

# **TUBE-TECH MP 2A** **microphone pre-amplifier**

## **Description**

The **TUBE-TECH microphone preamplifier MP 2A** is a two-channel microphone and instrument preamplifier.

Each amplifier consists of a microphone input transformer (with a static screen) with a step-up of +10 dB, a dual tube preamplifier with a stepped gain (2dB/step passive and 10dB passive/active), 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** and switchable +48 V **PHANTOM**-power, three selectable input **IMPEDANCES** (600, 1200,2400 Ohm), and a **PHASE** reversal switch.

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

Gain errors between the two channels are less than 0.5 dB at any gain setting.

The two amplifier circuits are completely separated and the cross talk between channels is below -60 dB ranging from 20 Hz to 20 kHz.

An **Overload** indication (RED LED) lights up when the output level exceeds +26 dBU.

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## CONTROLS:

- GAIN: The gain switches have a range from +20dB to +70dB.  
**Coarse** gain 10dB/steps (20-60dB) and  
**Fine** gain 2dB/step (+10/-10dB).
- LF cut: The high pass filter is selectable between **off**, **20Hz** (12dB/octave) and **40Hz** (6dB/octave).
- Phantom: The **phantom** switch switches the +48V DC power on and off.  
The +48V DC is supplied to the microphone input via two 6,81 K $\Omega$  resistors.
- PAD: This switch places a -20dB attenuation between the microphone and the input transformer.
- PHASE: Reverses the phase by 180 degrees on the mic input.  
The DI input is unaffected.
- IMPEDANCE: The mic. input load impedance can be selected between 600, 1200 and 2400 Ohm.

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## **TECHNICAL SPECIFICATIONS MP 1A:**

Input impedance: 600 Ohm/ 1,2 kOhm/2,4 kOhm  
DI input impedance: > 1 Mohm / 82pF  
Output impedance: < 60 Ohm

Frequency-response @ -3 dB: 5 Hz – 60 kHz

Distortion THD @40 Hz:

0 dBU: < 0,20 %  
10 dBU: < 0,20 %  
Maximum output (1 % THD): +26,0 dBU  
Maximum input (1 % THD): +21,0 dBU

Noise Rg=200 Ohm:

<u>Output Gain</u>	<u>+20 dB</u>	<u>+60 dB</u>
<u>Unweighted</u>	-85,0 dBU	-60,0 dBU
<u>CCIR 468-3</u>	-75,0 dBU	-50,0 dBU

CMRR @ 10KHz < -60dB

Gain:

Mic. Preamp: 0 to 70 dB

DI: 10 to 60 dB

Tubes

ECC 82 2

ECC 83 4

Dimensions

Height: 2 units 88 mm / 3,5"

Width: 483 mm / 19,0"

Depth: 165 mm / 6,5"

Weight

Net: 4,3 Kg / 9,5 lbs

Shipping: 6,1 Kg / 13,4 lbs

Power requirements

@ 115 V / 230 V AC, 50-60 Hz 30-45W

All specifications at RL=600Ω

Lydkraft reserves the right to alter specifications without prior notice

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