

# Automobile



## REVIEWS:

### **Driven: 2010 Ferrari 458 Italia**

January, 2010

**By Joe DeMatio**

**Photography by Mark Bramley**

There didn't seem to be a lot more that Ferrari could do with its V-8 berlinetta lineup. Over the past decade, the [cars](#) got better and better, further cementing Ferrari's role as the producer of the world's most desirable sports cars. The startlingly good 360 Modena began it all back in 1999, and each successive iteration of the mid-engine masterpiece from Maranello raised the bar: The 360 Challenge Stradale. The F430. The 430 Scuderia. And, most recently, the hyperfocused Scuderia Spider 16M. These cars became the backbone of Ferrari's resurgence by translating the automaker's hard-fought Formula 1 racing expertise into products that tantalized auto enthusiasts everywhere, rewarded the lucky few who owned them, and strengthened the ethereal aura around the brand. Ferrari created the gold standard in sports cars, a lineup that competitors as varied as the Ford GT, the Chevrolet Corvette ZR1, the Lamborghini Gallardo, the Porsche 911 GT3, and the Aston Martin V8 Vantage sought to assail. But in the tussle for sports car supremacy, Ferrari always managed to end up at the top of the heap.

With leadership comes responsibility, but it also can bring vulnerability. When it came time to replace the F430, would Ferrari succumb to success, throw up its collective hands, and decide that a mild refresh would do? After all, if any automaker today were to unveil a [car](#) that is as good as the F430 was five years ago, the car would be declared a champion. Ferrari could easily have simply tweaked the F430, slapped on a new skin and a new nameplate, and still filled its order books for a five-year run. This plan of action must have been tempting for a small carmaker that was already busy developing a class-leading V-12 GT flagship, the 599GTB Fiorano; an all-new convertible, the California; and a midcycle repositioning of its two-plus-two, the 612 Scaglietti, not to mention running a Formula 1 racing team and supplying engines to Alfa Romeo and Maserati.

To be sure, with the 458 Italia, which goes on sale here this summer, Ferrari has not reinvented the [automobile](#). At about 3300 pounds, the 458 is light but not particularly so. The wheelbase is a couple of inches longer than the F430's, but the overhangs are slightly shorter and the cabin is marginally longer. The car still, of course, uses an internal-combustion engine that burns gasoline at a prodigious rate,

although Ferrari says that emissions rival the California's for the company's lowest ever. Yet what an engine it is. The 4.5-liter flat-crank, direct-injected V-8 (Technics sidebar, page 74) produces an astonishing 562 hp and 398 lb-ft of torque and redlines at a lofty 9000 rpm. By comparison, Lamborghini gets 552 hp out of its 5.2-liter V-10. The 458 Italia's V-8 is a further derivation of the F136 family of Ferrari V-8s from the F430 and the California, all of which have 104-mm bore centers and 92- or 94-mm bores. Ferrari primarily varies displacements by changing the length of the stroke.

[Home](#) » [Car Reviews](#) » [Driven: 2010 Ferrari 458 Italia](#) » [seven speed dual clutch automatic](#)



## Driven: 2010 Ferrari 458 Italia

In a nod toward market reality, the 458 Italia will not be offered with a manual transmission. Instead, it gets a seven-speed dual-clutch automatic supplied by Getrag and configured for this application. Purists can howl all they want, but the people who actually buy Ferraris have voted: the take rate for traditional manuals has been just this side of zero. The 458 also gets a new, faster-responding version of the electronic limited-slip differential that debuted on the F430. And in what we can only conclude is an offensive maneuver against burgeoning competitors, Ferrari made the 458 Italia's carbon-ceramic brake system standard—as with all of its U.S. models—rather than charging the price of a bathroom remodel for them. Ferrari also uses a technique it calls Pre-Fill to activate the pistons in the brake calipers whenever electronic sensors detect that the driver is decelerating. The F430 had a similar system, but it was mechanically controlled, and the pads actually came into light contact with the discs, which added drag.

In the eternal quest to shed pounds wherever possible, Ferrari's structural engineers borrowed techniques from the aeronautical industry for the 458's aluminum-spaceframe construction and aluminum bodywork. A new alloy allowed them to make the roof, doors, and hood panels a wispy 1.0-mm (0.04-inch) thick, and a new die-casting process was employed for the door frames.

