

# Yamaha FX Limited SVHO (2019-)

## Brief Summary

The FX series of five WaveRunner models represents Yamaha’s line of luxury and performance Personal Water Craft (PWC).

The FX Limited SVHO is the ultimate package with the most technology, the most amenities and the most performance. Yamaha packages this model with all of the accessories, leaving nothing to want when playing on the water.

## Price

**Base Price**\$17399.00

*Prices, features, designs, and equipment are subject to change. Please see your local dealer or visit the builder's website for the latest information available on this boat model.*

## Key Features

- 1.8-liter, Supercharged 4-cylinder, 4-stroke, Super Vortex High Output (SVHO) marine engine
- 1 to 3-person rider capacity
- 44 gallons (167 L) of storage capacity
- NanoXcel®2 lightweight hull and deck
- Connex® touchscreen with security and drive control
- Reverse RiDE™ with traction control

## Specifications

Length Overall	140.9"   3.58 m
BEAM	50"   1.27 m
Dry Weight	822 lbs.   373 kg
Tested Weight	
Draft	

Draft Up	
Draft Down	
Air Draft	
Deadrise/Transom	N/A
Max Headroom	open
Bridge Clearance	
Weight Capacity	529 lbs.   240 kg
Person Capacity	3
Fuel Capacity	18.5 gal.   70 L
Water Capacity	
Length on Trailer	
Height on Trailer	
Trailer Weight	
Total Weight	
Aft Deck	
Salon Inside Width	
Salon Fore & Aft	

Salon Height	
Salon Volume	
Galley Volume	
Master SR Width	
Master SR fore & Aft	
Master SR Overhead	
Master SR Volume	
Eng. Room Volume	

## Acceleration Times & Conditions

Time to Plane	
0 to 20	
Ratio	
Props	
Load	
Climate	

## Contents of Report

- [Mission](#)

- [Major Features](#)
- [Performance](#)
- [Handling](#)
- [Features Inspection](#)
- [Stern](#)
- [Side Decks](#)
- [Seats](#)
- [Storage](#)
- [Control Systems](#)
- [Engine](#)
- [Accessories](#)
- [Options to Consider](#)
- [Price](#)
- [Observations](#)

Yamaha and FX Limited are trademarks of Yamaha Motor Co., Ltd.  
Yamaha FX Limited SVHO running

The FX Limited SVHO is Yamaha's top of the line for luxury and performance in their WaveRunner series.

Yamaha and FX Limited are trademarks of Yamaha Motor Co., Ltd.  
Yamaha FX Limited SVHO running

The FX Limited SVHO has a newly designed deck and hull that enhances performance and comfort.

Yamaha and FX Limited are trademarks of Yamaha Motor Co., Ltd.  
Yamaha FX Limited SVHO running

The Yamaha FX Limited SVHO is a 140.9" (3.58 m) PWC and has a three-person seating capacity.

## Mission

Yamaha put all of their knowledge and experience in personal watercraft design and construction to create their ultimate package, the FX Limited SVHO. Altogether, the Yamaha FX Limited SVHO offers the top of the line performance, luxury features, and accessories to enjoy exhilarating experiences in comfort and give

owners bragging rights on the water.

## Yamaha FX Limited SVHO running

Yamaha has WaveRunner models ranging from economical to performance racers. With the Yamaha FX Limited SVHO you get a WaveRunner with everything Yamaha has to offer.

# Major Features

- **1.8-liter Supercharged SVHO Jet Drive.** This is the largest displacement engine in the personal watercraft market at 1812cc.
- **4.3" Multifunction Display.** Connex<sup>®</sup>, Yamaha's all-in-one touchscreen helm control system integrates the boat's entertainment features, operation functions, and essential system information.
- **No Wake Mode.** 3-position switch sets engine speed and maximizes jet thrust for No Wake zones.
- **44-Gallons of Storage.** The Yamaha FX Limited SVHO has 44 gallons (167 L) of wet and dry storage in multiple compartments.
- **Cruise Control.** Yamaha's Cruise Assist allows the operator to set the speed for cruising.
- **Integrated Fold-Down Re-Boarding Step.** Yamaha built in a wide drop-down re-boarding step to make it even easier to get onboard.
- **Accessory Tow Package.** The Yamaha FX Limited SVHO comes standard with Yamaha's Accessory Tow Package which includes a color-matched tube, inflator, 12-volt outlet, tow rope, and two fenders.
- **Accessory Tech Package.** The Yamaha FX Limited SVHO comes standard with Yamaha's Accessory Tech Package which includes two waterproof, wireless, Bluetooth<sup>®</sup> speakers, a GPS fishfinder with transducer and RAM<sup>®</sup> mount hardware.

