



Marine Power News

Xantrex and Teleflex deliver integrated NMEA 2000 solution

Boaters have long been frustrated with proprietary electronic devices that cannot intelligently communicate with each other. As more electronics make their way onboard, the challenge becomes even greater. To help alleviate this problem, Xantrex Technology and Teleflex Marine have formed an alliance to offer integrated power management and electronic control solutions based on the NMEA 2000 standard. Not only will boaters benefit from an integrated solution, but boat builders and technicians will also realize significant benefits.

Xantrex offers a range of power systems and solutions including inverters, chargers, and battery management accessories. Teleflex is a leading marine manufacturer of steering, engine throttle, shift controls, engine and power management systems, and electronic monitors and gauges. Xantrex's alliance with Teleflex will help further the adoption of NMEA 2000 and realize the benefits of power management products that communicate using a common protocol.

Xantrex MS2000 Inverter/Charger and Teleflex i5600

The first interoperable products from Xantrex and Teleflex are the MS2000 Sine Wave Inverter/Charger and Teleflex i5600 display. The MS2000, Xantrex' newest inverter/charger, is powerful, easy-to-use, and features an upgradeable design and built-in networking. It delivers premium true sine wave output and a high surge capability to power onboard appliances and electronic devices. Built-in flash memory ensures its software can be upgraded to take advantage of new features and system enhancements.

The Teleflex i5600 is a multipurpose display that handles engine monitoring, navigation, and network data. The user configurable screens can also display depth, temperature, and speed readings. Multiple i5600's can be installed on a boat, providing access to critical network information wherever convenient. In addition to its typical readings, the i5600's networked design allows it to display status information from Xanbus™ Enabled devices like the MS Inverter/Charger.

Xanbus and NMEA 2000

In the past, devices like inverters and engine systems operated independently, leaving boaters to determine how best to monitor and manage their power usage. Xantrex's newest inverter/chargers and accessories are Xanbus Enabled. Xanbus is a protocol that builds upon industry standards like CANbus and NMEA 2000 to support the unique requirements of network managed power in a marine environment. In addition to interoperating with these standards, Xanbus provides unique capabilities, such as configuration and control, which the other standards do not support. Configuration allows the operator to change the setup of a system to meet specific needs. For example, if a boater changes the type of batteries in his house

NMEA Gateway



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bank, Xanbus automatically informs all connected devices about the change to ensure continued optimal battery care. Xanbus' control capabilities relate to providing direct instructions to a specific device. For example, Xanbus can signal the generator to turn on automatically when the system detects more power is needed than the inverter can provide.

Xantrex has built a gateway that seamlessly connects a Xanbus network to an NMEA 2000 network. Figure 1 below illustrates the gateway installed into a typical Xanbus network. The gateway filters and translates Xanbus messages for use on an NMEA network so that devices on each network are "aware" of each other and can operate together.

A Teleflex panel operating on an NMEA network can display status information from an MS Inverter/Charger operating on a Xanbus network. The gateway passes battery, charger and inverter status information to the i5600. This includes critical information such as AC and DC voltage and current, battery temperature, and whether the MS Inverter/Charger is currently inverting or charging.

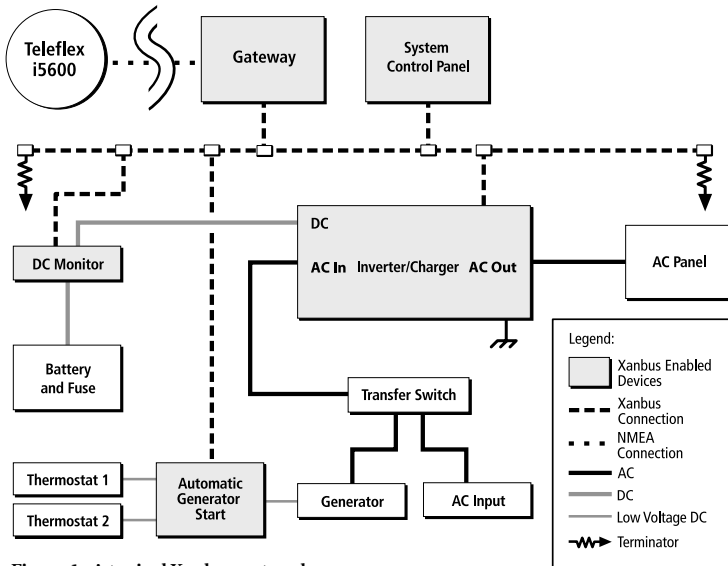


Figure 1. A typical Xanbus network.

Integration Benefits

Integrating Xantrex's inverter/charger products with Teleflex's display panel provides several benefits for boat builders, technicians, and boaters.

Reduced Costs. Higher reliability from digital network communications reduces overall warranty costs. Using a common NMEA 2000 compatible network allows boat builders to minimize wiring complexity. Reduced complexity translates into lower material costs and faster installation during boat construction.

Ease of Use. Information shared between Xantrex and Teleflex devices provides boaters with easy to understand information on power system status. Critical boat information is available from a single display panel.

Increased Intelligence. Devices that are networked can be updated and reprogrammed as needed. In the event of a system or device fault, reports are time stamped and logged for later recall by a technician. So less time is spent trying to reproduce intermittent faults, and potentially dangerous faults don't have to be replicated. An advantage for boat builders is the ability to create and store configurations for each unique boat design. A configuration can then be automatically applied to subsequent boats of the same model, eliminating time-consuming manual configuration of each power management system.

Thanks to the alliance between Xantrex and Teleflex, boaters will have convenient access to multiple sources of useful information in a way that has not been possible before. The Xantrex MS Inverter/Charger and the Teleflex i5600 will be available from marine retailers and distributors in early 2005. Visit www.xantrex.com to learn more about Xanbus and network-enabled products like the MS Inverter/Charger.

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