

Guardian
Safety Systems

Innovative Communications

Solutions for Workers in Hazardous Situations



INNOTECH
Innovative Technology

Consumer Products - Made for the Job

Effective radio communications provides workers in hazardous situations with an increased level of confidence, especially when undertaking the most demanding tasks.

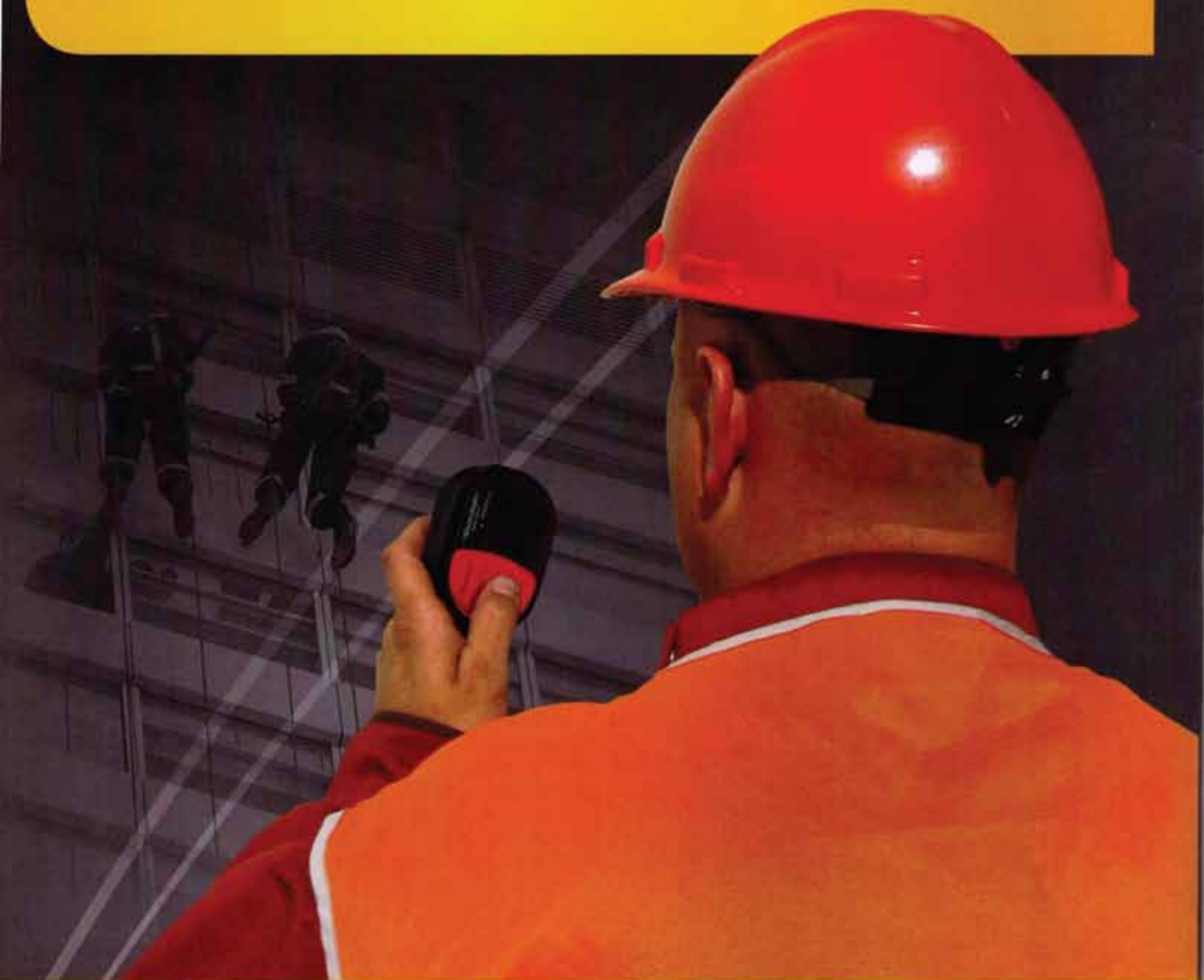
Two career fire fighters, frustrated by the lack of suitable communications, approached Innotech (Guardian Safety Systems parent company) with a proposal to design and develop a communication system to improve safety for themselves and their colleagues.

The result is the breakthrough Guardian BA and Helmet Accessories which connect to a portable two way radio via the Guardian Speaker Microphone. This combination provides clear and reliable communications in high noise, dangerous environments.

The Guardian Comms System utilises Innotech's patented bone conduction technology (harnessing voice vibrations through the skull) to send and receive communications. This effectively isolates ambient noise, reducing missed messages and improving transmissions resulting in increased safety and operational efficiency.

The Guardian Comms System allows received messages to still be heard even when hearing protection is worn, making it ideal for noisy environments.

Guardian Comms Systems was designed and built initially to meet the harsh realities of Fire Fighting. However, it is finding an increasing application where robust communication equipment is a vital part of everyday working requirements.



