Glass Cockpit/Garmin 8000 Q & A

Volvo Penta is as a world-leading supplier of integrated propulsion systems in the marine industry. Volvo Penta is linking engines and transmissions with instruments, controls and accessories in the electronic platform known as EVC, Electronic Vessel Control.

Using this electronic platform, Volvo Penta has been able to deliver products including the Joystick and the Dynamic Positioning System, making boating easier and more convenient for the end user.

The new Volvo Penta Glass Cockpit System is an all-integrated control and monitoring system that gathers all driver information – including warnings and alarms – and displays it in one spot; one or more, high-tech displays. It introduces a common, ergonomic design – and interface – for the whole dashboard, with push-buttons on the controls and touch-buttons on the screens.

In addition to the benefits for the boaters, the Glass Cockpit System opens up a new world of possibilities for creative and exciting – but also logical, safe and ergonomic – dashboard designs.

The Glass Cockpit System is a result of a fruitful cooperation with Garmin. By combining the two companies’ expertise, Volvo Penta software and the new Garmin 8000 display series, Volvo Penta is proud to introduce this revolution in driver environment design.

The Partnership

1. Why did Volvo Penta and Garmin choose to establish a strategic alliance with each other?

   A: Volvo Penta and Garmin are two well-known and strong performing companies who are innovators and technology leaders in their respective fields. Both international organizations feature high competence and skilled employees who strive to make a difference in the boating industry. This is the foundation that got us to cooperate with each other.

2. What is the foundation that got Volvo Penta and Garmin to cooperate with each other?

   A: Volvo Penta and Garmin have an established history of successful collaboration. In 2009, Volvo Penta and Garmin worked together on an autopilot project to bring a new level of handling and on-board comfort and performance to the helm. The success of this project, along with customer demand for more integrated solutions, made the companies look into the possibilities around further integrated solutions.

Garmin (why did Garmin choose to cooperate with Volvo Penta):
- Garmin chose to cooperate with Volvo Penta due to their reliable and established access to OEM business opportunities and strong customer OEM base. This strong customer base allows for fast penetration into the
market and furthers the opportunity to promote the Garmin name to the marine market.
- Easy access to OEM business
- Volvo Penta has a strong customer OEM base
- The strong customer base provides a fast & rapid penetration
- To realize the glass cockpit concept
- Opportunity to sell other navigation accessories

Volvo Penta (why did Volvo Penta choose to cooperate with Garmin):
- Volvo Penta chose to cooperate with Garmin due to their fully integrated line of multi-function displays and the opportunity to expand on the technology. With expertise in the Aviation and Automotive OEM segments, collaborating with Garmin also provides access to the latest in display technology and intuitive user interface.
- Access to latest display technology
- Complete range of multifunctional displays and opportunity to extend
- To realize the "prop to antenna" offer

3. **What is the vision of the partnership?**

   **A:** As Volvo Penta and Garmin are both very innovative companies, our main ideas include the following:
   - Making the boating experience easier and more car-like
   - Attracting more people to the boating industry by a turn-key solution
   - Providing a ‘one-stop shop’ concept for the OEM – one order, one delivery and one invoice
   - Opening new possibilities to new features as a result of the integration
   - To simplify and make boat installation more robust with larger systems being tested together.
   - *(Volvo Penta)* To be the best provider of integrated functions and solutions
   - *(Volvo Penta)* Becoming market leader for ‘one-stop shop’ in OEM business

4. **What does the collaboration consist of?**

   **A:** This unique strategic alliance will merge propulsion solutions by Volvo Penta and navigation solutions by Garmin. We’ll leverage the strengths of each company to provide a fully integrated marine monitoring system.

5. **What are the primary advantages for the OEMs, dealers, and customers?**

   **A:**
   
   *For the OEMs:*
   - The one-stop-shop concept
   - The integration of driveline and navigation equipment made by Volvo Penta/Garmin will result in simplified installation and fewer ‘zero-hour faults’
   - A big range of displays enables creative and flexible dashboard solutions.
For the dealers:
- One point of contact, all solutions integrated into one.
- Providing a fully integrated and turn-key solution
- System will be less complicated since everything is integrated.

