

music hall

mmf-11

INSTRUCTION MANUAL

music hall
<http://www.musichallaudio.com>

CONGRATULATIONS ON YOUR PURCHASE

You have selected an exceptional turntable. Each component used in the construction of the mmf-11 was selected to provide you with superior performance and the highest level of sound reproduction available today. The precise and elegant design of this turntable makes it easy to install and operate. Please take a few moments to read over the operating instructions to ensure that you get the best performance from your turntable and years of trouble-free service.

SAFETY GUIDELINES

This product is designed and manufactured to strict quality and safety standards. However, you should be aware of the following installation and operation precautions:

1. Take heed of warnings and instructions

Read all the instructions before connecting or operating the turntable. Keep this manual so you can refer to these safety instructions. Heed all warnings and safety information in these instructions and on the turntable. Follow all operating instructions.

2. Water and Moisture

To reduce the risk of fire or electric shock, do not expose the turntable to moisture or water. If the turntable is exposed to moisture, immediately disconnect the power cord from the wall. Take the deck to an authorized Music Hall service center for inspection. Do not touch the turntable, power cord, or plug with wet hands.

3. Object or liquid entry

Do not allow foreign objects or liquids into the unit. If this happens, immediately disconnect the power cord from the wall and take the unit to an authorized Music Hall service center for inspection.

4. Heat

Keep the turntable away from naked flames, radiators, heat registers, stoves, or any other heat-producing appliances (including amplifiers).

5. Climate

The turntable has been designed for use in moderate climates. Do not attempt to use below 41 degrees Fahrenheit (5 degrees Celsius) or above 95 degrees Fahrenheit (35 degrees Celsius).

6. Racks and Stands

Place the turntable on a fixed, level surface strong enough to support its weight. Do not place it on a moveable cart that could tip over. We recommend only using stands approved for use with audio equipment. See the **SITING** section for further suggestions.

7. Cleaning

Please refer to the **MAINTENANCE** section for detailed cleaning instructions.

8. Power Sources

Connect the turntable only to a power supply of the type and voltage described in the operating instructions or specified on the rear panel of the unit.

9. Power-cord protection

Connect the turntable to the power outlet only with the cord supplied. Do not modify the supplied cable in any way. Do not attempt to defeat grounding and/or polarization provisions.

Do not use extension cords.

Do not route the power cord where it will be crushed, pinched, bent at severe angles, exposed to heat, or damaged in any way.

