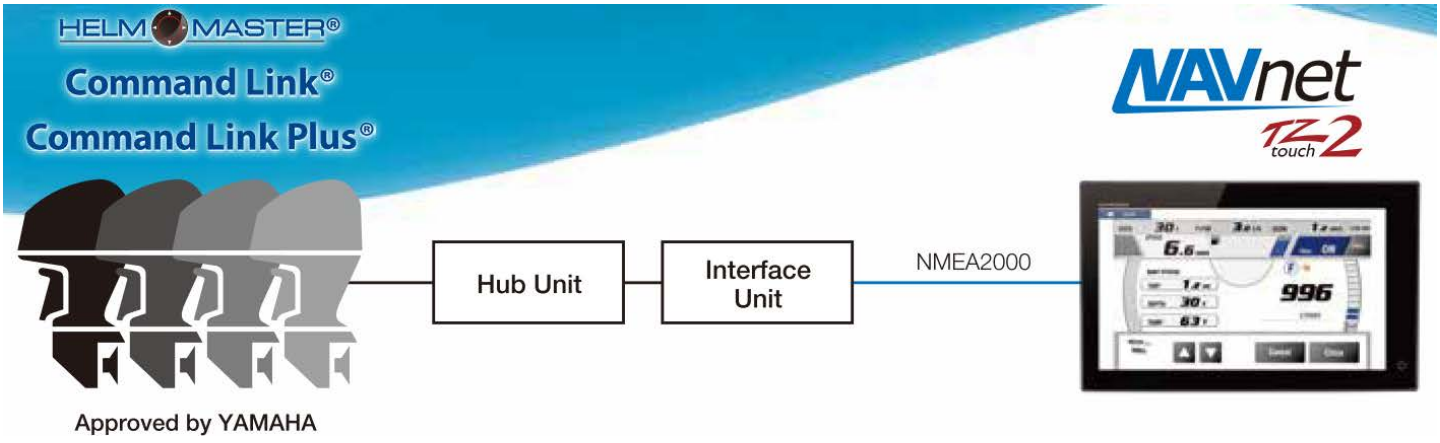
NAVnet TZ touch 2

Yamaha on NavNet TZtouch2

1. Yamaha on NavNet TZtouch2

TZTL12F/15F with v5.02 or higher is a suitable display **approved by Yamaha and complies with Yamaha specifications** for Yamaha outboards compatible with **Command Link**, **Command Link Plus**, and **Helm Master**. **All setups and indications of Yamaha engine gauges that have been available with the dedicated Yamaha displays are all available on a large color screen of TZTL12F (12.1"-wide) and TZTL15F (15.6"-wide).** This document describes the overview of the Yamaha interface, as well as available functions for Yamaha engine indication on the TZTL12F/15F.



2. Connecting to Yamaha Network

2.1. Compatible Yamaha Engines

The TZTL12F/15F with v5.02 or higher can be networked with Yamaha engines compatible with Command Link, Command Link Plus, and Helm Master.

Yamaha Engine Systems

System by Yamaha	Descriptions
Command Link	System to display digital information such as engine status and condition: Command Link supports up to two (2) outboards.
Command Link Plus	System to display digital information such as engine status and condition: Command Link Plus supports more than three (3) outboards.
Helm Master	Steering and throttle control system for middle- to large-sized outboard boats with twin to triple 4-stroke (225 to 350 HP) outboards: All steering actions are controlled electronically. Shifting and rotational vessel motion can be controlled with a joystick.

