

MotoGP™ upgrades communications to KENWOOD DMR TIER 3 with simulcast capability.



KENWOOD

RADIO COMMUNICATIONS
SUPPLIER



KENWOOD delivering clear and reliable two-way radio communications to the elite MotoGP™ Series.



There are few places on earth where extremes in noise, vibration, high temperature and gravitational forces are commonplace. It's a harsh environment which puts unique demands on both people and equipment. This is the world of elite motor sport, and MotoGP™ is perhaps one of the most unforgiving.

MotoGP™ attracts an attendance of more than 2,884,242 spectators throughout the season and a TV audience of 400 million. It takes a team of between 300-400 people to make things happen at each of the 19 rounds of the championship held in Europe, Middle East, USA, South America and Asia.

Dorna Sports is the exclusive commercial and television rights holder of the FIM Road Racing World Championship Grand Prix (MotoGP™).



Event Critical Radio Communications.

For the 2018 Championship, the Radio Frequency Team at Dorna Sports wanted to upgrade their analogue two-way radio system to provide instant and reliable communications between Race Organisers, Technical staff, TV Production, Medical Teams, Safety cars, Timing officials, TV Broadcasters, Security teams, VIP Hospitality staff and IRTA, the Racing Teams Association.

Following a technical review process, Dorna Sports announced a new three-year contract with JVCKENWOOD as the Radio Communications Supplier of MotoGP™ from 2018 to 2020. Sharing many of the core values of MotoGP™.



Osamu Muraoka, General Executive of Communications Systems Division, JVCKENWOOD Corporation, says: "We are very honoured to be the official supplier of the digital radio communications system

for the MotoGP™ series. We are delivering a digital radio communications system with high reliability and functionality, which was developed by leveraging our long-standing technologies and know-how in communications and audio around the world. Our digital radio technology is noted for excellent speech quality which is especially important with the intense noise in motor sports. I'm sure the new DMR system featuring KENWOOD equipment and the proven Simulcast technology from our subsidiary Radio Activity will ensure the smooth operation of MotoGP™."



Pau Serracanta, Managing Director, Dorna Sports, adds: "We are pleased to welcome JVCKENWOOD on board as Radio Communications Supplier to MotoGP™ and we look forward to a successful three-year

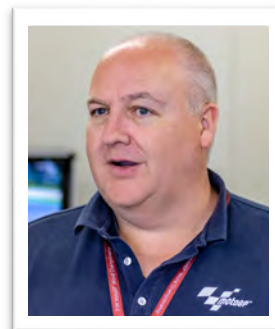
collaboration. Sharing much of the same vision, we are sure that JVCKENWOOD will supply top quality equipment and service focused on technical progress, and that this agreement will be a mutually valuable venture for both parties."



Matt Beasant, MotoGP™ RF Engineer reports: "The two-slot time-division transmission of DMR TDMA effectively gives us two voice channels in one repeater and frequency pair.

