



Police Motorcycle Communications



Setcom[®]
SetcomCorp.com

Police Motorcycle Communications

Setcom invented the first communications kit for police motorcycle officers in 1970 and has been the leader in the field ever since. While others have come and gone, Setcom owes its longevity to its quality and innovation. Public safety professionals in all fifty states, most major U.S. cities and more than twenty countries worldwide rely on Setcom.

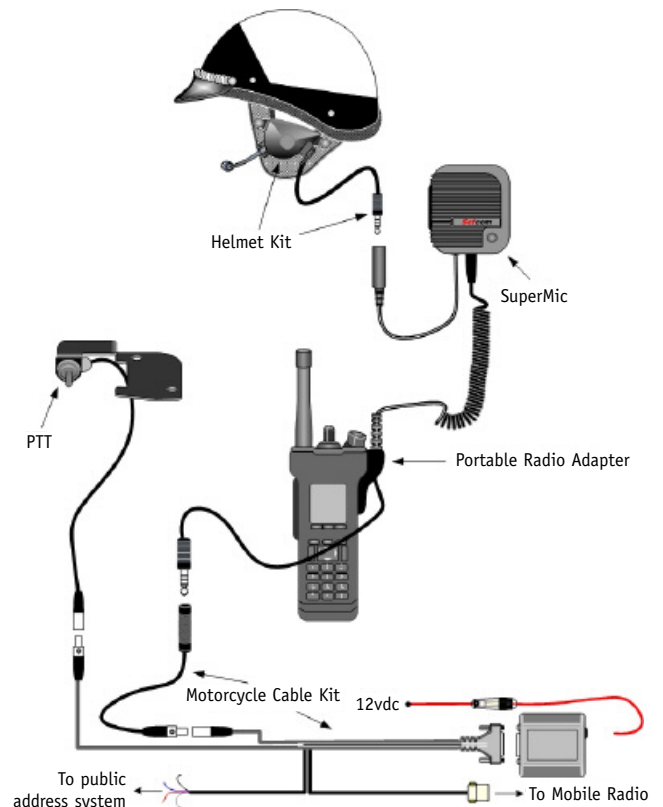
Tradition of Quality, Experience and Innovation

- **Premier communications systems** and accessories for all widely-used portable and motorcycle mobile radios.
- **Outstanding quality and durability; time-tested designs:** Setcom's products have been designed, engineered and assembled in the USA over 40 years. Thousands of police motor officers rely on Setcom's equipment every day.
- **Meticulous attention to quality:** No product leaves Setcom without being fully tested. Your satisfaction is our highest priority.
- **Customer-driven innovation:** Setcom will work with you to develop a system that meets your needs.
- **Generous demo program** allows you to put Setcom's products to the test, risk-free.

Unequaled Service and Support

- **Dedicated technical support** available 55 hours every week.
- **Responsive, in-house service department,** combined with fully repairable parts and components, decreases your lifetime cost of ownership. Setcom's longevity and reputation for consistent service and support are unmatched.
- **One-year warranty** on system components and workmanship.

Representative ComKit



ComKit™ Product Offerings

Liberator™ Wireless Systems	Setcom offers the most advanced, secure, and reliable wireless police motorcycle communications systems. Setcom's Liberator Wireless systems eliminate the cable that tethers the motor officer to the motorcycle, providing maximum flexibility, freedom of movement, and reliable communications.
Motorcycle Cable Kit	Setcom's cable kits allow you to safely key your radio and/or transmit over your public address system without taking your hands off the handlebars. Most states require that motorcyclists have both hands on the handlebars at all times.
SuperMic™	Since its introduction, the SuperMic has rapidly become one of Setcom's most popular products.
Helmet Kit	Setcom uses the highest quality speakers and microphones available to make its Helmet Kits. Kits are available for all helmet types: half shell, three-quarter shell and full face.

ComKits



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ComKits™

Setcom has been the leader in radio accessories for police motorcycles since 1970. The company's communications kits (ComKits) ensure clear, reliable communication even in the most demanding environments.