Compatibility Table for Yamaha Engine Indication on TZTL12F/15F

The following table shows Yamaha engine models compatible with Command Link and Command Link Plus. The TZTL12F/15F works as a Yamaha gauge in combination with applicable Yamaha engines. **Note that this is a general reference list and make sure to contact Yamaha representatives for the latest compatibility information.**

[✓]: Applicable / [–]: Not applicable

Code	Factory Model Name	US Model Name	Remarks	Digital Network Meter Command Link/Plus
6FM	F25GE(T)*	F25*C	Midrange	✓
6BT	F30B*	F30*A	Midrange	✓
6BG	F40F*	F40*A	Midrange	✓
60A	F50D*	–	Commercial	–
61S	FT50C*	–	Commercial High Thrust	–
6C1	F50H*	F50*B	Midrange	✓
6C5	F60F*	F60*B	Midrange	✓
6C2	FT50J*	T50*B	High Thrust	✓
6C6	FT60G*	T60*B	High Thrust	✓
6CJ	F70A*	F70*A	Midrange	✓
6D6	F75B*	F75*A	Midrange	✓
6BC	F75C*	–	Commercial	✓
6HW	F75D*	F75*B	Midrange	✓
6D7	F80B*	–	–	✓
6D8	F90B*	F90*A	Midrange	✓
6FP	F90C*	F90*B	Midrange	✓
60C	F100B*	–	Commercial	–
6D9	F100D*	–	–	✓
6HJ1	F100F*	–	–	✓
68V	F115A*	F115*A	In–Line Four	✓
68W	FL115A*	LF115*A	In–Line Four	✓
6EK	F115B*	F115*B	In–Line Four	✓
6EL	FL115B*	LF115*B	In–Line Four	✓
6FN	F115C*	VF115*A	In–Line Four V MAX SHO	✓
6EM	F130A*	F130*A	In–Line Four	✓
6EH	F150C*	VF150*A	VMAX SHO	✓
63P	F150D*	F150*B	In–Line Four	✓
64P	FL150D*	LF150*B	In–Line Four	✓

* = any letter at this position

Code	Factory Model Name	US Model Name	Remarks	Digital Network Meter Command Link/Plus
6BM	F150F*	–	Commercial	✓
6BN	FL150F*	–	Commercial	✓
6HP	F150G*	F150*CA	In–Line Four	✓
6HR	FL150G*	LF150*CA	In–Line Four	✓
6FA	F175A*	F175*A	In–Line Four	✓
6FH	F175B*	VF175*A	VMAX SHO	✓
6HS	F175C*	F175*CA	In–Line Four	✓
6HT	FL175C*	LF175*CA	In–Line Four	✓
6S1	F200B*	–	Commercial	✓
6S2	FL200B*	–	Commercial	✓
6AL	F200C*	F200*A	3.3L V6	✓
6AM	FL200C*	LF200*A	3.3L V6	✓
6CD	F200D*	VF200*A	4.2L 6V V MAX SHO	✓
6DA	F200F*	F200*B	In–Line Four	✓
6DB	FL200F*	LF200*B	In–Line Four	✓
6DV	F200G*	F200*CA	In–Line Four	✓
6DW	FL200G*	LF200*CA	In–Line Four	✓
6AS	F225B*	F225*A	3.3L V6	✓
6AT	FL225B*	LF225*A	3.3L V6	✓
6CC	F225D*	VF225*A	4.2L 6V V MAX SHO	✓
6CL	F225F*	F225*CA	4.2L V6 Offshore	✓
6CM	FL225F*	LF225*CA	4.2L V6 Offshore	✓
6HB	F225H*	F225*B	4.2L V6 Offshore	✓
6HC	LF225H*	LF225*B	4.2L V6 Offshore	✓
6P2	F250A*	F250*A	3.3L V6	✓
6P3	FL250A*	LF250*A	3.3L V6	✓
6CB	F250C*	VF250*A	4.2L 6V V MAX SHO	✓
6CG	F250D*	F250*CA	4.2L V6 Offshore	✓
6CH	FL250D*	LF250*CA	4.2L V6 Offshore	✓
6DX	F250G*	–	Commercial	✓
6DY	FL250G*	–	Commercial	✓
6FR	F250J*	VF250*A	4.2L 6V V MAX SHO	✓
6HD	F250L*	F250*B	4.2L V6 Offshore	✓
6HE	FL250L*	LF250*B	4.2L V6 Offshore	✓
6CE	F300B*	F300*CA	4.2L V6 Offshore	✓
6CF	FL300B*	LF300*CA	4.2L V6 Offshore	✓
6JA	F300C*	F300*A	4.2L V6 Offshore	✓

