HELM MASTER EX

YAMAHA
Revs Your Heart

RELIABILITY STARTS HERE

HELM MASTER EX

THE NEXT GENERATION IN DIGITAL BOAT CONTROL IS HERE

Yamaha has once again taken marine technology to the next level, with the industry-first and game changing Yamaha Helm Master® *EX* boat control system.

Helm Master® *EX* is a fully integrated boat control system that makes navigating and getting to your destination easier, and once you arrive, gives a whole new level of control to precisely manoeuvre your craft to exactly where and how you want it.

INDUSTRY-FIRST

INTEGRATED BOAT CONTROL SYSTEM

Never before has a single outboard engine been paired with a joystick control, delivering exceptional versatility and innovation.
In twin, triple and quad engine applications the new Helm Master® *EX* excels even further with seamlessly integrated multi engine control.

No longer do you have to install multiple third-party devices such as steering and control systems, autopilot navigation and additional heavy batteries - nor the hassles that come with complex integration systems.

With Yamaha's Helm Master® *EX*, you get all of the benefits of these systems and more, in a simple, clean and fully integrated, plug-and-play system. And because every component has been designed, engineered and manufactured by Yamaha, it works seamlessly together to deliver the ultimate in reliability, durability and performance.

Whether you're a beginner or seasoned expert, Helm Master® *EX* guarantees to make your fishing and boating experience easier, more enjoyable and productive.

By delivering effortless control over your boat, you get to spend more time on the spots where the fish are biting and less time setting up, anchoring or trying to fine tune your boat position.

***Helm Master® EX* - turning every fisherman into an expert.**

KEY FEATURES

One of the key features of the Helm Master® *EX* system is the suite of built-in SetPoint® functions which provide a range of position-hold and drift modes, that give you next level control over your craft, once you have arrived at your destination.

*SetPoint® features require the complete Helm Master® *EX* system.

FISHPOINT®

KEEPS POSITION
Single Engine & Multi Engine

FishPoint® works to maintain the boat's position. Simply identify your chosen fishing location and hit the FishPoint® button. Helm Master® *EX* then takes over using minimal engine RPM and the electric steering to hold your position.

The vessel can move in 1.5, 3 or 6 metre increments (preset in the gauge) with a bump of the joystick forward, reverse or to either side.

FishPoint® is perfect for stationary fishing directly below the boat.

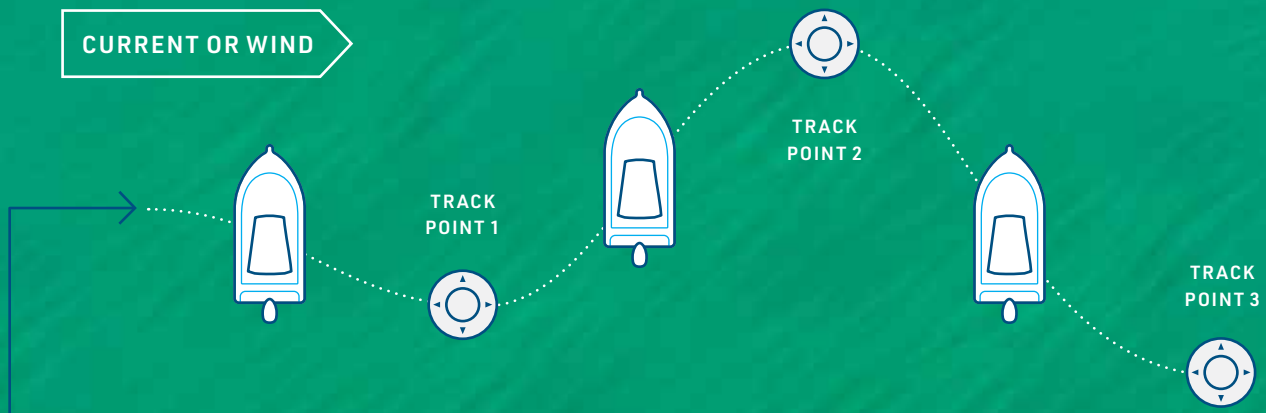
DRIFTPOINT®

KEEPS HEADING
Single Engine & Multi Engine

DriftPoint® allows you to keep your bow pointed in a set direction while allowing you to naturally drift via the prevailing current and/or wind.

One twist of the joystick moves your boat's bow heading angle by 1 degree, while a twist and hold moves it by 5 degrees, with additional twists up to 50 degrees.

DriftPoint® is great for drift-fishing a reef or watching a sunset from the stern.



DRIFTPOINT® TRACK

KEEPS HEADING
Single Engine & Multi Engine

DriftPoint® Track allows you to maintain your bow heading, while drifting along a set track (route) of waypoints that you have plotted using your compatible Multifunction Display. The boat will drift and use forward and reverse thrust to follow the predetermined route.

This is handy when trying to follow a same depth contour or for keeping a certain distance from shore or underwater objects like reefs and wrecks.