Setcom offers ComKits in three varieties, one for each of three possible radio configurations: Mobile Radio Only; Portable Radio Only; and Mobile + Portable Radios. In all varieties, ComKits are made up of three components:

1 Motorcycle Cable Kit

Setcom's Motorcycle Cable Kits have been in use for more than 30 years, allowing you to safely key your radio and/or transmit over your public address system without taking your hands off the handlebars. Setcom's Motorcycle Cable Kits include:

- Radio interfaces that work with all widely-used police mobile radios; plugging a Setcom system into a police motorcycle radio will not void the radio's warranty.
- Powder-coated, stainless steel, custom-designed brackets to fit all police motorcycles.
- Shielded cabling and rugged push-to-talk switches.
- Break-away connections throughout, making installation and maintenance easy and economical.
- Optional public address (PA) system interface, which works with all PA systems used on police motorcycles.
- Optional Auto-Switching between your portable and mobile radios. When you're on the motorcycle, you transmit and receive using your mobile radio. When you're off the motorcycle, transmit and receive automatically switches to your portable radio.

2 Connection Between Motorcycle and Helmet Kit

With many options for connecting a Motorcycle Cable Kit to a Helmet Kit, Setcom has a solution for every budget. Below are Setcom's more popular alternatives:

- **SuperMic™** - Since its introduction, the SuperMic has rapidly become the most popular option for connecting a portable radio to Setcom's Motorcycle Cable Kit on one end, and Setcom's Helmet Kit on the other (please see SuperMic section for more detail).
- **Liberator™ Wireless** - Setcom's newest product line, the Liberator Wireless system eliminates the cable between you and the motorcycle, giving you maximum flexibility and freedom of movement. Now available for portable-only & mobile portable configurations (please see Liberator Wireless section for more detail).

3 Helmet Kit

Setcom makes its Helmet Kits using the highest quality speakers and microphones and offers a kit to fit every police motorcycle helmet.

- Thin, lightweight speakers (less than 2 oz.) for 3/4-shell and full face helmets are comfortable and specifically designed for radio traffic in the voice frequency range; they are loud enough to be heard on a motorcycle without distortion, even at pursuit speeds. A modular plug makes them easy to repair or replace.
- Waterproof, noise-canceling microphones are ideally suited for the radios with which they're intended to work, providing a superior signal-to-noise ratio and clear voice transmission. A flexible-boom with two counter-wound beryllium-alloy springs resists work-hardening and fatigue.

Liberator™ Wireless Systems



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Liberator™ Wireless Portable-Only

The most widely used wireless system for police motorcycle officers. Setcom Liberator Wireless Portable-Only system was introduced in 2005 and has been the most popular system since its inception. Setcom's Liberator Wireless SuperMic eliminates the cable between you and the motorcycle, giving you maximum flexibility, freedom of movement and reliability.

The Liberator Portable-only wireless system's handlebar transmitter enclosure is waterproof and has been certified to meet the IP-X8 standard. In addition, the Liberator SuperMic is independently certified to meet the IP-X7 waterproof standard. Conformal coating on the proprietary circuit boards provides a second layer of protection against water and other contaminants like salt and road grime which could cause the circuitry to malfunction.

The Liberator uses highly reliable frequency spectrum

- **No pairing** - The Liberator automatically establishes a wireless link when an officer presses the push-to-talk button on the motorcycle. There is no need to "sync" or "pair" the system to the motorcycle.
- **No batteries** - The Liberator's efficient power management technology eliminates the need to recharge batteries, a potentially critical point of failure. It draws the minimal power it requires from the portable radio battery.
- **Waterproof** - Independently tested: SuperMic is IP-X7 and handlebar transmitter is IP-X8.
- **Conformal coated** - The SuperMic and transmitter circuit boards are conformal coated for additional water and contaminant protection.
- **Up to 1,024 simultaneous riders** - With its selectable channel plan, the Liberator has been carefully designed and rigorously tested to eliminate extraneous communication between two police motorcycles and/or between the Liberator and the portable or mobile radio. Up to 1,024 motorcycles can ride together without interference.
- **Backward compatible helmet kits** - Setcom's Liberator is completely compatible with Setcom's traditional Helmet Kits, making it easy and affordable to upgrade.
- **Quick release jack** - As with Setcom's traditional SuperMics, the Liberator's helmet connection provides a quick-release jack to improve officer safety.
- **Worldwide Compatibility** - Systems available for North America and Europe/ROW frequency plans.
- **U.S. Patent: 8,010,171**

Setcom, making it easy and affordable to upgrade

1. Backwards compatible with your current Setcom helmet kit.
2. Easy installation. Estimated 1/2 hour install for Harley-Davidson.
3. Try the Liberator on one motorcycle and prove its quality and reliability for yourself.