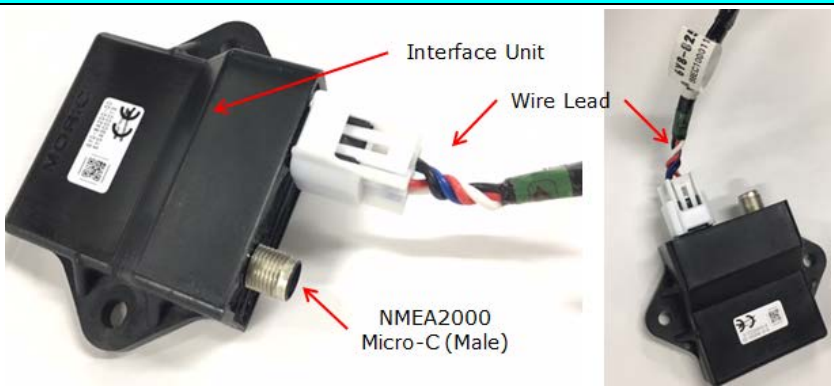
* = any letter at this position

Code	Factory Model Name	US Model Name	Remarks	Digital Network Meter Command Link/Plus
6JB	FL300C*	LF300*A	4.2L V6 Offshore	✓
6AW	F350A*	F350*CC	5.3L V8 Offshore	✓
6AX	FL350A*	LF350*CC	5.3L V8 Offshore	✓

* = any letter at this position

2.2. Network with Yamaha Engines

The TZTL12F/15F should be connected to Yamaha engine network via the **Yamaha interface model: 6YG, supplied by Yamaha**. Before networking the TZTL12F/15F to the Yamaha engine, arrange the 6YG through a local Yamaha repesentative.

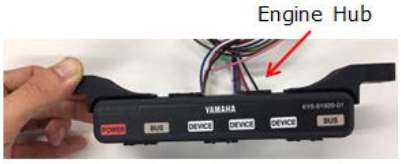


Yamaha Interface Model: 6YG

Yamaha Model Code	Name	Remarks
6YG-8A2D0-00	INTERFACE UNIT	Gateway
6YG-82521-00	WIRE LEAD	NMEA cable (male/female, 2 ft)

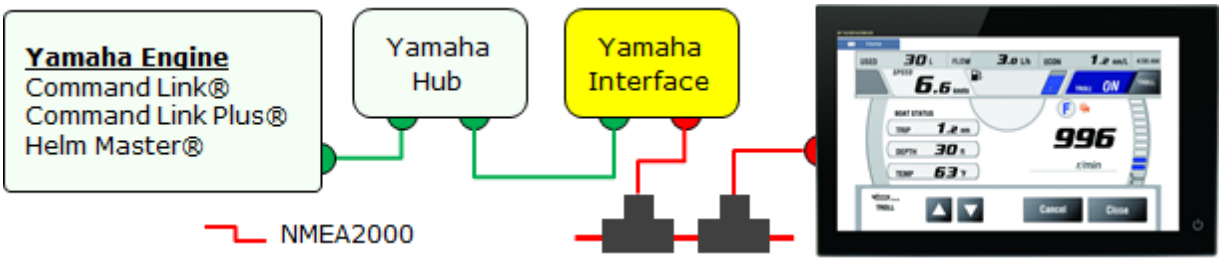
Note:

Make sure that the Yamaha engine hub (Yamaha supply) is also available onboard.



Yamaha Engine Hub

The following drawing shows an overview of network: Connect the Yamaha Interface to the engine hub and NMEA2000 backbone.