Ferrari's own developments from racing informed the aerodynamic design of the 458, starting with the front winglets in the lower air dams, which deflect nearly an inch at speeds above 125 mph to generate downforce and channel air to the front-mounted radiators. The small vents just inboard from the headlight clusters admit air, which then exits through vents near the front wheels to create downforce. The large apertures aft of the side windows are the source of air for the engine, while the ducts ahead of the rear wheels direct air into the glass-covered engine compartment. Intakes at the top rear of the [car](#) serve to cool the clutch and gearbox heat exchangers near the left and right taillights, respectively. The

horsepower rating is actually a bit misleading: at extremely high speeds, Ferrari acknowledges that the ram-air effect contributes about 5 hp to the engine's 562-hp total output.

The 458 Italia's cabin is a mixture of old and new. The caramel-colored leather on the seats, the upper dash, and the door panels in our test car was classic Ferrari, taut and beautifully stitched yet supple and rich to the hand; the seats themselves are firm and supportive. Hides also stretch across the engine-compartment wall's padded panel and the adjoining parcel shelf behind the seats, which is big enough for a couple of briefcases. (The front trunk is surprisingly capacious, at 8.1 cubic feet.)

[Home](#) » [Car Reviews](#) » [Driven: 2010 Ferrari 458 Italia](#) » [driver focused cabin](#)



## Driven: 2010 Ferrari 458 Italia

The driver faces the usual huge central tachometer, with the 9000-rpm redline clearly labeled. It's flanked by two digital display screens. When you enter the [car](#), the left screen says "458 Italia" and the right one says "Ferrari." Very cool. Once you're underway, the right screen defaults to an analog-style image of a speedometer but also is used for the navigation system and the radio, while the left screen's role is to provide details of the dynamic parameters controlled by the manettino, to show a lap timer, or to display temperature gauges and the like. There's no center stack but instead an oddly shaped protrusion from the upper dash, canted toward the driver, with a volume knob and a control knob for the right-hand screen. If it sounds confusing, it is, but Ferrari claims that it's all part of making the 458's cabin intensely driver-focused. "In the 458," says chief test driver Raffaele De Simone, in explaining the layout, "the driver takes the main role, whereas the California is to share with another person." Indeed. About all a passenger could possibly operate are the climate controls, which are accessible and logical.

The big, easy-to-grab steering-column-mounted paddles flank a racing-style, flat-bottomed steering [wheel](#) with a dizzying array of controls mounted on it. In addition to the red starter button, you've got the *manettino* switch, the high/low-beam switch for the headlights, the windshield-wiper controls, and, believe it or not, push buttons for the turn signals. Those definitely take some getting used to. There are no steering-column stalks whatsoever.

The starting process is familiar: turn the key, hit the red starter button, and the V-8 springs to life with a metallic rasp. It's instantly identifiable as a Ferrari eight-cylinder. As was the case with all recent Ferraris with the F1 automated-manual transmission, you put your foot on the brake and pull back on both paddles to select neutral. To choose the automatic mode, push the large button labeled [Auto](#) in the console astride the center tunnel (next to it is R for reverse, and to the left of that is the button for the

standard launch control). Or simply pull back on the right paddle to select first gear; the left paddle is solely for downshifting.

Such light and delicate actions, these flicks of your fingers, but they produce such potent and violent reactions. In first gear, the 458 leaps forward with the frenetic energy of a Ducati MotoGP bike as the engine races toward its redline. Will it be your pinky or your index finger that, in the blink of an eye, makes contact again with the paddle? It doesn't matter: now you're in second gear, and the greens and browns of the Emilia-Romagna autumn are blurring the side windows. Another digit relaxes its grip; another flick; another gear, instantly obtained; and the ripping and shattering of the V-8 resumes as the tach needle swings upward again.

[Home](#) » [Car Reviews](#) » [Driven: 2010 Ferrari 458 Italia](#) » [manettino settings](#)



## Driven: 2010 Ferrari 458 Italia

The *manettino* is in Sport, the default mode. You enter a very tight left-hander a bit too fast, and the front wheels crab a bit. Let's try the next position, Race mode, which widens the stability control net to allow more oversteer. All of the *manettino* settings have been reengineered, and the "little hand" now controls an even more complex array of dynamic parameters than in the F430, including the F1-Trac [traction control](#); stability control; ABS; and the E-Diff3. All you really need worry about is which of the five available settings to twist the little red knob to: the low-traction one in slippery conditions; Sport for everyday driving; and Race when you're feeling a bit randy. The final two *manettino* positions, CT-off and CST-off, are best reserved for track use. CT-off, according to Ferrari, "allows oversteer right to the edge of the car's limits," while CST-off deactivates both traction and stability control for hero drivers.