For the end users:
- To make boating more user-friendly and car-like
- Providing a fully integrated and turn-key solution
- System will be less complicated as everything is integrated
- One point of contact, all solutions integrated into one.

New features:
- One HMI for all displays (meaning no need to learn and remember different HMIs).
- Simplified HMI and the “one-touch solution”.
- When it comes to quality, more complex systems integrated by one supplier will result in a more robust system.

6. How does this affect the collaboration with other market players and competitors?

A: This collaboration does not preclude the use of competitive electronics with Volvo Penta solutions, however, presents a strong and integrated partnership between the two companies that delivers reliable solutions through multiple communication protocols including the NMEA 2000 and NMEA 0183 interfaces.

The Products

1. When is the planned introduction and availability date?

A: Public launch August 1st at Sydney boat show.
Availability Q4 2013 / End of 2013 (communicate to press)
Week 45 (communicate to internal and OEM)

2. A strategic alliance between Volvo Penta and Garmin was announced in 2011 with products being promised in 2012. Why has it taken so long for these to come to market?

A: Volvo Penta and Garmin are dedicated to creating products for OEMs, dealers and end users that provide the highest quality standards and best user
experience possible. Volvo Penta and Garmin have worked closely to ensure that their products uphold these standards before releasing them to the public.

3. **Why is the hardware Garmin branded?**

   **A:** The hardware is Garmin branded to help simplify aftermarket support and increase availability.

   The same hardware brings customer value by avoiding and eliminating long lead times caused by unique hardware. This also allows for quick response, deliveries and product flexibility.

4. **Under what name will the Volvo Penta products be marketed?**

   **A:** Volvo Penta Glass Cockpit 8000/8500 Series
   
   Monitor: 15”, 17”, and 19”
   
   MFD: 8”, 12”, and 15”

5. **What are the current Garmin product offerings referred to?**

   **A:** GPSMAP 8000 MFD/Glass Helm Series and GPSMAP 8500 Black Box Series

6. **What is the difference between Volvo Penta Glass cockpit and Garmin 8000-series?**

   **A:** The Volvo Penta glass cockpit products boast integrated engine data and instrumentation features, otherwise found in non-integrated solutions, as well as new features in comparison to the Garmin GPSMAP 8000 Series. These features we believe will add further customer value.

   **New features:**
   
   - One user interface for all displays, meaning there’s no need to learn and remember different interfaces.
   
   - Simplified and integrated user interface provides a ‘one-touch solution’
   
   - Pertaining to quality, more complex systems integrated by one supplier will result in a more robust and reliable system.
   
   - The Volvo Penta products feature full EVC integration
   
   - Full System Power ON when boat is started
   
   - Integrated station handling triggered by the EVC system
   
   - Synchronized backlight levels on displays
   
   - Unique user interface to access various customizable screen views
   
   - Volvo Penta status bar
   
   - Interceptors
   
   - Autopilot Integration
7. **What is the difference between the MFD and the separate monitors?**

   **A:** The MFD has an integrated processor box whereas the monitors have an external black box that can be installed apart separately from the monitor.

8. **What sizes are offered?**

   **A:** Monitor: 15”, 17”, and 19”
   
   MFD: 8”, 12”, and 15”

Sales, Aftermarket, Support and Service

1. **How do I order Glass cockpit?**

   **A:** OEM will need to go directly through Volvo Penta. Volvo Penta organization will need to go through Prosales.

2. **What are the unique selling points?**

   **A:** The objective is to take out the complexity of boating and simplify it by incorporating the following features into an integrated glass cockpit:
   - Complete range of glass cockpit sizes, from 8” to 19”
   - Full EVC functionality, such as alarm, station control, DPS and PTA
   - Volvo Penta user interface
   - Status bar
   - Interceptors and autopilot
   - MyView, Engine View, Calibration and more
   - All driver information is easily accessible in one location for improved safety
   - Optimized used space with integrated functionality
   - Follows EVC by providing station handling, dimming, power and the possibility of user-defined screens
   - Design, testing and supply from one supplier
   - One system with all functions for all engines
   - One set up, easy installation and aftermarket tool
   - One point of contact for service
Aftermarket

