



## User Instructions

**IPC ELECTRONICS LTD.**

### **LOUDSPEAKER AMPLIFIER UNIT IPC-4619-W**

#### **IMPORTANT**

Please read these instructions carefully  
before using apparatus

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#### **Loudspeaker Amplifier Unit IPC-4619-W**

##### **Introduction**

The Loudspeaker Amplifier Unit is designed to amplify audio signals and provide an output to the internal loudspeaker or external sockets.

##### **Description**

The amplifier in conjunction with the internal loudspeaker provides a minimum voltage gain of 40 (32dB) across a full audio range of 20Hz to 20kHz, the amplifier itself provides a frequency response of 15Hz to 300kHz at 32dB min.

##### **Power Supply**

The unit requires a regulated power supply between 9V-12VDC at a min. of 30mA, connection is via the red & black 4mm sockets on the front (incorrect polarity protection is internally provided). Alternatively IPC can supply a separate 12VDC Adapter which simply connects to the input power socket at the back of the unit.

##### **Operation**

Turn the volume control fully anti-clockwise. Connect the signal to be amplified to either the blue & black sockets marked SIGNAL INPUT or the 3.5mm jack socket on the left of the unit. Set the INTERNAL SPEAKER switch to the ON position and turn the volume control clockwise until the signal is clearly heard.

If required, the amplified signal can be fed to an oscilloscope or separate speaker using the white and black sockets marked SIGNAL OUTPUT. In this case the INTERNAL SPEAKER switch should be set to the OFF position. Only loudspeakers with an impedance greater than 8ohms should be used.

##### **Additional Notes**

When using the Loudspeaker Amplifier Unit it is important to recognise the polarities of the input and output connections. All black sockets are connected together internally and form the reference for the amplifier signals. Connecting a signal source to the input or an oscilloscope to the output with incorrect regard for polarity may cause the amplifier to become noisy or oscillate.

Due to the high sensitivity of the input section of the amplifier and the high level of voltage gain it may be necessary to use screened leads when connecting to the signal input. Alternatively, it may be necessary to experiment with lead placement to produce the best output signal.