

Shopping? Check out our latest product comparisons

Pierre DeRoche TNT Royal Rétro 43 shows that six second hands are better than one

Students developing an injectable foam to treat battlefield wounds

Nuseti mountain bike features a sealed drivetrain

Is it possible to make a good-looking Ducati Panigale streetfighter?

"Nano-pixels" hold huge potential for flexible, low-power, high-res screens

MORE TOP STORIES

MARINE

Seakeeper Gyro: stability on the high-seas

By Noel McKeegan
July 12, 2007

[2 Pictures](#)



Seakeeper stabilization technology
(www.seakeeper.com)

[Image Gallery](#) (2 images)

July 13, 2007 The experience of cruising the ocean waves is a joy for some, but as anyone who suffers from sea sickness can attest, it can also be completely unbearable. Boats pitch, roll and yaw much like aircraft and to counter the disorientation this causes to our bodies gyroscopic stability systems and [trim tabs](#) have been developed to combat the rolling seas. [Seakeeper](#) is one company addressing this issue through the research and development of stability devices for small boats under 100 feet that include products for both low and high speeds. The company has developed different systems depending on the size of their craft and how it is used. The first is a gyroscopic stability system designed to combat what's considered the worst part of the boating experience - low speed boat roll - and the second is a stability system that makes use of sensor-adjusted small control surfaces (like a more advanced form of the traditional trim tabs) that adjusts the motion of a boat moving at speed and improves comfort, handling, and safety.

The [Seakeeper Gyro](#) stability system is quite unique in that unlike other

Recent popular articles in Marine

V8 Wet Rod: The luxury yacht of personal watercraft?

Aquila electric surfboards promise high-speed cruising, carving and freestyling

products, which the company claims are heavier and less efficient, it uses a computer controlled flywheel rotating in a vacuum-enclosed sphere. The reduced air friction of the vacuum enclosure enables the flywheel to spin at higher speeds, thus producing a greater stabilizing effect. The system is suitable for boats upwards of 35 feet and multiple units can be fitted to boats larger than 55 feet. The advantage of the gyroscopic system is that it is efficient at low speeds, reducing low speed boat roll. As the system is controlled by a motion-sensing computer, unlike more common passively regulated systems, it adjusts to a wide range of wave conditions, giving it a performance edge over competitors.

Also available is the [Seakeeper stability control system](#) which features transverse blades that act as control surfaces (much like the rudder on a boat or aircraft) that instead of being actuated by the pilot are automatically adjusted by sensors. The system is suited to craft of all sizes but efficiency is limited below 20 knots.

The Seakeeper Gyro is available for US\$55,000 plus installation and the Seakeeper stability control system costs US\$21,500 plus installation.

A video demo is available at the [Seakeeper website](#).

Systems designed specifically for boats at anchor like [this one](#) from Quantum are also available and an informative discussion of some of the different stabilization systems can also be found [here](#).

More from Gizmag



Programmable Mybell gives your bike a voice of its own



Cree aims to make fluorescent tubes obsolete with LED T8 series



The World's first flying hotel - The Helicopter



Rolling Shelter: Gizmag's favorite campers of 2013

More from around the web



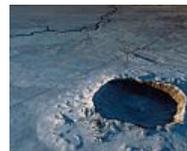
The Most Amazing, Hilarious, Perfectly Timed Photos Taken at the Right Moment
All Perfectly Timed



10 cars you won't see on sale after 2015 Fortune



5 Crazy New Forms of Energy That Just Might Work
Wall St. Cheat Sheet



9 Big Holes That Aren't the Grand Canyon
AARP

Recommended by

About the Author

HP Proactive Care at CDW

cdw.com/hpservices

Prototype GHOST military watercraft claims a world's first

Zapata's outrageous, US\$6,600 Flyboard - Aquaman meets Iron Man

The Skimmer - 100 km/h ground effect recreational water toy

Riva 88 Florida yacht opens to the sky with convertible top

The SeaPhantom - helicopter speed, powerboat price

New Zealand's home-made 'hoverwing' flies 5 feet above water

Vindskip ship concept uses the hull as a sail

Zapato blends surfing and Flyboarding with new Hoverboard by ZR

Sections

[Features](#)

[Reviews](#)

[Aircraft](#)

[Architecture](#)

[Around The Home](#)

[Automotive](#)

[Bicycles](#)

[Children](#)

[Computers](#)

[Digital Cameras](#)

[Electronics](#)

[Environment](#)

[Games](#)

[Good Thinking](#)

[Health and Wellbeing](#)

[Holiday Destinations](#)

[Home Entertainment](#)

[Inventors and Remarkable People](#)

[Laptops](#)

[Marine](#)

[Medical](#)

[Military](#)

[Mobile Technology](#)

[Motorcycles](#)

[Music](#)

After a misspent youth at law school, Noel began to dabble in tech research, writing and things with wheels that go fast. This bus dropped him at the door of a freshly sprouted Gizmag.com in 2002. He has been Gizmag's Editor-in-Chief since 2007. [All articles by Noel McKeegan](#)



[Outdoors](#)

[Pets](#)

[Robotics](#)

[Science](#)

[Space](#)

[Sports](#)

[Telecommunications](#)

[Urban Transport](#)

[Wearable Electronics](#)



Tags

[» Boating](#) [» Sailing](#)

Related Articles



[Sealegs amphibious boat powers over land and sea](#)



[Three decades of enhanced vehicle safety: ABS turns 30](#)
29th April, 2008



[Stability 60 SWATH - the practical superyacht](#)
26th February, 2008



[The world's first solar speedboat: 30-knot, 80kw Czeers Mk1](#)
23rd May, 2008



[EZ Launch adds extra stability for canoe and kayak launches](#)
29th June, 2010



[The Zingy tribrid motorboat, rowboat, sailboat](#)
21st February, 2010

KICK
A pocket-sized lighting studio for photo & video

~~\$179~~ **\$149**

[BUY NOW](#)

Looking for something? Search our 27,646 articles

Most Popular Articles

Today Last week All time

Firefly Space Systems unveils Alpha launch vehicle design with aerospike engine

Boeing increases carry-on capacity with new Space Bins

Borospherene bounces into buckyball family

DOL-Fin is designed to let you swim like a dolphin

The Titanium Utility Ring makes your fingers extra-useful – and manly

Adventure cubed: XPCamper carries your favorite gear around the world

Jaguar Virtual Windscreen concept looks to the future of HUDs

Nuseti mountain bike features a sealed drivetrain

Pierre DeRoche TNT Royal Rétro 43 shows that six second hands are better than one

Smartphone sensor generates crowdsourced pollution maps

Most Commented Articles

Today Last week All time

Subscribe to Gizmag's

Email Newsletter

Follow Gizmag on
Twitter

Subscribe to Gizmag's
YouTube channel

Subscribe to Gizmag's
RSS feed

Follow Gizmag on
Stumbleupon

Follow Gizmag on
Google Plus

All content copyright © Gizmag 2003 - 2014

[Top](#) [Home](#) [About](#) [Contact](#) [Privacy](#) [Terms & Conditions](#) [Advertise](#)