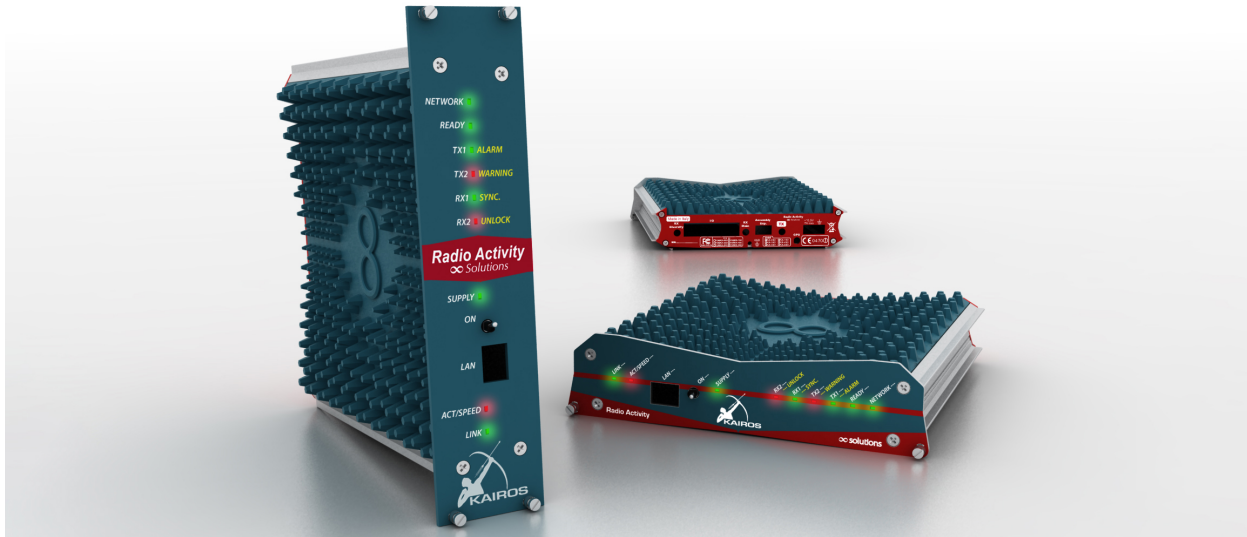
With fewer repeaters, the power consumption, cooling requirements and the cost of moving the hardware between races is much lower than the old analogue system. Using Tier 3

trunking allows us to share capacity and channels between all the different user groups which makes much more efficient use of our frequencies while retaining complete control over the system with the control channel to maintain the security of our communications network".



Reliability with the ability to operate in high levels of RF interference.

Matt continued: "KENWOOD equipment has a reputation for reliability and the ability of their repeaters to operate in high levels of RF (Radio Frequency) interference. This is exactly what we have at a MotoGP™ circuit and it was essential for us that the equipment was able to deal with this level of interference and still operate reliably. Another benefit of the KENWOOD system was the OTAP (Over The Air Programming) feature which gives us both the flexibility to configure the system for each circuit but also to make corrections before anything untoward happens. I'm very happy; the close working relationship with the KENWOOD engineers has enable us to give a much better service to Dorna and everyone involved at each event".



Noemi Lacasa, MotoGP™

Radio Frequency Manager reports: “The new KENWOOD DMR Tier 3 system gives us the capacity for more users with fewer frequencies required which also means that

we can now make private calls and with the addition of the Kairos repeaters, we can employ simulcast architecture to achieve greater coverage of the circuit with less infrastructure. I’m delighted. We now have a more reliable system with the full support from a responsive and capable team at KENWOOD”.

KENWOOD DMR Tier 3 with Simulcast System Overview

Client: Dorna Sports, S. L.

System: KENWOOD DMR Tier 3

Type: Trunked with Simulcast

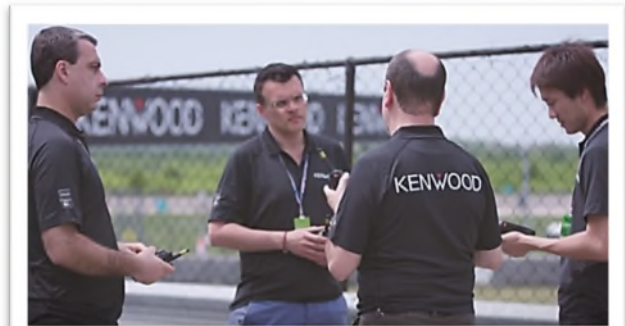
Technology: Digital



Channel Access: 12.5 kHz 2-slot TDMA

Air Interface Protocol: DMR

Hand-Portable Radios: NX-3000 Series hand-portables and mobiles

Repeaters: Kairos KA-450



 	
<p>DORNA Principe de Vergara 183 – 28002 Madrid Spain T: +34 917 820 220 F: +34 915 615 807 W: www.dorna.com</p>	<p>JVCKENWOOD UK Ltd 12 Priestly Way London NW2 7BA United Kingdom T: +44 (0)208 208 7500 W: www.kenwoodcommunications.co.uk</p>