

Application Report 619SRI Audio Bridge

SYDNEY MONORAIL PROJECT

Customer Profile

- Australian Mobile Radio Sydney-based Omnitronics dealer with many years experience of our products.

Application

- On demand full duplex communication path to individual carriages of the Sydney monorail in the event of an emergency.

Business Benefits

- The ability to communicate selectively with individual and multiple monorail carriages is essential in today's environment in a high profile city such as Sydney, Australia.

Products Used

- 619SRI Audio Bridge using 5-tone SELCAL encode and decode and audio switching.



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→ Customer Overview

The Sydney monorail required a communications management system that featured voice communications, public address and passenger emergency help points in each carriage of monorail operating between Sydney Central and Darling Harbour.

→ The Challenge

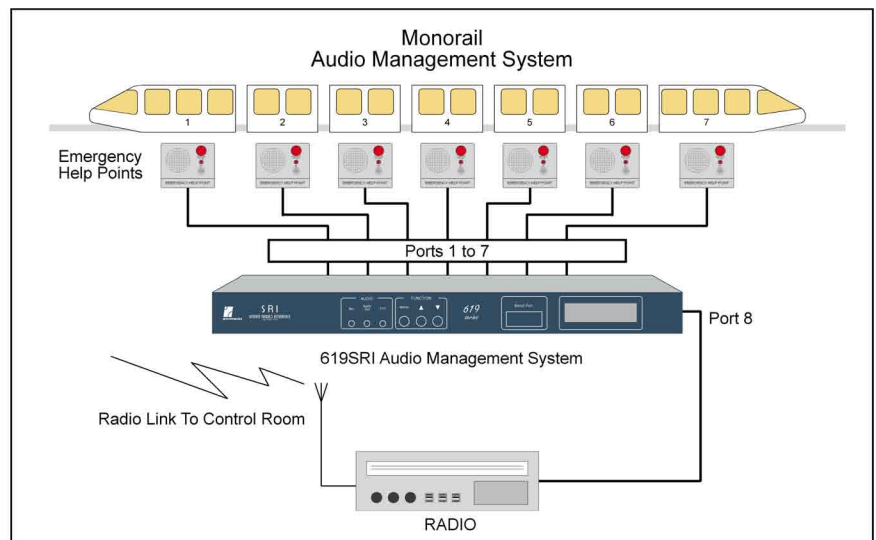
The key requirement was to ensure that passengers could open a full duplex voice link to the Train Control Centre, in the event of an emergency - and to do this with just the press of a button.

→ Solution

Omnitronics teamed up with Australian Mobile Radio to provide a solution based on the 619SRI Audio Bridge with its powerful audio switching capabilities. The 619SRI Audio bridge interfaces between the seven emergency help points installed in each monorail carriage and the monorail radio link to the Train Control Centre.

The 619SRI decodes the SELCAL signals and routes or distributes audio to a specific carriage or to all carriages. Conversely, when the 619SRI receives a push button command from an emergency help point it encodes a unique SELCAL sequence which it sends via the monorail radio link to the Train Control Centre.

The controller of the train is then able to identify the source of the emergency call, in terms of train and carriage number, and respond to the call. Once an emergency call has been activated the 619SRI provides the Train Control Centre with an open audio path to the monorail carriage without further intervention by the passenger who made the call.



→ Conclusion

This project provided a novel and somewhat non-standard use of the 619SRI Audio Bridge. The powerful features of this product, together with the on-board processing capability of the bridge enabled Omnitronics to provide a robust and ideal solution to the challenge described above, for the Sydney monorail.

