

HHB

Tube Processors

Radius and Classic Series



HHB Tube Processing: A unique sonic signature

HHB's pedigree in digital audio is well documented, with the company playing a key role in pioneering the acceptance of DAT, CD-R, MD and MO as professional recording formats. So why develop a range of outboard processors based around a technology that's more than 90 years old? The answer is simple. At HHB, we believe in applying the right tools for the job and, when it comes to EQ and dynamics processing, nothing matches the unique sonic characteristics of the vacuum tube.

For total flexibility and impeccable audio performance, the three HHB Classics set new standards in tube equalization, compression and microphone pre amplification. And in the home and project studio, our highly affordable Radius Series delivers the unique sonic signature normally only associated with big studio productions.

Whether it's adding depth and warmth to a stereo mix, breathy presence to a vocal track or roundness and detail to a drum track, HHB Tube Processors provide that extra ingredient to make your recordings something special.

tube designs. Careful research into hybrid circuits ensures that the tubes in HHB processors achieve their maximum sonic effect, while noise and distortion performance, slew rates and bandwidth remain comparable with other equipment in the modern recording facility. Vintage sound. Modern performance. HHB gives you the best of both worlds.

Another secret to the HHB sound is the minimal use of transformers in the signal path, ensuring none of the attendant frequency response roll off, phase errors and distortion. Advanced transistor circuitry ensures maximum power transfer between the valve stages and combines with high HT voltages used to supply the tubes (typically 250V DC in the Classics) to deliver exceptional performance. You'll find no low voltage 'wall wart' power supplies on HHB Tube Processors, only fully stabilised discrete power supplies with balanced DC heater supplies where necessary to provide maximum gain and headroom, and minimum noise, hum and microphony. The tubes themselves are military grade specification, and all components are of the highest possible quality, including glass fibre double sided circuit boards, custom steel cored toroidal mains transformers, metal film resistors and high-grade, long life capacitors.

Nobody does it better

The desire for a 'vintage' sound is rarely accompanied by a nostalgia for noise. It's a modern world, so HHB Tube Processors combine solid state circuitry, with its superior noise performance and tube stages to deliver the vintage tube sound without the inherent noise which plagued older



THE HHB RADIUS SERIES

High performance tube processing used to be the exclusive domain of big budget recording studios and live sound productions. Not any more. The HHB Radius Series combines innovative British professional audio design with the finest components and exacting manufacturing standards to create a range of tube outboard equipment in which price is the only corner we've cut. The HHB Radius Series consists of a mic pre amp, a four band stereo EQ, a compressor, a voice processor and a mic pre amp / compressor, bringing the unique warmth and presence of the vacuum tube to all kinds of recording, mixing, mastering and performance projects, large and small. Signal interfacing includes balanced XLRs and unbalanced jacks, making it easy to incorporate Radius processors into your existing setup, and the clear, consistent layout of the controls means that you'll be adding the magic ingredient of an HHB Radius tube processor to your music, straight out of the box.



Radius 10

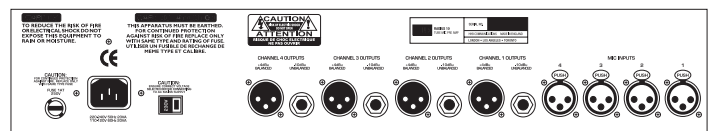
TUBE MIC PRE AMP



KEY FEATURES

- Four channels of high quality mic pre amplification.
- Balanced XLR mic inputs, with both XLR and unbalanced jack line outputs.
- Variable control of input and output gain allows optimum signal level through tubes.
- Switchable 90Hz high pass filter.
- Switchable +48V phantom power for connection of condenser microphones.
- Phase reverse switch allows instant phase correction for each input signal.
- Drive and peak LEDs indicate the degree of tube warming and warn of low headroom.
- Twin stage triode vacuum tubes.
- Stabilised 150V DC power supply.