# Performance

## Yamaha FX Limited SVHO running

The newly re-designed deck and hull use Yamaha's NanoXcel 2 construction technology which substantially improves the FX Limited SVHO's power-to-weight ratio.

The Yamaha FX Limited SVHO has a length of 140.9" (3.58 m) and a beam of 50" (1.27 m). With an empty weight of 822 lbs. (372.85 kg), with 100% fuel, and one person onboard and 50 lbs. (22.68 kg) of gear, there was an estimated weight of 1,182 lbs. (536.15 kg).

**Top Speed.** With a single supercharged Yamaha 1.8-liter Super Vortex High Output (SVHO) engine turning the internal impeller jet drive, the test PWC reached a top speed of 68.0 mph (109.44 kph) at 7600 rpm.

**Best Cruise.** The best cruise came in at 4000 rpm running at 25.5 mph (41.04 kph). At that speed, the 7.8 gph (12.3 lph) translates to 7.8 miles per gallon (3.33 kpl) and a range of 130 statute miles (210 kilometers) while still holding back a 10% reserve of the PWC's 18.5-gallon (70.03 L) total fuel capacity.

## Acceleration and Conditions

Yamaha FX Limited SVHO acceleration

## Handling

Yamaha FX Limited SVHO running

The Yamaha FX Limited SVHO has race-inspired performance and demonstrated an exhilarating ride. With Yamaha's supercharged, high-performance SVHO engine and the lighter-weight NanoXcel 2 hull and deck construction, the FX Limited accelerated onto plane virtually instantly, going from zero to 30 mph in 1.5 seconds. Yamaha has the steering dialed in with playful spin-outs easily achievable. Remember, that is what these PWC were designed for serious fun by experienced riders.

**Low-Speed Maneuvering.** Yamaha has added their Thrust Directional Enhancer (TDE). This creates the benefit of downward thrust when maneuvering at low speeds.

## Features Inspection

Yamaha FX Limited SVHO fish finder

The GPS fishfinder with RAM mounts comes standard on the Yamaha FX Limited SVHO.

## Stern

The stern of the Yamaha FX Limited SVHO is designed for easy boarding from in the water with a custom-cut, rubberized non-skid that is easy on bare feet. The non-skid surface also deters the heat from the sun. Further back is a flip-down re-boarding step making it easier to re-board the FX Limited without having to climb and pull ourselves out of the water.

Yamaha FX Limited SVHO mats

The custom-cut mats are a significant addition to the comfort level on the Yamaha FX Limited SVHO.

Yamaha FX Limited SVHO

The re-boarding step on the Yamaha FX Limited SVO easily flips down.

Note the handle at the base of the seat to make boarding even easier. Most PWC manufacturers don't design to this level of detail and or consideration of how customers use their products.

## Yamaha FX Limited SVHO step

Fully extended, the re-boarding step provides a wide and secure step to get aboard from the water.

## Side Decks

The side decks on the Yamaha FX Limited SVHO also have custom-cut, rubberized non-skid for comfort and security. Yamaha has included drains in the footwell to keep the water from building up and sloshing about.

## Yamaha FX Limited SVHO side decks

The side decks taper on the Yamaha FX Limited SVHO from the stern to the footwells.

## Yamaha FX Limited SVHO foot well

Yamaha has included footwell drains that keep the footwells relatively dry (yellow arrow).

## Yamaha FX Limited SVHO cleats

A pair of spring-loaded, pull-up cleats makes for easy tie-ups dockside without creating a trip hazard.

