TUBE-TECH PM 1A Microphone pre-amplifier Module

Description

The **TUBE-TECH microphone preamplifier PM 1A** is a combined microphone and DI preamplifier.

The amplifier consists of a microphone input transformer (with a static screen) with a step-up of +10 dB, a dual tube preamplifier with a coarse stepped gain 20-60dB (10dB/step), a fine stepped gain +/- 10dB (2dB/step) giving a total gain range of +10-70dB, an output amplifier with two dual tubes in push-pull and an output transformer (with a static screen).

The microphone inputs are provided with a switchable -20dB attenuation PAD, a selectable input impedance 600/1200/2400 Ohms, a switchable phase reverse and switchable +48 V phantom-power.

The microphone input is capable of accepting levels of up to +6 dBU (1.55V) at 40 Hz without the **PAD** and +26 dBU (15.5V) at 40 Hz with the **PAD**, so the microphone input can be used as a unity gain line amplifier.

The high impedance **DI** input is unbalanced and placed in the circuit directly after the input transformer. The gain range for this input is +10dB to +60dB. When in use, the microphone input is disabled.

A high pass filter for the microphone and the DI input is switchable between **off**, **20 Hz** and **40 Hz**. It is advisable to use this filter in environments with high levels of very low frequency disturbances.

(071221 JGP)

CONTROLS:

GAIN: The **gain** switch has a range from +20dB to +70dB in steps of 10dB/2dB.

<u>LF cut:</u> The high pass filter is selectable between **off**, **20 Hz** 12dB/octave) and

40 Hz (6dB/octave).

Phantom

<u>power:</u> The **phantom power** switch switches the +48V DC power on and off.

The +48V DC is supplied to the microphone input via two 6,81 K Ω

resistors.

PAD: This switch places a -20dB attenuation in front of the microphone

transformer.

Impedance: 2400 Ohm

The microphone input impedance can be switched between 600, 1200 or

<u>Phase:</u> The phase of the mic input can be reversed 180 degrees.

This does not affect the DI input.

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TECHNICAL SPECIFICATIONS MP 1A:

<u>Input impedance:</u> > 600/1200/2400 Ohm Di input impedance: > 1 Mohm / 82 pF

Output impedance: < 60 Ohm

<u>Frequency-response @ -3 dB:</u> 5 Hz – 60 kHz

Distortion THD @40 Hz:

 0 dBU:
 < 0,20 %</td>

 10 dBU:
 < 0,20 %</td>

 maximum output (1 % THD):
 +26,0 dBU

 maximum input (1 % THD):
 +21,0 dBU

Noise Rg=200 Ohm:

 Output Gain
 +20 dB
 +60 dB

 Unweighted
 -82,0 dBU
 -60,0 dBU

 CCIR 468-3
 -72,0 dBU
 -50,0 dBU

CMRR @ 10KHz < -60dB

Gain:

Mic. Preamp: -10 to 70 dB DI: 0 to 60 dB

Tubes

ECC 82 1 ECC 83 2

Dimensions

Height: 176 mm / 3,5"
Width: 50 mm / 19,0"
Depth: 220 mm / 6,5"

Weight

Net: 1,2 Kg / 2,6 lbs Shipping: 1,8 Kg / 4,0 lbs

Power requirements: 15W

All specifications at RL=600 Ω

Lydkraft reserves the right to alter specifications without prior notice

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