STAYPOINT®

KEEPS POSITION & HEADING
Multi Engines Configuration Only

StayPoint® "marks" your position and heading, while maintaining the spot within 3 metres (ideal conditions) or 23 metres (high winds/currents). This is handy when waiting to dock or refuel.

The vessel can move in 1.5, 3 or 6 metre increments (preset in the gauge) with a bump of the joystick forward, reverse or to either side.

One twist of the joystick will move the bow heading angle by 1 degree, while a twist and hold will move it by 5 degrees, with additional twists up to 50 degrees.

AUTOPILOT

NAVIGATION SYSTEM
Single Engine & Multi Engine

Another innovative feature of the Helm Master® *EX* system is the integration of Yamaha's all-new Autopilot system – making getting to your destination easier, more direct and efficient.

With the simple push of a button or a few taps on your compatible Multifunction Display, you can quickly plot out your journey, sit back and let the Helm Master® *EX* Autopilot and Digital Electric Steering do the rest.

HELM MASTER EX SYSTEM

Helm Master® *EX* allows you to customise your boating control set-up to suit your personal preferences, budget and boating needs.

Available for all current F150 to XTO425 Digital Electronic Control (DEC) outboards.

It's available across all current Yamaha's Digital Electronic Control outboards from F150 to XTO425 and can be installed in single, double, triple and quad outboard applications.

The system consists of four primary application levels and has been designed to be fully expandable and customisable to suit your needs. This means you can install the complete Helm Master® *EX* system, or start with the Digital Electronic Controls and Digital Electric Steering, and add additional components over time, allowing you to reap the benefits that come with each component upgrade.

As the whole system has been designed and manufactured by Yamaha, using a plug-and-play approach, each component is easy and quick to install and comes with none of the inherit problems that occur when trying to integrate complex third-party electronic devices from different manufacturers.

HELM MASTER® *EX* APPLICATION LEVELS

Each application level delivers additional functionality and user benefits. You can choose to install the complete system or add application components over time.

FUNCTION	DEC Digital Electronic Control LEVEL 1	DES Digital Electric Steering LEVEL 2	AP Autopilot LEVEL 3	FM Full Maneuverability LEVEL 4 (FULL SYSTEM)
Single Lever	●	●	●	●
Speed Control	●	●	●	●
Trim Assist	●	●	●	●
Centre Engine	●	●	●	●
Neutral Hold	●	●	●	●
Pattern Shift	●	●	●	●
Adjustable/Variable Lock-to-Lock		●	●	●
Adjustable/Variable Steering Friction		●	●	●
Heading Hold			●	●
Course Hold			●	●
Track Point (with Compatible Multifunction Display)			●	●
Pattern Steer (Zig Zag and Concentric Spiral)			●	●
Autopilot with Waypoint Arrival and Joystick Control				●
SetPoint® Features (FishPoint®, DriftPoint® & StayPoint®)				●
Full Joystick Manoeuvrability				●

HELM MASTER® *EX* SYSTEM – FULLY *EX*PANDABLE

You can install the complete system or choose to upgrade each component over time, to suit your changing needs and budget.

LEVEL 1
DIGITAL ELECTRONIC CONTROL

Level 1 of the Helm Master® *EX* System incorporates Yamaha's upgraded Digital Electronic Control and CL5 touchscreen display. There is also the option of the all-new slimline electronic key switch panel with keyless remote, to lock and unlock engine ignition.

SINGLE HANDLE DEC

TWIN HANDLE DEC

DIGITAL ELECTRONIC CONTROL

Completely redesigned with greater ergonomic comfort and capabilities, the Digital Electronic Control is available in single handle, or twin handle for twin - through to quad-engine installations.

HELM MASTER EX

KEY FEATURES INCLUDE:

- Push button up and down Speed Control.
- Pattern Shift mode which automatically places the engine in and out of gear for slower-than-idle-speed trolling, for perfect lure presentation.
- Neutral Hold allows the operator to increase engine RPM while in neutral for engine warm up or to generate additional charge for the batteries.
- Trim Assist automatically trims the outboard to the operator's pre-set levels, at chosen engine speeds, making operation easier.
- Station Selector allows you to switch between multiple helms and/or additional Joystick Station.
- Single Lever allows you to control multiple outboards with a single throttle handle.*
- Centre Engine(s) allows you to select the centre engine/s only, for when trolling or in no-wake zones, for triple and quad engine applications.
- Throttle Friction Adjustment allows you to customise the amount of pressure required to move the throttle handle.

*Twin handle controls only.

LEVEL 1
DIGITAL ELECTRONIC CONTROL

CL5 TOUCHSCREEN DISPLAY

The low profile Yamaha Command Link® CL5 touchscreen display is small in size but big on information, features and capability.

Its sophisticated, modern design features intuitive operation and matches the latest boat console trends, while its compact size leaves more room on the console for other electronics. The CL5 is suitable for all of Yamaha's Electronic Fuel Injected engines and can monitor up to four outboards.

It is also the control centre for all of the Helm Master® *EX* functions including Autopilot, SetPoint®, steering and other adjustments.