## Seats

The level of luxury that Yamaha has achieved on the FX Limited SVHO begins with the seats. They are more like saddles when you sit in them and not on them. The textured upholstery and wraparound saddle backs hold all three riders securely.

## Yamaha FX Limited SVHO cruise seat

The Yamaha FX Limited SVHO provides all-day cruise comfort for up to three riders.

The rear position of the three saddle seats includes a wraparound grab handle for safety. This also comes in handy for rear-facing riders observing the end of the towline.

## Yamaha FX Limited SVHO riders

Shown is the Yamaha FX Limited SVHO that can accommodate three full-grown adult riders.

## Yamaha FX Limited SVHO

The SVHO engine and jet drive are powerful enough to accommodate tow sports. Yes, that is Captain Steve testing the tube to make sure it is safe for kids.

The rear-most position includes a wraparound grab handle for safety and this also comes in handy for rear-facing riders observing the end of the towline. The aft deck provides a secure place for the observer rider to place their feet.

## Yamaha FX Limited SVHO tow rope

Yamaha provided a tow rope connection under the aft end of the seat.

## Storage

The Yamaha FX Limited SVHO has 44 gallons (167 L) of storage situated throughout several separate compartments.

**The forward-most compartment** is the largest of these compartments. It can be conveniently opened from the operator's position. This is a relatively large space that could easily accommodate a soft side cooler.

### Yamaha FX Limited SVHO storage

The forward storage compartment hatch is held open by a strut. Note that the required fire extinguisher is in the yellow container.

### Yamaha FX Limited SVHO hatch

A small hatch below the handlebars reveals a convenient storage compartment.

### Yamaha FX Limited SVHO accessory outlet

Inside is a 12-volt accessory outlet. It can be used with the inflator that comes with the Accessory Tow Package.

### Yamaha FX Limited SVHO aft seat

Removing the aft seat section reveals an additional water-tight storage area on the Yamaha FX SVHO.

**Water-tight Compartment.** Hidden beneath the removable aft seat section there is a compartment with a fine threaded cap to keep the interior watertight. The entire compartment is removable allowing people to take their valuables with them.

### Yamaha FX Limited SVHO wet storage

There is self-draining wet storage in the base of the seat accessible from the aft deck of the Yamaha FX Limited SVHO. Shown is the freshwater flush connector (yellow arrow).

The sides of the wet storage trunk compartment are slightly raised above side decks. Any water falling off of wet gear stored inside will drain away onto the side decks and overboard. Snaps on both sides of the hatch close the hatch securely.

## Control Systems

The hand grips on both sides are ergonomically designed and padded to help the operator stay comfortable. The RAM mounts put the waterproof speaker(s) and GPS fishfinder within easy reach of the operator and the Connex<sup>®</sup> touchscreen display is in direct line of sight for the operator. Dual rear-view mirrors are well placed outside the Connex<sup>®</sup> dash housing.



## Yamaha FX Limited SVHO handlebars

The ergonomics and functionality of the control systems are indicative of Yamaha's experience and knowledge of how their customers operate their PWC. The handlebars are height adjustable.

## Yamaha FX Limited SVHO gps

The Yamaha FX Limited comes standard with the TECH Accessories Package which includes a GPS fishfinder, two waterproof Bluetooth™ speakers and RAM® mounts.

## Yamaha FX Limited SVHO throttle

The trigger throttle on the Yamaha FX Limited SVHO is located outside the righthand handlebar grip (yellow arrow).

## Yamaha FX Limited SVHO handle bar

On the inside of the righthand handlebar grip are the Cruise Assist controls (red and yellow arrows) and No Wake Mode set button (green arrow).

**Cruise Control.** Yamaha's Cruise Assist allows the operator to set the speed for cruising. Using the trigger throttle to reach the desired speed, the operator presses the "set" button (yellow arrow above) to enter Cruise Assist mode. There will be a series of beeps, and then the operator squeezes the throttle all the way to set the speed. Pressing the up and down arrows (red arrow above) will allow the operator to make incremental adjustments to that speed. To override, the operator gives the throttle trigger a quick release.