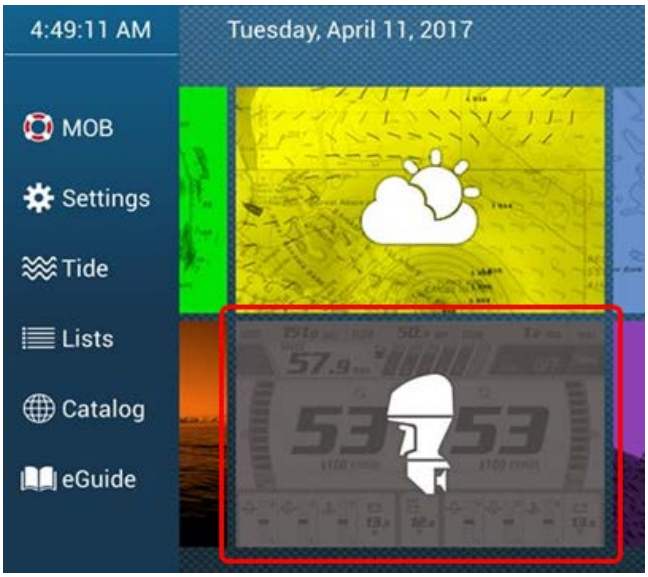
3. Setting Up for Yamaha Engine Display

Once the TZTL12F/15F detects the Yamaha engine network, the dedicated setup page is available in [Settings] – [Initial Setup] – [**YAMAHA ENGINE SETUP**] or a window will pop up to prompt you to this page, where you can access basic setup and calibration.

4. Utilizing Yamaha Engine Display

4.1. Yamaha Engine Page

The TZTL12F/15F complies with the specifications of Yamaha for graphical designs and available functions as an approved indicator. In the Home page, a new tile shown at right is available to access the Yamaha page in a full screen.



Home – Access to Yamaha Page

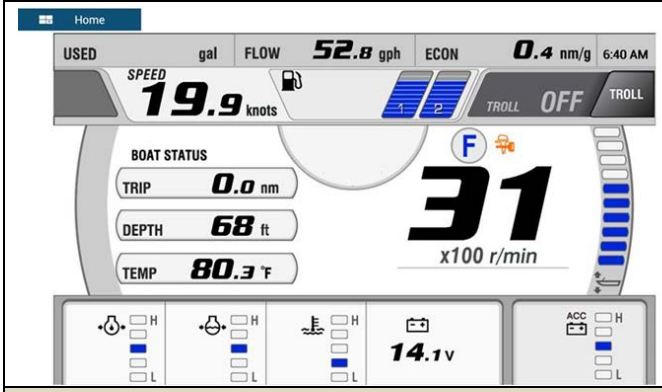
Note:

The Yamaha page is available in a **full screen mode only**, while the quarter size screen is planned for future update.

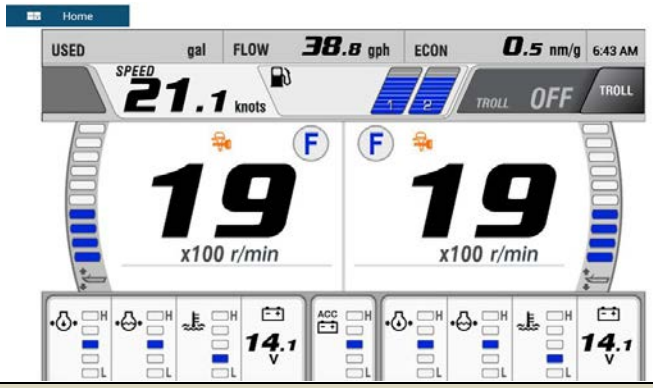
A total of two (2) screen options are available in the Yamaha page for **Engine Display** and **Boat Status**.