HELM MASTER EX

ELECTRONIC KEY SWITCH (OPTIONAL)

The back-lit engine Start and Stop switch panels offer a slim, space-saving, push-button design and modern look. These new panels take up very little space, allowing more room for other electronic equipment.

KEYLESS REMOTE

KEYLESS REMOTE

The buoyant wireless keyless remote (push-button) allows for keyless start/stop push-button ignition. It also serves as the on/off device for Yamaha's Y-COP® anti-theft system.

It allows for one-touch starting while at the helm and can unlock/lock ignition from up to five metres away.

The keyless remote floats and is water resistant for up to five minutes. Two remotes are provided with each Helm Master® *EX* Electronic Key Switch panel (not available with other Yamaha switch panels).

SAFETY LANYARD SWITCH

SINGLE OUTBOARD SWITCH

TWIN OUTBOARD SWITCH

TRIPLE OUTBOARD SWITCH

QUAD OUTBOARD SWITCH

LEVEL 2
DIGITAL ELECTRIC STEERING

Level 2 of the Helm Master® *EX* system sees the addition of Yamaha's plug-and-play bolt-on Digital Electric Steering. This system takes marine steering to the next level, with extreme smoothness, quietness, technical smarts and precision.

Yamaha's V6 and V8 outboards offer a built-in Digital Electric Steering option that forms part of the unit.

BETTER PERFORMING

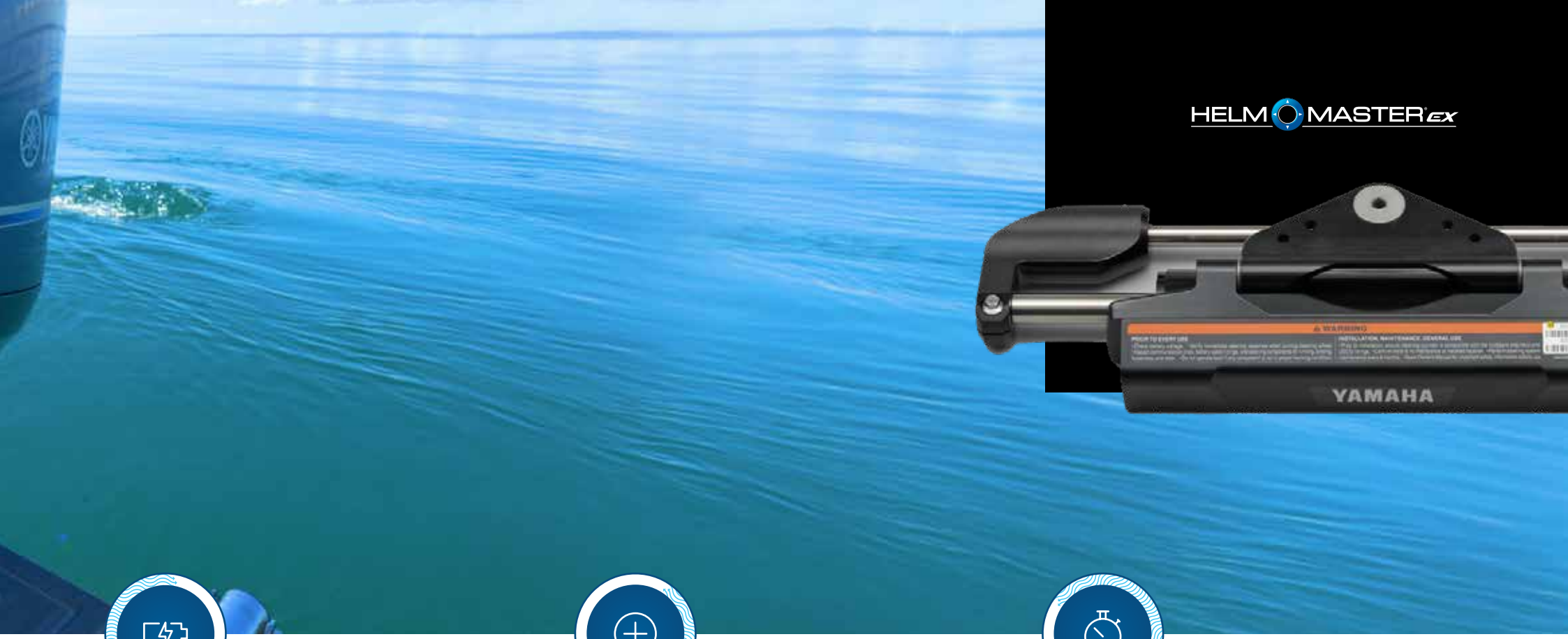
Yamaha's digital electric steering system is smoother, quiter, faster and has zero lag time - in comparison to hydraulic and cable steering systems – delivering an overall more enjoyable piloting experience.

SMART LOCK-TO-LOCK

You can set the lock-to-lock wheel rotation to constant or variable, with the latter using the engines RPM to deliver finer control at high speeds and more responsive control at low speeds.

SMART STEERING FRICTION

You can adjust the steering friction for a heavier or lighter feel to suit your personal preference and the prevailing conditions. In addition, the system also automatically adjusts the friction based on the outboards RPM, ensuring improved control at all speeds.



