

OPERATION MANUAL

COLOR DISPLAY

YD42

en English

YANMAR

Preface

Disclaimer

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Warranty

Refer to the Yanmar Limited Warranty Handbook for a complete warranty description.

Compliance statement

Yanmar declare under our sole responsibility that the product conforms with the requirements of:

- CE under EMC Directive 2014/30/EU
- Level 2 devices of the Radio communications (Electromagnetic Compatibility) standard 2017

Warning

The user is cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

About this manual

This manual is a reference guide for operating the unit. It assumes that all equipment is installed and configured, and that the system is ready to use.

Some features may not be activated or available for screenshots in the manual. As a result, screenshots of menus and dialogs may not match the look of your unit.

Important text that requires special attention from the reader is emphasized as follows:

→ **Note:** Used to draw the reader's attention to a comment or some important information.

⚠ Warning: Used when it is necessary to warn personnel that they should proceed carefully to prevent risk of injury and/or damage to equipment/personnel.

Contents

7 Basic operation

- 7 Front panel and keys
- 8 Turning the unit on and off
- 8 Menus
- 8 Editing a value
- 9 Display setup
- 10 Selecting a page

12 Pages

- 12 Static gauge
- 12 Changing page data
- 13 Missing or faulty data
- 13 Predefined pages

22 Fuel

- 22 Requirements
- 22 Calibrate
- 22 Fuel management
- 23 Adding fuel
- 23 Fuel used

25 Alarms

- 25 System alarms
- 25 Engine alarms
- 26 The alarms dialog

29 Trip log

- 29 Accessing the trip log
- 29 Trip 1
- 29 Trip 2
- 30 Log

31 User settings

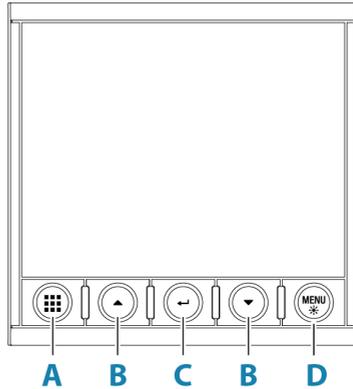
- 31 Accessing the settings dialog
- 31 Pages
- 34 Calibration
- 34 Damping

35	AIS
37	Software setup
37	Software setup sequence
37	Accessing the system settings dialog
37	Network settings
40	Units settings
40	Decimal places
40	Key beeps
40	Language
41	Time
41	Display setup
42	Files
42	Simulate
42	Restore defaults
42	Engine setup
43	Global reset
43	About
44	Files
44	USB mass storage device
44	Accessing the files dialog
44	Software update
46	Import system settings
46	Export system settings
47	Maintenance
47	Preventive maintenance
47	Cleaning the display unit
48	Dimensional drawings
49	Technical specifications
50	Supported data
50	NMEA 2000
52	J1939

1

Basic operation

Front panel and keys



A Pages key

With no menu active:

- Press to scroll through the enabled pages
- Press and hold to display a list of enabled pages from where you can select directly the page to display

Menu and dialog operation:

- Press to return to previous menu level or to exit a dialog

B Arrow keys

- Press to move up and down in menus and dialogs
- Press to adjust a value

C Enter key

- Press to select a menu option and to enter the next menu level
- Press to activate/deactivate a menu/dialog option

D Menu/Backlight key

- Press once to display the page menu
- Double-press to display the settings dialog
- Press and hold to open the display setup dialog from where you can adjust the backlight

Turning the unit on and off

The unit is turned on by the power ON wire. Refer to the installation documentation for more information.

It is possible to put the unit in sleep mode, refer to *"Display setup"* on page 9.

Switch off the main power supply to turn the unit off.

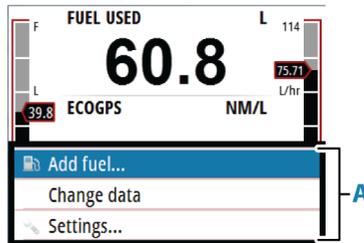
First time startup

When the unit is started for the first time, or after a factory default, the unit displays a series of dialogs. Respond to the dialog prompts to make fundamental settings.

You can perform further setup and later change settings using the system settings dialogs.

Menus

Not all pages have a page specific menu (A), but all page menus give access to the Settings dialog.



Activate the menu by pressing the Menu key from any page.

To navigate the menu:

- Use the arrow keys

To confirm a selection:

- Press the enter key

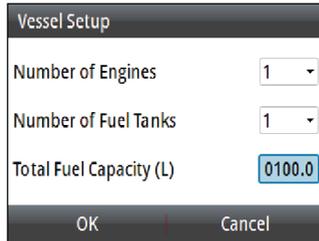
To return to the previous menu level:

- Press the pages key

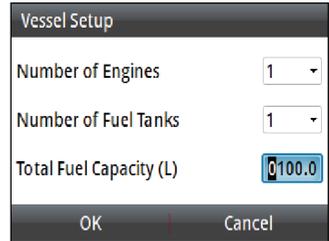
Editing a value

1. Press the enter key to turn the field into edit mode

- The left digit starts flashing
- 2. Use the arrow keys to set the value for the flashing digit
- 3. Press the enter key to move focus to the next digit
- 4. Repeat step 3 and 4 until all digits are set
- 5. Press the enter key to leave edit mode for the selected field



Selected field

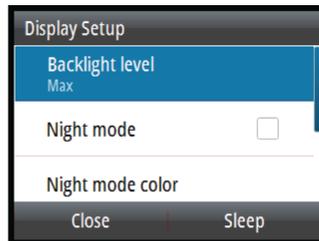


Field in edit mode

To cancel editing or leave a dialog:

- Press the pages key
- Press the menu key

Display setup



The display setup can be adjusted at any time from the Display setup dialog.

To access the dialog:

- Press and holding the menu key

Backlight level

Adjusts the backlight level.

When the dialog is active, you can cycle the preset backlight levels by short presses on the menu key.

Night mode

Activates/deactivates the night mode color palette.

Night mode color

Sets the night mode color palette.

Invert day color

Changes the background color for the pages from default black to white.

Sleep mode

In Sleep mode, the backlight for the screen and keys are turned off to save power. The system continues to run in the background.