**No Wake.** The No Wake Mode works similarly to the Cruise Assist. Pressing the switch (green arrow above) sets engine speed and maximizes jet thrust for No Wake zones.

## Yamaha FX Limited SVHO handle bar

On the left side handlebar is the start (on the front side yellow arrow) and stop (green arrow) buttons, the kill switch safety and wrist lanyard (red arrow), trim control (blue arrow) and RiDE Technology trigger (purple arrow).

## Yamaha FX Limited SVHO engines start

Shown is the engine start button on the Yamaha FX Limited SVHO.

**RiDE Technology.** Yamaha has designed a bucket that drops down over the jet nozzle and vectors the flow to both or either side to create better control when reversing. It can also create a braking effect when at speed. There is actually no shifting or reversing the jet drive. However, RiDE provides a neutral position to stop forward or reverse motion.

## Yamaha FX Limited SVHO ride tech

Shown is the Yamaha RiDE Technology in action on the FX Limited SVHO.

**Reverse.** By squeezing the left-hand trigger, the Yamaha FX Limited SVHO reversing bucket drops down over the jet nozzle effectively putting the FX Limited SVHO in reverse. Turning the handlebar vectors the thrust. Steering is opposite of forward steering. Consider steering the bow, not the stern.

**Neutral.** A quick squeeze of the left-hand trigger puts the Yamaha FX Limited SVHO into neutral. This effectively keeps the FX Limited SVHO from moving forward or backward, but turning the handlebars will cause the boat to pivot rather than turn.

**Braking.** A big benefit of the RiDE Technology is braking. At any speed, squeezing the left-hand trigger slows the engine while simultaneously dropping the reverse bucket, effectively creating a braking effect without putting the FX Limited SVHO into a nosedive. Keep squeezing and the braking begins reversing.

**Trim.** Yamaha incorporated a Thrust Directional Enhancer (TDE) to the RiDE Technology on the FX Limited SVHO which allows incremental trim corrections at speed. This allows operators to correct the trim with added riders and loads creating the most efficient trim for any condition.

## Engine

The FX Limited SVHO has the biggest engine Yamaha makes. The Super Vortex High Output (SVHO) engine is a 1812cc supercharged and intercooled, 4-stroke, 4-cylinder, 16-valve motor.

Yamaha FX Limited SVHO operators seat

Under the operator seat is access to the Yamaha SVHO engine. Day-check points are all within easy access.

**High-Performance Intercooler.** The SVHO engine features a high-performance intercooler, increased supercharger air intake capacity and boost, and a modified fuel injection system for increased fuel flow.

**3-Blade Stainless Steel Impeller.** The SVHO engine is driving the 160mm, 3-blade, 16.4-degree pitch, stainless steel impeller through an 8-vane high-pressure jet pump for impressive thrust.

Yamaha FX Limited SVHO

The hull and deck of the FX Limited SVHO is built with NanoXcel 2 construction process which is proprietary to Yamaha and produces a stronger, lighter watercraft with a superior finish.

## Accessories

The Yamaha FX Limited comes standard with Yamaha's Accessory Tech Package which includes a GPS fishfinder and two waterproof speakers along with two RAM® mounting systems. It also comes standard

with Yamaha's Accessory Tow Package that includes a soft side cooler, tow rope, tube, and 12-volt inflator.

## Yamaha FX Limited SVHO accessories

Shown are all of the accessories that come standard on the Yamaha FX Limited SVHO.

## Options to Consider

The Yamaha FX Limited SVHO is the top of Yamaha's line of WaveRunners and comes with essentially everything an owner would want for having fun on the water.

## Price

The manufacturer's suggested retail price (MSRP) for the Yamaha FX Limited SVHO is \$17,399.

## Observations

The Yamaha FX Limited SVHO combines Yamaha's most powerful engine, its top-of-the-line luxury, its foremost level of technology and all of the most popular accessories to create the ultimate WaveRunner. This PWC is not really for a beginner because it is so powerful. Rather, it is for riders who have found their existing machine a little too tame. They are the enthusiasts who should consider the Yamaha FX Limited SVHO.