

Kalista

M E T R O N O M E

T E C H N O L O G I E

Kalista

CD Transport

Made in France

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1 – Important safety instructions

ATTENTION

- So as to avoid any risk of fire or electrical shock, maintain this unit on a dry place. Do not expose under rain.
- Before to connect and to operate this product, we recommend you to read attentively and fully the present manual.
- This power supply generates dangerous voltages for the human body, do not introduce any metallic object by aerations of the casket neither on the connectors. Do not dismantle the upper hood if the unit is not unplugged: for all intervention, thank you to contact your retailer.
- Characteristics, specifications and conception of this product can be submitted to modifications without preliminary notification and this to improve the equipment.

2 – Company profile:

METRONOME TECHNOLOGIE is a French company founded in 1987 by Dominique Giner. **METRONOME TECHNOLOGIE** has developed over the years a wide range of High End products.

Our products are designed by a team around Dominique Giner: CD players, CD transports, Digital to Analog Converters and now Integrated Amplifiers, Pre-amplifiers and Power Amplifiers.

The main objective for us is twice: one is to access to the best sound that digital and analog components can provide, applying the most advanced technology available and the second is to reconcile aesthetic and technology.

Our KALISTA CD Transport is therefore the result of many months of technical research and countless hours of listening.

3 - Introduction :



Congratulations on purchasing the METRONOME TECHNOLOGIE KALISTA CD Transport.

If you desire to contact METRONOME TECHNOLOGIE to ask us any information on your purchase or for a technical detail please connect you to our web site:

www.metronome-technologie.com

The Top loaded CD Transport is made around material selected for their ability to deliver the best sound. The KALISTA presents an innovative design and an aesthetic way to extract digital information for the best sound from CD media.

Design specificity:

- Three parts design: one dedicated to the reading mechanism, one for servo and user control and the last for digital and up-sampler outputs.
- Power supply with individual power transformers and complete independent lines power, providing an inter-stage EMI/RFI radiation protection.
- Stainless-steel and methacrylate clamp and shaft for better CD stability and low jitter.
- Continuous ground link from the disk surface to the electrical earth: no CD static charge so no ESD parasitic and better working conditions for electronic and optic components.
- Lighting of the CD surface for better information extraction: no influence of ambient light.
- Use of many high density material for low frequency resonance
- Professional drive mechanism with proprietary modifications.

4 - Unpacking:

The KALISTA CD Transport has been packed in 2 specially designed boxes. One contains Power Supply unit and the second one contains KALISTA CD Transport.

- Unpack carefully the machine: attention, to lift the unit, it is recommended to have the help of a second person.

- Please preserve carefully packages and protections, they will be able to be useful for the shipment of the unit in case of maintenance. Please note that the warranty will be considered as cancelled if the units are dispatched incorrectly packed.

- Insure you to have read the important safety instructions chapter before to continue.

The boxes contain:

- KALISTA CD Transport

- Power Supply

- A roll support clamp

- A pair of white gloves

- Power supply cable

- Main electrical cord

- An accessory "malette" with:

- A black metal Remote Control RC1.

- A transparency methacrylate clamp.

- 3 DELRIN[®] cones.

- 3 DELRIN[®] discs for feet.

- A key to dismount the remote control to change the the batteries.

5 - Power Supply:

5-1 Installation:

- Install the power supply of the converter on the hi-fi unit or a stable and strong support.

- Be sure to not obstruct the upper of the casket. For optimum operation and correct ventilation keep a free area of 5 cms (2 inches) above the power supply. Please note that after a few minutes of operation, the upper casket is warm: this is normal.