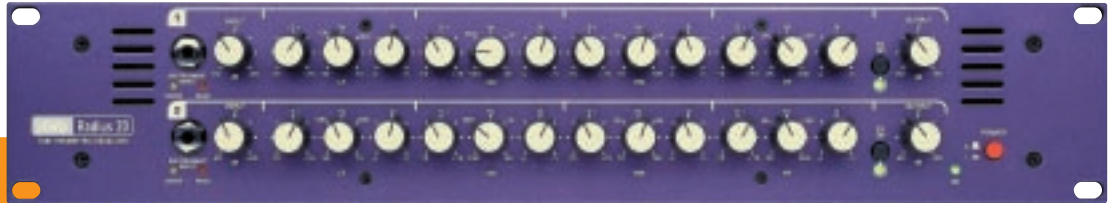
Whether recording in the studio or performing live on stage, the Radius 10 will add great life to even the cheapest of dynamic microphones, producing a more rounded, open sound which compares favourably with the quality of expensive tube condenser microphones. With four channels of high quality tube mic pre amplification, vocals and instruments are instantly warmed, with the extra presence loved by artists and recording engineers alike. Each channel features input and output level controls, switchable +48V phantom power, phase reverse and a 90Hz high pass filter, ensuring each signal may be quickly and easily processed, adding the required level of rich, harmonic overtones associated with vacuum tubes. Drive and peak LEDs indicate the operational status of these twin stage tubes, displaying at a glance whether they are being driven at their optimum level. This, coupled with variable input and output gain, means that signal levels through the tubes may always be optimized.





Radius 20

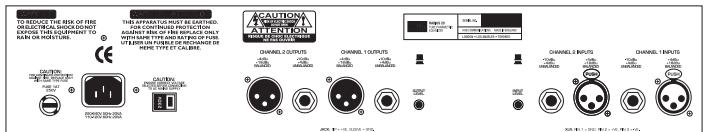
TUBE PARAMETRIC EQUALIZER



KEY FEATURES

- Two channels of four band parametric tube equalization.
- Balanced and unbalanced line inputs and outputs with gain controls.
- 1/4" jack instrument input on the front panel for each channel.
- EQ has $\pm 15\text{dB}$ gain, variable Q and variable frequency:
 - LF band - 30Hz and 1kHz,
 - LM band - 100Hz and 3kHz,
 - HM band - 1kHz and 12kHz,
 - HF band - 3kHz and 20kHz.
- EQ bypass switch for each channel.
- Drive and peak LEDs indicate the degree of tube warming and warn of low headroom.
- Stabilised 150V DC power supply.

The Radius 20, with its combination of solid state circuitry and vacuum tube technology, will not only alter the sound of an input when required, but also improve its tonality, ensuring every instrument or mix sounds just the way it's intended to. Drums become tighter and more punchy, guitars are made to cut through any texture, and many different vocal effects may be achieved, limited only by your imagination. Four bands of fully parametric equalization provide complete control. With variable gain, frequency and bandwidth, the Radius 20's comprehensive controls are designed for familiarity and ease of use. And with the addition of an EQ bypass switch, any added equalization may be removed for instant A/B signal comparison. Both channels feature a front panel 1/4" jack instrument input so that, when rack mounted in the studio, the Radius 20 is quickly accessible. Overall levels are managed by the input and output gain controls, controlling the amount of tube effect required.



Radius 30

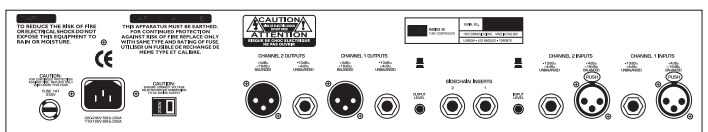
TUBE COMPRESSOR



KEY FEATURES

- Two channels of variable ratio tube compression.
- Balanced and unbalanced line inputs and outputs with gain controls.
- 1/4" jack instrument inputs on the front panel.
- Sidechain inserts for frequency controlled compression.
- Variable threshold, compression ratio and gain make-up for each channel.
- Drive and peak LEDs indicate the degree of tube warming and warn of low headroom.
- Stereo link mode for compressing stereo signals.
- Compressor bypass switch.
- Variable threshold control on the expander / gate helps reduce noise during quiet sections in the signal. The red LED indicates when this gate is closed.
- VU monitoring of output level or gain reduction.
- Stabilised 150V DC power supply.

With two separate channels of compression, the Radius 30 will soon become an indispensable part of your studio setup, adding the finishing touch to the sound of individual instruments or compressing an entire stereo mix. Vocals take on a different character when compressed - quiet singing becomes incredibly intimate thanks to the unique combination of the Radius 30's tube technology and solid state circuitry. Even screaming vocal lines are controlled; only the tone of the voice shows the true levels. Backlit VU meters for each channel monitor either the output level or the amount of gain reduction. The Radius 30 has all the benefits of the vacuum tube without the additional noise, due to HHB's unique transconductance amplifier design which avoids using VCAs. With control of input and output gain for each channel, and variable threshold, ratio, gain and attack / release times, the Radius 30 will control and compress every input to your exact requirements, without missing a single beat.





