

Application Report 619SRI Audio Bridge

Customer Profile

- Queensland Railways - a large network user covering the state of Queensland, 1.8 million square kilometers.

Applications

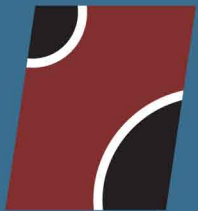
- Radio Network splitting and night switching.

Business Benefits

- Provides the ability to reduce staffing levels in small rural centres at night, eliminating security and welfare concerns.

Products Used

- 619SRI Audio Bridge using the remote over-air DTMF re-configuration capability. An inbuilt standard feature of the 619SRI.



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RADIO NETWORK SPLITTING & COMBINING

→ Customer Overview

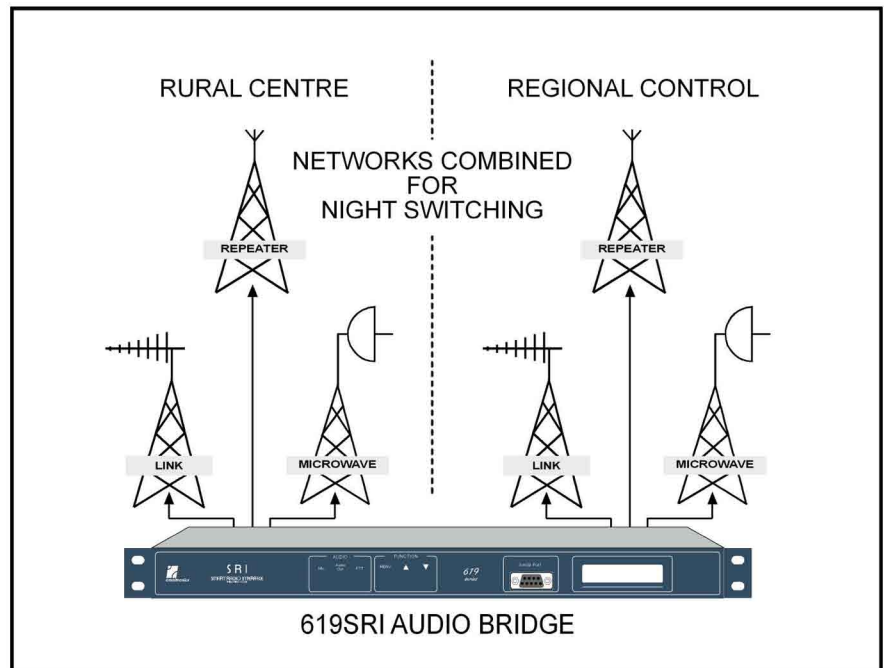
The Queensland Railway operates an extremely large Statewide Communication Network which requires manning and monitoring 24 hours each day, 7 days a week. This network covers the state of Queensland, an area of approximately 1.8 million square kilometers.

→ The Challenge

During the day, many small rural centres are quite busy, however during the night time they are often left unmanned. During these periods, communications are routed to one of the major regional centres i.e. night switched. The challenge was for the control of night switching to be dynamic and to be controlled from either centre, in case the controller at the rural centre forgets to operate the night switch.

→ Solution

As each of the eight ports of the 619SRI Audio Bridge can be re-configured dynamically using signalling tones from remote radios, Queensland Railway decided that this dynamic configuration of the ports using DTMF signalling was the preferred method of control. This solution therefore allowed for any network radio to send a pre-configured DTMF code to a 'hub' 619SRI which would then re-configure the ports of the 619SRI to any desired combination for routing communications traffic. This meant that during the day, the smaller rural network could be isolated while during the night time period it could be combined with the regional network.



→ Conclusion

Omnitronics Audio Bridges are ideal for combining, cross banding and matrixing communication networks. However, they can also provide significant other benefits using the many in-built features available. The 619SRI proved it's worth in this application.



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