LESS BATTERY POWER

Digital Electric Steering only uses current when in operation (on demand), which means it is not constantly drawing amps like conventional power steering pumps. This gives you more net battery power to run other electronic devices.

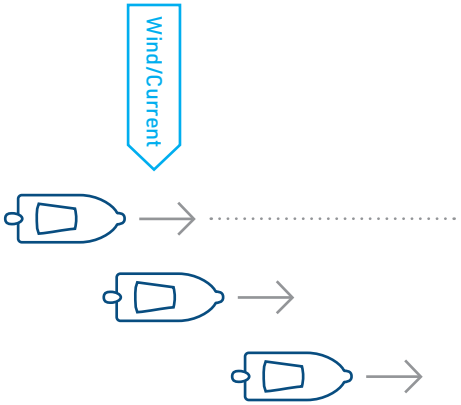
MORE AVAILABLE SPACE

Unlike hydraulic steering systems, there are no pumps, valves or hoses, freeing up space in the bilge area at the back of the boat and upfront under the console.

QUICKER AND CHEAPER TO INSTALL

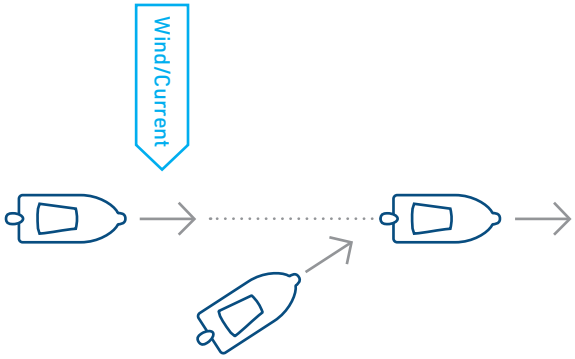
This plug-and-play bolt-on system is easy and quick to install, saving on installation time and costs. There is no need to install pumps, valves and hoses, nor the ongoing maintenance costs that come with other steering systems.

LEVEL 3
AUTOPILOT



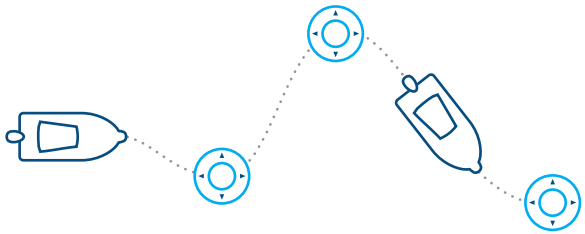
HEADING HOLD

With the push of a button, Heading Hold allows you to automatically maintain a set compass heading (e.g. due North), while allowing your boat to drift with the prevailing currents and wind.



COURSE HOLD

With a push of a button, Course Hold allows you to keep your course, with the system automatically adjusting the boat back on course if it is impacted by current and/or wind. This is handy if your aiming to travel the shortest route to a specific location.

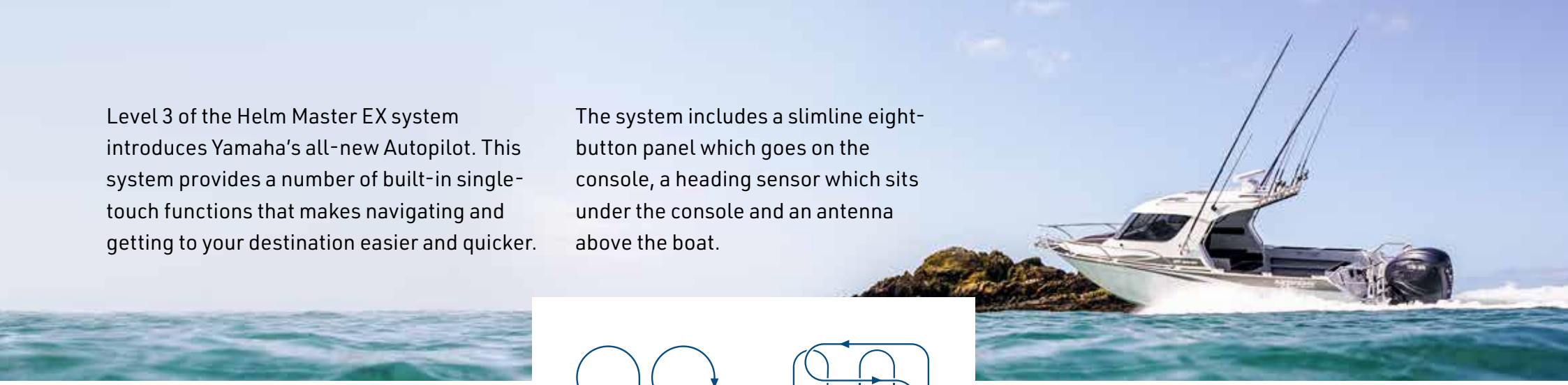


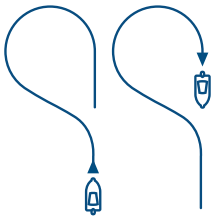
TRACK POINT

Track Point allows you to pilot your boat automatically along a set of waypoints that you have plotted into your compatible Multifunction Display. This is handy for following set depth contours, channel markers, navigation beacons, a shoreline or other structures.