Radius 40

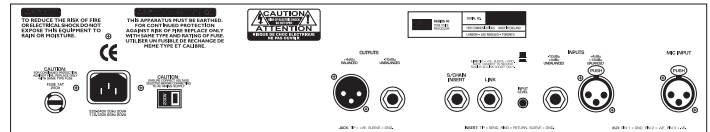
TUBE VOICE PROCESSOR



KEY FEATURES

- Tube voice processor with four stages - a pre amp, compressor, expander and equalizer.
- Balanced XLR mic inputs and both XLR and unbalanced jack line outputs.
- Input and output gain control.
- Bypassable compressor, featuring variable threshold, ratio, gain, attack and release times.
- A four band bypassable equalizer section, each with 12dB cut / boost:
 - LF band - 60Hz, 120Hz, 250Hz or 500Hz,
 - LM band - 250Hz, 500Hz, 1kHz or 2.2kHz,
 - HM band - 1.5kHz, 2.2kHz, 3.6kHz or 5kHz,
 - HF band - 2.2kHz, 5kHz, 8kHz or 12kHz.
- EQ may be switched before or after the compressor.
- Stereo link for connecting two Radius 40s.
- Stabilised 150V DC power supply.

HHB's Radius 40 tube processor, although designed primarily for voice processing, will also enhance the sound of any input, from instruments, keyboards, samplers or workstations, since it combines both a high quality mic pre amp and line input with a compressor, expander / gate and an equalizer. These comprehensive features make the Radius 40 ideal for use in any project or professional studio environment when recording directly to tape, as all processing takes place within the machine itself. The mic pre amp has switchable 48V phantom power and a 90Hz high pass filter, with a 1/4" jack instrument input for keyboards or guitars. A backlit VU meter, displaying either the input, output or gain reduction, is all you need for confidence in your recording levels. With clearly laid out compressor and equalization functions along with balanced and unbalanced inputs and outputs, including a sidechain insertion point for frequency controlled processing, the Radius 40 is an all-round performer.



Radius 50

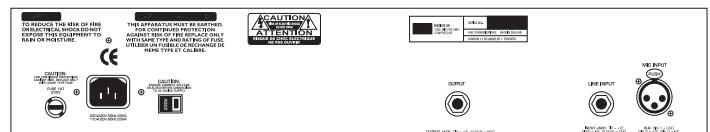
TUBE MIC PRE AMP / COMPRESSOR



KEY FEATURES

- High quality pre amp and compressor.
- Balanced mic / line input with jack output.
- Comprehensive mic input gain control from +16 to +60dB, with the large output fader providing an extra +15dB of gain.
- Switchable 48V phantom power.
- Switchable high pass filter in the mic pre amp.
- Compressor allows control of threshold, ratio and gain make-up, with two attack and release times.
- Compressor can be bypassed for quick A/B signal comparison.
- Two eight-segment LED meters indicate gain reduction and output gain.
- Stabilised 150V DC power supply.

Probably the most reasonably priced tube mic pre amp / compressor available, the HHB Radius 50 adds extra weight and presence to every input. A 1/4" jack instrument input allows any keyboard or guitar to benefit from the on-board tubes, producing a warm, rounded sound characteristic of this style of processing. Direct to tape recording from any microphone source, from dynamic to condenser, is made simple due to the logical layout of all analogue controls, providing at-a-glance confirmation of applied compression and pre amplification. The compressor has fully variable control of threshold, ratio and gain, and features switchable attack and release times from 'fast' to 'slow'. Two LEDs indicate power on and compressor on, with segmented LED meters displaying gain reduction and output level, which can be controlled by a large rotary fader.



THE HHB CLASSIC SERIES

The HHB Classic Series tube processors are designed for demanding, high-end applications necessitating the highest possible levels of sonic performance. From their heavy gauge front panels to their massive power supplies, the Classic Series processors ooze quality, delivering their vintage tube tone under precision control, and with none of the noise normally associated with tube processor designs. All tubes are the finest, military grade specification, including General Electric 12AX7 and Siemens EF86 pentode devices, with a 250V DC voltage to ensure maximum gain and minimum noise, further enhanced by minimal use of transformers in the signal path. Comprising a tube compressor of exceptional quality, a wonderfully sweet-sounding parametric equalizer and a mic pre amp which enhances the sound of even the most expensive studio microphones, the HHB Classic Series brings a unique sonic signature to any recording or performance project.

