

# **Operating Manual**

A 4906 Mic/Line/100V Input - Line +24V Switched Output





## **OVERVIEW**

The A 4906 is a versatile unit which accepts either a line level signal, balanced microphone signal or 100V input signal. The output signal is a line level signal suitable for feeding into an amplifier. Phantom power is available to the microphone input, and a VOX circuit, with adjustable sensitivity is used to trigger output relays. The unit is powered from a 24V DC source.

## **OPERATION**

A signal is fed into any of the three inputs. Either a Balanced Mic Input with an input level of 3mV, a line level input with an input level of 300mV or a 100V input directly from the output of a 100V PA amplifier. The three inputs are mixed internally and output to the Line Output with a level of 5V.

Any of the input signals will trigger the VOX circuit, which has an adjustable sensitivity. Once the VOX circuit has been triggered, the VOX active LED will illuminate and the state of the relay outputs will change.

#### PHANTOM POWER

An internal jumper selects phantom power to the microphone input. This is 12V DC and is applied to the hot and cold pins of the microphone input. The jumper is fitted as standard, ie Phantom power is "ON". To turn the phantom power "OFF" the jumper inside the unit will have to be removed. To do this, first remove all the screws from one side of the unit and remove the panel. Then remove the four screws in the corners on the other side of the unit, and then slide the board assembly out. The jumper position on the board is shown in Fig 1.

#### **RELAY OUTPUTS**

There are two sets of relay contacts available. The first set provide a Normally Closed (N/C) and a Normally Open (N/O) set of contacts which are voltage free. These would be used when just a closing contact is required.

The second set provide a Normally Closed (N/C) and a Normally Open (N/O) set of contacts which have 24V DC present. These would be used to operate an external 24V DC device. (Note the maximum current draw available at this output is 120mA).

#### **FEATURES**

- Mic, line or 100V input level.
- Line level output.
- •Phantom power to Mic Input (12V DC).
- Controls for master volume and VOX sensitivity.
- VOX operated relay outputs.
- 24VDC switched output. (120mA Max).
- 24VDC operation via 2.1mm DC power jack.
- Dimensions 133W x 30H x 80D mm.



Fig 1

Phantom Power Jumper

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## **FRONT & REAR PANELS**



## 1 100V Input

An input for connection to the 100 Volt output of a PA Amplifier.

## 2 Auxiliary Input

A standard stereo RCA input for connection to an audio source.

## 3 Output Volume

Adjusts the output volume.

#### 5 Microphone Input

A balanced input for connection to balanced audio sources and microphones.



## 1 Relay Contacts

Set of closing contacts and a set of 24V DC output contacts.

# 2 VOX Sensitivity Adjustment

Adjusts the sensitivity of the VOX muting circuitry.

#### 3 VOX Active LED

Illuminates when the VOX circuit is active.

### 4 Auxiliary Output

A standard stereo RCA output for connection to an amplifier/pre-amp.

#### 5 Power LED

Indicates when the unit has power..

### 6 24V DC Input

Provides power to the unit via 2.1mm DC jack.