BA Accessory

The Guardian BA accessory is a communications device that is easily fitted onto many different brands of Breathing Apparatus mask straps. Its seamless design means that once fitted, there is no delay putting on the mask which remains comfortable after long periods of use.

The BA Accessory connects to the portable two way radio via the Guardian Speaker Microphone providing clear and reliable communications in high noise, dangerous environments.

The BA accessory has an advanced speech transducer that converts voice vibrations from the wearer's skull into electrical energy which is then amplified and passed to the Guardian Speaker Microphone for transmission when the Speaker Microphones PTT button is pressed.

This technology means the user doesn't have to shout through the BA mask into a regular speaker microphone which typically results in poor quality transmissions.

The BA accessory also converts received signals to mechanical audible vibrations which are then passed to the wearer's skull through the vibration transducer. As a result of this, received messages may still be heard even if hearing protection is worn, making it ideal for noisy environments.

The BA Accessory is rated to IP 66 so it can be left on the mask during cleaning or decontamination.



BA Accessory Key Advantages

- > Easily fitted and removed from a wide range of mask straps
- > Does not delay putting on the mask
- > Remains comfortable after long periods of use
- > Excellent performance in noisy environments
- > Can stay attached during cleaning or decontamination
- > No batteries: For greater reliability when attending an incident
- > Suitable for:
 - Confined Space Work and Rescue
 - Mines Rescue
 - Workers wearing protective or encapsulated suits
 - Fire Fighting
 - Maintenance Work
 - Any other application that requires the use of a BA mask and reliable communications

Winner of an Australian International Design Award 2008



Ordering Information and Model Number on the Back Page



Helmet Accessory

The Guardian Helmet Accessory is a dedicated communications solution for Structural Fire Helmets. The Helmet accessory easily attaches in seconds to the helmet ratchet housing.

It does not delay the donning of the Helmet and can be worn for long periods of time due to its superior comfort.

The Helmet Accessory connects to the portable two way radio via the Guardian Speaker Microphone providing clear and reliable communications in high noise, dangerous environments.

The Helmet Accessory has an advanced speech transducer that converts voice vibrations from the wearer's skull into electrical energy which is then amplified and passed to the Guardian Speaker Microphone for transmission when the Speaker Microphone PTT button is pressed.

This means ambient noise is reduced significantly, improving transmissions and minimising repeated messages when compared to a conventional speaker microphone.

The Helmet Accessory also converts received signals to audible mechanical vibrations which are then passed to the wearer's skull through the vibration transducer. As a result of this, received messages may still be heard even if hearing protection is worn, making it ideal for noisy environments.

The Helmet accessory is rated to IP65, which allows it to be cleaned with other PPE equipment. Facilities are provided for cable stowage when the cable is not in use.



Helmet Accessory Key Advantages

- > Quick and easy to install and remove
- > Does not delay donning of Helmet
- > Seamless design for greater comfort, doesn't compromise helmet functionality
- > Excellent performance in noisy environments
- > Can be used with hearing protection
- > Suitable for:
 - Emergency Response Team leaders
 - Pump Operators
 - Any work requiring a structural helmet and comms