To exit Sleep mode:

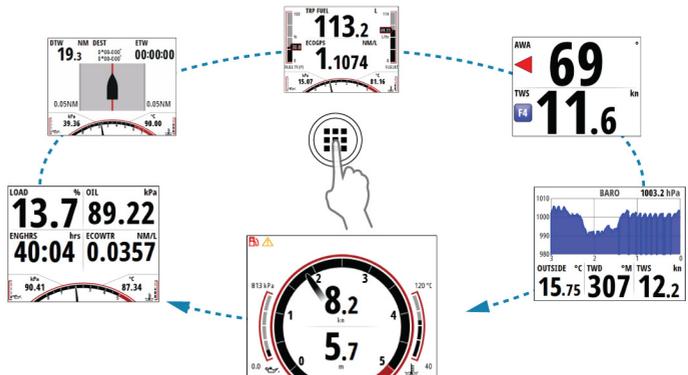
- Press the menu key

Selecting a page

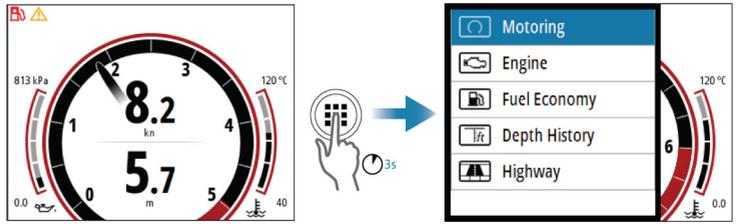
Scrolling through enabled pages

To scroll through the enabled data pages:

- Press the pages key



Directly selecting a page



To display the list of enabled pages:

- Press and hold the pages key

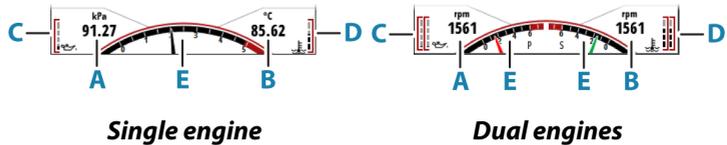
If you do not confirm your selection the menu will timeout and the highlighted page will be displayed.

2

Pages

Static gauge

Some pages have a static gauge at the bottom of the display showing engine data.

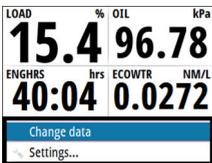


	Description
A	Engine oil pressure (single engine) / Port-side engine speed (Dual engines)
B	Engine coolant temperature (single engine) / Starboard-side engine speed (Dual engines)
C	Engine oil pressure
D	Engine coolant temperature
E	RPM dial

Changing page data

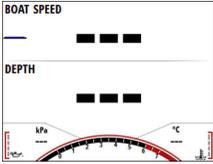
Some pages allow you to change which data is displayed on the page.

To change page data:



- 1 Press the menu key and select the change data option
- 2 If the page has multiple data fields, select the field you want to change
- 3 Select the data to be shown in the field
- 4 Repeat steps 2 and 3 to change additional fields
- 5 Press the menu key and save your changes

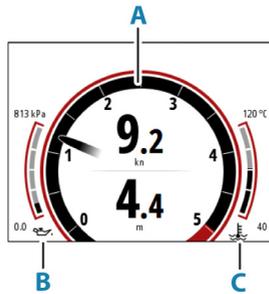
Missing or faulty data



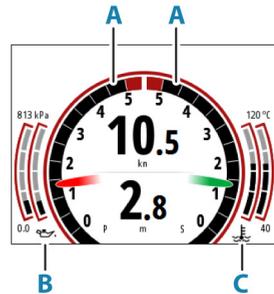
If a data type is missing or if the data is out of scale, there will be no data reading on the display. The example shows a page with missing information.

Predefined pages

Motoring



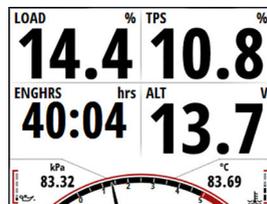
Single engine



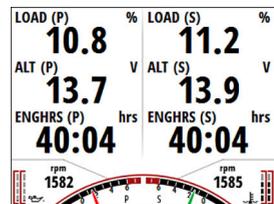
Dual engines

Description	
A	RPM dial
B	Engine oil pressure
C	Engine coolant temperature

Engine digital

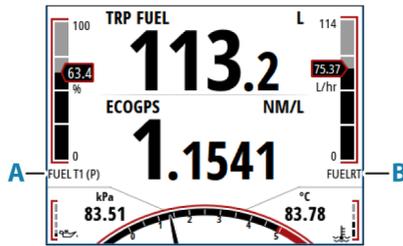


Single engine



Dual engines

Fuel economy



Description	
A	Tank level for selected tank or vessel fuel remaining depending on configuration. Vessel fuel remaining shows the total amount of fuel remaining in all tanks.
B	Fuel rate

→ **Note:** Vessel fuel remaining will only be available when fuel flow data is available and a Navico fuel storage device is connected to the NMEA 2000 network.

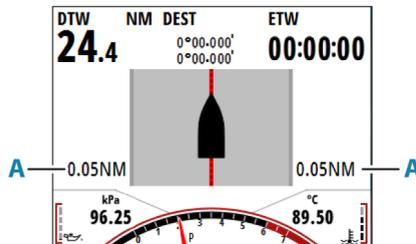
Page menu



From the page menu you can access the refuel dialog by pressing the add fuel option. For more information, refer to "Fuel" on page 22.

Highway

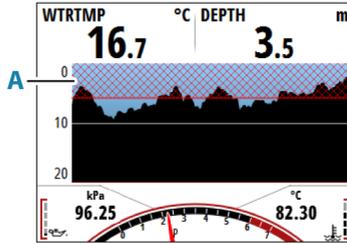
Shows navigation information, including visualization of the boat's position on the track. The cross track error limit (**A**) is shown on the page.



→ **Note:** Requires a compatible navigational source connected to the network.

Depth history

Shows current water temperature, depth and a histogram of recorded depth data. The shallow water alarm limit (A) is visualized on the page.

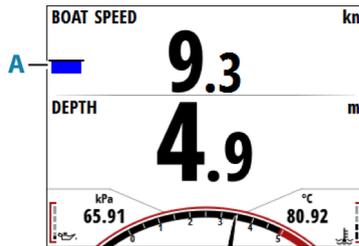


Page menu

From the page menu you can change the history time range.