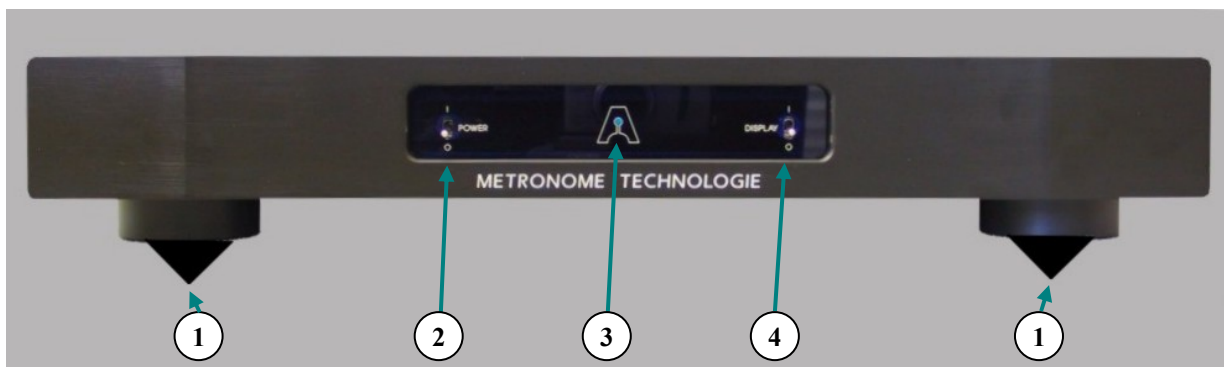
- Be sure the power switch is in low position (switch off).

- Connect the main cable on the socket.

- Connect the power link cable on power supply connector.

5-2 Front view:

KALISTA POWER SUPPLY Front view

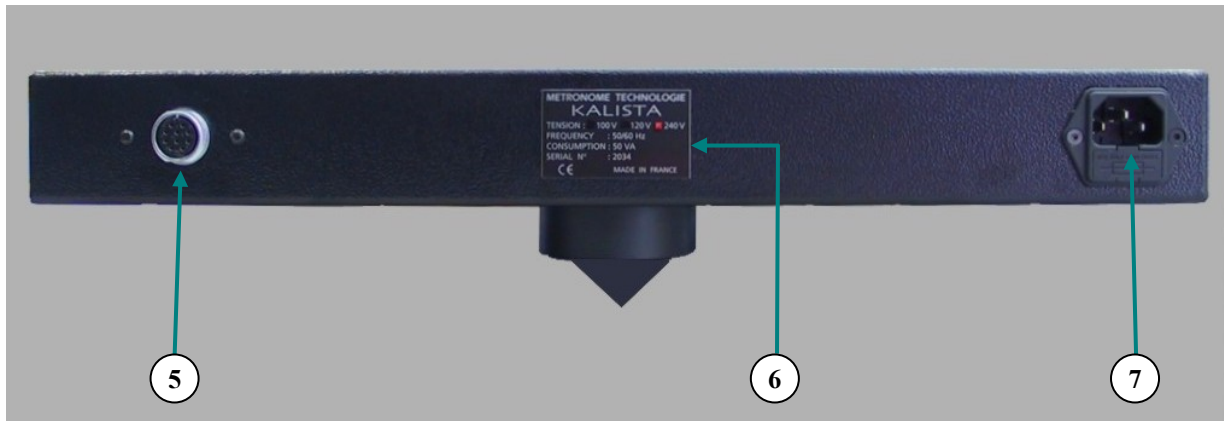


On the front of the KALISTA's Power Supply:

- ① Cones: Very important in increase the quality of sound.
- ② Power switch ON/OFF: Push up to switch on the power supply and push down to switch off it.
- ③ Led lighting: The led is lighting only to indicate when the power supply is running.
- ④ Display switch ON/OFF : During a normal use of your CD Transport you can increase the sound quality by switching off the display, indeed it can be the source of some minus unwanted noise.

5-3 Back view:

KALISTA POWER SUPPLY Rear view



On the back of the KALISTA's Power Supply:

- ⑤ Power Supply Connector: To connect the power supply with the KALISTA CD Transport (10 wires cable).
- ⑥ Label: The label show you, the product's name, the AC voltage value & its frequency, the consumption and the serial number.
- ⑦ Power entry connector & fuse compartment: To plug the electrical network cable and change fuses if broken.

5-4 Utilization:

Your Power Supply for Kalista CD transport is adjusted for a nominal voltage corresponding to your country's electrical network.

If it fails to operate:

- A - Turn off the Kalista CD Transport.
- B - Unplug all the cords.
- C - Replug the cords.
- D - If there is no difference, please contact Metronome Technologie factory.