Rescue Helmet Accessory

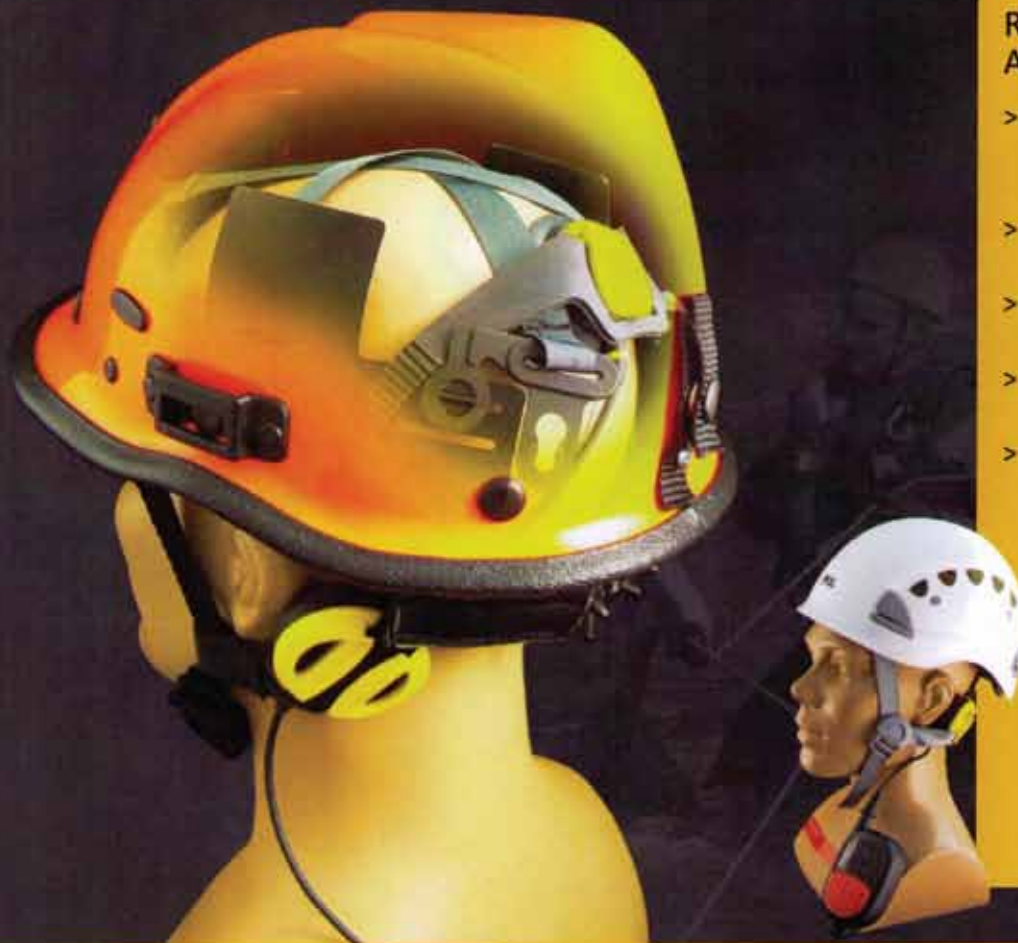
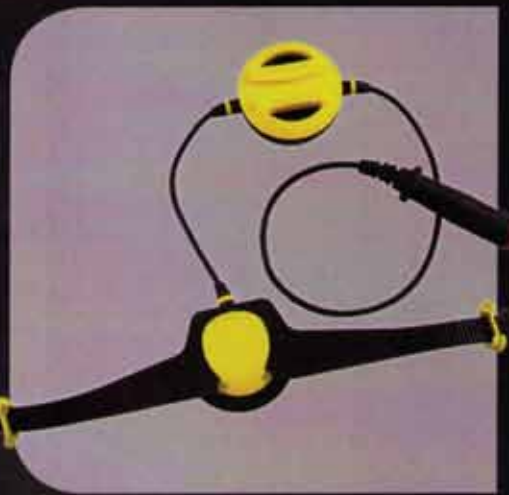
The Rescue Helmet Accessory can be easily fitted to numerous light-weight rescue style helmets. Its seamless design means there is no delay putting on the helmet and remains comfortable after long periods of use.

The Rescue Helmet Accessory includes two easily fitted clips, attached either side of the helmet, and a rubberised strap which supports the transmit transducer inside the helmet. The receiving transducer mounts directly onto the helmet harness.

The Rescue Helmet Accessory, when connected to the portable radio via the Guardian Speaker Microphone provides clear and reliable communications.

The Guardian Speaker Microphone's easy to use PTT button effectively provides a hands free system, as it can be activated by a variety of means.

The Rescue Helmet accessory allows received messages to still be heard even when hearing protection is worn, making it ideal for use in a wide range of high noise, hazardous environments.



Rescue Helmet Kit Advantages

- > Easily attached to a wide range of light-weight rescue style helmets
- > Does not delay putting on the helmet
- > Remains comfortable after long periods of use
- > Excellent performance in noisy environments
- > Suited to:
 - Confined Space work and rescue
 - Vertical work and rescue
 - Mines Rescue
 - Arborists & Forestry workers
 - Workers wearing protective or encapsulated suits

Speaker Microphone Ordering Details



FC001
Speaker Microphone with Jedi Connector to suit Motorola Radios



FC003
Speaker Microphone with Warris Connector to suit Motorola Radios



FC005
Speaker Microphone with Connector to suit Tait Orca Radio



FC007
Speaker Microphone with Mini Warris Connector to suit Motorola, Simoco and other Radios



FC009
Speaker Microphone with Connector to suit Simoco SRP9100 Radio



FC011
Speaker Microphone with Connector to suit Tait TP9100 Series Radios



FC013
Speaker Microphone with connector to suit Tait TP8100 Series Radios

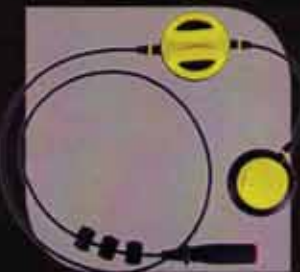
Patent Information
Internationally Registered Designs and Design Patents Awarded and Pending

Accessory Ordering Details



FC101
Helmet Accessory for use with Guardian Speaker Microphone. Attaches to the ratchet housing of a helmet.

FC102
Variant for Jet Style Helmets



FC202
BA Accessory for use with Guardian Speaker Microphone. Attaches directly to Breathing Apparatus Mask straps.



FC300 Series
Rescue Helmet Accessory for use with Guardian Speaker Microphone. Models available to attach to a wide range of Rescue and Light Weight Helmets.

Additional Specifications

FM Class	3610 & 3611 when used with speaker microphone
Ingress Protection	IP 65
EMC	CTick, CISPR 13

International Patents Awarded and Pending. International Registered Designs and Design Patents Awarded and Pending

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Contact Information

SYSTAG - Systems Technology for Air & Gas
36-38 Stanley Street
Capalaba Qld 4157
Ph: 07 3245 2098 Fx: 07 3245 2302
www.systag.com.au