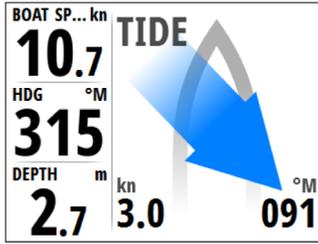
Basic speed/depth

The speed field includes an acceleration bar (A).

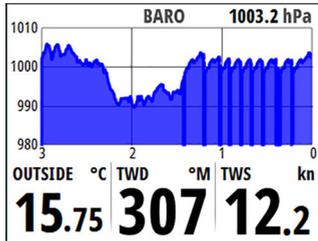


Tide

Tidal information shown relative to the yacht's bow.



Weather

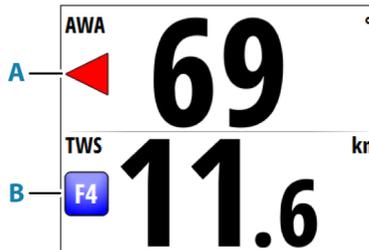


Page menu



From the page menu you can change the history time range.

Basic wind angle/speed

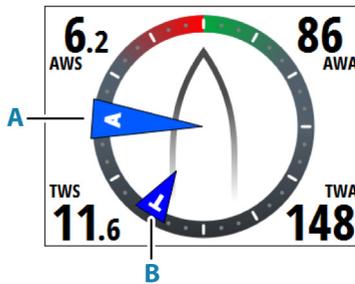


Description	
A	Wind angle indicator, red for port and green for starboard tack
B	True wind speed Beaufort scale indicator

GPS

POS			
N 50°39.666'		W 1°42.679'	
COG	°M	TIME	SOG kn
160		09:34:28	12.9
BTW	°M	ETW	DTW NM
001		00:34:28	10.7

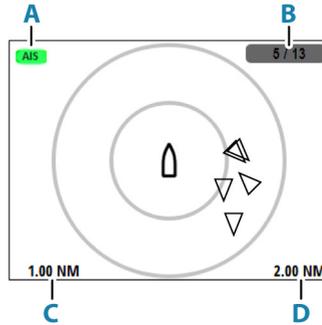
Composite wind



Description	
A	Apparent wind angle indicator
B	True wind angle indicator

AIS

If a compatible AIS system or an NMEA 2000 VHF that can do AIS (Automatic Identification System) is connected to the network, then any targets detected by these devices can be displayed on the AIS page. You can also see messages and position from SARTs and AtoNs within the defined range.



	Description
A	AIS mode
B	Number of displayed icons versus total number of targets
C	Distance between range rings
D	Selected range

Select a target

To select a target:

- Use the arrow keys

To display single target information

- With the desired target selected press the enter key

AIS SART

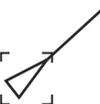
When an AIS SART (Search and Rescue Transponder) is activated, it starts transmitting its position and identification data. This data is received by your AIS device.

If your AIS receiver is not compliant with AIS SART, it interprets the received AIS SART data as a signal from a standard AIS transmitter. An icon is positioned on the AIS page, but this icon is an AIS vessel icon. If your AIS receiver is compliant with AIS SART, the following takes place when AIS SART data is received:

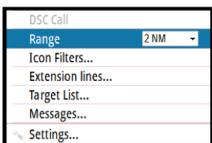
- An AIS SART icon is located on the page in the position received from the AIS SART

- An alarm message is displayed if you have enabled the siren, the alarm message is followed by an audible alarm
- **Note:** The icon is green if the received AIS SART data is a test and not an active message.

AIS target symbols

	Sleeping AIS target (not moving or at anchor).
	Moving and safe AIS target with course extension line.
	Dangerous AIS target, illustrated with bold line. A target is defined as dangerous based on the CPA and TCPA settings.
	Lost AIS target. When no signals have been received within a time limit, a target is defined as lost. The target symbol represents the last valid position of the target before the reception of data was lost.
	Selected AIS target, activated by selecting a target symbol. The target returns to the default target symbol when the cursor is removed from the symbol.
	AIS SART (AIS Search And Rescue Transmitter).

Page menu



Range

Defines the display range on the AIS page. Selected range is indicated in the lower right corner of the AIS page.

Extension lines

Defines the length of course over ground and heading extension lines for your own vessel and for other vessels.

The length of the extension lines is set to indicate the distance the vessel will move in the selected time period.

Your own vessel heading information is read from the active heading sensor, and COG information is received from the active GPS. For other vessels COG data is included in the message received from the AIS system.

Icon filters

By default, all targets within the selected range are shown on the AIS page. You can select to hide safe AIS vessels, and to not show targets based on vessel speed.

Target list

The target list displays basic information for all received AIS targets.

For additional options:

- Press the menu key

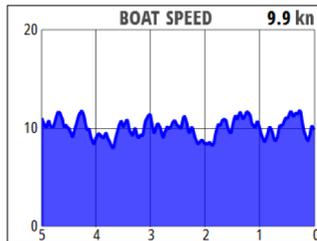
Messages

All received messages are listed in the Message listing.

To display a message:

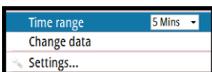
- Select the desired message and press the menu key

Single time plot

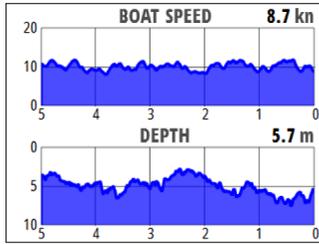


Page menu

From the page menu you can change the history time range.



Dual time plot



Page menu

From the page menu you can change the history time range and/or shown data.

3

Fuel

Requirements

To use the fuel utility, a Navico fuel data storage device must be fitted to the vessels NMEA 2000 network.

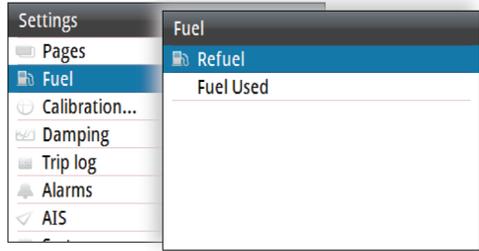
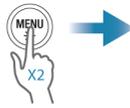
Calibrate

Calibration may be required to accurately match measured flow with actual fuel flow. Access calibration from the Refuel dialog. Calibration is only possible on Navico's Fuel Flow sensor.

