



Instructions

IPC ELECTRONICS LTD.

RUBENS' TUBE AMPLIFIER IPC-4315-W

IMPORTANT

Please read these instructions carefully
before using apparatus

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Rubens' Tube Amplifier IPC-4315-W

Introduction

This unit represents a simple and convenient way to set up and demonstrate a Rubens' tube experiment. The Rubens' Tube Amplifier houses a high-quality stereo pre-amplifier & mono power amplifier combination in an ABS enclosure.

You will need (not included)

A Rubens' tube with a 4ohm/8ohm loudspeaker fitted to a suitable gas supply. An IPC-4885-W or IPC-4744-W Signal Generator or a music source (eg. iPad etc.), plus either 4mm to 4mm leads or 3.5mm jack stereo cable (supplied).

Safety Instructions

The Amplifier operates from a safe 5VDC mains adapter (supplied), however please read the instructions supplied with the Rubens' tube to ensure safe use.

General instructions

First connect the Rubens' tube speaker sockets to the Amplifier sockets marked "Speaker 4 – 8ohm" using two 4mm leads, polarity is not important.

A plug-top mains adapter is included with the Amplifier, plug the cable connector from the adapter into the socket marked "5V dc Power".

Connect your music source into the socket marked "Stereo Input" using the stereo cable provided. Note: the two stereo channels are mixed in the pre-amplifier to a mono signal. Alternatively if using the IPC-4744-W or IPC-4885-W signal generator, connect this to the two 4mm sockets marked "Sig Gen I/P" using 4mm to 4mm leads, connecting green to green & white to white. Note: if using IPC-4885-W then either the 4Ω or 600Ω output may be used.

Set the volume control/switch to off (fully anti-clockwise) and plug the mains adapter into a mains supply socket. Now set your music source or signal generator to its lowest volume setting and switch it on.

Switch the Rubens' Tube Amplifier on by turning the volume control clock-wise and then adjust both the source and Amplifier controls to set the volume to an acceptable level. Sound should be heard from within the Rubens' tube and varying the input frequency should produce louder sound near to the tubes' natural resonant frequency or multiples thereof (note: a steady sinewave around 300Hz will produce the most obvious resonance), if distortion is heard reduce the volume control to provide a pure sound.

Read and follow the instructions supplied with the Rubens' tube carefully to connect the gas supply and ignite the tube itself.