The LED on the front panel indicates the state of the unit: when the LED is alight, the power supply is operational.

This power supply can be switched on during a long period however for a prolonged absence, we advise you to switch it off, with the switch on the rear panel of the machine.

This power supply is protected by internal electronic circuits and by a general fuse situated in the block near the main chord, beside the switch. To change the fuse, it is imperative to unplug first the main cable, then open the fuse compartment (see photo on paragraph 5-3) with a screwdriver and replace the fuse by an identical model: 1 Ampere slow blow. The machine is delivered with a second fuse.

ATTENTION: Never modify the value of the fuse.

Note: it is possible that after a long period without functioning, the fuse burns out when the power supply is switched on: in fact when the power supply is completely discharged, on switch on, there is a very important current consumption during a brief instant.

6 - Kalista CD Transport:

6-1 Installation:

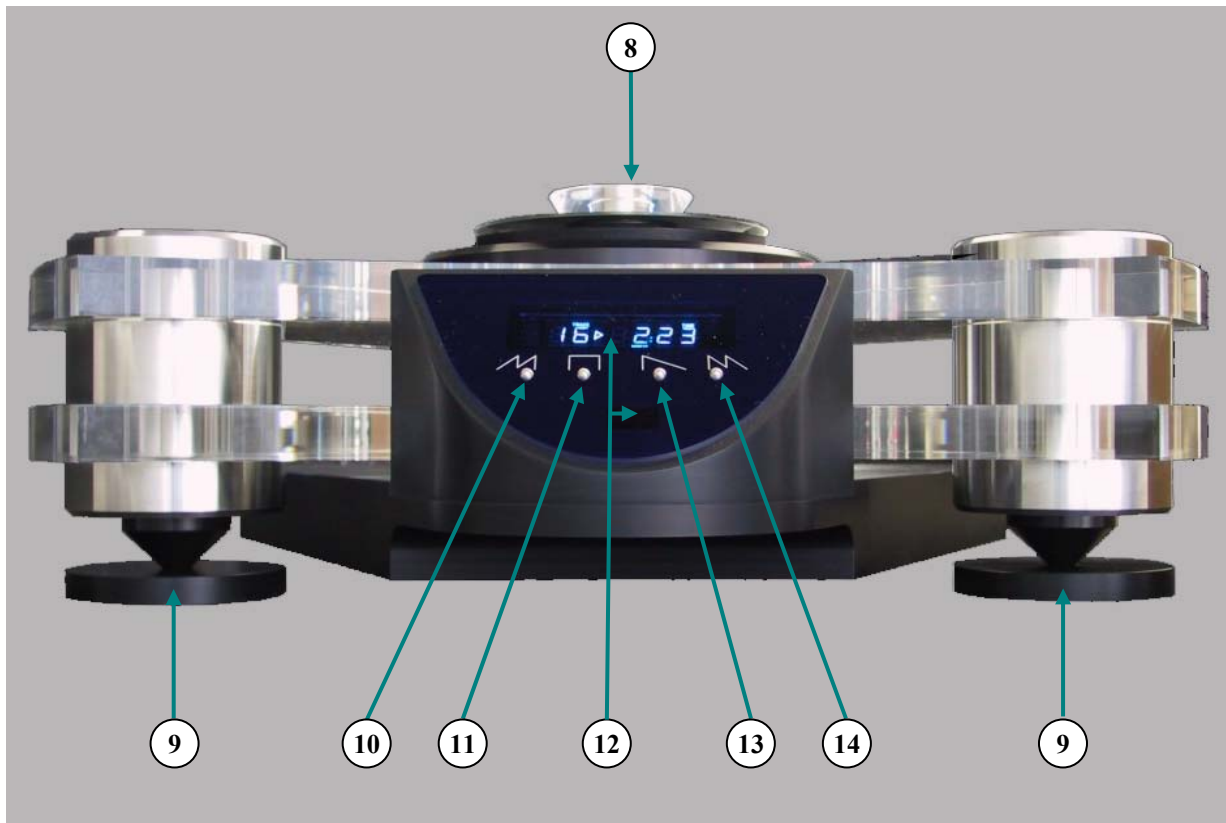
● Install the Kalista CD Transport on the hi-fi unit or a stable and strong support. Do not install directly on a carpet or an inflammable material. Do not put any object on the top and take care to put the clamp on its support when you don't use the drive.