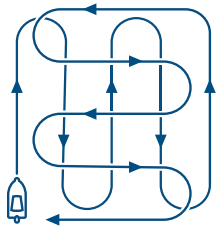
Level 3 of the Helm Master EX system introduces Yamaha's all-new Autopilot. This system provides a number of built-in single-touch functions that makes navigating and getting to your destination easier and quicker.

The system includes a slimline eight-button panel which goes on the console, a heading sensor which sits under the console and an antenna above the boat.

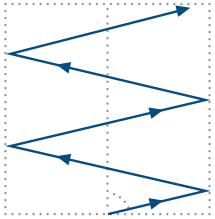




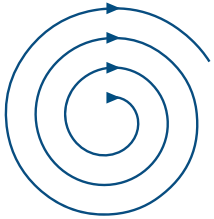
WILLIAMSON TURN



PATTERN SEARCH



ZIGZAG



SPIRAL

WAYPOINT ARRIVAL

Provides automatic deceleration when approaching the set destination. You can also choose to engage one of the SetPoint® functions automatically (available with the Joystick System) as you return the throttle to the neutral position, on arrival. This function is only available through a compatible Multifunction Display.

PATTERN STEER

Another feature of the Autopilot is Pattern Steer, which allows you to select one of four preset adjustable steering patterns, without having to set waypoints on a Multifunction Display. You can engage Speed Adjust and Pattern Shift (very slow trolling) while in Pattern Steer mode.

SYSTEM INTEGRATION

Autopilot seamlessly integrates with Speed Control, Trim Assist, the joystick and other Helm Master® *EX* functions.

LEVEL 4
FULL MANOEUVRABILITY JOYSTICK

Level 4 is the premium level of the Helm Master® *EX* system, with the addition of Yamaha's full manoeuvrability joystick control system.

This stylish and ergonomic controller provides simultaneous control over shift, throttle and steering, in one easy-to-use joystick application. It can also be used in conjunction with many of the built-in Helm Master® *EX* SetPoint® positioning modes (FishPoint®, DriftPoint® and StayPoint®), for maximum control over your vessel's positioning.

SETPOINT® FUNCTIONS

The joystick gives you additional control over your vessel when in FishPoint®, DriftPoint® and StayPoint® modes.

(More info about each feature on pages 3 and 4)

FISHPOINT® (BOW & STERN)

DRIFTPOINT®

DRIFTPOINT® TRACK

STAYPOINT®

(Only available in twin, triple and quad outboard applications)

ADJUSTABILITY

THRUST & STEERING ADJUSTMENT

While in Joystick, Fishpoint® or DriftPoint® modes, you can increase or decrease the maximum thrust level available to the system, to suit the prevailing conditions. You can also adjust the joystick steering sensitivity when Autopilot is active.

* StayPoint® automatically selects the thrust level.

FULL MANOEUVRABILITY

The joystick delivers precise low speed control when approaching a dock, launching and retrieving off a trailer or coming up to a beacon, wreck or other physical structure.

Simply push the joystick to move forward, pull the joystick to reverse and twist the joystick to turn. With twin, triple and quad outboard applications, you also have the ability to move the joystick from side-to-side for precise lateral movements and twist for turning on the spot, for even greater control over your vessel.

