

Muarah Mr. Black/White MT-1 analogue turntable

User Manual



Our mission is to make surrounding reality inspiring for eyes and for ears. Our goal is to offer novel, luxury things - things with a bit of creator's soul as a contrast to pervasive trumpery and mediocrity. Using those special things shall be inspiring and nice. Our inspiration are audio and automotive worlds seemingly outlying but in fact having a lot in common. When you read about our turntable design you will notice it clearly.

So, relax and spend a while with us...

Jacek Siwiński & Wiesław Zawada

Muarah

www.muarah.pl
muarah@muarah.pl
V1.0



MT-1 Muarah Mr. Black / White – Hi-End class turntable

MT-1 Turntable is a classic construction in its overall shape, and on the other hand, its quite unique in detail. The idea of a weighty platter turntable, seated on relatively lightweight base frame, with use of a coil springs suspension, is for us the best combination due to best isolation from harmful vibrations and great bass reproduction with no compromise. We decided to make step forward in the direction of suspensions, well proven in the automotive industry, and created turntable with suspension dampening system. Damping is achieved thanks to properly fitted oil shock-absorber, that is our own design. The platter is fabricated from solid aluminum and covered with thin layer of acryl, it's heavy mass guarantees great rpm stability. Muarah Turntable in standard configuration is offered with support for SME, Jelco or Rega tonearms – according to customer's preferences. It is also possible to fit in most of popular 9-inch tonearms. Optional, dedicated 650g record clamp is also available. Muarah Turntable is offered in two colors: piano black (Mr. Black) and high gloss white (Mr. White).



Chart 1: Identification and naming of the turntable parts.



MT-1 turntable main features

- Heavy weight construction, incl. platter weighting c.a. 8 kg, ensures great bass control, low distortion level and good rpm speed control.
- Resilient suspension with unique oil damping system.
- Acrylic turntable base platform in „sandwich” construction - additional isolation from motor or environment originated vibrations.
- Synchronous motor of superior quality.
- Choice of two popular record rotary speeds: 33 1/3 or 45 rpm, manual change through the drive belt move on the pulley.
- Double leveling system: initial leveling of the platter vs. acrylic base (tonearm weight compensation) and independent of the entire turntable over the ground.
- Precise and easy leveling mechanism featuring two rotating knobs.
- Advanced bearing designed to work well with high load: magnetic with ceramic ball, PTFE sleeve surface.
- Bearing designed for long life even w/o lubrication.
- Possibility to lubricate the main bearing with no need to take off the platter, improved performance and increased life.
- Start/stop system with no moving parts, touch sensor.
- Turntable operation indication - back-lighted „Muarah” logo.
- Switchable auto-stop function - motor switches off automatically after c.a. 50 minutes.
- Adjustable of the tonearm mounting plate (and consequently tonearm pivot placement) from the main bearing pivot point in the range of +/- 5mm, ensures great compatibility with wide range of 9 inch tonearms.



Selection of the tonearms

In general Muarah turntable is offered without tonearm and phono cartridge. Exchangeable tonearm mounting plate of the Muarah turntable causes, that practically the only limitation of tonearm selection is its effective length - in the range of c.a. 9 inch. In standard configuration the turntable is offered with mounting plate for Jelco tonearms. On customer's request we can offer free of charge adaptation plate for any 9-inch length tonearm. We recommend following tonearms as best suited to our turntable: Jelco, SME, Morch or Rega top models. We prefer tonearms of low to moderate total weight, but two stage leveling system makes the tonearm mass is not a critical limitation. However as we didn't test our turntable with all tonearms available on the market, in case of any problems in turntable leveling, please contact us via e-mail on: muarah@muarah.pl

Installation

WARNING: it is recommended to involve two persons in the turntable installation process. In the shipping box you can find latex covered gloves, which improve grip and prevent from leaving fingerprints on high gloss parts.

1. At first, please pick up the 3 acrylic disks with chromed cone inserts (cone feet supports). Place the discs in appropriate order and distances - see chart 2.