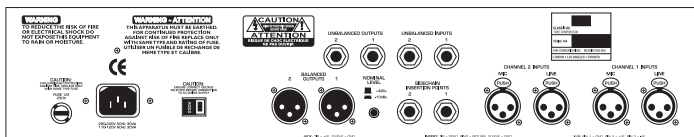
Classic 60 TUBE COMPRESSOR



KEY FEATURES

- Two channels of variable ratio compression.
- Balanced mic inputs with phantom power, balanced and unbalanced line inputs and outputs.
- Switchable 90Hz high pass filter on all inputs.
- 1/4" jack instrument inputs on the front panel with gain control and sensitivity switch.
- Each compressor channel features variable input gain, threshold, attack / release times, compression ratio and gain make-up for complete signal control.
- Sidechain inserts for frequency controlled compression.
- Both channels of the compressor may be linked to apply identical processing for stereo signals.
- Flexible backlit VU monitoring of either the output level or gain reduction.
- 250V HT voltage rail.

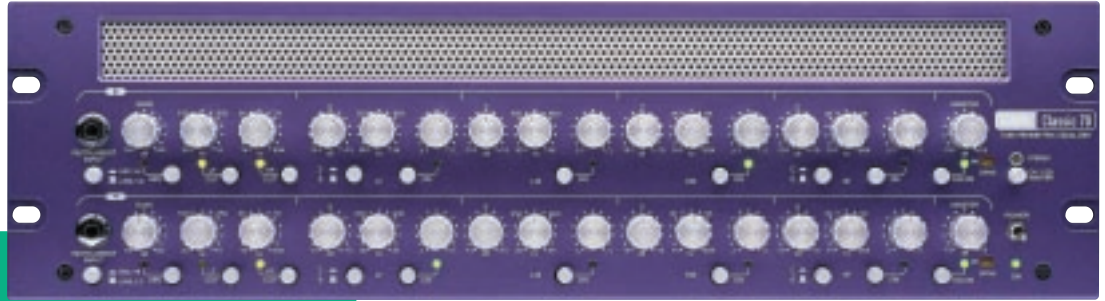
Exceptional sound quality and unrivalled flexibility combine in the HHB Classic 60 to produce a 2 channel tube compressor that's equally suited to tracking vocals or adding warmth and depth to an entire stereo mix. High quality on-board mic pre amps allow direct to tape recording of microphone sources and 1/4" jack instrument inputs are front panel mounted so guitars or keyboards can be plugged straight in. All controls are continuously variable, unlike inferior devices which use switched parameters, and the absence of VCAs results in a particularly transparent sound, with distortion across the full bandwidth virtually constant at a very low figure of 0.05%. The frequency response is virtually flat between 20Hz and 40kHz and, measured between -3dB points, is an incredible 5Hz to 70kHz. Use it once and you'll never want to be without the HHB Classic 60 tube compressor again.





Classic 70

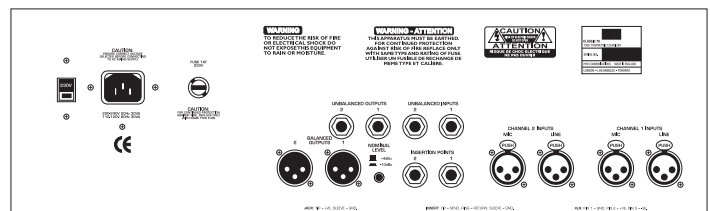
TUBE PARAMETRIC EQUALIZER



KEY FEATURES

- 2 channels of four band parametric tube equalization.
- Balanced mic and line inputs with variable gain.
- Dual sensitivity 1/4" jack instrument inputs on the front panel for each channel.
- EQ has $\pm 15\text{dB}$ gain, variable Q and variable frequency:
 - LF band - 30Hz to 3kHz,
 - LM band - 30Hz to 3kHz,
 - HM band - 1kHz to 20kHz,
 - HF band - 1kHz to 20kHz.
- LF and HF bands switchable peaking / shelving.
- High and low pass variable filters and EQ bypass switch for signal comparison.
- Insert points before the EQ section on each channel.
- Drive and peak LEDs indicate the degree of tube warming and warn of low headroom.
- 250V HT voltage rail.