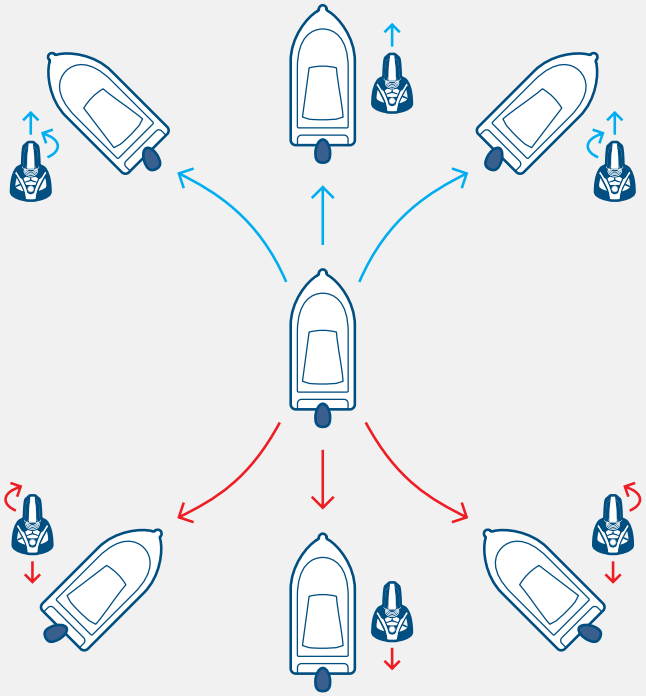
MULTIPLE STATIONS

HELM MASTER EX

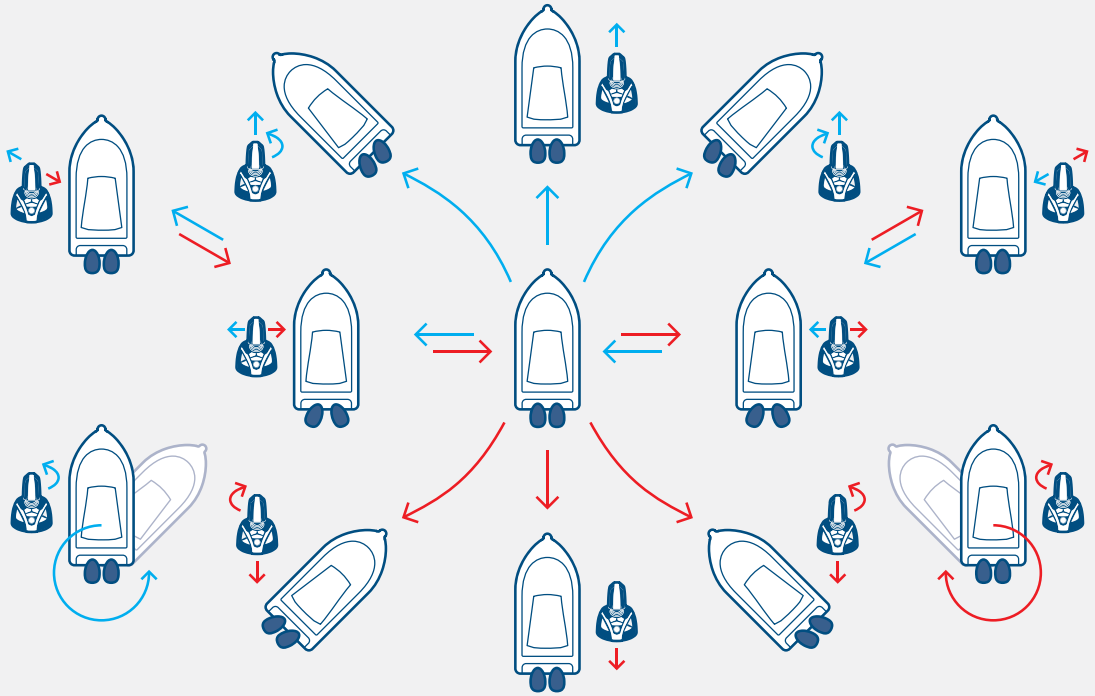
A Second Station can be added to vessels that have more than one helm.

A seperate Joystick Station, which includes a CL5 gauge or Multifunction Display, can also be added for additional boat maneuvering and positioning capabilities.

SINGLE ENGINE APPLICATION



TWIN/TRIPLE/QUAD ENGINE APPLICATION



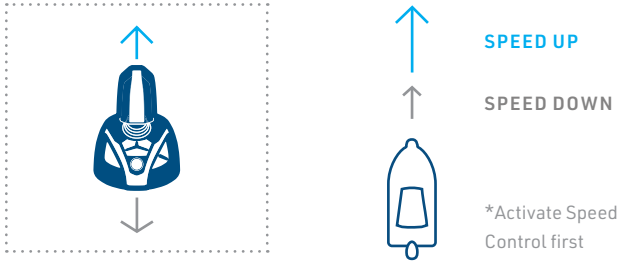
LEVEL 4
FULL MANOEUVRABILITY JOYSTICK

AUTOPILOT INTEGRATION

The joystick system also works in with the Autopilot to provide additional speed, direction and positioning control.

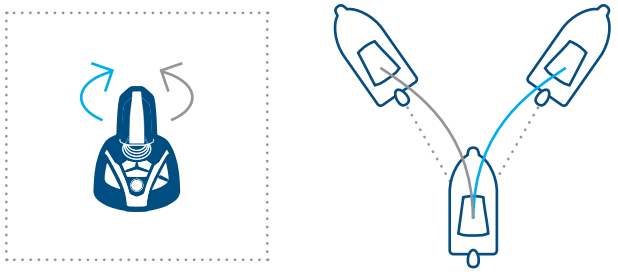
SPEED ADJUST

You can adjust the speed up or down, by RPM or by GPS speed over ground (operator-selected via display), in preset increments, by pushing the joystick forward (increase speed) or backward (reduce speed). This feature is available during normal operation and when using Autopilot, by activating the Speed Control on the Digital Electronic Control.



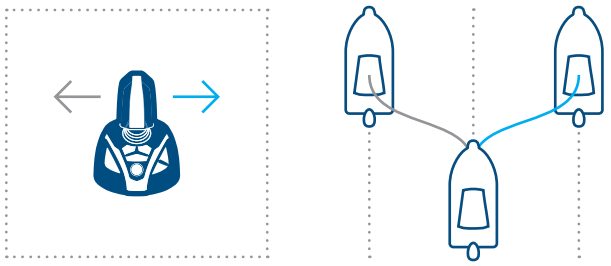
HEADING ADJUST

While using the Heading Hold feature in Autopilot, you can adjust the heading by twisting the joystick handle once for a one-degree adjustment or twist and hold the joystick until it beeps, for a 5 degree adjustment. You can continue this up to 50 degrees, by twisting and holding the joystick repeatably.