● Connect the link cable of power supply on the Kalista.

● Connect the output(s) on respective converter(s).

ATTENTION: If you want to disconnect the link cable, please be sure the power supply is switch off.

6-2 Front view :

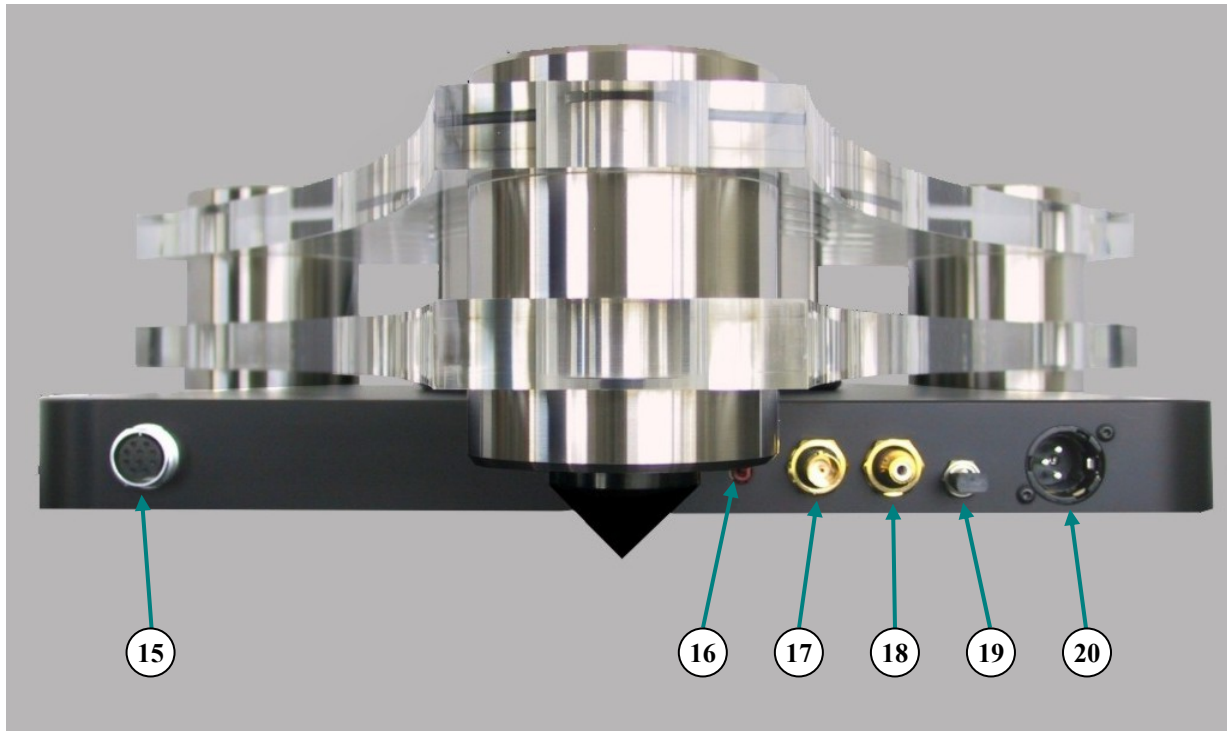


On the front of the KALISTA:

- ⑧ Clamp: It's absolutely necessary to put the clamp on the CD to be able to read it, without it you will destroy the CDPRO drive.
- ⑨ Delrin disc: To absorb the vibrations.
- ⑩ Previous track: To select the previous track on the cd.
- ⑪ Stop: To stop the reading of cd.
- ⑫ Display & IR : To show various information like the number of the track in the course of reading, its state of advance of reading, the repeat functions (1 or all) and pauses ; Infrared Receptor for remote control
- ⑬ Play: To start the reading of cd.
- ⑭ Next track: To select the next track on the cd

WARNING: DO NOT APPLY THE CLAMP WHEN NO CD IS PRESENT.

