

# TUBE-TECH

Gear For Life

Product catalogue 2014

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TUBE-TECH manufactures some of the world's best sounding audio processors. That's not just our own opinion but statements from some of the leading audio professionals in the business.

We rely on tried and tested vacuum tube technology as well as carefully designed circuitry, con-

sisting of the finest components available.

The result is an abundance of warmth, transparency and definition - as certified by countless hit records during the last three decades.

Try for yourself - and let your ears be the judge!



## PRODUCT DESCRIPTION

The MP 2A is a combined mic preamp/DI, based on a classic TUBE-TECH design, but featuring even higher fidelity and some new features: An impedance switch to match the input perfectly to all microphone types, an overload indicator and 2 dB gain steps.

Serious listening tests of the MP 2A have revealed a sound

quality second to none, placing it among a handful of the world's very best designs.

The MP 2A DI continues the TUBE-TECH tradition of extremely good sounding DI's, delivering world class sound for a.o. bass and guitar recordings. You simply won't find a better DI than this!

## TECHNICAL FEATURES

- All-tube design featuring push-pull output amplifier
- Frequency response @ -3 dB: 5 Hz to 60 kHz
- Typical noise: 5 dB @ 200Ω
- CMRR: > 60 dB @ 10 kHz
- Gain: +10 dB to +70 dB in 2 dB steps - DI gain: 0-60 dB
- Selectable mic input impedance: 600 Ω/1.2 kΩ/2.4 kΩ
- Selectable pad in front of input transformer (-20 dB)
- Selectable +48 V phantom power
- Low cut filter (20 Hz/40 Hz/Off)
- Phase reverse
- Overload indicator
- Gold plated switches
- DI jack input for a variety of instruments
- DI input impedance > 1 MΩ
- MU-metal shielded input transformer
- In- and outputs are transformer balanced and fully floating



## PRODUCT DESCRIPTION

The MEC 1A is an all-tube mono recording channel, combining three classic TUBE-TECH designs in one powerful, 2U recording package:

- MP 1A Mic Preamp,
- EQ 1A Active EQ and
- CL 2A Opto Compressor

The MEC 1A delivers true TUBE-TECH sound: Full and warm, yet open and transparent.

It provides a compact and cost effective solution whenever you need a superior front end that will deliver top quality recordings of any audio source.

## FEATURES

### General

- Freq. response @-3 dB: 5 Hz - 60 kHz
- Low noise: < -85 dBu @ 10 dB gain
- CMRR: > 60 dB @ 10 kHz
- Output gain: Off to +10 dB
- Clickless swap relay (EQ <-> comp)
- Separate in/out switch per section
- Conductive plastic potentiometers
- Gold plated switches
- Fully regulated power supply with torodial transformer
- All-tube design (except PSU & side chain circuit)
- In- and output are transformer balanced and fully floating

### Microphone preamplifier:

- Gain: +20 to +70 dB (DI:10-60 dB)
- Input impedance: > 1.2 kΩ

- +48V phantom power, phase reverse, -20 dB pad, low cut
- DI input impedance > 1 MΩ

### Equalizer

- Active, tube based equalizer
- Three bands
- 6 low shelving frequencies
- 6 high shelving frequencies
- Bell-type Mid with 12 selectable frequencies & variable Q

### Opto Compressor

- Low distortion optical gain reduction element
- Ratio: 1.5:1 to 10:1
- Variable attack and release
- VU meter shows output or compression
- Linkable for stereo applications



## PRODUCT DESCRIPTION

The PE 1C is a passive, all-tube EQ, based on the classic PULTEC EQP 1A design and featuring a passive EQ section and a high quality output amp. With the original Pultec out of production, the PE 1C is by far the easiest way to achieve this unique and coveted sound.

The PE 1C low end section combines two separate passive EQ

filters with slightly different cut/boost frequencies. When combined, this results in truly unique EQ curves, often named the “Low End Trick” and widely used for cleaning up low/mid frequencies.

Furthermore, the high frequency band offers unrivalled clarity and transparency, and the PE 1C is widely regarded as one of the world’s finest passive tube EQ’s.