1. **How do I update the Volvo Penta dealer list?**
   
   **A:** Via the Garmin website and the SD card and together with maps updates.

2. **Can I purchase Volvo Penta Glass Cockpit through a Volvo Penta Dealer?**
   
   **A:** Yes, but only together with an engine(s). The Glass Cockpit is only sold with an engine as a complete system.

3. **How do I purchase additional navigation accessories like radar, sonar, etc., to create a complete system with Volvo Penta Glass cockpit products?**
   
   **A:** Through Garmin. Visit www.garmin.com or locate your local Garmin dealer.

4. **How do I purchase / update additional maps/sea charts?**
   
   **A:** Through Garmin. Visit www.garmin.com for online purchase or to locate your local Garmin dealer. There are two options; either download the information onto a blank SD card or order a preloaded SD card.

Support, Service and Warranty:

1. **How does the Garmin and Volvo Penta collaboration affect the aftermarket service and support?**
   
   **A:** To give the best possible service and support, the cooperation between Volvo Penta and Garmin also covers the aftermarket support and service. As a Volvo Penta customer, you are always welcome to contact your Volvo Penta dealer but you can also access valuable information and software updates through www.garmin.com.

2. **How do I address questions regarding usage of my Glass Cockpit product?**
   
   **A:** First, try to find the information you need in the Volvo Penta Glass Cockpit owners manual. Further information can be found under the support section on www.garmin.com. You will find valuable information such as a FAQ section. You can also contact Garmin support through the contact details provided on www.garmin.com.

3. **How do I update my Glass Cockpit unit software?**
   
   **A:** Software updates are done through Garmin’s website using the standard Garmin update procedures.
   
   1. **Go to the support section on garmin.com to get the latest SW.**
2. Follow the instructions to get the SW onto your SD card.
3. Put the SD card into the Glass Cockpit SD-card reader, make sure all Glass Cockpit units and additional navigation equipment on the marine network are powered on.

4. Where do I turn to raise a service request?
   A: You are welcome to contact your local Volvo Penta dealer.

5. What are my responsibilities as a Volvo Penta dealer? (Volvo Penta dealers, Volvo Penta Internal)
   A: As a Volvo Penta dealer, you are responsible to take care of service requests and the customer. You must provide basic level troubleshooting and, if needed, escalate and hand over service requests to Garmin Dealer Technical Support. Full service instructions and contact information can be found on the Volvo Penta Partner network.

6. Where can I order replacement units and spare parts? (Volvo Penta dealers, Volvo Penta Internal)
   A: Replacement units and spare parts are provided by Garmin. Glass Cockpit units and accessories are not available through Volvo Penta parts system.

7. How do I claim the labor costs spent to Garmin? (Volvo Penta Dealer, Volvo Penta Internal)
   A: You will claim into the Volvo Penta warranty system and be reimbursed by Volvo Penta.

Warranty:

1. What are the warranty terms?
   A: Two (2) years from the date of purchase.

2. What if my device is out of warranty?
   A: A broken unit can be replaced at a pre-defined flat rate cost. Visit www.garmin.com for valid rates.

Logistics:

1. Will the Glass cockpit be shipped together with the propulsion package?
   A: Yes and only with the propulsion package.
2. *Will the navigation accessories like radar, sonar, etc., come from Garmin?*
   
   **A:** Yes

**Branding & Marketing:**

1. *Should Volvo Penta communicate with Garmin in marketing material?*
   
   **A:** No. Although the two series of units look similar, they have different functionalities. Since they are two different product lines, they will go through two different distribution channels.

2. *Can the Volvo Penta dealers use Garmin in advertising?*
   
   **A:** No, only promote the Volvo Penta Glass Cockpit.