6-3 Back view:



On the back of the KALISTA:

- ⑮ Power Supply connector: To connect the power supply with the KALISTA CD Transport (10 wires cable).
- ⑯ Switch 44,1/96Khz: To choose the sample rate converter present on the PCB designed by Metronome Technologie, into the KALISTA CD Transport (96KHz Up position)
- ⑰ BNC: S/PDIF digital output *
- ⑱ RCA S/PDIF: S/PDIF digital output *
- ⑲ OPTICAL: OPTICAL digital output *
- ⑳ AES/EBU: AES/EBU digital output *

* Note: all outputs marked by a star need to go to an external converter

6-4 Utilization:

6-4-1 Power on:

Now you can switch on the Kalista. To do this, push switch [14] on upper position, verify the switch display [16] is on upper position to activate the display. If there is no CD on the Kalista, the display indicates "OPEN". The CD Transport Kalista can be switched on during a long period however for a prolonged absence, we advise you to switch it off, with the switch [14] on the front panel of the machine.

6-4-2 Listening:

Put a CD on Kalista, attentions don't forget the clamp. After a few seconds, Kalista detects automatically the CD and initialize by reading the T.O.C. of CD, so it indicates number of tracks and total time and then stops waiting for a user order. You can begin the listening by a press on switch [6] on the board of Kalista. For other function please refer to paragraph 6-2. Note that you can drive the Kalista with the remote control (refer paragraph 7).

6-4-3 Display off:

You have the possibility to switch off the display of the Kalista; this is to increase sound quality by eliminating interferences in electronic clock display.

6-4-4 Digital outputs:

In the Kalista you have 4 digital outputs:

- Output [9] is an AT/T optical: this link allows a total electric isolation between the drive and the converter.
- Output [10] and [11] are S/PDIF format output.
- Output [13] is a professional AES/EBU format output.

All the outputs can be sampled with 44.1 KHz or 96 KHz frequency by switch [9]. On upper position Fs is 96 KHz and on lower position Fs is 44.1 KHz.

6-4-5 Cleaning:

To clean your Kalista CD Transport, use a **SOFT CLOTH** with no abrasive cleaning product.

Please take care because transparency methacrylate surface is very fragile.

6-4-6 Technology:

- **Power supply:** The power supply of the Kalista has taken an attentive care to reduce for the maximum all digital perturbations. To do this we use independent transformers and regulations for any section.

Filter is made with multiple high capacitors and we use regulators with 5A current capacity and fast transient response with MOS FET transistor integrated. We use also a separate box for a perfect shield for the CD Transport with earth connection to evacuate any perturbation.

- **Kalista CD transport:** This part is unique by material and components never use for a CD Transport. Our idea was to have a very low mechanical frequency resonance for one part and second the use the better optical block to extract digital information on CD without any alterations or perturbations.

So we use Methacrylate, Delrin[®], Stainless-Steel and massive Aluminium for better mechanic absorption and reduce frequency resonance to a lower value. The optical part is a professional component with proprietary modifications. The CD is continuously discharged of electrostatic energy by the clamp connected to earth with the central axe of the mechanism.

