



Well Tempered Lab

INSTRUCTION MANUAL

Bill's Phono

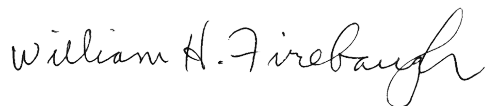
An Introduction

Based on the original William Firebaugh designed phono preamplifier, Bill's Phono is now a single chassis version that due to the availability of improved componentry and manufacturing techniques allowed Well Tempered Lab to produce a significantly improved, fully discrete, single chassis version with AC mains connection and without any compromise to the original design that pays particular attention to the RIAA equalisation used in the recording process.

Supplied in either a 230V AC or 120V AC version, the AC within the chassis is particularly well shielded and positioned to avoid any pollution to the delicate analog signals but allowing for the convenience of an AC wall outlet power connection.

A word from the Chief Engineer

"I designed the original phono preamplifier several years ago. Shortly after receiving and listening to a well respected phono preamp. I was not satisfied with the impulse response of the design. I was determined to do better. I believe the Well Tempered Lab Phono design as evidenced by the impulse and square wave response along with the accuracy of the RIAA equalisation will provide the best possible result from any recording."

A handwritten signature in cursive script that reads "William H. Firebaugh". The signature is written in black ink and is positioned to the left of the typed name and title.

*William Firebaugh
Chief Engineer*

Description

Bill's Phono is a William Firebaugh designed Phono Preamplifier suitable for all cartridges both Moving Magnet (MM) and Moving Coil (MC)

Important Safety Instructions

1. Read the instructions

The safety and operating instructions should be read before using the Bill's Phono.

2. Retain Instructions

The safety and operating instructions should be retained for future reference.

3. Follow Instructions

All operating and use instructions should be followed.

4. Location

Bill's Phono should be installed in a stable location with ample ventilation. We recommend that this phono preamplifier be placed at a suitable distance away from all amplifiers.

5. Water and Moisture

As with any electrical equipment, this phono stage should not be used near water and moisture.

Connection and Operation

Bill's Phono is supplied in both 230VAC and 120VAC versions and must be ordered by an authorised distributor in the country of purchase any change in voltage must be authorised by Well Tempered Lab and performed by competent personnel conversant with the procedure.

Note: Well Tempered Lab will not be responsible for damage caused by unauthorised personnel attempting voltage change.

Input Connections: One group Single Ended (RCA) type connectors labelled "L In" and "R In" are provided. Ensure correct polarity.

Output Connections: One group Single Ended (RCA) and one group Balanced (XLR) type connectors labelled "L Out" and "R Out" are provided. Ensure correct polarity.

Important: Always use the best available interconnects and ensure correctly polarity is maintained throughout the system.

Earth: A dedicated earth terminal is supplied on the rear of Bill's Phono. Some experimentation may be required to achieve optimum earthing but normally the earth wire from the turntable or tonearm will connect to the earth terminal.

Bill's Phono has a shielded chassis but it is not recommended that it is placed close to the turntable or cartridge.

Impedance and Gain

Bill's Phono is equipped with micro switches on the underside of the chassis to facilitate both loading and gain. There are many factors that contribute to the optimum loading for phono cartridges that include cables, preamplifier etc. and we recommend starting with the lowest impedance setting closest to the manufacturers recommendations.

Shipped factory set suitable for most Low Output M.C. cartridges at 100Ω 63dB gain. 47KΩ is suitable for M.M. cartridges.

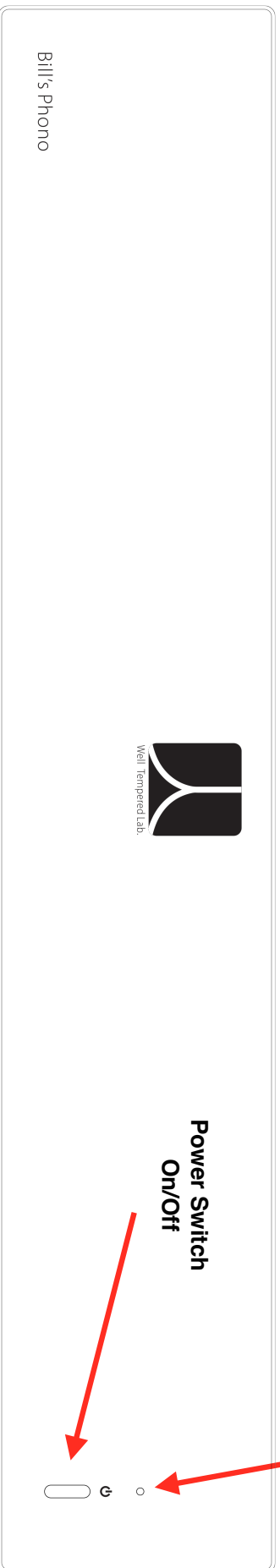
Following is a table of settings available on Bill's Phono:

Switch no.	1	2	3	Impedance
	ON	OFF	OFF	47KΩ
	OFF	ON	OFF	100Ω
	OFF	OFF	ON	400Ω
	OFF	OFF	OFF	47KΩ
Switch no.	4	5	6	Gain
	OFF	OFF	OFF	44dB (MC)
	ON	OFF	OFF	63dB (MC)