COURSE ADJUST

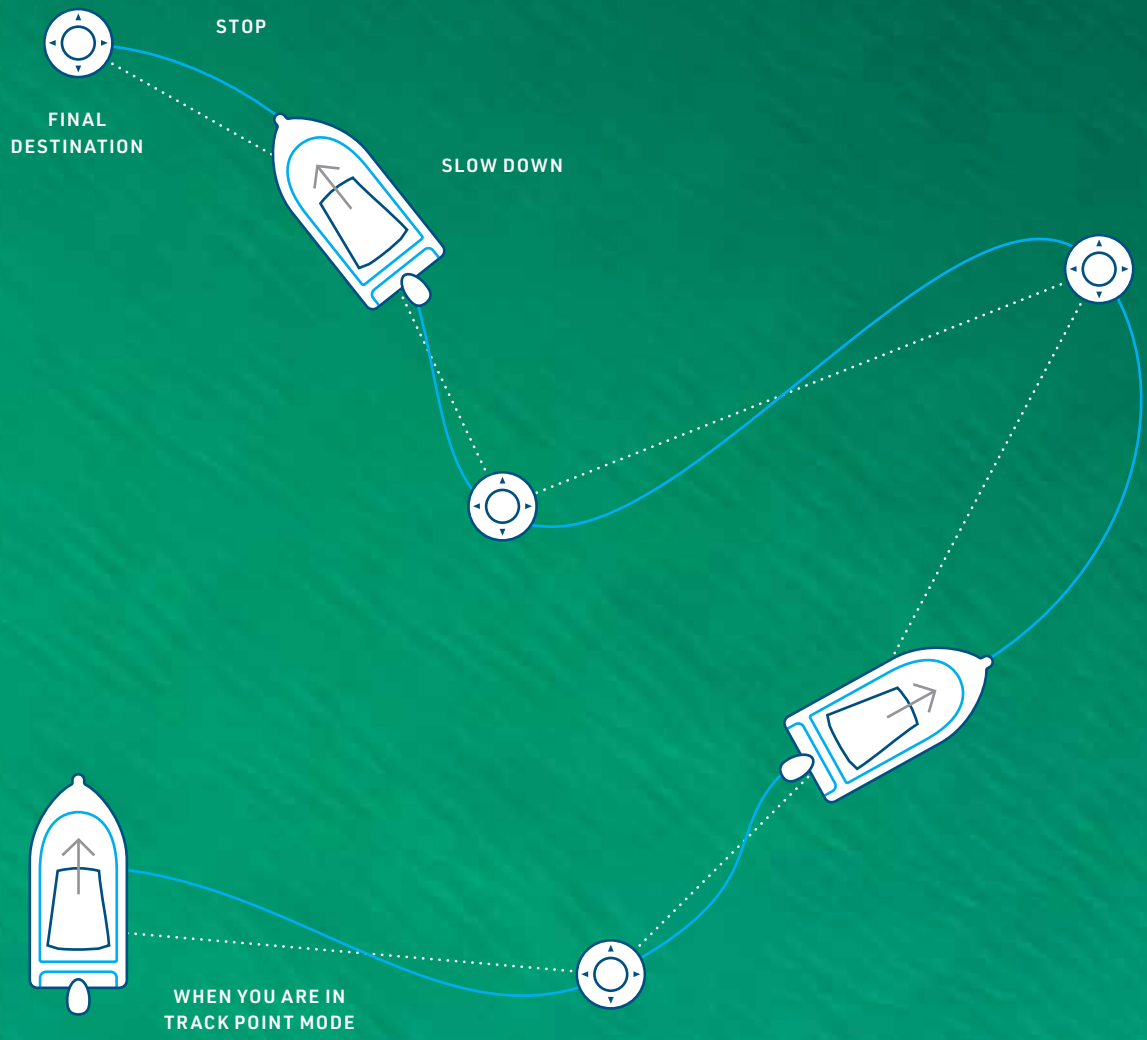
While using the Course Hold feature in Autopilot, you can adjust your course heading by twisting the joystick (same as Heading Adjust), or offset your course parallel by moving the joystick sideways (3 metre, 6 metre, 15 metre intervals, preselected through the display)



WAYPOINT ARRIVAL WITH SETPOINT®

The operator can select what the Autopilot does on approach to the final waypoint:

- Alert the skipper to the arrival at the waypoint.
- Automatically decelerate, alert the operator to move the control handle to neutral, the boat will then enter the preselected SetPoint® mode (i.e. FishPoint®, DriftPoint® or StayPoint®)
- Automatically decelerate, alert the skipper to the arrival at the waypoint and await further skipper input.



* Waypoint Arrival is only available with a compatible Multifunction Display. Boat deceleration and stopping characteristics may differ between Multifunction Display manufacturers. The boat may pass by the final waypoint in some situations during Waypoint Arrival. Operator attention is required when approaching the final waypoint.