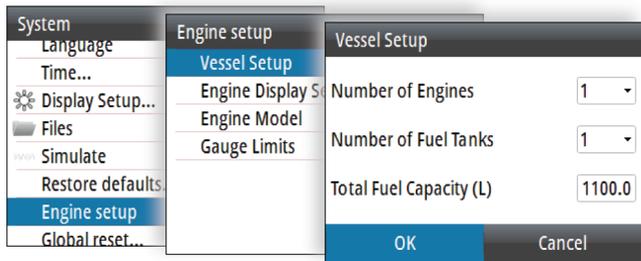
1. Start with a full tank and run the engine as it would normally be operated.
 2. After at least several liters (a few gallons) have been used, the tank should be fully refilled, and the Set to full option selected.
 3. Select the Calibrate option.
 4. Set the actual amount used based on amount of fuel added to the tank.
 5. Select OK to save settings. The Fuel K-Value should now show a new value.
- **Note:** To calibrate multiple engines repeat the steps above, one engine at a time. Alternatively, run all engines simultaneously, and divide the Actual amount used by the number of engines. This assumes reasonably even fuel consumption on all engines.
- **Note:** The Calibrate option is only available when Set to full is selected, and a Fuel Flow is connected and set up as a source.
- **Note:** A maximum of 8 engines is supported using Fuel Flow sensors.

Fuel management

Fuel settings can be found in the settings dialog.

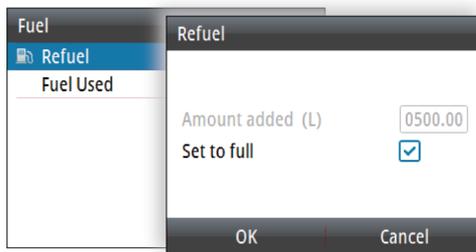


Make sure that the vessel setup is completed and the number of tanks and total fuel capacity is set to the correct value.



Adding fuel

Enter the amount of fuel added to the tank, or select the set to full option when filling the tank to its maximum capacity.



Fuel used

The fuel used dialog shows the amount of fuel used since the last fill, from trip reset and seasonal usage.

If the vessel is configured with multiple engines, the fuel used data shown is the total for all engines. It also lists data for each engine. The reset option in the dialog allows resetting the fuel used data. You can reset all engines or each engine separately.

4

Alarms

System alarms

Type of messages

The messages are classified according to how the reported situation affects your vessel. The following color codes are used:

Color	Importance
Red	Critical alarm
Orange	Important alarm
Yellow	Standard alarm
Blue	Warning
Green	Lite warning

Alarm indication

An alarm situation is indicated with an alarm pop-up. If you have enabled the siren, the alarm message is followed by an audible alarm.

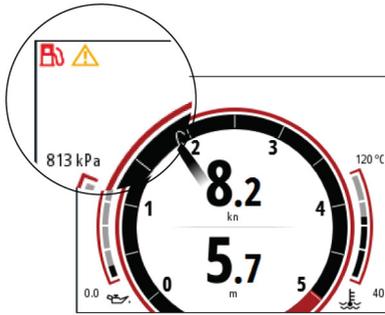


A single alarm is displayed with the name of the alarm as the title, and details for the alarm.

If more than one alarm is activated simultaneously, the alarm pop-up can display 3 alarms. The alarms are listed in the order they occur with the last activated alarm at the top. The remaining alarms are available in the alarms dialog.

Engine alarms

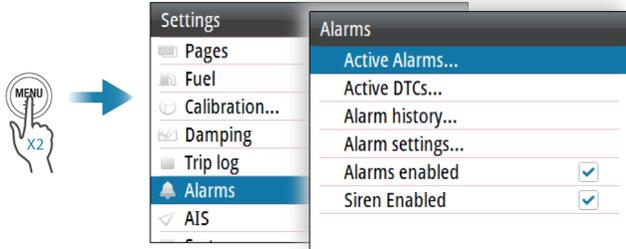
For engine specific alarms, an icon will appear on the page. The icon will remain active as long as that alarm instance is still valid.



→ **Note:** For dual engine configuration, the alarm icon will appear on the side of the display that the engine is configured.

Icon	Alarm description
	Engine alarm - Check active alarms / DTCs for available information
	Low fuel level < 25%

The alarms dialog

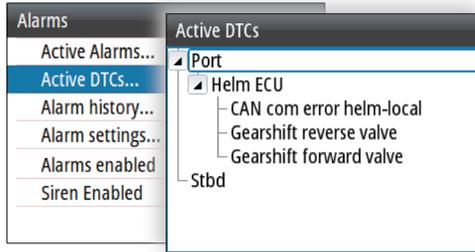


Active alarms

Lists all active alarms.

Active DTCs (Diagnostic Trouble Code)

Lists all active DTCs, to show details select the desired DTC.



Alarms history

The Alarm history dialog stores alarm messages until they are manually cleared.

To show alarm details or to clear all alarms:

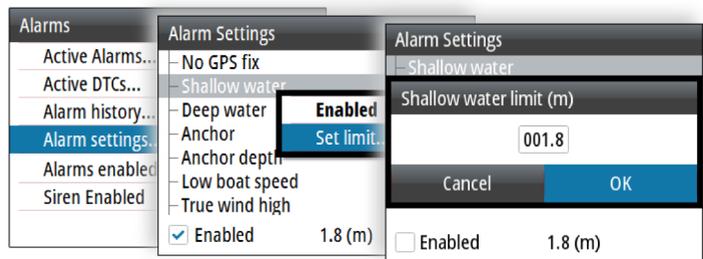
- Press the menu key and select the desired action

Alarm History			
Shallow water	Dsabl	13:59	22/03/18
Deep water	Ackd	13:59	22/03/18
Deep water	Raise	13:58	22/03/18
Low boat speed	Dsabl	13:58	22/03/18

Alarm settings

To show the menu from where you can set the alarm limit and enable/disable an alarm:

- Press the menu key



Alarms enabled

Enables/disables all alarms.

