

## CM 1A

<b>Impedance</b>
Input: 600 ohm
Output: < 60 ohm

<b>Frequency response</b>
5 Hz - 25 kHz +0.5/-3 dB

<b>Distortion THD @ 40 Hz</b>
0 dBU: < 0,15 %
10 dBU: < 0,15 %
Max. output: (1 % THD): +26,0 dBU
Max. input: (1 % THD): +21,0 dBU

<b>Noise Rg=200 ohm</b>
Output Gain 0 dB +30 dB
Unweighted: -85,0 dBU -75,0 dBU
CCIR 468-3 : -75,0 dBU -65,0 dBU

<b>CMRR @</b> 10KHz < -60dB
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<b>Gain:</b> Off to +30 dB
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<b>Compressor</b>
Ratio: 2:1 to 10:1
Threshold: off to -30 dBU
Attack: 0,5mS to 300mS
Release: 0,05 S to 10S

<b>Tracking between connected compressors</b> (0 to 20 dB compression): < +/- 1 dB
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<b>Tubes</b>
ECC 82 1 pc
ECC 83 1 pc

<b>Dimensions</b>
Height: 176 mm 6,93"
Width: 50 mm 1,97"
Depth: 220 mm 8,66"

<b>Weight</b>
Net: 1,0 Kg 2,2 lbs
Shipping: 1,2 Kg 2,7 lbs

<b>Power requirements:</b> 15W
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## EM 1A

<b>Impedance</b>
Input: 600 ohm
Output: < 60 ohm

<b>Frequency response @ -3db</b>
5 Hz to 40 kHz

<b>Distortion THD @ 40 Hz</b>
0 dBU: < 0,15 %
10 dBU: < 0,15 %
Max. output: (1 % THD): +26,0 dBU
Max. input: (1 % THD): +21,0 dBU

<b>Noise Rg=200 ohm</b>
Unweighted: -85,0 dBU
CCIR 468-3: -75,0 dBU

<b>CMRR @</b> 10KHz < -60dB
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<b>Gain:</b> 0 dB
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<b>Tubes</b>
ECC 82 1 pc
ECC 83 1 pc

<b>Dimensions</b>
Height: 176 mm 6,93"
Width: 50 mm 1,97"
Depth: 220 mm 8,66"

<b>Weight</b>
Net: 1,0 Kg 2,2 lbs
Shipping: 1,2 Kg 2,7 lbs

<b>Power requirements:</b> 14W
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## RM8

<b>Dimensions</b>
Height: 184 mm 7,25"
Width: 444 mm 17,5"
Depth: 346 mm 13,6"

<b>Weight</b>
Net: 8,9 kg 19,7 lbs.
Shipping: 10,,3 kg 22,6 lbs

<b>Power requirements:</b>
@ 115 V/230 V, 50-60 Hz: 10-140 W

## PM 1A

<b>Impedance</b>
Input: 600/1200/2400 Ohm
Di input impedance: > 1 Mohm / 82 pF
Output: < 60 Ohm

<b>Frequency response @ -3db</b>
5 Hz - 60 kHz

<b>Distortion THD @ 40 Hz</b>
0 dBU: < 0,20 %
10 dBU: < 0,20 %
Max. output (1 % THD): +26,0 dBU
Max. input without PAD (1 % THD): +6 dBU
Max. input with PAD (1 % THD): +26,0 dBU

<b>Noise Rg=200 ohm</b>
Output Gain +20 dB +60 dB
Unweighted: -80,0 dBU -60,0 dBU
CCIR 468-3 : -70,0 dBU -50,0 dBU

<b>CMRR @</b> 10KHz < -60dB
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<b>Gain:</b>
Mic. Preamp: +10 to 70 dB
DI: 0 to 60 dB

<b>Tubes</b>
ECC 82 2 pc
ECC 83 4 pc

<b>Dimensions</b>
Height: 176 mm 6,93"
Width: 50 mm 1,97"
Depth: 220 mm 8,66"

<b>Weight</b>
Net: 0,9 Kg 2,0 lbs
Shipping: 1,1 Kg 2,4 lbs

<b>Power requirements:</b> 19W
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**NOTE:**  
All specifications at RL=600 Ohm  
Lydkraft reserves the right to alter specifications without prior notice

TUBE-TECH  
sound engineering

# RM8 TUBE MODULES



# RACK'EM UP!

TUBE-TECH quality goes modular...

The TUBE-TECH RM 8 Frame is a modular rack mount that can be configured with any combination of up to eight separate tube-based modules in a single powerful package. The modular building blocks consists of the PM 1A microphone / DI preamplifier, the EM 1A program Equalizer Module and the CM 1A Compressor Module.

# RM8 TUBE MODULES



## CM 1A Compressor Module

Based on our “classic” CL 1B, the CM 1A features all the benefits of powerful optical compression in a modular package.

The optical element is placed after the input-transformer of the compressor and followed by an all tube-based amplifier with a +30 dB gain. Thus the signal is not fed through any semiconductor circuitry on its way to the output.

The amplifier consists of two tubes (valves) in push-pull configuration (one ECC 83 as the pre-amp and phase splitter, and one ECC 82 as the output stage), and an output transformer. Both input and output are transformer balanced (600 Ohm) and fully floating. The in/out key switches the compressor in and out without clicks, while the amplifier remains in the signal path. The 11 segment led display shows either output level (as VU-meter) or gain reduction. A red LED on top of the display, shows when output clipping has approached @ +26dBu.



## EM 1A Program Equalizer Module

The EM 1A modular program equalizer features the same specs and transparent sound as our PE 1C program equalizer.

The filter has a low frequency boost/attenuate section with 4 selective frequencies, a high frequency boost section with a variable bandwidth and 10 selective frequencies and a high frequency attenuation section with 3 selective frequencies. The filter is placed directly after the input transformer thus eliminating noise from the amplifier.

The amplifier consists of two tubes (valves) in push-pull configuration (one ECC 83 as the pre-amp and phase splitter, and one ECC 82 as the output stage), and an output transformer. Both input and output are transformer balanced (600 Ohm) and fully floating. The in/out key switches the filter in and out without clicks, while the amplifier remain in the signal path. A red LED shows when output clipping is approached @ +26 dBu.



## PM 1A Microphone Pre-amplifier Module

The PM1A modular microphone amplifier is a true high end mic pre and DI amplifier featuring extremely controlled and transparent sound. PM1A is based on our famous MP1A.

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 input is provided with a switchable -20dB attenuation PAD, a selectable input impedance of 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 PAD and +26 dBu (15.5V) at 40 Hz with 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 the DI input is 0dB 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. A red led shows when output clipping is approached @ +26 dBu. Overloading the input stage is not possible.

## RM8 Table Top Frame

The RM 8 is a self-powered tabletop frame holding up to 8 modules of your selection.



The built-in power supply contains all voltages necessary for the modules to work (+270V, +48V, +15V, -15V and +12V – all stabilized). The frame is made of electroplated steel sheet to make it rugged and sturdy and with top and bottom covers made of aluminium. It also comes with a module for monitoring all voltages showing that they are present and correct. All inputs and outputs are female XLR connectors paralleled to DB25 female connectors (Tascam standard). The mains voltage can be switched to either 230VAC or 115VAC. The RM8-frame can be configured with any combination of modules.