Compressors/Limiters

# KT-2A

Classic Leveling Amplifier with Vacuum Tubes, Optical Attenuator and MIDAS Transformers

- Classic tube compressor/leveling amplifier modeled after the iconic Teletronix LA-2A\*
- Completely discrete signal path
- Premium selection 12AX7, 12BH7 and EL84 tubes
- Lag-free optical attenuator based on original electroluminescent technology
- Custom-built MIDAS input and output transformers
- Frequency Response:
  10 Hz to 20 kHz, +/- 1 dB
- Gain Limiting: 0 to 30 dB
- Ultra-fast attack time: 10 milliseconds
- Release time: 50 milliseconds to 5 seconds
- Adjustable stereo-link connection
- Variable pre-emphasis for digital audio recording and broadcasting transmission
- Vintage-style meter features gain reduction and output
- Transformer balanced inputs and outputs on Neutrik\* XLR connectors
- Rugged 2U rackmount chassis for durability in portable applications
- Auto-ranging universal switch-mode power supply
- 10-Year Warranty Program\*
- Designed and engineered in the U.K.

If ever there is an official "Audio Technology Hall of Fame", it will definitely include a shrine to the iconic Teletronix LA-2A\*. We pay homage to this audio-processing pioneer that has graced so many recordings, with our KT-2A Classic Leveling Amplifier. And while vintage Teletronix LA-2As are extremely rare and expensive, the KT-2A is amazingly affordable – and designed for the 21st Century.



Mastering quality compression and limiting, at a price point that makes the KT-2A equally at home in your studio – and your live rack!



#### **Building on a Classic**

The KT-2A draws inspiration from the original Teletronix LA-2A leveling amplifier, which was first produced in the early 1960s. Since then, Teletronix leveling amplifiers have been prized for their smooth musical sound, and audio engineers have utilised them at all stages of the recording process – from tracking to mastering.

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## KLARKTEKDIK

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A Class Act

At the heart of the KT-2A is a vintage lag-free optical attenuator based on the very same electroluminescent technology used in its predecessor. The KT-2A is constructed from the highest-quality discrete components – all of which meet or exceed the LA-2A's original specifications. This is just one of the many ways the KT-2A brings unparalleled precision and superb signal integrity into the new audio age.





#### The Warm Sound of Tubes

KT-2A owes its characteristic warmth to a set of premium, hand-selected 12AX7, 12BH7 and EL84 tubes. This time-tested combination provides ultra low-noise analog output with the ideal balance of tight, warm bass, silky-smooth midrange and brilliant, airy treble.

#### MIDAS – The Legend in Sound Quality

Ever since its formation in the 1970s, MIDAS has had a long history of innovation and leadership in the world of audio mixing consoles. Employed by the most famous touring acts and installations worldwide, legendary MIDAS consoles such as the XL4 and Heritage H3000 quickly became industry standards.

MIDAS has earned an impeccable reputation due to their no-compromise approach for audio and build-quality, and in particular for their Award-winning Mic Preamps, considered by experts as the industry's best-sounding designs. Building on this legacy, the XL8 and PRO Series of Live Mixing Systems continue this great heritage of Award-winning audio quality.

KLARK TEKNIK is proud to incorporate custom-designed MIDAS Input and Output transformers in the KT-2A for the ultimate in high-quality audio reproduction in both live and studio environments. Find out more about MIDAS' amazing legacy by visiting their extensive website.





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#### **Incredible Flexibility**

KT-2A frequency response extends from 10 Hz to 20 kHz (+/- 1 dB), and provides the kind of flexibility you simply won't find in the average leveling amplifier, such as gain limiting from 0 to 30 dB with an ultra-fast attack time of 10 milliseconds, a release time that ranging from 50 milliseconds to a full 5 seconds, and so much more. The Limit/Compress switch lets you select between the internally-fixed compression ratio of Compress mode and the near-infinite ratio in Limit mode. A built-in adjustable stereo-link TRS connection allows a pair of KT-2As to blend their sidechain signals for shared threshold response between the two devices.

### Controls

The controls on the KT-2A consist of a Pre-Emphasis trimmer which adjusts the compressor / sidechain interaction. When set fully clockwise, the sidechain responds to the full frequency bandwidth of the incoming audio. As the trimmer is turned counterclockwise, the compressor responds less to the signal's high frequency transients. The Peak Reduction knob controls the threshold of the compressor/limiter with an available maximum 40 dB of gain reduction. The Output Gain knob provides any makeup gain necessary for setting the output signal to the optimal level.





#### Metering

Old-school VU Meters ruled the day back in the 1960s and '70s, so we stayed true to the original with the KT-2A's metering. The classic d'Arsonval movement averages out short duration signal peaks and troughs, providing a much more realistic view of perceived loudness. A Meter Selection knob lets you display either the amount of gain reduction or the output level.



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#### **Balanced Connections**

The KT-2A has both XLR and  $\frac{1}{4}$ " TRS balanced Inputs and Outputs with custom-designed MIDAS transformer, both of which operate at line level. Unbalanced connections are also available via  $\frac{1}{4}$ " TS cables.