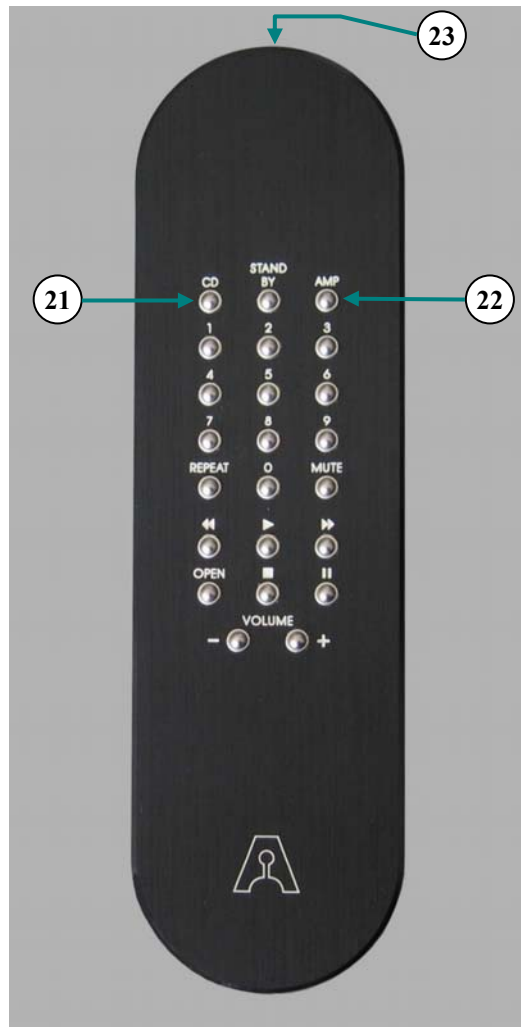
In order to extract the ultimate information, the display should be switch off. In this case there is no pollution by digital clock which is near from the optical block.

The digital outputs are totally independent and the user has the possibility to choose the Sample Frequency between 44.1 KHz and 96 KHz according to his DAC specifications and performances.

7 – Remote Control:

Remote control RC1

On the top of the KALISTA's Remote Control RC1:



Please unpack carefully the remote control.

Please preserve carefully packages and protections, they will be able to be useful for the shipment of the unit in case of maintenance.

For cleaning the remote control, please use a sweet and no abrasive cloth. Never use any solvent or chemical product.

For finger prints, only use a window-pane cleaning product.

This remote will operate with 2 batteries LR03 type size AAA. It is delivered with 2 batteries.

For changing the batteries, unscrew the 3 screws on the back side (key is provided), replace the batteries. Remount the back side. In normal use, capacity of the batteries is a few months.

Warning: don't leave used batteries in the remote, they could damage the circuit.

- Access function :

This remote can drive all the CD drives, pre-amplifiers and integrated amplifiers of the METRONOME TECHNOLOGIE products.

②1 To activate **CD** mode press on [**CD**] key, the remote locks on the **CD** mode. The available functions are:

- Direct access to the disk tracks by pressing on [**0**] to [**9**] keys.
- **PLAY TRACK** function by pressing on the key: ▷
- **NEXT TRACK** function by pressing on key: ▷▷
- **PREVIOUS TRACK** function by pressing on key: ◁◁
- **PAUSE** function by pressing on key: ||
- **STOP** function by pressing on key: □
- **REPEAT** function by pressing on key [**REPEAT**]: Pressing this key once time, the drive will play the disk indefinitely. Pressing a second time the key, the drive will play the current track indefinitely; and by pressing one more time, the drive will operate on normal play mode.
- **OPEN** function by pressing on key [**OPEN**], the tray will open. This function is available on electric tray drives only.
- **STANDBY** function by pressing on key [**STANDBY**], the drive will enter on standby mode. If you have to keep the drive for a long time without use, it is better to switch off the machine with the main switch.

②2 To activate **AMP** mode, press on [**AMP**] key. The remote locks on **AMP** mode. The available functions are:

- Direct selection of inputs of pre-amplifier or integrated amplifier by pressing on key [**1**] to [**9**]. Number of inputs depends on models.

- **MUTE** function by pressing on key [**MUTE**]: this function will put the output level at 0dB. Another press will activate the initial output level.
- **VOLUME –** function by pressing on key [**VOLUME -**]: this function will decrease the output level.
- **VOLUME +** function by pressing on key [**VOLUME +**]: this function will increase output level.
- **STANDBY** function by pressing on key [**STANDBY**], the pre-amplifier or integrated amplifier will enter on standby mode. If you have to keep the drive for a long time without use, it is better to switch off the machine with the main switch.

②③ IR transmitter

Note: For a correct function of the remote, we recommend a 40° max angle of incidence with the receptor.