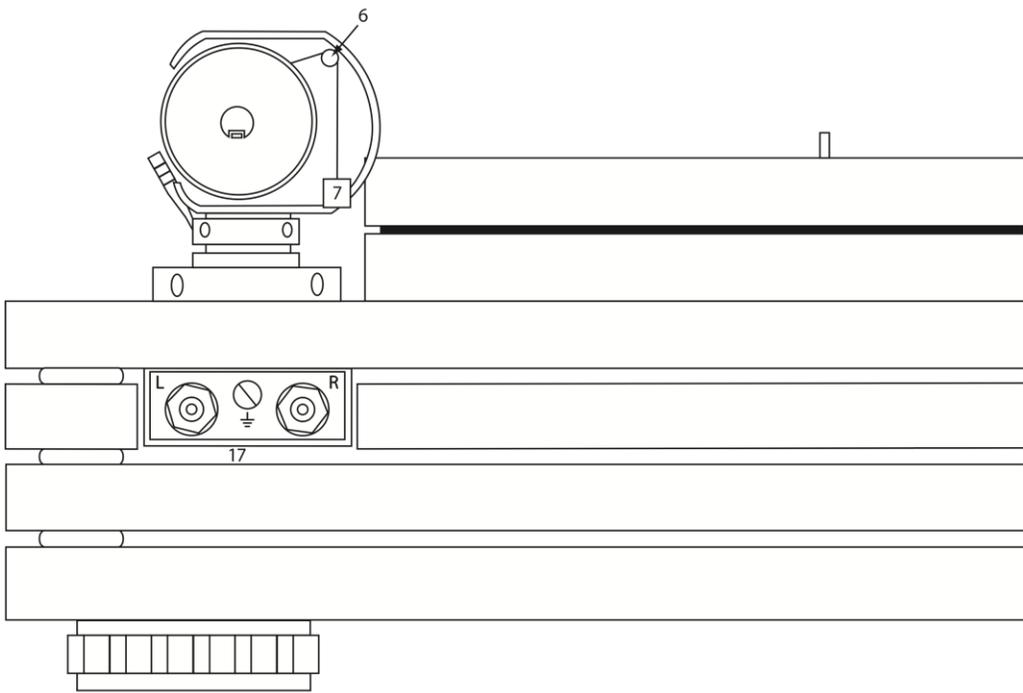
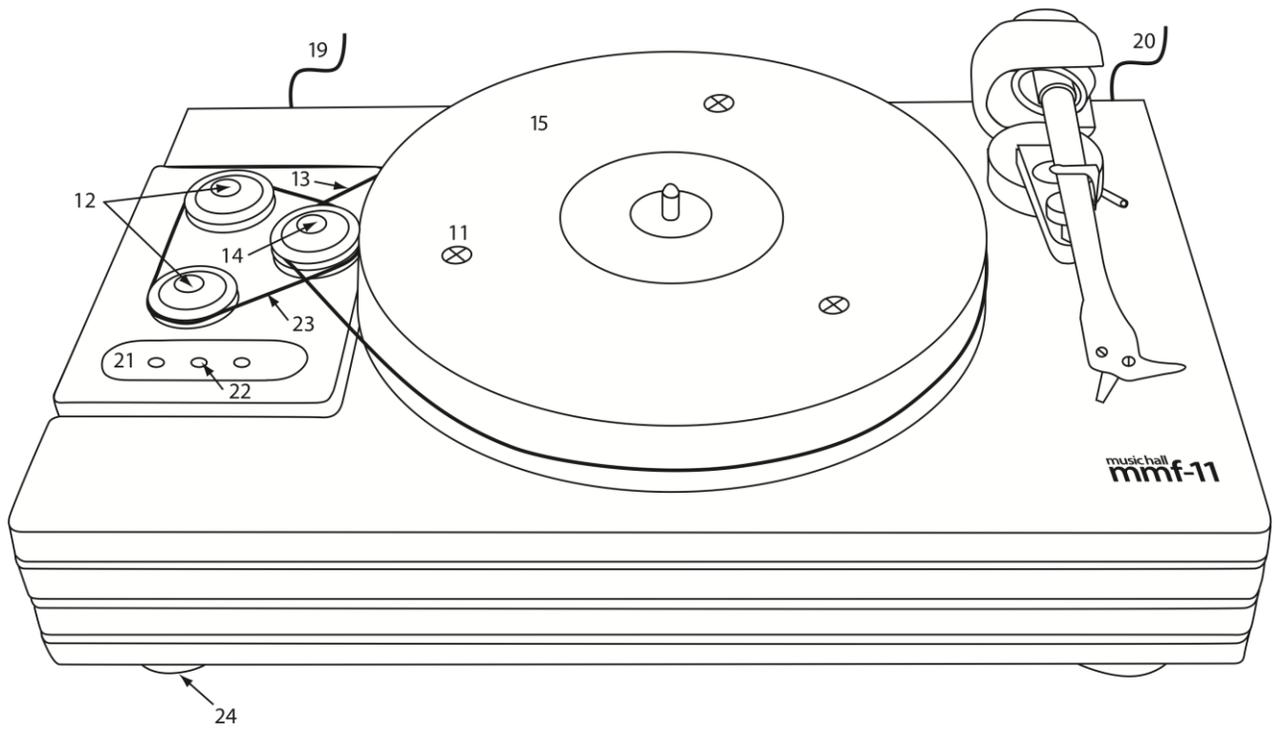
10. Non-use periods