HELM MASTER EX

HELM MASTER EX

COMPATIBLE OUTBOARDS

The Helm Master® *EX* system can be retrofitted to all Digital Electronic Control (DEC) engines from F150 up to XTO425.*

Please discuss with your Yamaha dealer to confirm the system is suitable for your application.

* Excludes first generation V8 F350, V8 F300 and 3.3L DEC F250 models.

	XTO425	F300 DES	F300	F250 DES	F250	F225	F200	F175	F150 (DEC)
Cylinders	V8	V6	V6	V6	V6	V6	In-Line 4	In-Line 4	In-Line 4
Configuration	32-Valve DOHC	24-Valve DOHC with VCT Direct-Action 60°	24-Valve DOHC with VCT Direct-Action 60°	24-Valve DOHC with VCT Direct-Action 60°	24-Valve DOHC with VCT Direct-Action 60°	24-Valve DOHC with VCT Direct-Action 60°	16-Valve DOHC VCT Direct-Action	16-Valve DOHC Direct-Action	16-Valve DOHC Direct-Action
Digital Electric Steering	Built-In	Built-In	Bolt-On Optional	Built-In	Bolt-On Optional	Bolt-On Optional	Bolt-On Optional	Bolt-On Optional	Bolt-On Optional
Helm Master® EX Ready	✔	✔	✔	✔	✔	✔	✔	✔	✔
Signature Grey	✔	✔	✔	✔	✔	✔	✔	✔	✔
Pearlescent White	✔	✔		✔			✔		✔
Bore x Stroke (mm)	96 x 96	96 x 96	96 x 96	96 x 96	96 x 96	96 x 96	96 x 96.2	96 x 96.2	96 x 96.2
Displacement (cm³)	5559	4169	4169	4169	4169	4169	2785	2785	2785
Recommended Max RPM	5000-6000	5000-6000	5000-6000	5000-6000	5000-6000	5000-6000	5000-6000	5000-6000	5000-6000
Weight (kg)*	XF425XSA: 432 LXF425XSA: 432 XF425USA: 443 LXF425USA: 443 XF425ESA: 463 LXF425ESA: 463	F300XSB: 288 LF300XSB: 288 F300USB: 294 LF300USB: 294	F300XCB: 263 LF300XCB: 263 F300UCB: 268 LF300UCB: 268	F250XSB: 288 LF250XSB: 288 F250USB: 294 LF250USB: 294	F250XCB: 263 LF250XCB: 263 F250UCB: 268 LF250UCB: 268	F225XCB: 263 LF225XCB: 263 F225UCB: 268 LF225UCB: 268	F200LCA: 221 F200XCA: 222 LF200XCA: 222	F175LCA: 219 F175XCA: 220 LF175XCA: 220	F150LCA: 219 F150XCA: 220 LF150XCA: 220
Transom Height	X: 637mm (25.1") U: 764mm (30.1")	X: 643mm (25.3") U: 770mm (30.3")	X: 643mm (25.3") U: 770mm (30.3")	X: 643mm (25.3") U: 770mm (30.3")	X: 643mm (25.3") U: 770mm (30.3")	X: 643mm (25.3") U: 770mm (30.3")	L: 516mm (20.3") X: 643mm (25.3")	L: 516mm (20.3") X: 643mm (25.3")	L: 516mm (20.3") X: 643mm (25.3")
Fuel Induction System	EFI	EFI	EFI	EFI	EFI	EFI	EFI	EFI	EFI
Alternator Output	90A	70A	70A	70A	70A	70A	50A	50A	50A
Gear Ratio	1.79:1	1.75 : 1	1.75 : 1	1.75 : 1	1.75 : 1	1.75 : 1	1.86 : 1	1.86 : 1	2.00 : 1

*Dry weight without prop.

MAKE YOUR DREAM
A REALITY

YMF
YAMAHA MOTOR FINANCE

- Ability to finance accessories and approved insurances
- Flexible loan terms available from 2 to 7 years
- Fixed interest rate and repayments
- Simple and convenient
- Available from your local Yamaha Dealer

To find your local Yamaha dealer visit
www.ymf.com.au

YMF Direct Sales
1800 123 100

Disclaimer: Finance to approved applicants. Credit criteria, fees, charges, terms and conditions apply.
Yamaha Motor Finance Australia Pty Ltd ABN 29101928670 Australian Credit Licence 394553

YAMAHA
FINANCIAL SERVICES

YMI
YAMAHA MOTOR INSURANCE

- Only genuine Yamaha parts used on repairs for Yamaha powered boats
- New for Old on mechanical and electrical components of the motor regardless of age
- 3 years replacement option on your new Yamaha powered boat
- Layup discount for the months your Yamaha powered boat is not used
- Up to $5,000 cover for emergency towing assistance
- Personal effects cover up to $1,500 per item and $10,000 in aggregate

To find your local Yamaha dealer visit
www.ymia.com.au

YMI Direct Sales
1300 794 454