Portable Only Wireless SuperMic



Handlebar transmitter

Liberator™ Wireless Portable-Only¹ Specifications

Frequency Plan

Frequencies Used (North America / Europe and ROW)	916 MHz (ISM band) / 869 MHz
Syncing / Pairing Requirement	None
Registration Identifier (US FCC / Canada IC)	TLV-WP01000 / 6143A-SWP01000
Number of Concurrent Riders in Localized Area	Up to 1,024

Power Management

Source of Power	SuperMic: portable radio battery Motorcycle Cable Kit: motorcycle battery
Power Draw of SuperMic	Standard usage draws less than 5% of portable radio's battery capacity
Battery Recharging	None

Radio Compatibility

Motorola APX / XPR Series	Yes
Motorola JEDI-series ²	Yes
Motorola HT750, HT1250, GP-360	Yes
M/A-COM Harris P7300, P5400	Yes
M/A-COM JAGUAR, 700P, 5100P, 7100, 7150, 7200	Yes
M/A-COM LPE-200	Yes
M/A-COM MRK	Yes
Kenwood NX-300, TK-3180	Yes

Radio Usage

On Motorcycle	Transmit: portable radio Receive: portable radio
Off Motorcycle	Transmit: portable radio Receive: portable radio

Waterproofing

SuperMic	Yes (IP-X7) ³
Motorcycle Cable Kit / Black Box	Yes (IP-X8) ⁴
Handlebar Push-to-Talk Switch and Boot	Yes (IP-X8) ⁴
SuperMic and Transmitter Circuit Boards	Conformal coated

Auto Mute

SuperMic Speaker	Auto mutes when helmet kit is plugged in
SuperMic Microphone	Auto mutes when helmet kit is plugged in

Other Features

Quick Release Connectors	Helmet kit connection uses quick-release Nexus connector
SuperMic Pigtail Connector	Custom molded with EZ Grip plastic coating
Backward Capability	All Setcom KE and KA helmet kits
Ear Bud Jack	Optional accessory. Setcom part number 25-KE2EB
Easy Installation	Usually installs in less than 30 minutes on a Harley-Davidson police motor

¹ U.S. Patent 8,010,171

² Motorola JEDI-series radios include: HT1000, JT1000, MT2000, MTS2000, MTX838, MTX8000, MTX9000, XTS1500, XTS2250, XTS2500, XTS3000, XTS3500, XTS5000, GP1200, GP900, GP9000

³ Setcom's Liberator Portable-only SuperMic enclosure meets the IP-X7 immersion specification as verified by an independent test laboratory.

⁴ Setcom's Liberator Portable-only transmitter enclosure and handlebar PTT switch meet the IP-X8 immersion specification.