Engine Display

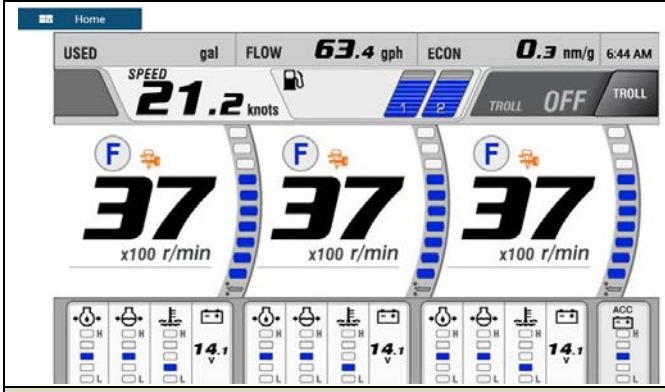
Single Engine



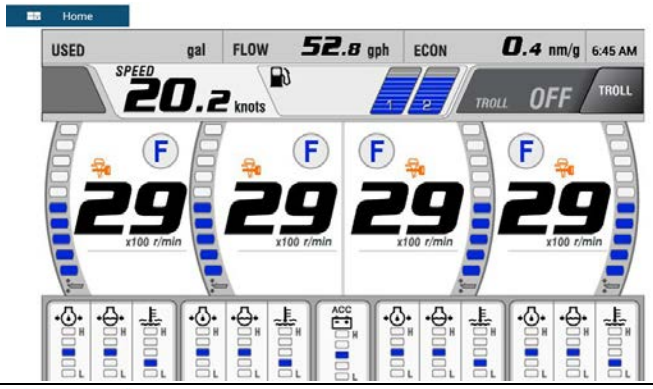
Twin Engine Combo (2 Enginies)



Triple Engine Combo (3 Engines)



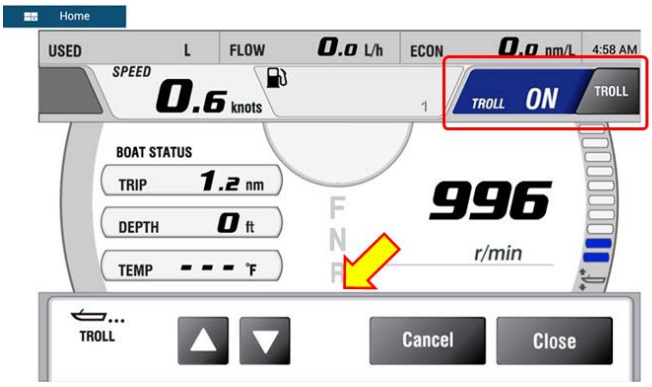
Quad Engine Combo (4 Engines)



Troll Mode

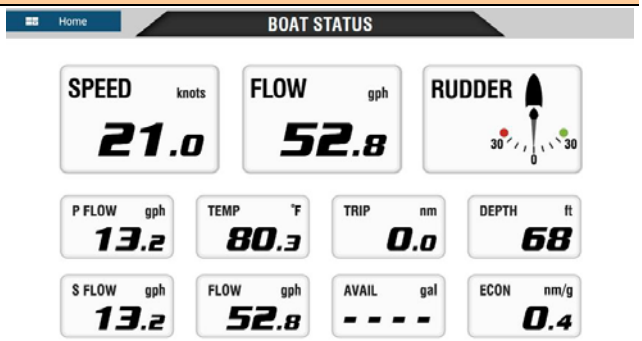
In the Engine Display screen, **Troll Mode** can be turned **on** or **off** and the **engine RPM can be adjusted**.

See **Section 4.2.** for details on how to utilize the Troll Mode in combination with autopilot **NAVpilot-711C.**



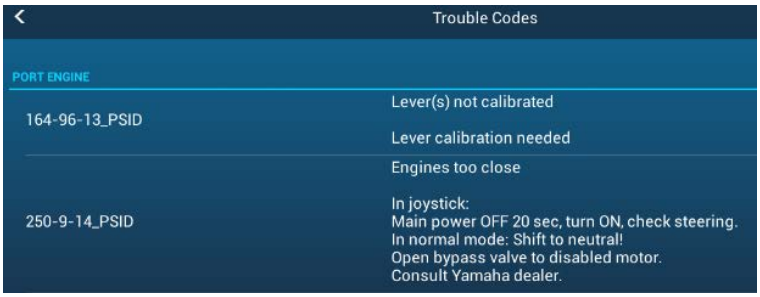
Boat Status

In addition to engine data, the boat status is also available.



