

# 7999-2

# Three-Pole Audio Multiplexer Module

for Remote Mounting



The 7999-2 Three-Pole Audio Multiplexer Module contains a three-pole 1×3 multiplexer, and a 3-pole 1×4 multiplexer for switching audio signals. For minimizing the effects of noise, the input and output connectors are shielded, high quality audio connectors, and the module is enclosed in an aluminum case. In addition, each input and output line has an RF filter for filtering out high frequency noise.

The 7999-2 module is designed for mounting in a remote location such as at a test fixture, and operates independently of a switch control mainframe. Operating each relay requires an external 24VDC supply and control of the LO terminal of the relay.

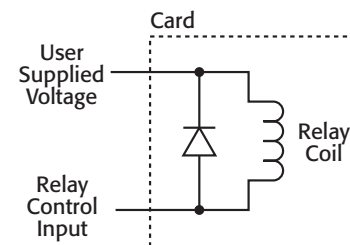
## Ordering Information

**7999-2 Three-Pole Audio Multiplexer Module for Remote Mounting**

**Accessories Supplied**  
**Instruction Manual**

- RELAY SWITCH CONFIGURATION:** 1 bank of 3:1 MUX 3-pole switching. 1 bank of 4:1 MUX 3-pole switching.
- CONTACT CONFIGURATION:** 3-pole Form A.
- CONNECTOR TYPE:**
  - MUX Common Connector (1): 6-pin LEMO.
  - MUX Input/Output Connectors (7): 3-pin LEMO.
  - Control Connectors (1): 15-pin male D-sub.
- MAXIMUM SIGNAL:** 30V DC, 42V peak between any two inputs or chassis, 1A switched, CAT I.
- CONTACT LIFE:** Cold Switching:  $10 \times 10^8$  closures.  
At Maximum Signal Levels:  $2 \times 10^5$  closures.
- CHANNEL RESISTANCE (per conductor):**  $< 1 \Omega$ .
- CONTACT POTENTIAL:**  $< 10 \mu V$  per contact.
- ACTUATION TIME:** 3ms.
- ISOLATION:** Channel to Channel:  $> 10^6 \Omega$ ,  $< 80 pF$ .  
Common Mode:  $> 10^6 \Omega$ ,  $< 150 pF$ .
- CROSSTALK (1MHz, 50Ω load):**  $< -40 dB$ .
- INSERTION LOSS (50Ω source, 50Ω load):**  $< 0.1 dB$   $\leq 20 kHz$ ,  $> 25 dB$  @ 2GHz.
- RELAY DRIVE CURRENT (per relay):** 8.5mA @ 24V (user supplied).
- USER SUPPLIED VOLTAGE:** 24V  $\pm 4V$  DC, 175mA max.
- RELAY CONTROL INPUT:** Relay Closed:  $< 2.0V$ .  
Relay Open: User supplied voltage.

## RELAY DRIVE CONFIGURATION



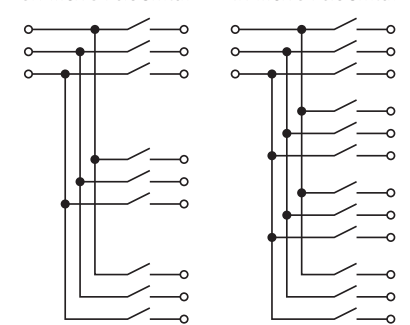
## GENERAL

**ENVIRONMENT:** Operating: 0° to 50°C, up to 35°C  $< 80\%$  R.H. Storage: -25° to 65°C.

**EMC:** Conforms with European Union Directive 89/336/EEC, EN 55011, EN 50082-1, EN 61000-3-2 and 61000-3-3, FCC part 15 class B.

**DIMENSIONS:** 155mm long  $\times$  108mm wide  $\times$  38mm deep (6 1/8"  $\times$  4 1/4"  $\times$  1 1/2").

## 3:1 MUX 3-Pole Switch      4:1 MUX 3-Pole Switch



Mainframe-independent, remote-mount audio switching

SWITCHING AND CONTROL

1.888.KEITHLEY (U.S. only)

www.keithley.com

KEITHLEY