Wired Systems



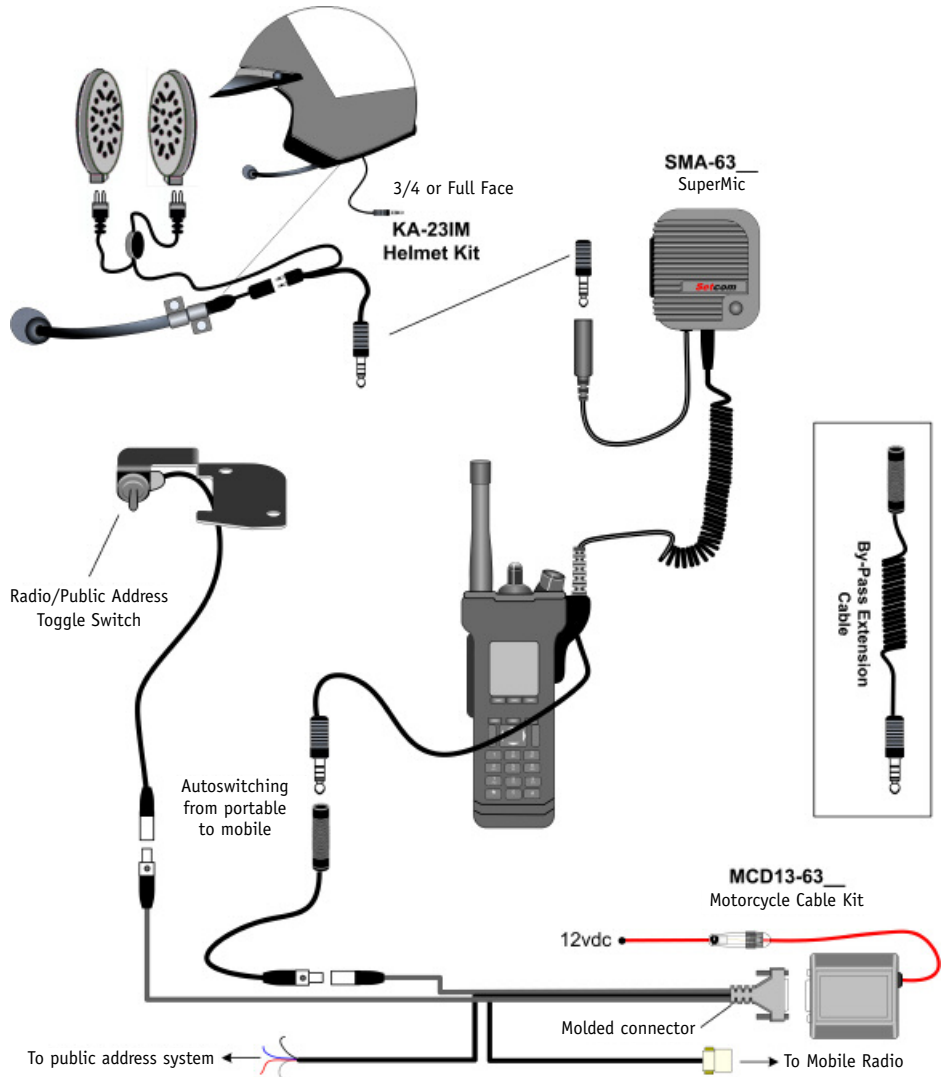
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Wired Mobile Portable

The latest update in the Setcom line of wired police motorcycle communications products. Setcom's Series 63 Mobile-Portable wired system, redefines function and durability.

Series 63 Features Include:

- **Waterproof Design:** The Series 63 SuperMic is independently certified to meet the IP-X7 waterproof standard. Conformal coating provides a second layer of protection against water and other contaminants like salt and road grime causing the circuitry to malfunction.
- **Auto-Switching:** The Auto-Switching feature allows the ComKit to automatically switch the communications from mobile radio to portable radio when the officer unplugs from the motorcycle. And will automatically switch back to the mobile radio when plugged back into the motorcycle.
- **Public Address:** Public Address integration is provided as a standard feature on the Series 63 System.
- **Modular Design:** The modular design of the Series 63 system provides a flexible, easy to install system that requires very little maintenance. Because of this modular design you can, change radios, motorcycles, and helmets without needing to replace the entire system. Only component changes may be required.
- **Multi-Mode Operation:** Can operate in both Mobile+Portable mode or can work in Mobile-Only Mode when utilizing the helmet by-pass extension cable.
- **Auto-Muting Mic and Speaker:** When the helmet kit is plugged into the SuperMic the speaker and mic of the SuperMic are automatically muted. When the officer unplugs the helmet kit from the SuperMic, the speaker and mic become active.
- **Backwards Compatibility:** Setcom Systems are designed to work with your current Setcom helmet kits.



Optional Mobile-Only Mode

The Series 63 system has been designed to be the most versatile mobile-portable system available. It is design to operate in both mobile-portable mode as well as mobile-only mode. Setcom has designed it this way because:

- **Safety** – This allows the motor officer to carry the Series 63 by-pass extension cable and utilize this cable in the rare case something should happen to his portable radio or his Series 63 Supermic. Just simply plug the helmet kit into this cable and plug this by-pass cable into the motorcycle cable kit.
- **Budget Flexibility** – This allows a budget conscious department a starting point for a quality system. They can procure the Series 63 for mobile-only mode and then when more budget is available, they can add the SuperMic to the system.

