

MOTOTRBO POWERS AUSTRALIAN GRAND PRIX COMMUNICATIONS

RELIABLE, SECURE COMMS FOR WORLD'S LARGEST SPORTING EVENT



Few events compare to the Formula $1^{\$}$ – the largest motor sport event in the world – and its party atmosphere. Celebrating its 20th year at Melbourne's Albert Park, this year's Formula $1^{\$}$ Australian Grand Prix is the first in the FIA Formula One World Championship season.

The 5.303km Albert Park Grand Prix Circuit is built every year partially utilising public road sections around Albert Park Lake, south of Melbourne's main business district. In preparation for the event, work starts two months prior to the race — erecting trackside fencing, pedestrian overpasses, grandstands and other motor sport infrastructure.

CUSTOMER

Australian Grand Prix Corporation, Melbourne 2016

Industry

Event Management

Technology Partner The P.A. People

Need

 A reliable and secure communications system for an event which presents complex logistical challenges, estimated crowds of more than 90,000 people and a large geographical area.

Benefits

- Call clarity
- Battery life
- Dedicated channels
- Security
- Transmit interrupt functionality
- Software Radio Management application
- Flexible solutions



KEY PARTNERSHIPS

One partner company dedicated to the success of the Formula 1® Australian Grand Prix is The P.A. People. Based in Sydney, The P.A. People is among a very select group of event communications specialists worldwide, with experience extending to events such as both summer and winter Olympic Games, Commonwealth Games, Asian Games in Doha Qatar (2006), the Inaugural European Games in Baku (2015) and the iconic Sydney New Year's Eve celebrations on Sydney Harbour.

The P.A. People partner with some of the most innovative and dynamic companies internationally, ensuring that regardless of the complexity of an event — such as the 2016 Formula 1[®] Rolex Australian Grand Prix — the right solution is delivered.

One such partner is Motorola Solutions. Motorola Solutions was selected by The P.A. People for the radio networks and two-way radios deployed at the 2016 Formula 1® Rolex Australian Grand Prix. The P.A. People has used Motorola Solutions' equipment and solutions for over a decade, due to their high quality. "We want to have the best product and the best service, and Motorola Solutions has the best product," says Chris Dodds, managing director of The P.A. People.

MOTOTRBO DEBUTS AT THE 2016 FORMULA 1® ROLEX AUSTRALIAN GRAND PRIX

The P.A. People celebrates six years of providing the audio system for the Melbourne event, however, for the first time, at the 2016 Formula 1® Rolex Australian Grand Prix, a second contract was awarded to The P.A. People for the radio network. This contract entailed the provision of two MOTOTRBO IP Site Connect sites and more than 500 Motorola Solutions' two-way radios with 12 channels.

Two-way radios provide critical communications for the duration of the event. For example, medical teams who provide immediate medical support on the track all carry radios. Radios are also deployed to security staff, engineers, fire fighters, race control, cleaning staff as well as the recover and rescue crew, who are on hand to remove damaged cars or debris from the track.

CLEAR, RUGGED AND GREAT BATTERY LIFE

Prior to the race during set-up, two-way radios at the 2016 Formula 1® Rolex Australian Grand Prix operate on Motorola Solutions' IP Site Connect (Orion network) with the benefit of city-wide

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Chris Dodds, managing director, The P.A. People.

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Craig Moca, manager, engineering, Australian Grand Prix Corporation

coverage. During race week they cut over to Motorola Solutions' radio system (the "event radio system"). Changing over to the event radio system enables a tactical network as the network is dedicated to event users. As a result the network can be more responsive and all radios can key up very quickly — critical for such a big event.

A combination of MOTOTRBO portable and mobile radios are deployed to Grand Prix staff: engineers, race control, sector marshalls, medical staff, recovery and rescue crews, cleaners and fire fighters.