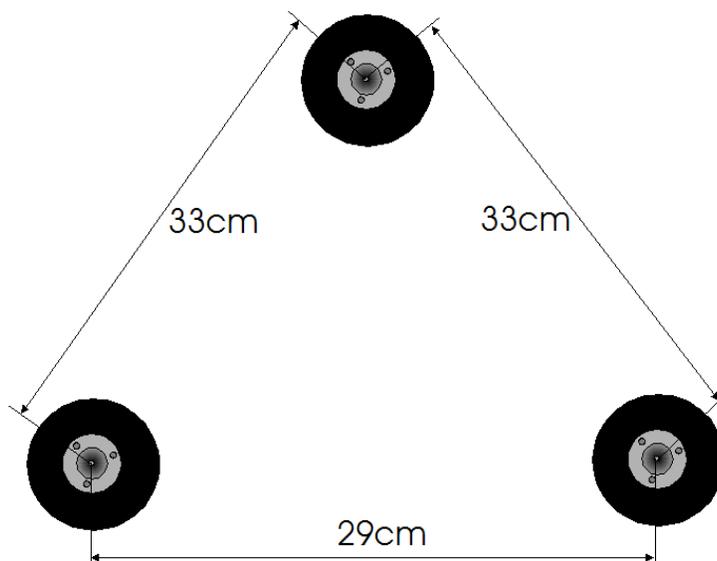


Chart 2: Placement of cone feet supports, distances.



2. Pay attention to place the turntable in appropriate distance from other electronic devices e.g.: amplifier (due to possible interferences). Recommended distance is minimum 20 cm.
3. Carefully move the platter covered in soft fabric. Take off the fabric with patience and then leave the platter in safe place - e.g. on the plate of the packing foam.
4. Pick up the motor and leave it in the safe place as well.
5. Carefully take the main part of the turntable out of the box (the base, main frame, bearing). Please don't hold the main frame but the acrylic base board. It is recommended to use latex gloves, included in the box.
6. The main part of turntable should be placed on acrylic/chrome feet supports, first located in appropriate order according to chart 2.
7. Carefully remove the tape preventing the bearing from spreading away. Please pay attention, not to slide away the bearing roller and sleeve, due to the magnetic force. If carefully proceeding, the upper part of the bearing (the sleeve) after the tape removal should move up a little, but still stay on the roller.
8. Place the platter on upper part of the bearing with maximum care. The platter should gently slide on the bearing, causing little deflection of the turntable suspension to the proper working height - c.a. 23-25mm. At the end, lay down leather mat included in the box on the platter.
9. Unpack the motor from the fabric case. Guide power connector and cable carefully through the dedicated hole in the acrylic base in place of the motor installation - see chart 1. Before motor placement, plug the mini "Jack" connector of the steering cable into the socket on the bottom of the motor housing.
10. Carefully place the motor on the acrylic base, paying attention on proper centring of the motor housing vs. the hole in the upper acrylic base layer. It is very important to prevent from the motor housing contacting with the upper layer of acrylic base, as the direct contact will significantly reduce the turntable isolation from vibrations of the motor.
11. Now it's time to install the tonearm, according to the actual tonearm producer's instructions.
12. If it is required to adjust distance of tonearm pivot from the main bearing pivot point, please unscrew the two bolts, mounting the tonearm support to



the main frame, move the part to achieve required distance and at the end screw on the bolts with moderate force.

13. With platter on its place it is necessary to perform initial leveling of the main frame vs. the acrylic base frame. It is achieved with use of 3 hexagon socket bolts located in cylinders supporting the turntable suspension - see chart 3. If any adjustment of the main frame level is needed, please insert the small hex key (included with the set) into sockets as shown on the picture. Turn the adjusting bolt clockwise to rise the height of main frame over the acrylic base platform.