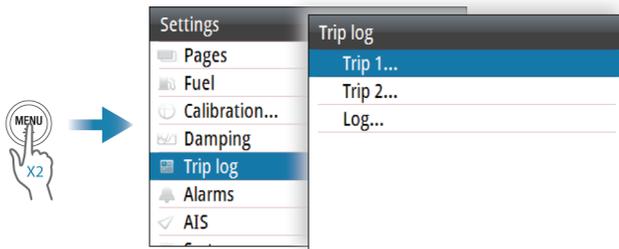
Siren enabled

Enables/disables the alarm siren.

5

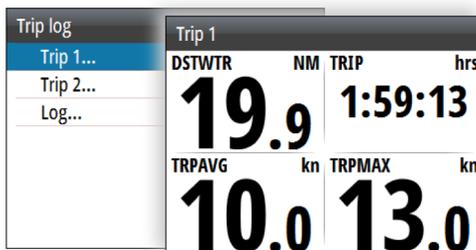
Trip log

Accessing the trip log



Trip 1

Trip 1 records distance traveled through the water (Log input).



To exit the trip log dialog:

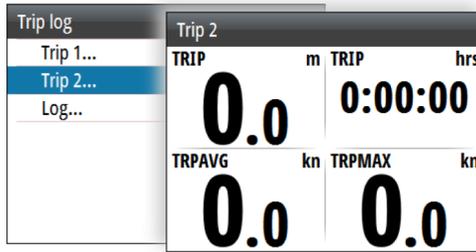
- Press the pages key

To start, stop or reset a trip:

- Press the menu key and select the desired option

Trip 2

Trip 2 records distance traveled over ground (GPS input).



To exit the trip log dialog:

- Press the pages key

To start, stop or reset a trip:

- Press the menu key and select the desired option

Log

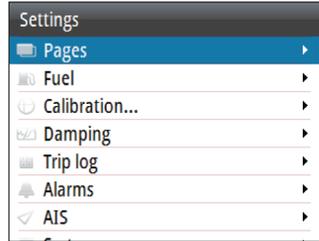
The Log dialog shows total distance run from system installation or from a system restore.

6

User settings

Accessing the settings dialog

The software setup is done from the settings dialog.



Pages

Predefined pages

Pre-defined pages		Template pages	
	Motoring		<ul style="list-style-type: none">• Full screen• Full screen (Engine), with static gauge
	Engine		<ul style="list-style-type: none">• 2x1 Grid• 2x1 Grid (Engine), with static gauge
	Fuel economy		<ul style="list-style-type: none">• 2x2 Grid• 2x2 Grid (Engine), with static gauge
	Depth history		<ul style="list-style-type: none">• 2x2 Grid Offset• 2x2 Grid Offset (Engine), with static gauge

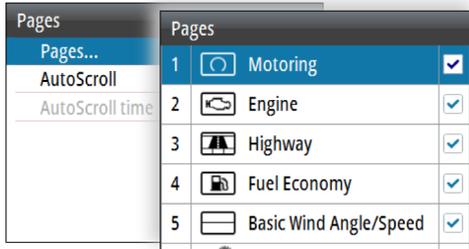
Pre-defined pages		Template pages	
	Highway		<ul style="list-style-type: none"> • 3x2 Grid Offset • 3x2 Grid Offset (Engine), with static gauge
	Tide		<ul style="list-style-type: none"> • 3x3 Grid • 3x3 Grid (Engine), with static gauge
	Weather		1+3 Digital bottom
	Basic Speed/Depth		1+6 Digital bottom
	Basic Wind Angle/Speed		1+3 Digital side
	GPS		1+4 Digital bottom
	Composite Wind		Single analog
	AIS		Analog + 3
	Single Time Plot		
	Dual Time Plot		

Enable/disable a page

To make a page available for display it has to be enabled.

To enable/disable a page:

- Select the desired page and press the enter key

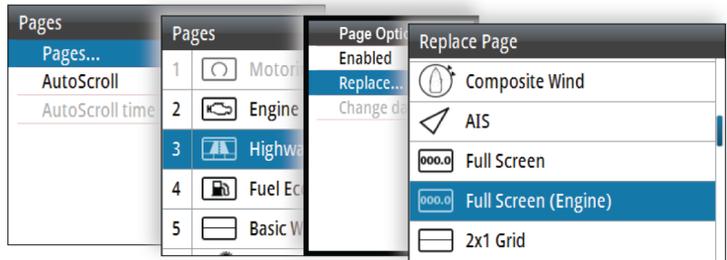


Replace a page

Pages can be replaced with one of the other predefined pages, or by a template page if you want to create a custom page.

To replace a page:

- 1 Highlight the desired page and press the menu key
- 2 Select the replace option and then select the preferred page



Creating and editing a custom page

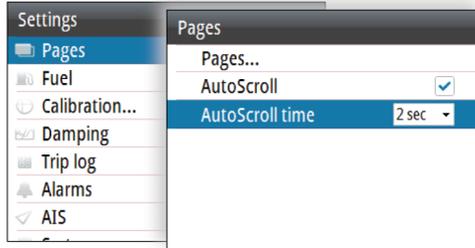
A custom page is created in a two steps process:

- 1 Replace one of the active pages with a template page, refer to "*Replace a page*" on page 33
- 2 Select the data to be shown in the page's data field(s), refer to "*Changing page data*" on page 12

Automatic scrolling pages

The system can automatically scroll through all enabled pages at a defined time interval.

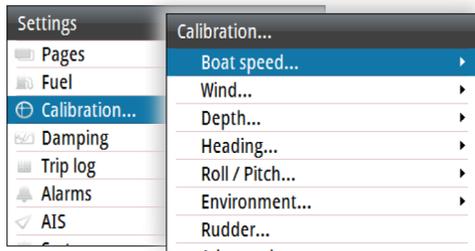
Select the desired time interval when the automatic scroll is enabled. The time interval can be changed later, if needed.



Calibration

Use the calibration option to correct any data inaccuracies from compatible NMEA 2000 devices.

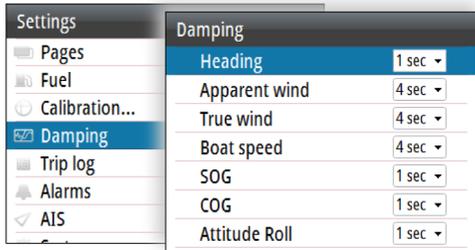
For more information, refer to the device documentation.