MOTOTRBO was selected for the 2016 Formula 1® Rolex Australian Grand Prix for a number of reasons:

- Call clarity and radio quality: One senior marshall, Arthur Cooksley, is stationed directly underneath an audio speaker around the track, yet reported that the "clarity was good and I can hear over all the noise".
- Battery life: A trunked radio system places greater demands on battery life, yet long days on-site mean that the radios must operate for long shifts without recharging. Senior marshall Cooklsey commented that "the battery life is great: I never have to charge it through a day's shift".
- **Dedicated channels:** The system was set up without time sharing, so that each team using the radios has exclusive use of their channel. Moreover, the medical team's channel is locked down so they cannot accidentally change channel.
- **Security:** As part of the security measures for such an important event, MOTOTRBO's restricted access to system (RAS) key prevents the radio files from being copied and prohibits access to the network.
- Rugged design: The 2016 Formula 1® Rolex Australian Grand Prix weekend experienced the best that Melbourne's weather had to offer: extreme heat followed by cold, stormy days. Scott Davidson, senior systems engineer for The P.A. People, described it as "first dusty, then wet, then muddy, but the radios stood up to it all".

• Transmit interrupt functionality: All

MOTOTRBO two-way radios were programmed with transmit interrupt functionality. If a radio user accidentally keys up — for example, the radio push-to-talk is accidentally pressing against something and the user does not notice — race control can take back control of the talk group to free the channel and allow others to use it. This is an important feature when there are emergencies so that if the channel is being used, someone can interrupt the call to ensure their urgent information gets through quickly and they do not need to wait for the channel to become available.

• Software Radio Management application:

When setting up and integrating all the radios in the fleet, The P.A. People were able to use Motorola Solutions' Software Radio Management application to bring all radios online on the network quickly and easily. The application can program up to 16 radios at one time and track which radios have been successfully programmed, providing a clear view of the entire radio fleet and a code plug history for each radio.

- Flexible solutions: The role of the medical crew is to attend any accidents on the race track and provide first aid to the drivers, so a rapid response with constant access to communication is vital. Their activities must not be encumbered by the equipment they use. The medical crew initially requested mobile radios for each car, however, The P.A. People suggested portable radios, held in place by a chest harness that can be worn under a seatbelt. A headset could then be attached in a way that ensured it did not become an obstacle if a medical officer got out of their car, thereby ensuring continuous radio contact with the Race Control Room.
- "The MOTOTRBO radios are rugged and reliable," says track manager Campbell Waller. "We've been using these radios all around the world. We first purchased a lot of these radios in 2006, and they are still going today, which is a testament to their quality."



Motorola Solutions' equipment also impressed Craig Moca, manager, engineering, at Australian Grand Prix Corporation, particularly the battery life of the MOTORBO radios. "The big issue in digital radio before was battery life, but these batteries have been lasting a day and a half, which is fantastic, as is the ease of using the handsets," adds Moca.

THE FUTURE

The staff at The P.A. People are enthusiastic about the opportunity to expand on the functionality of the two-way radios at future Grands Prix. Proposed initiatives include merging the list of staff names with radio programming for improved asset management of the radios, a radio shack for troubleshooting, and a dedicated channel for The P.A. People on the same two-way radios instead of using a separate radio system, among other enhancements.

SET FOR ONGOING SUCCESS

The Formula 1® Australian Grand Prix is an event known for its glamour, excitement and passion — in both the fans and the drivers. It is also an event renowned for a high level of professionalism and superior organisation with no detail overlooked. A part of its success comes down to the high standard of organisations forming the backbone of the event's infrastructure.

The P.A. People brings expertise and technical ability gained from more than 20 years of worldwide experience in some of the biggest and most complex events ever staged. They combine these skills with the best and most suitable equipment and solutions, such as two-way radio equipment, networks and software from Motorola Solutions, a company which also represents a long history of experience and technical excellence. With this powerful combination, the success of the 2016 Formula 1® Rolex Australian Grand Prix communications system was assured.

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