## FEATURES

- Tube based push-pull amplifier
- Freq. resp. @ -3 dB: 5 Hz - 40 kHz
- Low noise: < -85 dBu @ 0 dB gain
- CMRR: > 60 dB @ 10 kHz
- All-tube passive EQ
- 4 LF boosts: 20, 30, 60 and 100 Hz (0 to +14 dB)
- 4 LF attenuations: 20, 30, 60 and 100 Hz (0 to -18 dB)
- 10 HF boosts with variable band-  
width: 1, 1.5, 2, 3, 4, 5, 8, 10, 12 and 16 kHz (0 to +18 dB w/ sharp Q, 0 to 10 dB w/ broad Q)
- 3 HF attenuations: 5, 10 and 20 kHz (0 to -18 dB)
- No insertion loss
- Clickless In/Out switch
- Conductive plastic potentiometers
- In- and output are transformer balanced and fully floating





## PRODUCT DESCRIPTION

The TUBE-TECH ME 1B is a passive, all-tube midrange EQ, based on the legendary Pultec MEQ 5 and featuring two boost- and one dip section. The bandwidths of the individual sections are slightly broader than in the MEQ 5 for extra smooth and musical equalization, perfect for vocals, instruments, speech and all other midrange sources.

The TUBE-TECH ME 1B can shape the midrange frequencies in that very pleasant way, only a passive equalizer is capable of. Even extreme midrange boosts still sound open and warm without the slightest trace of harshness.

The ME 1B also works very well with drums and percussion and as a bus EQ, and it is the perfect partner for the PE 1C program EQ.

## FEATURES

- Tube based push-pull amplifier
- Frequency response @ -3 dB: 5 Hz to 40 kHz
- Low Noise: < -80 dBu @ 0 dB gain
- CMRR: > 60 dB @ 10 kHz
- 5 LF peaks: 0.2, 0.3, 0.5, 0.7, and 1 kHz (0 to +10 dB)
- 11 MF dips: 0.2, 0.3, 0.5, 0.7, 1, 1.5, 2, 3, 4, 5 and 7 kHz (0 to -10 dB)
- 5 HF peaks: 1.5, 2, 3, 4, 5 kHz (0 to +8 dB)
- Input impedance: 600Ω
- No insertion loss
- Gold plated switches
- Conductive plastic potentiometers
- In- and output are transformer balanced and fully floating



## PRODUCT DESCRIPTION

The TUBE-TECH CL 1B is an all-tube optical mono compressor. It features a gain reduction element, positioned immediately after the input transformer and controlled by the sidechain amplifier, which also contains the two time control circuits.

The CL 1B delivers a very musical and smooth compression, preserving the clarity of the source even at extreme settings, and this

is where CL 1B really stands out compared to other compressors.

Furthermore, the operation is very intuitive, enabling you to achieve your goal quickly and easily.

With thousands of units sold, the CL 1B is by far the most successful Tube-Tech device to date, and its distinctive sound can be heard on countless legendary recordings.

## FEATURES

- Unique, low-distortion optical gain reduction element
- All-tube based push-pull amplifier
- Frequency response @ -3 dB: 5 Hz to 25 kHz
- Low noise: < -75 dBu @ 30 dB gain
- CMRR: > 60 dB @ 10 kHz
- Variable ratio from 2:1 to 10:1
- Continuously variable attack and release times
- Output gain: Off to +30 dBu
- Variable threshold: Off to -40 dBu
- Interconnection of several compressors via two busses
- VU meter shows input, compression or output
- Clickless In/Out switch
- Conductive plastic potentiometers
- Input and output are transformer balanced and fully floating



## PRODUCT DESCRIPTION

The TUBE-TECH CL 2A is an all-tube optical compressor with two independent, linkable channels. The gain elements are positioned immediately after the input transformer, followed by an all-tube output amplifier with +10 dB gain.

In many respects, the CL 2A is a stereo version of the CL 1B, but there are a few differences:

CL 2A features a different optical element, with a little more “soft” or “rounded” action compared to that of the CL 1B. Also, its input transformer and tube amps deliver a more “normal” gain level (+10 dB as opposed to CL 1B: +30 dB).

The CL 2A works great on any source, i.e. guitars, keyboards, vocals or even the main mix.

## FEATURES

- Low-distortion optical gain reduction element
- All-tube based push-pull amplifier
- Frequency response @ -3 dB: 5 Hz to 60 kHz
- Low noise: < -80 dBu @ 10 dB gain
- CMRR: > 60 dB @ 10 kHz
- Variable ratio from 1.5:1 to 10:1
- Continuously variable attack and release times
- Output gain: Off to +10 dBu
- Variable threshold: Off to -20 dBu
- VU meters show output or compression
- Linkable for stereo applications
- Interconnection of several compressors via two busses
- Clickless In/Out relay
- Conductive plastic potentiometers
- Gold plated switches
- Input and output are transformer balanced and fully floating





## PRODUCT DESCRIPTION

The LCA 2B is a VCA compressor/limiter with two independent, linkable channels. It is an all-tube device, except for the power supply and sidechain circuit.

The LCA 2B is an extremely versatile unit that works equally well with vocals, instruments and as a bus compressor. Due to its very fast and smooth attack it is also

perfect for drums and percussion.