Truth is, it's easy to feel like a hero in the 458 Italia no matter where the *manettino* is pointing. On the climb through the Apennine foothills south of Maranello, the 458 Italia reveals a level of performance and driving pleasure that is extraordinary. First, the steering is exceedingly well-tuned: Light effort but perfectly weighted. Perfectly precise. Perfectly communicative. Pivoting the 458 through a hairpin corner will make you grin, shout, or do both. You know exactly where you're placing the [car](#) at all times. It takes only the most minute steering input to produce a corresponding movement in the front wheels. It's hard to overstate the level of driver confidence that the 458's super-communicative steering provides.

The 458 Italia's structural rigidity, brilliantly tuned suspension (control arms in front, multilink setup at the rear), and fantastic brakes also play a part in allowing a competent driver to storm along narrow,

undulating two-lane mountain roads with a nonchalance that borders on insane. The engine and the gearbox work together so intuitively that it's very difficult to find yourself without exactly the right amount of power on tap, no matter your speed, your gear, or your steering angle. Even in automatic mode, the transmission holds the gears to redline. Approach a corner, and the gearbox seems to know that you are going to decelerate before you even lift your foot from the [gas pedal](#), seamlessly slamming down a gear or two before you even start steering into the curve. The responsiveness from the engine at all points in the rev band, and the way the exhaust cycles from one tonal quality to another, are major touch points in the Ferrari experience. Under normal driving conditions (is there such a thing in a Ferrari?), bypass valves in the mufflers close, but when you dip into the throttle, the engine's ECU opens the valves and switches the exhaust gases to the two outer tailpipes, for a rich, big, boomy bass beat. Delicious.

The 458's competence unsurprisingly extends to the racetrack. At Ferrari's Fiorano circuit, test driver De Simone is a supreme master. In his hands, the 458 has the grace of a ballerina and the power of an Olympic sprinter, even as De Simone describes each corner to his passenger, adding the endearing "-ah" suffix to each English noun. But even a hapless journalist whose previous Fiorano forays have been ego bruising finds the 458 to, once again, make him feel like a hero.

We, admittedly, did not expect the 458 Italia to raise the bar significantly, but after our first drive, we can confidently tell you that Ferrari did not succumb, or compromise, or ride on past glories. Instead, it innovated, it rethought, and it continued to adapt lessons from the racetrack to the street. In so doing, Ferrari has positioned the 458 very effectively against an onslaught of new competitors trying to dethrone it, specifically the Mercedes-Benz SLS AMG and the upcoming McLaren MP4-12C. Yes, the latest Ferrari is that good.

[Home](#) » [Car Reviews](#) » [Driven: 2010 Ferrari 458 Italia](#) » [steering column](#)



## Driven: 2010 Ferrari 458 Italia

### THE STALKLESS STEERING COLUMN

Ferrari's latest steering wheel looks even more like the ones in its Formula 1 racing [cars](#) than any of those in the past. No stalks means that it's easier for the driver to grasp the shift paddles, which are fixed to the steering column behind the wheel.

1 **TURN SIGNALS** This is the most unusual part of the steering wheel. Most owners will likely take some time getting accustomed to it.

2 **HEADLAMPS** This little switch not only turns on the headlamps but also operates the high/low-beam function.

3 **SUSPENSION DECOUPLING** Divorces the dampers from any electronic controls selected via the manettino, offering improved "filtering" of the road surface, should the driver choose.

4 **MANETTINO** Ferrari's signature "little hand" directs the complex electronics that control vehicle dynamics. The 458 Italia's predecessor, the F430, had an "ice" setting that's now gone. The CT-off setting deactivates [traction control](#) but maintains a degree of stability control. The various manettino parameters can be displayed on the screen to the left of the yellow tachometer.

5 **WINDSHIELD WIPER/WASHER** Self-explanatory.



© 2010 Automobile Magazine,  
Source Interlink Media  
All rights reserved. WEB-060