With two channels of fully parametric 4-band tube equalization operating in conjunction with variable high and low pass filters, the HHB Classic 70 provides total control over any audio source. Continuously variable controls mean that the choice of frequency is not limited to switched settings, and the inclusion of 2 mic pre amps with phantom power enable direct to tape recording, with 1/4" jack instrument inputs also provided. Ideal for the precise equalization of stereo sources or an entire stereo mix, the Classic 70 features a stereo mode switch, linking both channels to the controls of channel 1 and applying identical processing to both. Stunning warmth and clarity is assured by the use of six tube stages per channel; one in each of the 4 EQ bands followed by a pair in the outboard stage, with top quality ECC83 and 12AX7A tubes specified throughout.



Classic 80

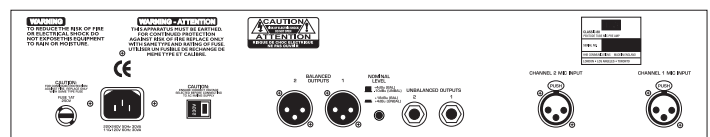
PENTODE TUBE MIC PRE AMP



KEY FEATURES

- High quality, 2 channel tube pre amp.
- Balanced mic inputs with 48V phantom power, balanced and unbalanced line inputs and outputs.
- Input gain control, with variable fine gain trim.
- Dedicated 1/4" jack instrument input on the front panel for simple connection of guitars and keyboards.
- High and low pass filters on both mic and line inputs with three switchable cut off frequencies:
 - HPF - 50Hz, 100Hz or 150Hz,
 - LPF - 5kHz, 10kHz or 15kHz.
- Phase reverse on channel 1.
- Drive and peak LEDs indicate the degree of tube warming and will warn of low headroom.
- Large rotary output faders.
- Illuminated VU meters showing output level.
- 250V HT voltage rail.

From a dynamic microphone to the most expensive studio condenser, the sound of any microphone source will gain an extraordinary openness, presence and clarity from the HHB Classic 80 tube mic pre amp. And a 1/4" jack instrument input on the front panel ensures that guitars and keyboards can also benefit from the added weight of HHB Classic tube processing. Each transformer coupled mic input is followed by a high gain, low noise EF86 pentode tube, with 2 further triode tube stages in each channel, and the precise amount of harmonic contribution from the tubes can be controlled through the use of separate input and output level controls. Switchable +48V phantom power, high and low pass filters and a phase reverse switch on channel 1 make the Classic 80 perfect for use in track laying or for direct to tape recording.



TECHNICAL DATA

RADIUS 10

TUBE MIC PRE AMP



Balanced XLR mic I/P:	Impedance / gain range >2kΩ / +16 to +60dB Input noise (EIN) -127dBu (22Hz-22kHz, 150Ω source) Phantom power +48V at 10mA max/mic High pass filter -3dB at 90Hz, 12dB per octave
Balanced XLR O/P:	O/P impedance / max level 47Ω / +26dBu
Unbalanced jack O/P:	O/P impedance / max level 47Ω / 18dBu into 10kΩ
Frequency response	10Hz to 40kHz, +0, -1dB
Power supply	110-120V 60Hz or 220-240V 50Hz
Power consumption	20VA typical
Dimensions (WxDxH)	19.0" x 7.9" x 3.5" (483 x 200 x 88mm), 2U rackmountable
Weight	5.5lbs (2.5kg)

RADIUS 20

TUBE PARAMETRIC EQUALIZER



Balanced XLR line I/P:	Impedance / gain range >5kΩ / -20 to +20dB Input levels +4dBu nominal, +26dBu max
Unbalanced jack line I/P:	Impedance / gain range >5kΩ / -20 to +20dB Input levels -10dBu nominal, +12dBu max
Instrument jack I/P:	Gain control range 40dB Maximum input level +12dBu
Balanced XLR O/P:	O/P impedance / max level 47Ω / +26dBu
Unbalanced jack O/P:	O/P impedance / max level 47Ω / 18dBu into 10kΩ
Frequency response	10Hz to 40kHz, +0, -1dB
Noise	-80dBu (22Hz to 22kHz), line I/P @ 0dB gain, EQ on and flat
Dynamic range	106dB (line I/P @ 0dB gain)
Power supply	110-120V 60Hz or 220-240V 50Hz
Power consumption	20VA typical
Dimensions (WxDxH)	19.0" x 7.9" x 3.5" (483 x 200 x 88mm), 2U rackmountable
Weight	5.5lbs (2.5kg)