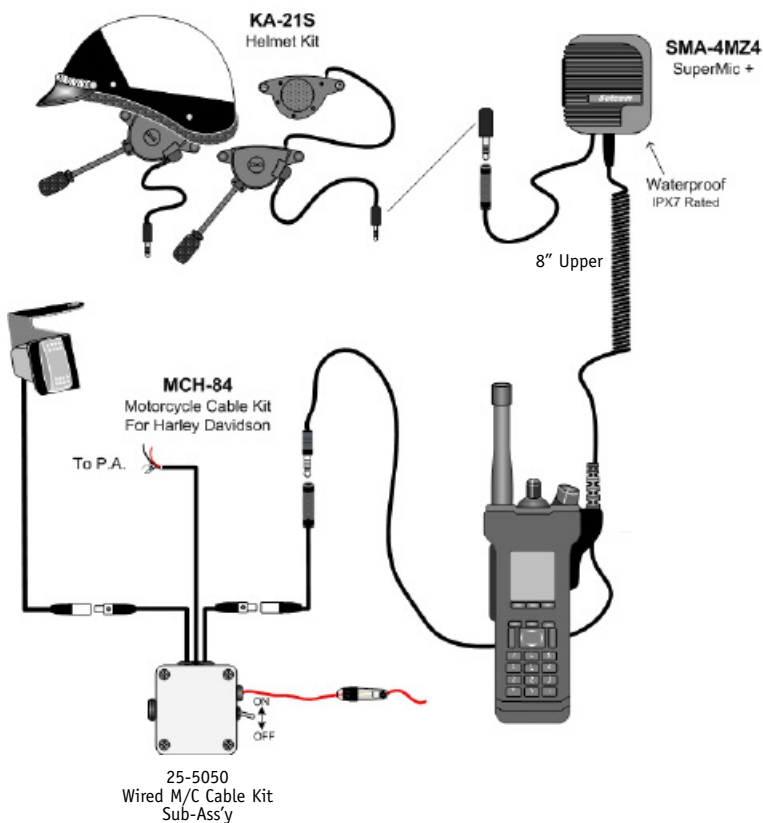
Wired Portable-Only Systems

Setcom offers two versions of wired portable-only systems. We offer our Series 4 System that has the ability to integrate with the motorcycle PA system and our Series 3 System that does not offer PA integration.

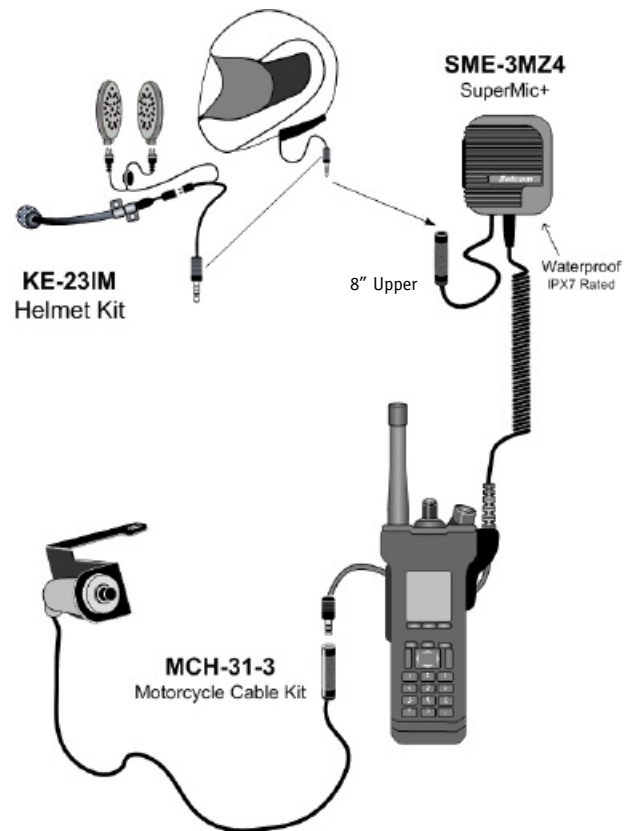
Portable-Only Systems Include:

- **Waterproof Design:** The Series 3 and 4 SuperMics are independently certified to meet the IP-X7 waterproof standard. Conformal coated circuit boards provide a second layer of protection against water and other contaminants like salt and road grime which could cause the circuitry to malfunction.
- **Modular Design:** The modular design of the portable-only systems provide a flexible and easy to install system that requires very little maintenance. Because of this modular design you can, change radios, motorcycles, and helmet without needing to replace the entire system. Only component changes may be required if a department's specifications change in the future.
- **Auto-Muting Mic and Speaker:** When the helmet kit is plugged into the SuperMic the speaker and mic of the SuperMic are automatically muted. When the officer unplugs the helmet kit from the SuperMic, the speaker and mic become active.
- **Backwards Compatibility:** Setcom Systems are designed to work with your current Setcom helmet kits.
- **Public Address:** Public Address integration is offered in the 4 Series.