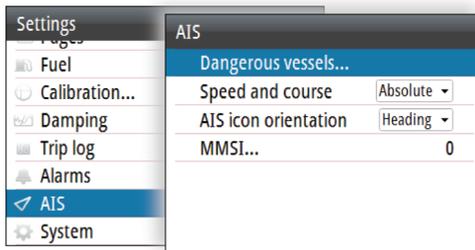
→ **Note:** Depending on the sensor, some offsets calibrated here will only be applied locally.

Damping

If data appears erratic or too sensitive, damping may be applied to make the information appear more stable. With damping set to off, the data is presented in raw form with no damping applied.



AIS



Dangerous vessels

You can define an invisible guard zone around your vessel. When a target comes within the set limits, the symbol changes to the Dangerous target symbol. An alarm is triggered if activated, refer to the alarms section.

Speed and course

The extension line can be used to indicate speed and course for targets, either as absolute (true) motion or relative to your vessel.

AIS icon orientation

Sets the orientation of the AIS icon, either based on heading or COG information.

MMSI

Used for entering your own MMSI (Maritime Mobile Service Identity) number into the system. You need to have this number entered to

receive addressed messages from AIS and DSC vessels. You also need to have your MMSI number entered to avoid seeing your own vessel as an AIS target.

7

Software setup

Software setup sequence

1 General settings

- Make general settings as desired

2 Source selection - refer to "Network settings" on page 37.

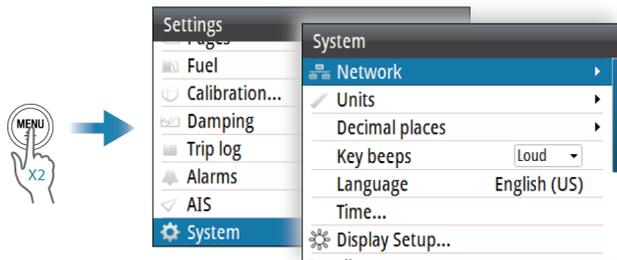
- Make sure that the proper external data sources have been selected

3 Engine and vessel setup - refer to "Engine setup" on page 42.

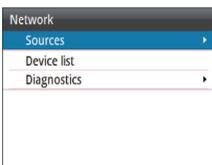
- Review the configurations made in the first time startup wizard
- Set the gauge limits to fit your equipment

Accessing the system settings dialog

The setup is done from the System settings dialog.



Network settings



Sources

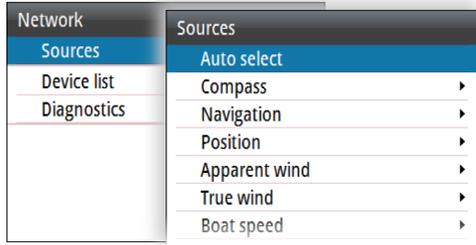
Data sources provide live data to the system.

When a device is connected to more than one source providing the same data, the user can choose the preferred source. Before

commencing with source selection make sure all external devices and networks are connected and turned on.

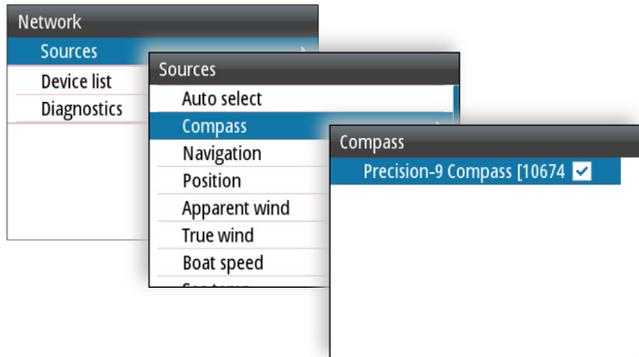
Auto Select

The Auto Select option looks for all sources connected to the device. If more than one source is available for each data type, selection is made from an internal priority list. This option is suitable for the majority of installations.



Manual source selection

Manual selection is generally only required where there is more than one source for the same data, and the automatically selected source is not the one desired.



Device list

Selecting a device in this list will bring up additional details and options for the device.

All devices allow allocation of an instance number in the configure option. Set unique instance numbers on any identical devices on

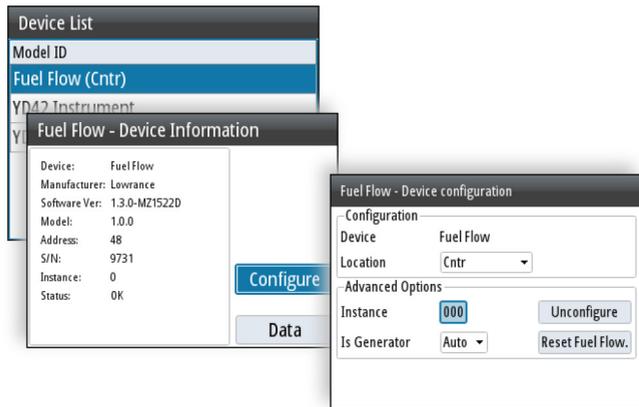
the network to allow the unit to distinguish between them. The data option shows all data being output by the device.

→ **Note:** In most cases, setting the instance number on a 3rd party product is not possible.

Configure a device

Devices may require configuration before use, they can be configured once connected to the network.

Some devices show additional options specific to the device. For example the Calibrate option, to allow easy setup of a device. For device specific details, refer to the device documentation.



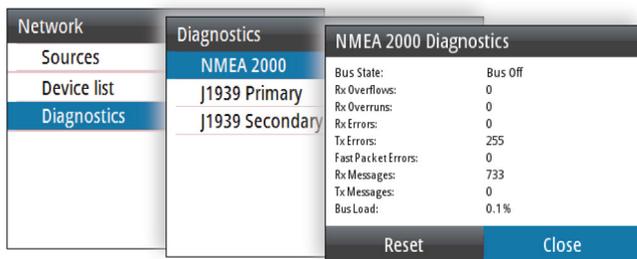
Diagnostics

Provides information useful for identifying an issue with the network.

NMEA 2000

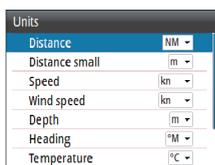
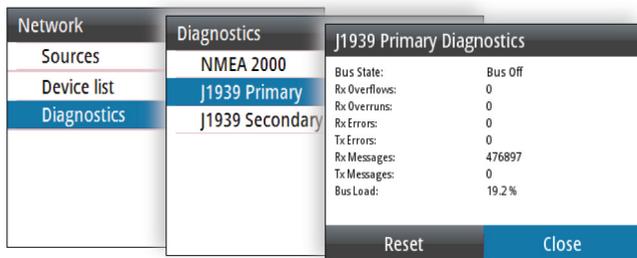
Provides information on NMEA 2000-bus activity.