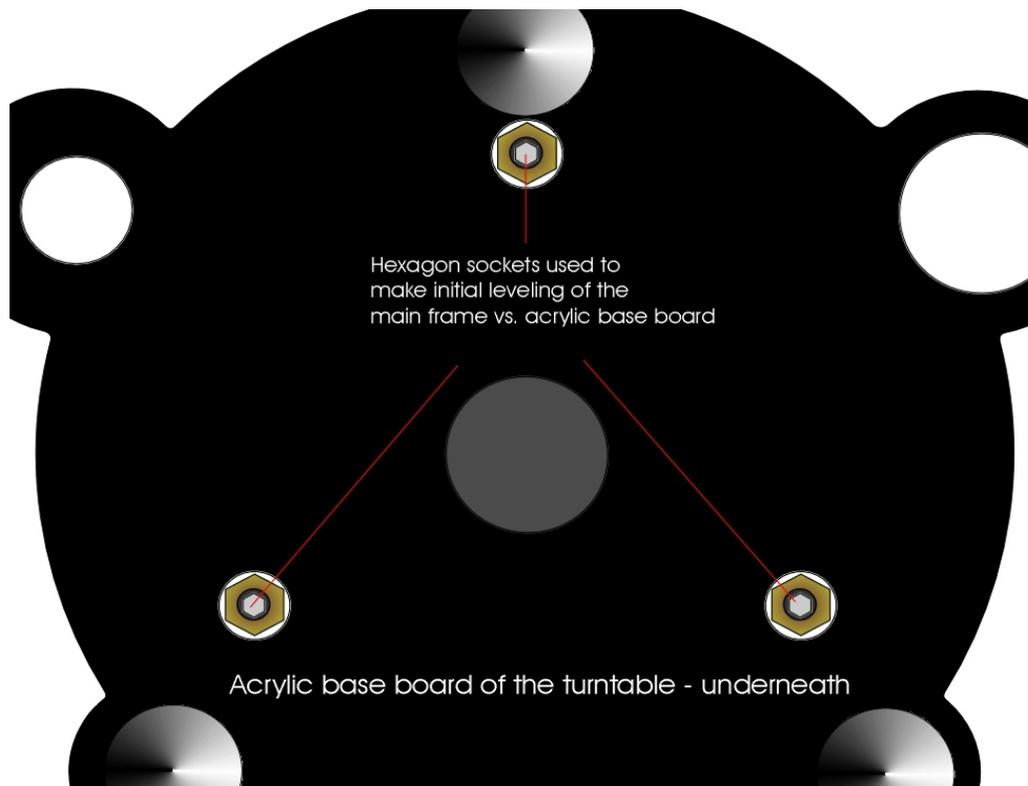


Chart 3 Locating the holes with hex socket bolts used for initial leveling.

14. For best result it is recommended to make the adjustment with the optional record clamp in place.
15. Proper leveling is achieved when close to all cylinders, distance between the main frame and the acrylic base board is equal with 1 mm accuracy. Typically it is in range of c.a. 23-25mm.



16. The next step is final leveling of the entire turntable. It is achieved thanks to chrome plated metal knobs, located in the front area of the acrylic base board – see chart 1 for reference. Turn each knob gently clockwise to lower the turntable height over the ground.
17. If it is necessary to increase height of the rear of turntable, please turn clockwise the rear cone feet, holding it directly by hand (the only feet w/o leveling knob).
18. Optional record clamp is helpful to easily control the leveling result.
19. If the turntable has been moved recently from a place with low temperature or high humidity, please wait at least 15 min prior to the engine first start.
20. **WARNING!** Now it is allowed to input the power connector to the 230V power source.
21. The final installation activity should be rubber drive belt placement on the proper groove on the pulley – depending on the desired rotary speed (33 1/3 rpm – the upper groove, 45 rpm – the lower groove). The drive belt is included in the set.
22. Scheme of the wiring of the turntable in typical Audio – Stereo system with use of phono preamplifier is shown on the following chart:

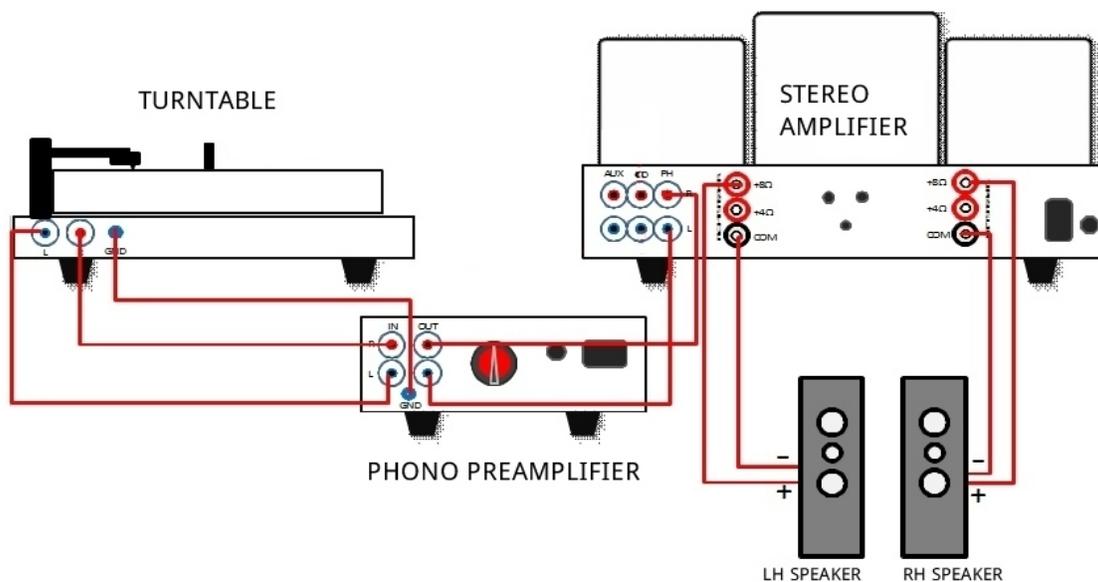


Chart 4: Scheme of the wiring of the turntable within Audio – Stereo system, incl. phono preamplifier.



Turn on / off and change of the platter rotary speed

1. Put the record on the turntable platter and eventually weight it on with the optional Muarah record clamp.
2. Gently finger touch the underneath side of the acrylic base, right below the Muarah logo. If the Muarah logo highlights with a bright-green light, this means that the turntable motor is running.
3. Put the phono stylus on the record surface, following the instructions of the chosen tonearm producer.
4. With the turntable running, you have to finger touch again in the same place under the Muarah logo to turn off the motor.
5. If you often forget switching off the turntable, it is recommended to use the auto-stop function. It will automatically turn off the motor after c.a. 50 minutes. It helps to save the turntable and the phono cartridge from excessive wear and also saves the energy.
6. If after about 50 minutes the motor switches off, this means that auto-stop function is in active mode. If you prefer to deactivate the function, it is possible through moving the small toggle switch on the bottom side of the motor housing (located close to the power cable inlet). In the same way it is possible to activate the auto-stop mechanism, when it's not active.
7. It's not necessary to stop the platter (and motor) each time when changing the record. Use of soft and anti-static mat, made from the genuine leather ensures, that putting o taking off the record, even on rotating platter is safe and doesn't result in excessive static concentration on vinyl. Please note that if the turntable is used this way, it is recommended to deactivate auto-stop function, see chapter 5.
8. Change of the platter rotary speed is done through move of the drive belt between two grooves on the motor pulley:



- a) The upper groove gives speed of 33 1/3 rpm, the most typical and very common for 12-inch, „LP” type of records.
- b) Moving the belt to the lower groove results in platter speed change to 45 rpm typical for 7-inch vinyl singles.

Care & maintenance

- 1) Chrome and lacquer plated, also acrylic parts of the turntable should be regularly dust cleaned with soft cotton cloth or very soft microfiber towel.
- 2) It is recommended to keep the turntable under cover, preventing from dust. We recommend the dedicated clear acrylic cover available in our offer.
- 3) Muarah turntable is designed to operate long time without platter bearing lubrication, however periodic use of attached oil is recommended and once per 6 month is sufficient. It's enough to pour 2 drops of oil into the hole in the bearing spindle. Gentle rise of the platter for c.a. 1cm, helps to transfer the oil deep inside the bearing. It is not needed to take off the platter in order to lubricate bearing, but if you prefer to do so, please pay a lot of attention and in particular prevent from the upper part of the bearing (sleeve) sliding out completely from the lower part (roller).

Safety rules

- 1) The turntable power cable should be plugged to the power source, only if the motor steering cable is connected.
- 2) Motor steering cable “Jack” connector, can be plugged into it's socket, only if the power cable is not connected to the 230V power source.
- 3) It's not allowed to open the motor housing under any circumstances.



Parameters

- Total turntable weight (w/o tonearm and record clamp) 18 kg
- Platter weight 8 kg
- Width 47,5 cm
- Depth 40 cm
- Height (w/o tonearm and record clamp) 20 cm
- Platter height 4 cm
- Record rotary speed supported 33 1/3 rpm, 45 rpm
- The motor AC synchronous
- Motor drive transfer rubber belt
- Tonearms supported wide range of 9-inch tonearms
- Power source 230V, 50Hz