Series 4 Representative Diagram



Series 3 Representative Diagram



Helmet Kits



Helmet Kits

1/2 Shell

- For most half shell helmets
- Option to slide up or snap on to helmet
- Designed with a modern, lightweight, UV-rated plastic for extended durability
- Available in single or dual ear speaker systems
- High-end, waterproof noise-cancelling microphone with rugged boom
- Repairable
- Installs in seconds
- Compatible with Super Seer, Shoei, Bell, and other half-shell helmets



3/4 Shell

- Available in single or dual ear speaker systems. Thin, lightweight speakers (less than 2 oz.) provide maximum comfort
- A modular plug makes the speakers easy to repair or replace, should the need arise
- High-end, waterproof noise-cancelling microphone with rugged boom
- Simple, non-intrusive install
- Patented design (5,590,209)
- Repairable
- Compatible with most three-quarter shell helmets including Shoei, Super Seer, and Bell



Full Face / Modular / Flip-up

- For most full face, modular, and three-quarter shell helmets
- Available in single or dual ear speaker systems
- Thin, lightweight speakers (less than 2 oz.) provide maximum comfort
- A modular plug makes the speakers easy to repair or replace, should the need arise
- High-end, waterproof noise-cancelling microphone with rugged boom
- Simple, non-intrusive install
- Repairable
- Compatible with most full face / modular / flip-up helmets including Shoei, Nolan and Bell
- Compatible with the Arai three-quarter shell helmet



Other Applications of Use

Dirt-Bike / Dual Sport / ATV / Snowmobiles

Setcom offers rugged off-road wired and wireless systems for dirt-bike, dual-sport, ATV and UTV applications. Our SuperMics, boom microphones, and PTT switches are waterproof to stand up to harsh environments.

The Liberator Portable-Only is the perfect system for these application because:

- Freedom from being tethered to the motorcycle or ATV.
- Low power consumption. The system draws minimal current from the vehicle's battery.
- Waterproof SuperMic is rated IP-X7 and handlebar Transmitter is IP-X8. This means that the units can be submerged up to one meter for at least 30 minutes.
- Easy to install - Typically, the system will install in less than 30 minutes.
- Proven - System has been used by numerous agencies for over six years with great success.



Mounted / Horse Patrol

Setcom Horse Patrol systems are the premier system for mounted police. We offer flexible solutions that allow for easy and safe communications while mounted or dismounted.



Other Markets and Contact Info

In addition to police applications, Setcom is a leader in the following markets:

Fire Apparatus Intercom Systems

Firefighters have relied on Setcom's communications equipment for over forty years. A pioneer in the field, Setcom remains an industry leader because it works with users to develop the kind of innovative, tailor-made products professionals depend on.



ARFF Intercom Systems

The System 1310 has been the premier dual radio, split audio intercom system for over fifteen years. The trusted standard among ARFF departments, 80% of the top 50 US airport fire departments rely on it. Having pioneered split audio, Setcom can configure a system for just about any situation. For those applications where a dual radio system isn't enough, Setcom also offers its System 1600, a premium six radio system.



Marine—Public Safety

Leveraging Setcom's 40 years of experience servicing the communications requirements of public safety vehicles and maritime communications knowledge, Setcom's public safety marine boat systems are designed for optimal performance on public safety radio systems while on the water. Setcom is the standard for police and fire marine vessel communications.



Marine—Civilian

Whether you call it a go-fast, cigarette, or airboat, these watercraft are incredibly noisy environments that require superior hearing protection and the ability to quickly and easily communicate with onboard crew and onshore support staff. Setcom provides a number of different intercom configurations for any type of boat. Just ask the crew of Miss Geico. Setcom is a proud official sponsor of Miss Geico.

