

## **Loudspeaker Amplifier Unit**

### **Description**

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

### **Power Supply**

The unit requires a power source able to supply 9V-12V d.c. smoothed and regulated at a minimum of 30mA. Connection is made via the red and black 4mm sockets marked 9V-12V d.c. The unit is internally protected against incorrect polarity.

### **Operation**

Turn the volume control fully anti-clockwise. Connect the signal to be amplified to the blue and black sockets marked SIGNAL INPUT. 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 8 ohms should be used.

### **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.