→ **Note:** The following information may not always indicate an issue that can be simply resolved with minor adjustment to network layout or connected devices and their activity on the network. However, Rx and Tx errors are most likely indicating issues with the physical network, which may be resolved by correcting termination, reducing backbone or drop lengths, or reducing the number of network nodes (devices).



J1939

Provides information on J1939-bus activity.



Units settings

Used for specifying the units of measurement displayed.

Decimal places

Defines number of decimals used for speed and sea temperature.

Key beeps

Controls the loudness of the beep sound when a key is pressed.

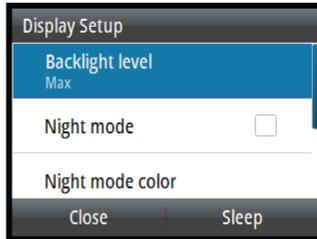
Language

Controls the language used on this unit for panels, menus, and dialogs. Changing the language causes the unit to restart.

Time

Controls the local time zone offset, and the format of the time and date.

Display setup



Backlight level

Adjusts the backlight level.

When the dialog is active, you can cycle the preset backlight levels by short presses on the menu key.

Night mode

Activates/deactivates the night mode color palette.

Night mode color

Sets the night mode color palette.

Invert day color

Changes the background color for the pages from default black to white.

Sleep mode

In Sleep mode, the backlight for the screen and keys are turned off to save power. The system continues to run in the background.

To exit Sleep mode:

- Press the menu key

Files

File management system, used to browse the contents of the unit's internal memory and storage devices connected to the unit.

For more information refer to "Files" on page 44.

Simulate

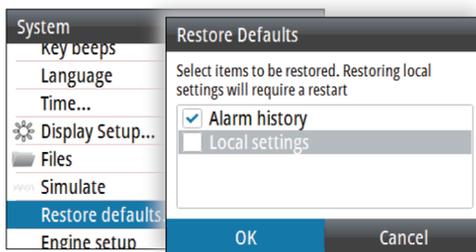
Runs the display with simulated data. Use the simulator to become familiar with your unit before using it on the water.

When activated, the simulator mode is indicated on the display.

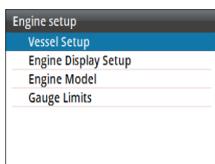


Restore defaults

Restores selected settings to default factory values.



Engine setup



Vessel setup

Set the number of engines, fuel tanks and total fuel capacity.

Engine display setup

A maximum of two engine's data can be shown on each gauge.

Engine model

Select the engine model for the connected engine(s).

Gauge limits

Used to set visual gauge limits.

→ **Note:** These limits are a visual guide on the data pages. They do not set any alarms.

Global reset

Resets the source selection on all displays connected to the network.

About

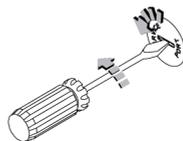
Displays copyright information, software version, and technical information for this unit.

8

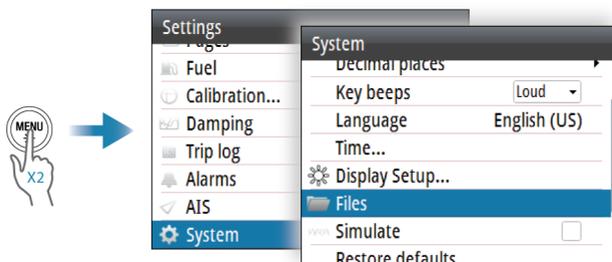
Files

USB mass storage device

The USB port can be used to connect a USB mass storage device.



Accessing the files dialog



Software update

You can update the unit's software and NMEA 2000 devices' software that are connected to the network, from the unit.

Downloading the latest software

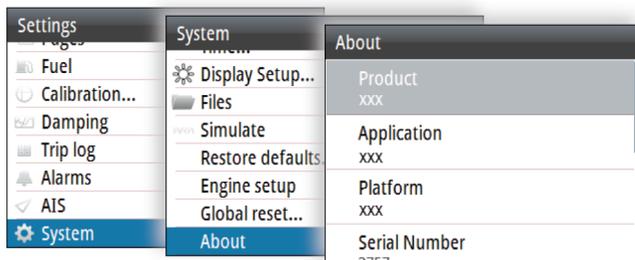
The latest software is available for download in the product's section at www.yanmarmarine.com.

Update the unit's software

- 1 Download and save the latest software update file for the unit to a storage device
- 2 Make sure that the unit is turned off
- 3 Connect the storage device to the unit

- 4 Turn the unit ON, the update procedure will start automatically
- 5 When the update is completed, remove the storage device from the unit

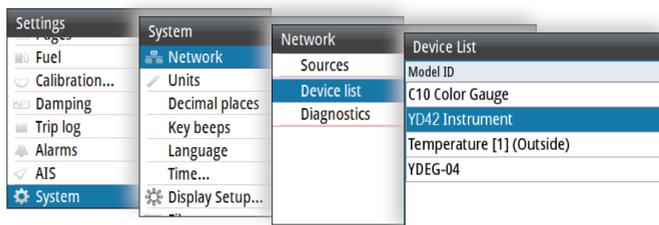
You can check the unit's software version from the About dialog.



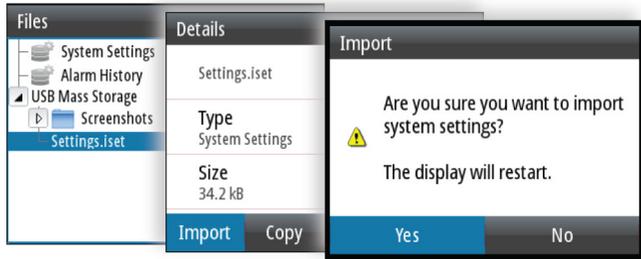
Remote device software update

- 1 Download and save the latest software update file for the remote device to a storage device
- 2 Connect the storage device to the unit
- 3 To start the update, select the update file from the storage device

The software version for connected NMEA 2000 sensors is available in the Device list.