8 – Technical Specifications:

- PICKUP MECHANISM:

- CDPRO MK II

- DIGITAL OUTPUT: 4 outputs

- BNC S/PDIF 75 OHMS
- RCA S/PDIF 75 OHMS
- AES/EBU 110 OHMS
- AT/T OPTICAL (Glass optic fiber)
- Output sample Frequency: 44.1 KHz or 96 KHz

- UP-SAMPLER:

- Dynamic Range: 120dB Min
- Total Harmonic Distortion: -110dB Max
- Resolution: 24 Bit
- Gain Error: 0.12dB Max
- Pass band ripple: 0.007 dB Max
- Interchannel Phase Deviation: 0.0°

- POWER SUPPLY:

- Voltage: 100 VAC +/- 10% - 50/60 Hz - Japan
- Voltage: 120 / 240 VAC +/- 10% - 50/60 Hz – Other countries
- Consumption : 100 VA Max

- CASKETS :

- Dimensions Power supply: W x H x D: 450 x 75 x 400 (dim en mm)
- Weight Power supply: 11 Kg

- Dimension CD Transport : W x H x D : 450 x 150 x 450 (dim en mm)
- Weight CD Transport : 25 Kg

9 - Warranty

Metronome Technologie Sarl warrants the components of your Metronome Technologie product for a 1 year period from the purchase date

In the event of failure of your product, Metronome Technologie will repair, readjust and, should the occasion arise, replace the units providing that all the clauses contained in the warranty are met.

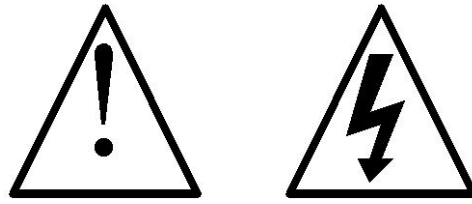
In order to initiate service of any kind, it is necessary to obtain first distributor or dealer authorization and then, ship the unit prepaid.

Any of the following conditions shall avoid the warranty:

- 1 – Operations not in accordance with this manual.
- 2 – Abuse, accident or unauthorized modifications as determined by Metronome Technologie S.A.R.L. exclusively.
- 3 – Removal, defacing or falsifying of the serial numbers.
- 4 – Shipping without the complete factory cartons.

Metronome Technologie S.A.R.L. shall not be liable for any accidental damages regarding operation, failure, trouble-shooting or repair of your KALISTA CD Transport.

Warning: Potential Shock Hazard



TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

This product uses high voltage. There are no operator serviceable parts inside. Refer servicing to qualified personnel only. Observe all warnings and instructions marked on the product. Use only a grounded outlet.

Do not install or use this product near water or when you are wet. Install the product securely on a stable surface.

During operation the vacuum tubes (if any) become hot: do not touch.

Information

Marking by the “CE” symbol indicates compliance of this device with the EMC (Electromagnetic Compatibility) and LVD (Low Voltage Directive) standards of the European Community.

SAFETY INSTRUCTIONS

Before operating your METRONOME TECHNOLOGIE equipment, please read all instructions and precautions carefully and completely.

1. **ALWAYS** disconnect your entire system from the AC mains before connecting or disconnecting any cables, or when cleaning any component.
2. **A three-conductor AC mains power cord** which includes an earth ground connection must be used. To prevent shock hazard, all three connections must **ALWAYS** be used.
3. **Original AC main power cord** is recommended for use with this product.
4. **NEVER** use flammable or combustible chemicals for cleaning.
5. **NEVER** operate this product with removed cover.
6. **NEVER** wet the inside of this product with any kind of liquid.
7. **NEVER** pour or spill liquids directly onto this unit.
8. **NEVER** block air flow through ventilation slots or heat-sinks.
9. **NEVER** bypass any fuse.
10. **NEVER** replace any fuse with a value or type other than those specified.
11. **NEVER** attempt to repair this product: contact your retailer.
12. **NEVER** expose this product to extremely high or low temperatures.
13. **ALWAYS** unplug sensitive electronic equipment during lightning storms.

Certificate of conformity

We hereby certify that your

Metronome Technologie

Model : KALISTA CD Transport

*Has been produced in our factory located in
France.*

*Every possible quality control measure was
taken to ensure that your have acquired the
most perfect and reliable product.*

Dominique GINER