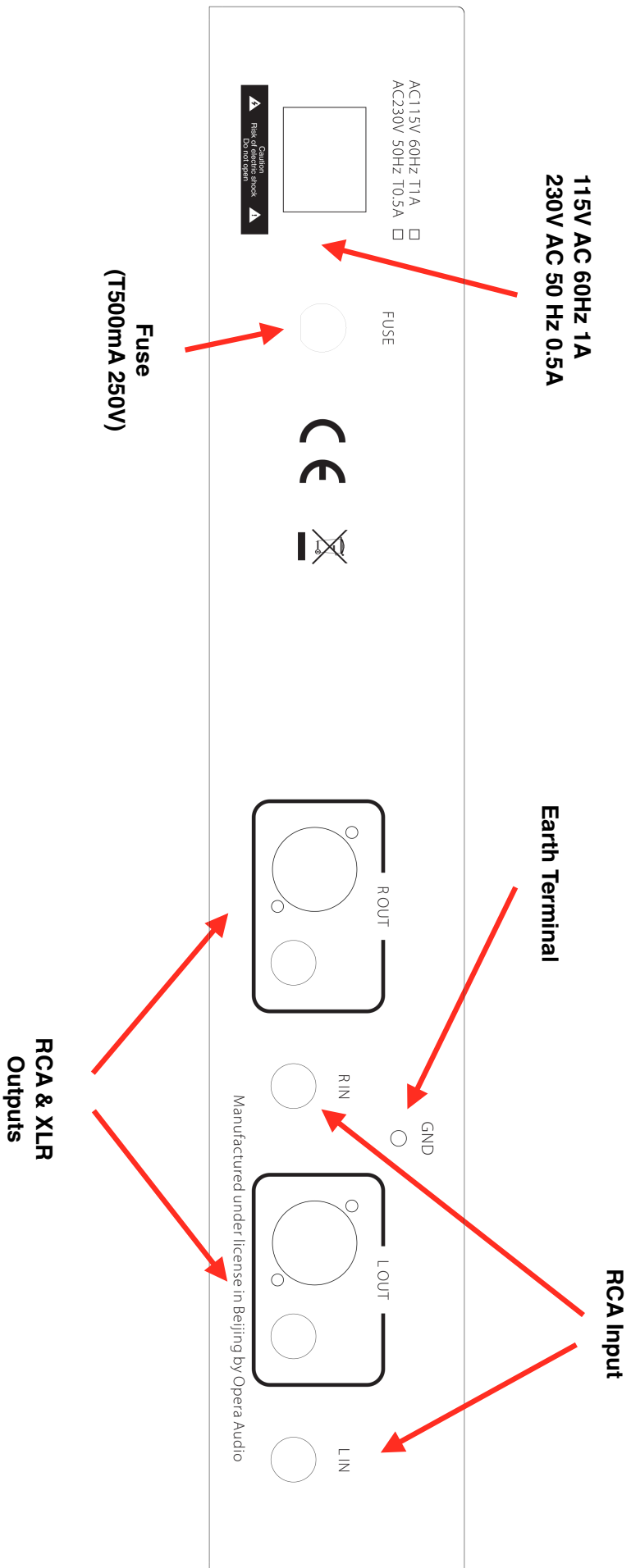
Specifications

- Control Functions
Power On/Off, Micro Switches for Gain and Impedance
- Harmonic Distortion (2V RMS Output)
0.07%
- Input Impedance
Variable (See table)
- Input Gain
Variable (See table)
- Input Connectors
1 group RCA
- Output Connectors
1 group RCA, 1 group XLR
- Ground Connector
Spring loaded terminal
- Signal/Noise
85 dB
- Consumption
18 watts
- Power Requirements
230V AC, 110V AC, 50 - 60Hz (Voltage Factory Set Only)
- Dimensions (H x W x D)
430 x 310 x 110 mm, 560 x 470 x 250 mm (Shipping)
- Weight
6.5 kg, 8 kg (Shipping)

Front Panel



Rear Panel



Warranty & Service

Valid on completion of warranty card and confirmed date of purchase. Details can be registered at www.welltemperedlab.net/welltemperedlab/contact/ or mailed to: Well Tempered Lab, P.O. Box 2650, Christchurch, New Zealand.

This Well Tempered Lab product is warranted against defects in material and workmanship for one year from date of purchase.

This warranty does not cover normal wear and tear and is void if the Well Tempered product has been subject to mis-use, accident or negligence or if it has been tampered with or modified in anyway. Spillage of any fluids supplied by the Well Tempered Lab is not covered within the scope of this warranty.

Warranty is restricted to the territory in which the product was purchased. Our distributors and dealers are under contractual obligation to service under warranty products only sold through them. They are entitled to make a non refundable charge for service to products purchased outside the territory if required.

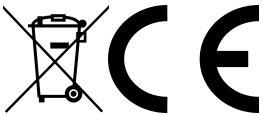
Claims Under This Warranty

The product should be returned to the dealer or†nearest Well Tempered distributor, complete with warranty card and confirmed date of purchase.

The European Waste Electrical and Electronic Directive

This product can be recycled. Products bearing this symbol must NOT be thrown away with normal household waste. At the end of the product's life, take it to a collection point designated for recycling of electrical and electronic devices. Find out more about return and collection points through your local authority.

The European Waste Electrical and Electronic (WEEE) Directive was implemented to dramatically reduce the amount of waste going to landfills, there by reducing the environmental impact on the planet and on human health. Please act responsibly by recycling used products. If this product is still useable, consider giving it away or selling it.





Well Tempered Lab

Registration Card

Name	_____	
Address	_____	

City	_____	
State	Post Code (Zip)	_____
Country	_____	
Phone	Email	_____
Model	Serial No.	_____
Dealer	_____	
	Date of Purchase	_____