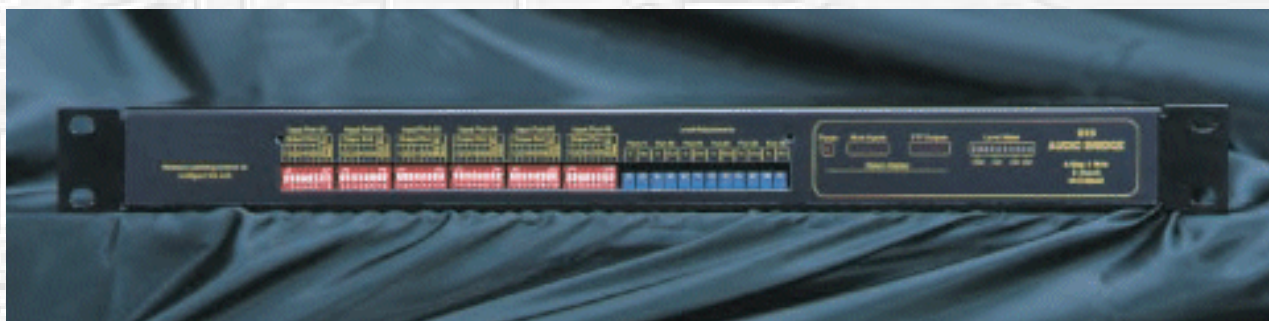


# 619 SERIES AUDIO BRIDGE

4 WAY / 6 WAY / 4 WIRE TYPE 619G1 & 619E1

BRIDGING THE GAP IN TELECOMMUNICATIONS



619E1 shown above

## New Features

- All audio adjustments through front panel.
- Led bar graph for setup and diagnostic testing.
- 4 or 6 independent ports.
- Input audio muting facility. Optional control by 'E' (Mute) lead.
- All DIP switch path selections via Front Panel access.
- Remote control of the 6 way bridge via rear 'D' connector.
- Wide input and output ranges.

**The new 619 series represents the most versatile and cost effective bridge on the market today.**

Providing full 4 wire bridging facilities on all ports the unit has a 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 audio range to cater for most landline and radio applications. The signalling leads are isolated using optocouplers (E mute lead) and relays (M PTT lead).

Audio routing and level adjustments for both inputs and outputs are made from the front panel. Initial setup and maintenance plans are now far easier to implement. A protective cover provides easy access to these points and prevents inadvertent damage.

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 3 dB steps. This meter can also be used as a diagnostic tool to monitor the bridges operation in conjunction with POWER, MUTE and PTT status LEDs.



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Company

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 control lines or where control facilities are incompatible ie. tone / DC keying.

Remote control of the 6 way bridge is now possible via a 37 way D connector on the rear panel. This can be controlled from BISS Techn 9000 / 9200 series telemetry equipment or the 970CD channel decoder and the 619 bridge controller combination using 5 tone SELCAL. A Common application is changing from a normal status mode. Particularly useful in shared repeater site.

619 series bridges can be coupled together to form larger bridge networks. All audio connection are made through 8 way US MODULAR connectors.

The bridge is powered form a single 12v DC source and has optional plug pack socket or 2 part screw terminal connections. The 1U 19' subrack housing provides a convenient and minimal profile method of integrating into existing or new systems.

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Voice communication

# S P E C I F I C A T I O N S

## Power Requirements

Supply Voltage: 10 to 16 Vdc  
 Supply Current: 300mA max.  
 Power supply rejection ratio: > 80dB

## E Inputs

Opto coupled bi-directional: 5 to 30 Vdc

## M Outputs (PTT)

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

## Audio Input

Impedance: 600 ohms balanced  
 Input Level range: -25 to +5dBm  
 Channel Crosstalk: Better than - 63dB  
 Common mode reject. ratio: Better than 60dB

## Remote control port (619E1 only)

37 way D connector  
 refer to Handbook specifications

## Audio Output

Impedance: 600 ohms  
 Output Level Range: -25 to +0dBm into 600 ohms  
 Frequency Response: 300 - 3kHz (+/- 1dB ref 1kHz)

## Diagnostic LEDs:

- 1 x Level Meter
- 1 x Power LED
- 4 /6 x Mute inputs
- 4/6 x PTT outputs

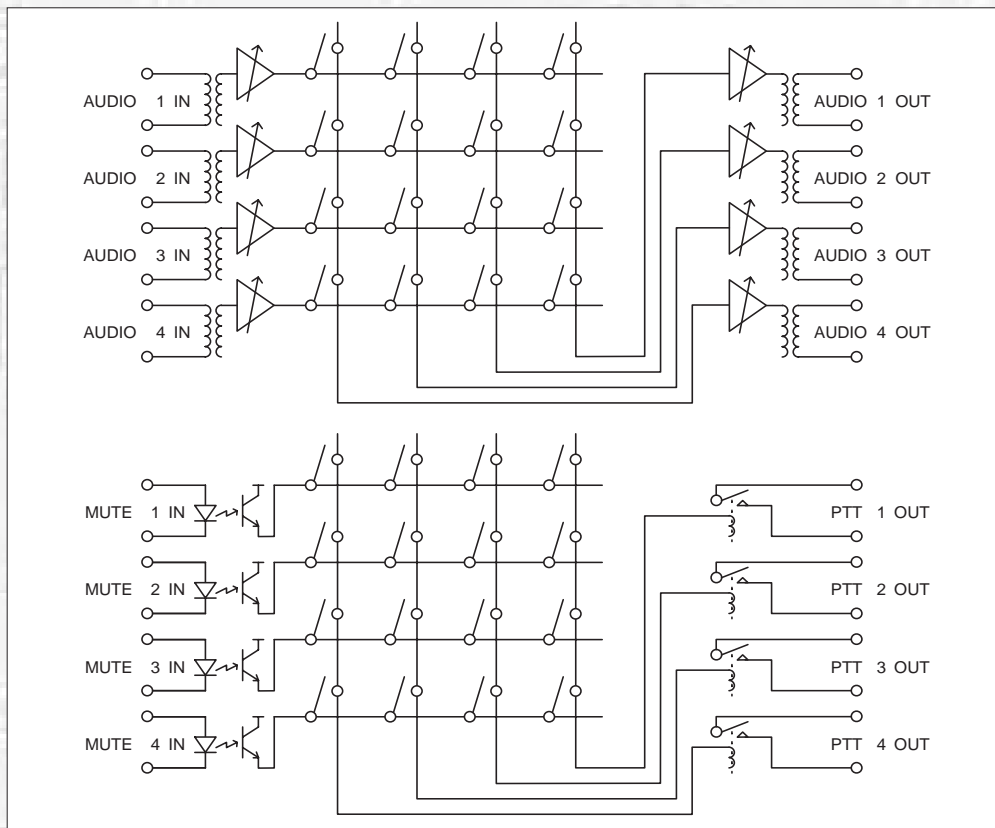
## Physical

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

## Environmental

Operating Temperature: 0 to 60 deg. C  
 Relative Humidity: 0 to 95% non condensing

BLOCK DIAGRAM OF TYPE 619GI AUDIO BRIDGE



**SWITCH MATRICES**  
 Signals only propagate from the rows through the switches down the columns.

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