

Manual for **BRINKMANN** turntable BARDO

design + service

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Legal regulation of the European Community :

This turntable had been designed and tested according to the guidelines EN55013 and EN55020, and it meets the safety requirements EN60065.

Informations for Safety :

The turntable BARDO is only to be used in dry rooms with an average temperature and is only allowed for 220–240V, 50...60Hz alternating current, or as otherwise stated on the back of power supply casing.

The power supply is only to be connected to grounded wall sockets.

Please connect or disconnect only when the mains plug is not connected to the mains.

Always disconnect the power supply from the mains when the turntable is not used for a longer period of time (during holidays etc.) ! Never leave the power supply unattended while it is connected to the mains !

Always keep the turntable away from wet, heat and open fire ! Never expose it to the blazing sun ! Never place receptacles with fluids on the turntable or power supply !

Power supply:

Never open the casing while the power supply is connected to the mains !

Attention, dangerous voltage !

The power supply is equipped with a temperature limiter that switches off at about 65°C ; to guarantee a flawless function please make sure to have a free space for air circulation measuring 30cm above the power supply and 10cm on each side. The power supply must never to be covered !

After disconnecting from the mains, the turntable can be cleaned with a dry cloth (microfiber) or a brush, do not use wet cleaning, wet cleaning can cause damages !

Repairs, modifications etc. are only to be carried out by the company **BRINKMANN** itself or by specially authorized workshops !

The glass/acrylic cover of the platter should be cleaned with multipurpose screen and surface wipes and a dry cotton cloth.

Never use solvent or sprays!

Attention! There are strong magnetic fields around the bearing, be careful never to bring metallic objects near the turntable without platter on.



Technical details :

The BARDO turntable is made mainly from parts of the OASIS turntable, the motor, the bearing, the platter and the tonearm base are the same.

The turntable consists of two independent parts: the plinth with the motor and the tonearm base(s) drilled according to the customers tonearms needs and the separate power supply. The motor drives the platter directly via magnetic fields.



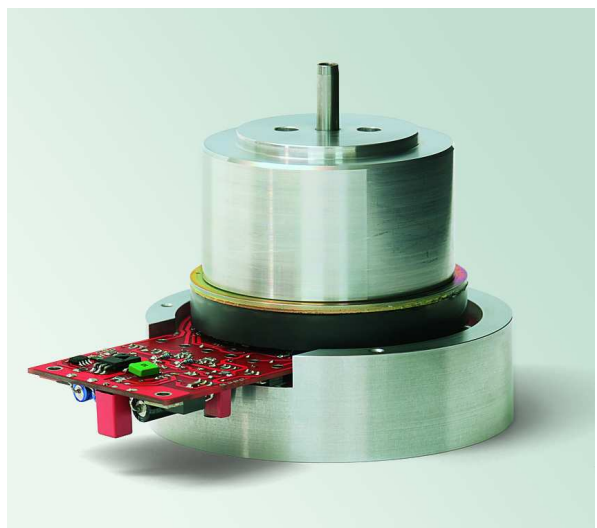
CHASSIS/TONEARMBASE :

The chassis includes the motor that drives the platter and guarantees a constant speed. There is a three pole plug at the back of the turntable for the connection with the power supply.

Additionally you can find there the output sockets. These can be equipped with XLR or RCA sockets or can be left open for tonearms with DIN connectors. Near the output sockets you can find a 2mm socket for the connection of the ground cord.

MOTOR :

The motor of the BARDO is a part of the chassis. A circular magnet is mounted into the bearing of the platter and is concentrically driven into rotation via coils on the circuit board under the magnet. Therefore the bearing of the platter is also the bearing of the motor. An electronic circuit drives the coils via two Hall resistors (resistors that react to



magnetic fields) into a highly constant and slow circular movement.

Below the chassis in the motor electronics cover and located near the switch there are two small drill holes, 4mm diameter each. They give access to the speed adjustment that can be regulated with the screwdriver you can find in the supply. The two trim pots have a stable plastic coating, there is no possibility to accidentally touch electrical contacts.

Inside the motor, the rpm of a speedometer disc is measured and turned into variable voltage that is fed into a control circuit where the rpm is compared to the reference voltage that is adjustable via the trim pots. The switch of the BARDO has three positions, the position “up” is 33 1/3 rpm and shows a green light, the “level” position has no light and stops the motor and the position “down” is 45 rpm and shows a red light.

The maximum starting voltage of the motor is approximately 500mA peak and goes down to approximately 80mA effective voltage in operation.

The platter can be stopped by hand without the risk of injury or damage. It is of no consequence for the turntable to touch the platter during operation.

POWER SUPPLY :

The casing of the power supply consists of plastic, it is completely closed and fully insulated. The power supply has an output line wire with a three pole plug matching for the connector on the back of the chassis. A cap screw ensures that an unintended removing of the plug is not possible.

Set up procedure for BARDO turntable :

The base for the BARDO should be approximately 31 x 44 cm, it is available as an optional granite base. First, the chassis with the mounted tonearm base and bearing should be placed on the surface and levelled with the help of a spirit level. There are three adjustable feet in the chassis to level the turntable, one can be reached with the screwdriver No.3 through a drill hole in the chassis, the other two adjustable feet are located beneath the black bolts aside the motor and can be adjusted by turning the feet.

The screwdriver No.3 can also be used to loosen the tonearm base and turn it in order to achieve the marked position of the tonearm or the right distance between the centre of the platter and the pivot.

Then the platter can be placed on the bearing, it is recommended to look through the centre hole of the platter to locate the axle of the bearing and then let platter down slowly and carefully to rest it on the subplatter of the

bearing. On the last centimetres there is a tight fit between platter and bearing, the platter shouldn't be tilted but held vertical.

The weight of the platter can bring the surface off level, it should be controlled again with the spirit level on the platter.

Next the three pole plug of the power supply is to be connected to the turntable. The power supply should be connected to the mains and the turntable should be operated for an hour to give the motor time to warm up before the speed can be fine adjusted. There are two drill holes next to the speed switch that give access to the speed adjustment, they can be regulated with the screwdriver you can find in the supply. The upper drill hole gives access to the $33 \frac{1}{3}$ rpm adjustment and the lower one gives access to the 45 rpm adjustment. It is advisable to use a stroboscope disc and the light of a 50Hz neon light.

To mount the tonearm, please follow the instructions of your tonearm instruction paper. If necessary, you have to take out all 3 screws of the tonearm base to be able to lift it off. The correct distance between tonearm and spindle can be adjusted by turning the tonearm base as much as necessary.

After connecting the preamp with the ground cable (close to output sockets) and interconnects you can start playing records.

The acrylic surface of the platter and record should be cleaned carefully as any dirt could cause clicks and pops on the record (please read the part Informations for safety). Never use solvent !

We strongly recommend to use a record cleaning machine for best results.

The BARDO turntable will be delivered with following components :

Chassis (plinth) + screwdriver No. 3 for tonearm base,
and for adjustable spike in the chassis,
+ cable for ground connection
+ screws for tonearm if needed,
+ screwdriver No. 2 and 2,5 for the screws at the output
sockets
+ screwdriver for speed adjustment
transistor psu + power cord
Datasheet

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