The LCA 2B is the Tube-Tech equivalent of the Fairchild 670 but only in terms of action, not the actual electronics. Hence, the LCA 2B does not lose its transparency at high frequencies, even when pushed to the limit. These characteristics have made it equally popular for studio and live use.

## FEATURES

### General

- Tube VCA compressor/limiter
- All-tube based push-pull amplifier
- Frequency response @ -3 dB: 5 Hz to 50 kHz
- Low noise: < -85 dBu @ 10 dB gain
- CMRR: > 60 dB @ 10 kHz
- Separate compressor and limiter
- Output Gain: -6 dB to +10 dB
- Interconnection of several compressors via two busses
- Clickless In/Out relay
- Conductive plastic potentiometers
- Gold plated switches
- Inputs and outputs are trans-

former balanced and fully floating

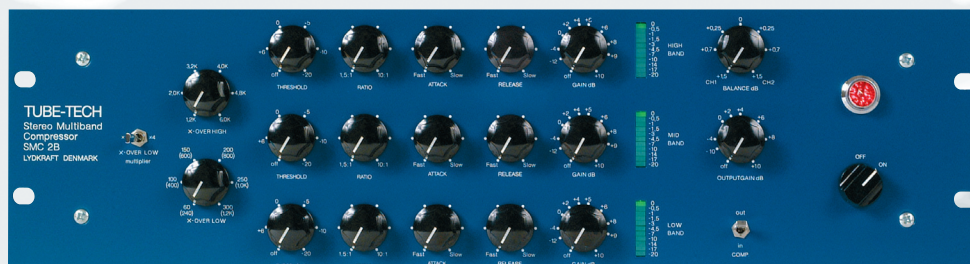
- Linkable for stereo applications

### Compressor

- Variable ratio (1.6:1 to 20:1)
- Variable threshold (Off to -20 dBu)
- Continuously variable attack and release times
- Choice between 6 presets (Fairchild) and manual attack/release control
- LED Gain reduction display

### Limiter

- Variable threshold (Off to 0 dBu)
- Attack: 0.8 ms - release: 0.5 sec
- Separate Limiter On/Off switch
- LED indication of limiter action



## PRODUCT DESCRIPTION

The TUBE-TECH SMC 2B Stereo Multiband Compressor features three independent optical stereo compressors.

The combination of 3 band level control with smooth 6 dB/octave overlap and individual compression of the three bands works wonders on any main mix bus as well as on submixes, drum busses, instrument

groups and single tracks.

The SMC 2B is one of the most creative and musical audio tools and a favourite for countless sound engineers across the globe.

SMC 2BM is the mastering version where all pots have been replaced with high quality switches, fitted with precision resistors.

## FEATURES

- The World's only all-tube multi-band compressor design
- Low distortion optical gain reduction elements
- Frequency response: @ -3 dB: 5 Hz to 60 kHz
- Low noise: < -60 dBu @ 10 dB gain
- CMRR: > 60 dB @ 10 kHz
- Three bands per channel with variable crossover frequencies
- Variable threshold, ratio, attack and release for all three bands
- Master output gain: Off to +10 dB
- Balance Control (+/-1,5 dB)
- LED display shows compression
- Clickless In/Out relay
- Conductive plastic potentiometers
- Gain Control for each band
- Gold plated switches
- In- and outputs are transformer balanced and fully floating



## PRODUCT DESCRIPTION

The TUBE-TECH SSA 2B Stereo Summing Amplifier features two very low noise/low distortion summing amplifiers with a very wide frequency response.

It provides a high end, yet cost effective solution for analog summing, and the simple layout of the SSA 2B makes recall just as easy as when you work ITB.

The SSA 2B sums your mix cleaner, wider and punchier than anything, you've heard before.

It makes it possible to perform your mixing at a level previously only achievable from summing using the best and most expensive consoles, and the low end response just doesn't get any better than this!

## FEATURES

- 10 stereo inputs - 1 stereo output
- Stereo inputs 1 and 2 can be switched as 4 mono inputs
- Zero field transformer balanced inputs
- Frequency response @ -3 dB: 5 Hz – 100 kHz
- Low noise: < -85 dBu @ all inputs terminated
- CMRR: > 60 dB @ 10 kHz
- Distortion < 0,05 %
- 23-step gold plated output gain control
- Master output gain: -10 dB to +10 dB
- Fully symmetrical circuitry from input to output
- Maximum input > +30 dBu
- Two large VU meters show output level
- Gold plated switches
- Outputs are transformer balanced and fully floating





**RM 8**



**RM 2**

The RM series is TUBE-TECH's solution for a compact, very high quality system for the modern studio or recording truck where space is an issue, but very high sound quality is imperative.

All TUBE-TECH RM modules are built to the exact same, very high standards and with same components as our 19" units.