RADIUS 30

TUBE COMPRESSOR



Balanced XLR line I/P:	Impedance / gain range >5kΩ / -20 to +20dB Input levels +4dBu nominal, +26dBu max
Unbalanced jack line I/P:	Impedance / gain range >5kΩ / -20 to +20dB Input levels -10dBu nominal, +12dBu max
Instrument jack I/P:	Gain control range 40dB Maximum input level +12dBu
Balanced XLR O/P:	O/P impedance / max level 47Ω / +26dBu
Unbalanced jack O/P:	O/P impedance / max level 47Ω / 18dBu into 10kΩ
Sidechain jack inserts:	Nominal level -2dBu Impedance 47Ω output, 10kΩ return input
Compressor functions:	T'hold (-20 to +20dBu), attack (fast / slow), release (fast / slow), ratio (1:1.5 to 1:30), gain (0 to +20dB)
Frequency response	10Hz to 40kHz, +0, -1dB
Noise	-80dBu, 22Hz to 22kHz, line I/P @ 0dB, compressor on and flat
Dynamic range	106dB (line input @ 0dB gain)
Power supply	110-120V 60Hz or 220-240V 50Hz
Power consumption	20VA typical
Dimensions (WxDxH)	19.0" x 7.9" x 3.5" (483 x 200 x 88mm), 2U rackmountable
Weight	5.5lbs (2.5kg)

RADIUS 40

TUBE VOICE PROCESSOR



Balanced XLR mic I/P:	Impedance / gain range >2kΩ / +16 to +60dB Input noise (EIN) -127dBu (22Hz-22kHz, 150Ω source) Phantom power +48V at 10mA max High pass filter -3dB at 90Hz, 12dB/oct
Balanced XLR line I/P:	Impedance / gain range >5kΩ / -20 to +20dB Input levels +4dBu nominal, +26dBu max
Unbalanced jack line I/P:	Impedance / gain range >5kΩ / -20dB to +20dB Input levels -10dBu nominal, +12dBu maximum
Instrument jack I/P:	Gain control range 40dB Maximum input level +12dBu
Compressor:	T'hold (-20 to +20dBu), attack (0.5 to 40ms), release (40ms to 4s), ratio (1:1.5 to 1:30), gain (0 to +20dB)
Balanced XLR O/P:	O/P impedance / max level 47Ω / +26dBu
Unbalanced jack O/P:	O/P impedance / max level 47Ω / 18dBu into 10kΩ
Sidechain jack insert:	Nominal level -2dBu Impedance 47Ω output, 10kΩ return input
Frequency response	10Hz to 40kHz, +0, -1dB
Noise	-80dBu, 22Hz to 22kHz, line I/P @ 0dB, compressor on, flat EQ
Dynamic range	106dB (line input @ 0dB gain)
Power supply	110-120V 60Hz or 220-240V 50Hz
Power consumption	20VA typical
Dimensions (HxWxD)	19.0" x 7.9" x 3.5" (483 x 200 x 88mm), 2U rackmountable
Weight	5.5lbs (2.5kg)

RADIUS 50

TUBE MIC PRE AMP / COMPRESSOR



Balanced XLR mic I/P:	Impedance / gain range >2kΩ / +16 to +60dB Input noise (EIN) -127dBu (22Hz-22kHz, 150Ω source) Phantom power +48V at 10mA maximum High pass filter -3dB at 90Hz, 12dB per octave
Balanced line I/P:	Impedance / gain range >5kΩ / -20 to +20dB Input levels +4dBu nominal, +26dBu maximum
Instrument jack I/P:	Gain control range 100dB (line input @ 0dB gain) Maximum input level +12dBu
Compressor:	T'hold (-20 to +20dBu), attack (fast / slow), release (fast / slow), ratio (1:1.5 to 1:30), gain (0 to +20dB)
Unbalanced jack O/P:	O/P impedance / max level 47Ω / +20dBu into 10kΩ
Frequency response	10Hz to 40kHz, +0, -1dB
Noise	-80dBu, 22Hz to 22kHz, line I/P @ 0dB I/P & O/P gain
Dynamic range	100dB (line input @ 0dB gain)
Power supply	110-120V 60Hz or 220-240V 50Hz
Power consumption	20VA typical
Dimensions	19.0" x 7.9" x 3.5" (483 x 200 x 88mm), 2U rackmountable
Weight	5.5lbs (2.5kg)