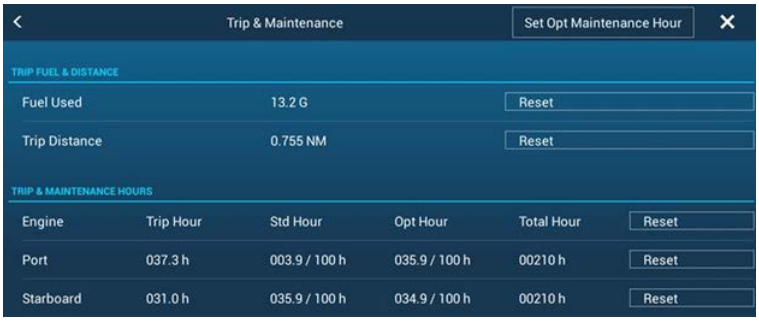
YAMAHA ENGINE SETUP Menu

In addition to Engine Display and Boat Status screens, other information can be checked in [Settings] – [Initial Setup] – [**YAMAHA ENGINE SETUP**] menu. As an example, **trouble codes** generated by the engine(s) can be reveiwed in [**Trouble Codes**] and **fuel used**, **trip distance**, **engine trip**, and **engine maintenance hour** can be reset in [**Trip & Maintenance**].



E.g. Trouble Codes

Trouble codes with detailed descriptions are available on the TZTL12F/15F screen.

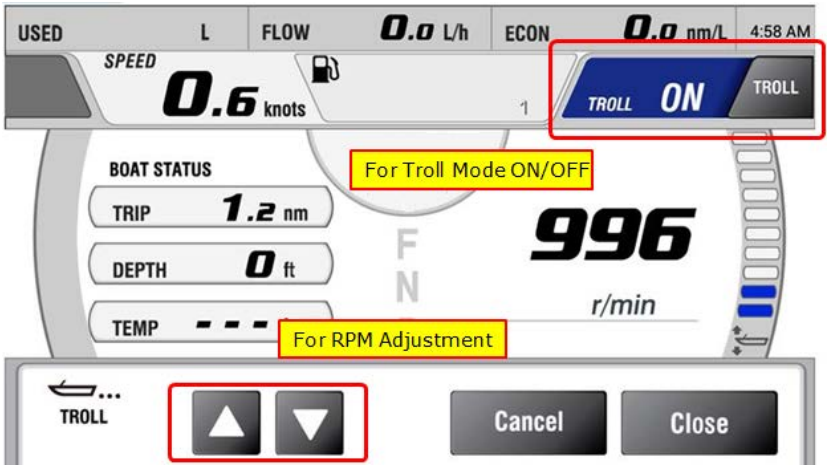


E.g. Trip & Maintenance

In this page, the trip and fuel infomration can be reset.

4.2. Troll Mode with NAVpilot-711C SABIKI Mode

The Troll Mode of Yamaha enables the eingine to operate at a lower RPM, which is suitable for trolling while fishing. The TZTL12F/15F Yamaha Engine page can **turn on the Troll Mode**. After activating the Troll Mode, **the engine RPM can be incrementally adjusted with the TZTL12F/15F by tapping on the large virtual icons**, depending on the condition of the boat and environment.



One of the situations where the Troll Mode adjustment is utilized is the **NAVpilot-711C SABIKI mode**: **The NAVpilot-711C SABIKI mode controls the reverse motion of outboards.** The boat heading will be stabilized while a boat slowly moves astern in the direction of wind and/or current for fishing. You just need to adjust the engine throttle(s) between neutral and reverse. **Under the Troll Mode, the engine RPM adjustment with the TZTL12F/15F large icons can make it easier to incrementally adjust the speed compared to manual throttle operation.**

4.3. NMEA2000 PGN: 127488 and 127489 via Yamaha Interface

The standard **NMEA2000 PGN: 127488 (Engine Parameters, Rapid Update)** and **PGN: 127489 (Engine Parameters, Dynamic)** are available in the NMEA2000 backbone through the Yamaha interface unit. In addition to the dedicated Yamaha page on the TZTL12F/15F, the conventional **Instrument page** can be utilized to show the engine data from these PGNs.

TZTL12F/15F – Instrument Page

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