Import system settings



- 1 Connect a storage device to the unit
- 2 Browse the memory and select the desired backup file to start the import

⚠ Warning: Importing system settings overwrites all existing system settings.

Export system settings



- 1 Connect a storage device to the unit
- 2 Select the system settings option to initiate the export

9

Maintenance

Preventive maintenance

The unit does not contain any field serviceable components. Therefore, the operator is required to perform only a very limited amount of preventative maintenance.

If a sun cover is available, it is recommended that you always fit it when the unit is not in use.

Cleaning the display unit

To clean the screen:

- A micro-fiber or a soft cotton cloth should be used to clean the screen. Use plenty of water to dissolve and take away salt remains. Crystallized salt, sand, dirt, etc. can scratch the protective coating if using a damp cloth. Use a light fresh water spray then wipe the unit dry with a micro-fiber or a soft cotton cloth. Do not apply pressure with the cloth.

To clean the housing:

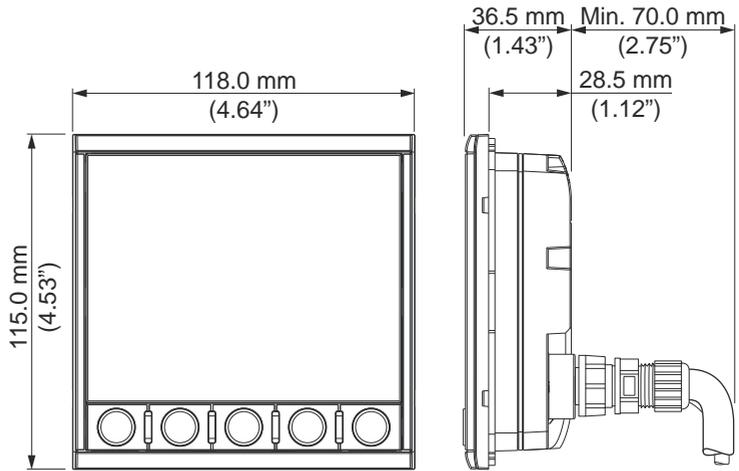
- Use warm water with a dash of liquid dish soap or detergent.

Avoid using abrasive cleaning products or products containing solvents (acetone, mineral turpentine, etc.), acid, ammonia, or alcohol as they can damage the display and plastic housing.

Do not use a jet or high pressure wash. Do not run your unit through a car wash.

10

Dimensional drawings



11

Technical specifications

Dimensions	Refer to " <i>Dimensional drawings</i> " on page 48
Electrical	
Supply voltage	12 V DC (10 - 15 V DC)
Fuse rating	3 A
Power consumption max	2.16 W (160 mA at 13.5 V DC)
Network load	1 LEN
Display	
Size	4.1" diagonal, 4:3 Aspect ratio
Resolution	320 x 240 pixels
Brightness	1200 nits
Viewing angles	80° top/bottom, 80° left/right
Environmental	
Waterproof rating	IPx7
Operating	-25° to +65°C (-13°F to +149 °F)
Storage	-40° to +85°C (-40°F to +185 °F)

12

Supported data

NMEA 2000

Receive

59392	ISO Acknowledgement
59904	ISO Request
60928	ISO Address Claim
126208	ISO Command Group Function
126992	System Time
126996	Product Info
127237	Heading/Track Control
127245	Rudder
127250	Vessel Heading
127251	Rate of Turn
127257	Attitude
127258	Magnetic Variation
127488	Engine Parameters, Rapid Update
127489	Engine Parameters, Dynamic
127493	Transmission Parameters, Dynamic
127505	Fluid Level
127508	Battery Status
128259	Speed, Water referenced
128267	Water Depth
128275	Distance Log
129025	Position, Rapid Update
129026	COG & SOG, Rapid Update
129029	GNSS Position Data
129033	Time & Date
129038	AIS Class A Position Report

129039	AIS Class B Position Report
129040	AIS Class B Extended Position Report
129041	AIS aids to Navigation
129283	Cross Track Error
129284	Navigation Data
129283	Cross Track Error
129284	Navigation Data
129539	GNSS DOPs
129540	GNSS Sats in View
129794	AIS Class A Static and Voyage Related Data
129801	AIS Addressed Safety Related Message
129802	AIS Safety Related Broadcast Message
129808	DSC Call Information
129809	AIS Class B "CS" Static Data Report, Part A
129810	AIS Class B "CS" Static Data Report, Part B
130074	Route and WP Service - WP List - WP Name & Position
130306	Wind Data
130310	Environmental Parameters
130311	Environmental Parameters
130312	Temperature
130313	Humidity
130314	Actual Pressure
130316	Temperature, Extended Range
130576	Small Craft Status
130577	Direction Data

Transmit

59904	ISO Request
60928	ISO Address Claim
126208	ISO Command Group Function

126996	Product Info
127258	Magnetic Variation

→ **Note:** For transmitted engine parameters, refer to "J1939" on page 52.

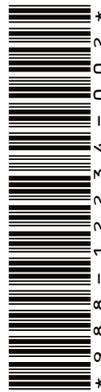
J1939

J1939 compliant PGN list

J1939 SPN/PGN	Description	NMEA2000 PGN
190 / 61444	Engine Speed	127488
102 / 65270	Engine Turbocharger Boost Pressure	127488
100 / 65263	Engine Oil Pressure	127489
175 / 65262	Engine Oil Temperature 1	127489
110 / 65262	Engine Coolant Temperature	127489
167 / 65271	Alternator Potential (Voltage)	127489
183 / 65266	Engine Fuel Rate	127489
247 / 65253	Engine Total Hours of Operation	127489
109 / 65263	Engine Coolant Pressure	127489
94 / 65263	Engine Fuel Delivery Pressure	127489
92 / 61443	Engine Percent Load at Current Speed	127489
513 / 61444	Actual Engine - Percent Torque	127489
189 / 65214	Engine Rated Speed	127498
237 / 65260	Vehicle Identification Number	127498
234 / 65242	Software Identification	127498

J1939 SPN/PGN	Description	NMEA2000 PGN
523 / 61445	Transmission Current Gear	127493
127 / 65272	Transmission Oil Pressure	127493
177 / 65272	Transmission Oil Temperature	127493

→ **Note:** The unit will act as a gateway and resend received J1939 PGN/SPN over NMEA 2000.



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