CLASSIC 60

TUBE COMPRESSOR



Balanced XLR mic I/P:	Impedance / gain range >10kΩ / +16 to +60dB Input noise (EIN) -126dBu (22Hz-22kHz, 150Ω source) Max input level +10dBu
Balanced XLR line I/P:	Impedance / gain range >5kΩ / -10 to +35dB Max input level +30dBu
Unbalanced jack line I/P:	Impedance / gain range >5kΩ / -10 to +35dB Max input level +24dBu
Instrument jack I/P:	Max input level +10dBu, switchable sensitivity
Balanced XLR O/P:	O/P impedance / max level <10Ω / 22dBu into 600Ω
Unbalanced jack O/P:	O/P impedance / max level 47Ω / 20dBu into 10kΩ
Sidechain jack inserts:	Nominal level -2dBu Impedance 47Ω output, 10kΩ return input
Compressor functions:	T'hold (-20 to +20dBu), attack (0.5 to 50ms), release (40ms to 4s), ratio (1:1.5 to 1:30), gain (0 to +20dB)
Frequency response	20Hz to 40kHz, +0, -1dB
Noise	-80dBu, 22Hz to 22kHz, line I/P @ 0dB, compressor on and flat
Distortion	0.05% (10Hz-40kHz)
Dynamic range	> 100dB
Power supply / consumption	110-120V 60Hz or 220-240V 50Hz / 30VA typical
Dimensions (WxDxH)	19.0" x 8.1" x 3.5" (483 x 205 x 88mm), 2U rackmountable
Weight	11.0lbs (5.0kg)

CLASSIC 70

TUBE PARAMETRIC EQUALIZER



Balanced XLR mic I/P:	Impedance / gain range >2kΩ / +10 to +60dB Input noise (EIN) -127dBu (22Hz-22kHz, 150Ω source) Max input level +10dBu
Balanced line I/P:	Impedance / gain range >5kΩ / -20 to +30dB Max input level +24 dBu
Unbalanced jack line I/P:	Impedance / gain range >5kΩ / -10 to +35dB Max input level +24dBu
Instrument jack I/P:	Impedance / max gain 220kΩ / 40dB Max input level +22dBu
Balanced XLR O/P:	O/P impedance / max level 47Ω / +26dBu
Unbalanced jack O/P:	O/P impedance / max level 47Ω / 20dBu into 10kΩ
Jack insert points:	Nominal level -2dBu Impedance 47Ω output, 10kΩ return input
Frequency response	20Hz - 40kHz, +0, -1dB
Noise	-80dBu, 22Hz to 22kHz, line I/P @ 0dB, EQ on and flat
Dynamic range	>100dB
Power supply / consumption	110-120V 60Hz or 220-240V 50Hz / 35VA typical
Dimensions (WxDxH)	19.0" x 9.8" x 5.2" (483 x 250 x 132mm), 3U rackmountable
Weight	19.8lbs (9.0kg)

CLASSIC 80

PENTODE TUBE MIC PRE AMP



Balanced XLR mic I/P:	Impedance / gain range >1.5kΩ / 20-50dB, ±12dB Input noise (EIN) -122dBu (22Hz-22kHz, 150Ω source) Distortion at 20dB of gain and 0dBu output 0.05% Max input level +6dBu
Instrument jack I/P:	Impedance 50kΩ Nominal sensitivity for 0dBu output -35dBu
Balanced XLR O/P:	O/P impedance / max level <10Ω / 26dBu into 10kΩ
Unbalanced jack O/P:	O/P impedance / max level 47Ω / 20dBu into 10kΩ
Frequency response	30Hz to 40kHz, +0, -2dB
Noise	-80dBu, 22Hz to 22kHz, line I/P @ 0dB input and output gain
Power supply / consumption	110-120V 60Hz or 220-240V 50Hz / 30VA typical
Dimensions (WxDxH)	19.0" x 8.1" x 3.5" (483 x 205 x 88mm), 2U rackmountable
Weight	13.2lbs (6.0kg)



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