DMR SIMULCAST NETWORKS

IP-BASED DMR SIMULCAST SYSTEMS

Harris DMR Tier 2 and DMR Tier 3 simulcast networks, powered by Tait, provide wide-area coverage on single receive and transmit frequencies for both conventional and trunked networks. The system’s flexible, innovative design simplifies set-up and reduces equipment requirements.

Simulcast transmission provides a cost-effective means of achieving wide-area coverage with geographically separated base stations using the same single receive and transmit frequencies. DMR simulcast networks can be stand-alone, or integrated into a larger non-simulcast Harris DMR network.

The Harris system’s flexible design provides a smooth migration of your current assets and protects additional investments in the future. As DMR simulcast networks use the same hardware as Harris’ current DMR networks, they can be partially or fully upgraded to simulcast later should this be required.

The Harris DMR simulcast solution uses less equipment than a typical analog simulcast network solution as the voting system is already included in the TB9300 and TB7300 base stations. This reduces the possible points of failure and increases the reliability.
WHY SIMULCAST?

Simulcast transmission provides wide-area coverage through geographically separated base stations using the same single receive and transmit frequency. In simulcast systems, audio is broadcast simultaneously over a number of transmitters. Essentially, for simulcast each transmitter in the system transmits exactly the same signal, with the same characteristics and the timing is optimized to deliver the best outcome. The incoming signals from terminals on the simulcast network are often received by multiple base stations. The best of these signals is chosen by a digital voter and provided for re-transmission or interfacing with other services.

Simulcast is very useful because obtaining multiple frequencies on all occasions in many locations is difficult. Reusing the same frequency over a large area is cost-effective and sometimes the only possible solution.

Simulcast also simplifies the user experience by reducing channel change activities in conventional systems and reducing the number of re-registrations on a trunking network.

About Harris Corporation
Harris Corporation is a leading technology innovator, solving customers’ toughest mission-critical challenges by providing solutions that connect, inform and protect. Harris supports government and commercial customers around the world.

Harris is the exclusive North American distributor of Tait solutions.
Learn more at harris.com

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Tait Limited facilities are certified for ISO9001:2008 (Quality Management System), ISO14001:2004 (Environmental Management System) and ISO18001:2007 (Occupational Health and Safety Management System) for aspects associated with the design, manufacture and distribution of radio communications and control equipment, systems and services. In addition, all our Regional Head Offices are certified to ISO9001:2008.