Absolutely no corners have been cut in the design of the RM Se-

ries, and one thing only has been scaled down: The physical size!

The RM Series features three modules: The PM 1A Microphone Preamplifier/DI, the EM 1A Program Equalizer and the CM 1A Opto Tube Compressor. To accommodate the modules, there's a choice of two frames: The RM 8 (8 modules) and the RM 2 (2 modules).



## PRODUCT DESCRIPTION

The PM 1A is a mic preamp/DI in the Modular Series. It is based on a classic TUBE-TECH design, improved to provide even higher fidelity and some new features: An impedance switch to match the input perfectly to all microphone types, an overload indicator and 2 dB gain steps.

Serious listening tests of the PM 1A have revealed a sound

quality second to none, placing it among a handful of the world's very best designs.

The PM 1A DI continues the TUBE-TECH tradition of extremely good sounding DI's, delivering world class sound for a.o. bass and guitar recordings.

You simply won't find a better DI than this!



## FEATURES

- All-tube design featuring push-pull output amplifier
- Frequency response @ -3 dB: 5 Hz to 60 kHz
- Typical noise: 5 dB @ 200Ω
- CMRR: > 60 dB @ 10 kHz
- Gain: +10 dB to +70 dB in 2 dB steps - DI gain: 0-60 dB
- Selectable mic input impedance: 600 Ω/1.2 kΩ/2.4 kΩ
- Selectable pad in front of input transformer (-20 dB)
- Selectable +48 V phantom power
- Low cut filter (20 Hz/40 Hz/Off)
- Phase reverse
- Overload indicator
- Gold plated switches
- DI Jack input for a variety of instruments
- DI input impedance > 1 MΩ
- MU-metal shielded input transformer
- In- and output are transformer balanced and fully floating

## PRODUCT DESCRIPTION

The EM 1A is a passive, all-tube modular EQ, based on the classic PULTEC EQP 1A design. With the original Pultec out of production for decades and used examples demanding sky-high prices, the EM 1A is the only way to achieve this unique and coveted sound in such a compact form.

The EM 1A low end section combines two separate passive EQ filters with slightly differ-

ent cut/boost frequencies. When combined, this results in truly unique EQ curves, often named the “Low End Trick” and widely used for cleaning up low/mid frequencies.

Furthermore, the high frequency band offers unrivalled clarity and transparency, and the EM 1A is widely regarded as one of the world’s finest passive tube based equalizers.



## FEATURES

- Tube based push-pull amplifier
- Frequency response @ -3 dB: 5 Hz to 40 kHz
- Low Noise: < -85 dBu @ 0 dB gain
- CMRR: > 60 dB @ 10 kHz
- 4 low frequency boosts: 20, 30, 60 and 100 Hz (0 to +14 dB)
- 4 low frequency attenuations: 20, 30, 60 or 100 Hz (0 to -18 dB)
- 10 HF boosts with variable bandwidth: 1, 1.5, 2, 3, 4, 5, 8, 10, 12 and 16 kHz (0 to +18 dB w/ sharp Q, 0 to 10 dB w/ broad Q)
- 3 HF attenuations: 5, 10 and 20 kHz (0 to -18 dB)
- Input impedance: 600Ω
- No insertion loss
- Gold plated switches
- Conductive plastic potentiometers
- In- and output are transformer balanced and fully floating

## PRODUCT DESCRIPTION

The TUBE-TECH CM 1A is an all-tube optical mono compressor.

It features a gain reduction element, positioned immediately after the input transformer and controlled by the side-chain amplifier, which also contains the two time control circuits.

The CM 1A delivers a very musical and smooth compression. It will make any track sit perfectly in the mix

without any muddiness or distortion - and the source never loses its integrity, even at extreme settings. Furthermore, the operation is very intuitive, enabling you to achieve your goal easy and fast.

The CM 1A is based on the same circuit as the very successful CL 1B but uses a different optical element for better action on percussive sources.



## FEATURES

- Unique, low-distortion optical gain reduction element
- All-tube based push-pull amplifier
- Frequency response @ -3 dB: 5 Hz to 25 kHz
- Low noise: < -75 dBu @ 30 dB gain
- CMRR: > 60 dB @ 10 kHz
- Variable ratio from 2:1 to 10:1
- Continuously variable attack and release times
- Variable threshold: Off to -30 dBu
- Output gain: Off to +30 dBu
- Interconnection of several compressors via two busses
- LED display for monitoring input, compression and output
- Conductive plastic potentiometers
- Gold plated switches
- Input and output are transformer balanced and fully floating

# TUBE-TECH

Gear For Life

Designed and manufactured in Denmark

[www.tube-tech.com](http://www.tube-tech.com)