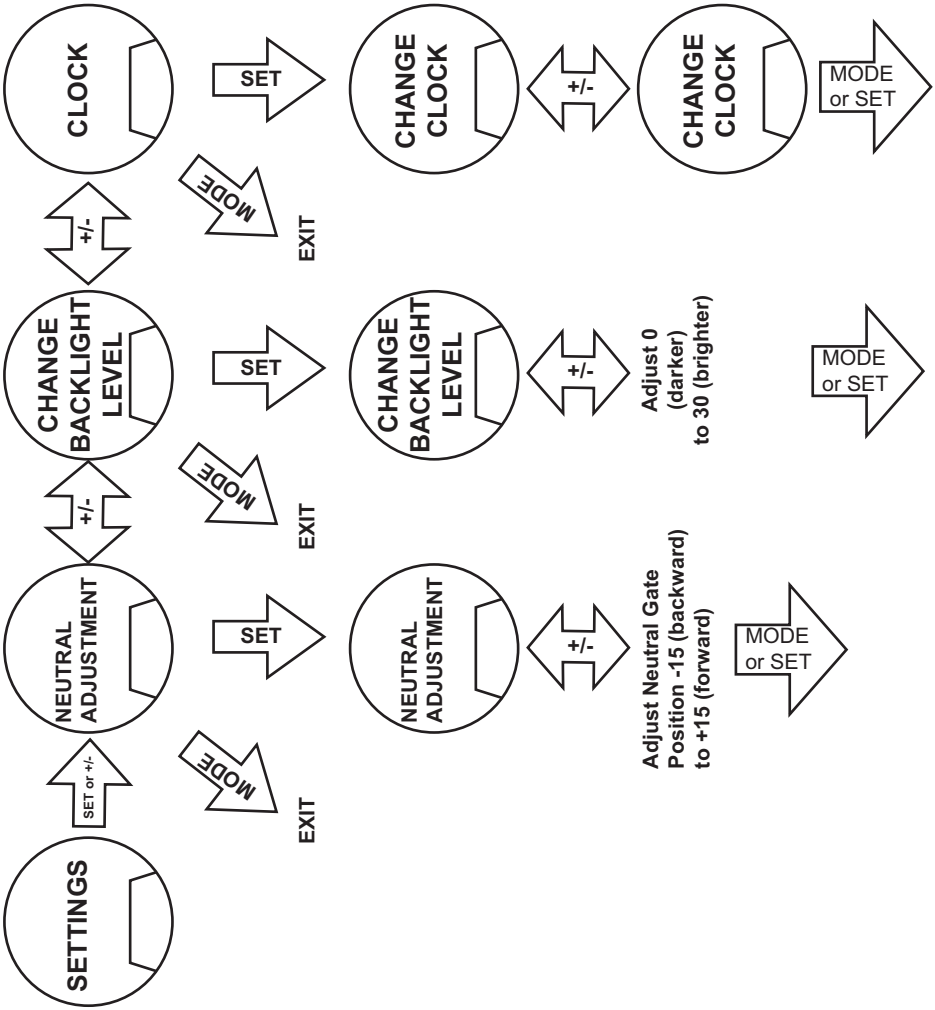
The check engine light will turn off after 3 consecutive driving cycles without active faults in the system.

Settings Menu - Engine OFF



NOTE: SYNCH is enabled by default at key ON

Settings Menu - Engine IDLE



iNR Functions

iNR OverRide

With the engine OFF, the reverse gate could be activated by enabling the iNR OverRide function.

In this condition, the reverse gate will be moving at 40% of the normal operating speed.

This function is mainly used for maintenance purposes..

The iNR OverRide can be disabled bu holding the Mode button or by starting the engine.

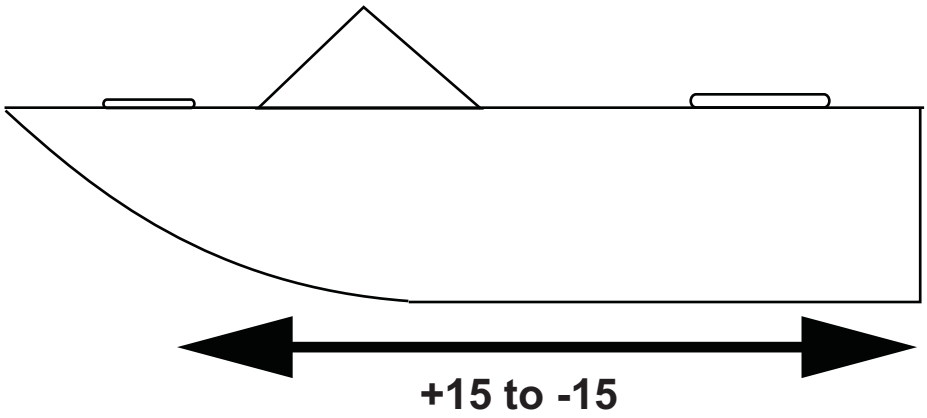
iNR Neutral Adjustment

With the engine running in idle condition, the lateral movement of the boat could be adjusted using the Neutral Adjustment function.

Adjustments can be made using the Up/Down Button. This will provide an adjustable window of +15 (must forward neutral thrust) to -15 (most reverse neutral thrust).

The iNR Neutral Adjustment will be disabled by pressing the Set Button or moving the throttle control arm.

NOTE: The last stored Neutral Adjustment will be kept in memory and used as the default value on the next driving cycle.



ROTAX®