

Audio bridge 619 EI for radio communications



The 619 EI or the affordable interoperability

Providing full 4 wire bridging facilities on all ports, the 619 EI has a huge range of applications, such as HF/VHF/UHF radio networks, audio bearer systems, data, modem splitters / combiners, public address systems, etc. Independent ports allow the bridge to be configured in any combination providing the system designer with greater flexibility.

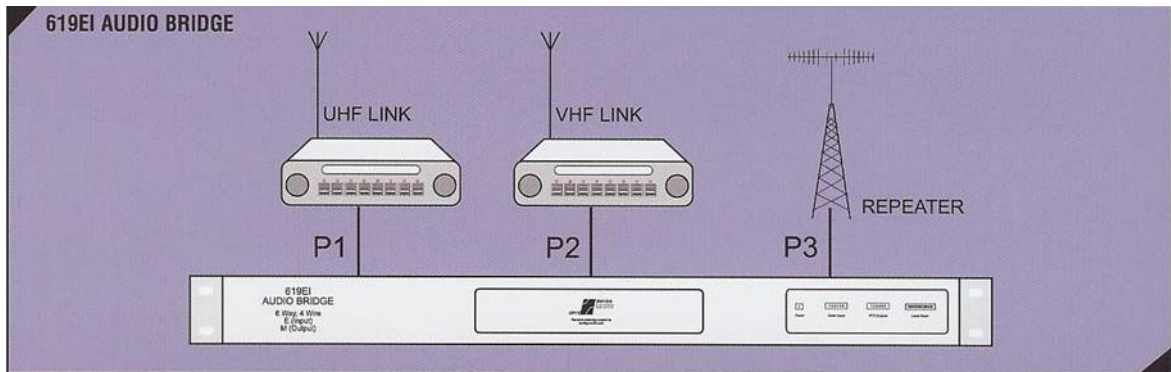
All audio inputs and outputs are transformer coupled and have a wide adjustment range to cater for most landline and radio applications. The signalling leads are isolated using opto-couplers (E mute lead) and relays (M PTT lead). Audio routing and level adjustments for both inputs and outputs are made from the front panel DIP switches. Initial setup and maintenance plans are now far easier to implement. A protective cover provides easy access to these points and prevents inadvertent configuration changes.

A LED level meter has been provided to allow simple setup of internal audio levels without the requirement for other test equipment. LED bars are calibrated in 3dB steps. This meter can also be used as a diagnostic tool to monitor the bridge's audio in conjunction with POWER, MUTE and PTT status LEDs.

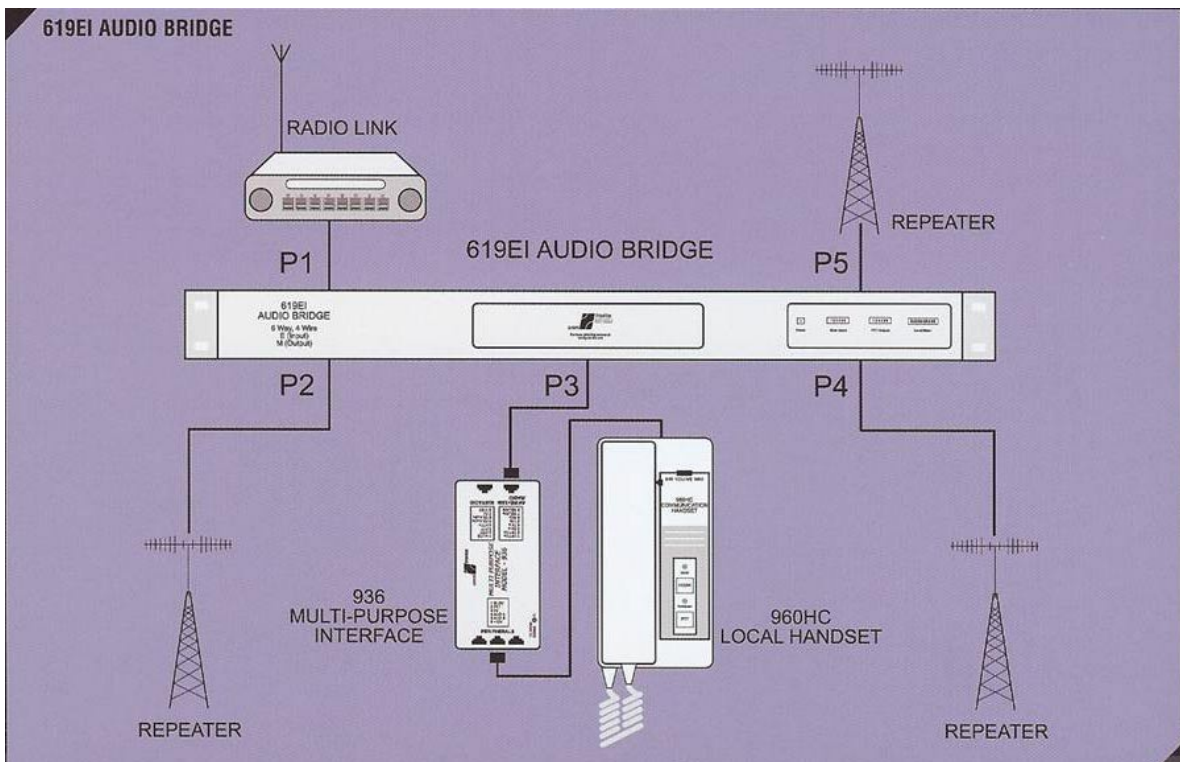
The mute disable facility allows audio bearer circuits to be mixed, without the requirement of a mute control. This is very useful in circuits without a control signal or where control facilities are incompatible i.e. tone / DC keying.

The bridge is powered from a single 12VDC source and has optional plug socket or two-part screw terminal connections. The 1RU 19" sub-rack housing provides a convenient and minimal profile solution for integrating into existing or new systems.

Applications



Typical repeater site interconnect between VHF / UHF links and a repeater installation
The bridge switch settings will control the level of interoperability.



A more complex application with multiple repeaters, a radio link and local handset.
The bridge DIP switches are used to control the interconnection of the various radios.

Specifications

Power requirement

Supply voltage : 11,5 to 16 Vcc.
 Supply current : 300mA max.
 Power supply rejection ratio : > 80 dB.

E inputs (MUTE)

Opto-coupled bidirectional : 5 to 30 Vcc.

M outputs (PTT)

Voltage free contact :
 30 Vcc and 1 A max. (resistive)

Audio input

Impedance 600 Ω balanced.
 Input level range : -25 to +5 dBm.
 Channel crosstalk : better than 63 dB.
 Common mode rejection ratio : better than 60 dB.

Remote control port

37 way D connector
 (refer to handbook specifications).

Audio output

Impedance 600 Ω .
 Output level range : -25 to 0 dBm
 into 600 Ω .
 Frequency response : 300-3 kHz
 (+/- 1 dB ref. 1 kHz).

Diagnostic LEDs

10 x level meter
 1 x power supply
 6 x Mute inputs (E)
 6 x PTT outputs (M)

Weight and size

Dimensions (H x W x D)
 44 x 484 x 255 mm (19" 1U).
 Weight : 5 kg.

Environment

Operating temperature :
 0 to 60 °C
 Relative humidity : 0 à 95 %
 non condensing.

Note : The features described in this document are subject to changes without prior notice. Please ask TSLO Télécom for features confirmation before placing any order. Version 1.0 from December 14th 2006.