### Legendary Dynamic Processing

While Teletronix may have written the book on studio compression/limiting with the legendary LA-2A in the 1960s, we just added a new chapter to that venerable tome – the KLARK TEKNIK KT-2A! Now audio aficionados of all means can afford the amazingly-precise dynamics processing that has defined generations of musical excellence – both on and off the stage.

Check out the KT-2A at your KLARK TEKNIK dealer, or get yours online today!

#### You Are Covered

We always strive to provide the best possible Customer Experience. Our products are made in our own MUSIC Tribe factory using state-of-the-art automation, enhanced production workflows and quality assurance labs with the most sophisticated test equipment available in the world. As a result, we have one of the lowest product failure rates in the industry, and we confidently back it up with a generous Warranty program.



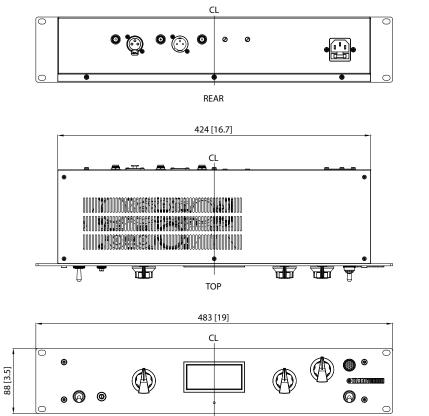


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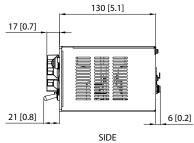


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## Dimensions



FRONT







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## **Technical Specifications**

Audio Input	
Туре	XLR, ¼" TRS, transformer balanced
Impedance	600 $\boldsymbol{\Omega},$ balanced and unbalanced
Maximum input level	+20 dBu, balanced and unbalanced
CMRR at 1 kHz	Typically -80 dB

#### Audio Output

XLR, 14" TRS, transformer balanced
70 $\Omega,$ balanced and unbalanced
+18 dBu, balanced and unbalanced

#### System Specifications

Frequency response	10 Hz to 20 kHz, ±1 dB
Noise at unity gain	-87 dBu, unweighted, 20 Hz to 20 kHz
THD at unity gain 0 dBu input level	Typically <0.1% 20 Hz to 20 kHz

#### Compressor

Attack time	Typically 10 ms
Release time	Typically 50 ms for 50% release,
	up to 5 s for full release
Maximum output gain	+30 dB
Maximum peak reduction	-30 dB
Tube types	2x 12AX7, 1x 12BH7, 1x EL84
Meter settings	Gain Reduction, +4 output, +10 output

ower Supply	
Mains voltage	100 – 240 V~, 50/60 Hz
Power consumption	30 W
Fuse	T1AH 250 V
Mains connection	Standard IEC receptacle

#### Physical

Dimensions (HxWxD)	88 x 483 x 158 mm (3.5 x 19 x 6.2")
Weight	2.9 kg (6.4 lbs)





Classic Leveling Amplifier with Vacuum Tubes, Optical Attenuator and MIDAS Transformers

### **Architecture & Engineering Specifications**

The KT-2A leveling amplifier shall provide a single channel vacuum tube compressor/limiter with optical attenuator in a standard 2U 19" rack mount chassis.

The KT-2A shall provide an output gain control which can provide make up gain.

The KT-2A shall provide a peak reduction control which sets the compressor threshold.

The KT-2A shall provide a three position VU meter mode rotary switch with setting of +4 dBu, +8 dBu and gain reduction

The KT-2A shall be fitted with an illuminated VU meter that can read either output level or gain reduction:

The KT-2A shall provide a toggle switch to select limiting or compression modes.

The KT-2A shall provide a mains power on/off toggle switch with a separate illuminated power on indicator.

The KT-2A shall provide a pre-emphasis trimmer which adjusts the compressors sensitivity to high frequency signals.

The KT-2A shall provide transformer balanced audio input and output 3 pin XLR connectors and parallel TRS jack connectors.

The KT-2A shall provide a stereo link TRS jack connector to enable two KT-2A units to function as a stereo pair, by means of side chain linking.

The KT-2A shall provide a rear panel stereo link trimmer to enable attenuation matching of a stereo pair of KT-2A units.

The KT-2A shall provide a rear panel meter trimmer to calibrate the VU meter.

The KT-2A shall be fitted with an internal switch mode power supply, capable of operation at AC voltages ranging from 100 to 240 VAC, at 50/60Hz. The mains connector shall be a standard IEC receptacle.

The KT-2A dimensions shall be 88 mm high x 483 mm wide x 158 mm deep (3.5 x 19 x 6.2"). The nominal weight shall be 2.9 kg (6.4 lbs).

The Leveling amplifier shall be the KLARK TEKNIK model KT-2A and no other alternative shall be acceptable.



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For service, support or more information contact the KLARK TEKNIK location nearest you:

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