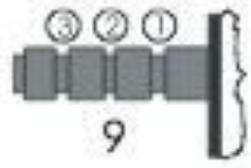
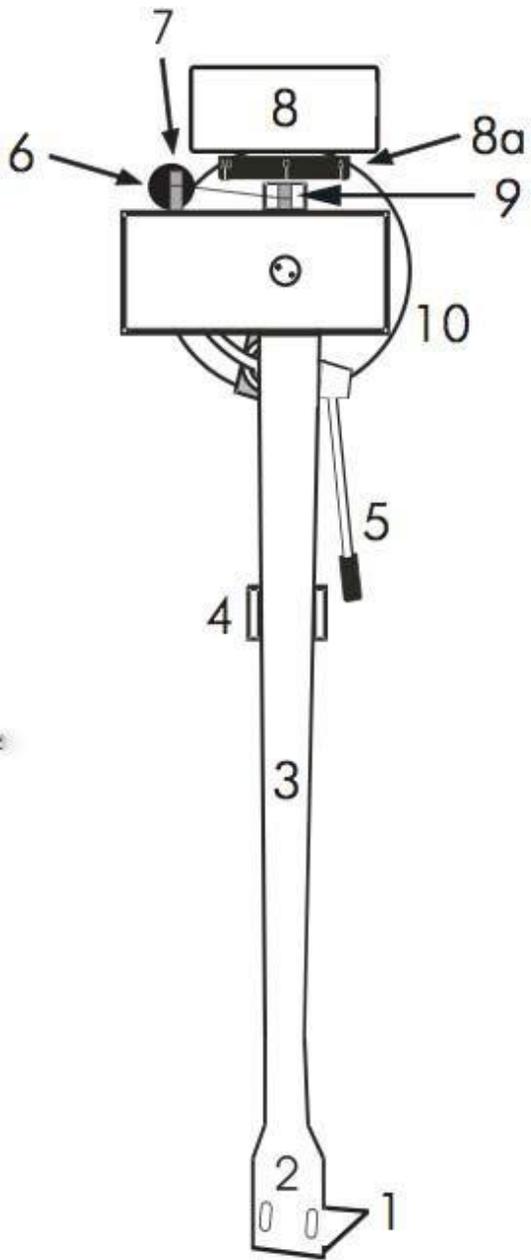
If the deck is to be left unused for a long period of time, the power cord should be unplugged from the wall outlet and the belt removed.

11. Damage Requiring Service

Stop using the turntable immediately and have it inspected by an authorized Music Hall service center whenever:

1. The power supply cord or plug has been damaged.
2. Liquid has been spilled onto the motor or into the bearing well.
3. The turntable has been exposed to rain.
4. The turntable does not operate properly.
5. The turntable has been dropped or damaged.
6. Smoke or any unusual smell is detected from the turntable.





PARTS INVENTORY AND OPERATION CONTROL DIAGRAMS

1. Finger lift
2. Headshell
3. Tonearm
4. Tonearm rest
5. Tonearm lift lever
6. Anti-skating weight hanger
7. Anti-skating weight
8. 3 x Tonearm counterweight (located in packing material)
 - 8a. Tracking force scale
9. Anti-skating weight adjustment rod
10. Tonearm base
11. 3 x Removable transport screw
12. 2 x Motor pulley
13. Platter/flywheel belt (packaged in parts bag – long belt)
14. Flywheel
15. Platter
16. Dust cover (not shown)
17. Turntable output connectors
18. Mat (packaged with platter, not shown)
19. Mains wire connected to power adaptor
20. Removable interconnect cable (included in parts bag)
21. Speed control
22. Stby-stop switch
23. Motor/flywheel belt (packed in parts bag – short belt)
24. 4 x Adjustable foot
25. Power adaptor (packaged in foam insert, not shown)

Parts bag includes:

- 1 x Platter/flywheel belt (13)
- 1 x Motor/flywheel belt (23)
- 1 x Anti-skate weight (7) (tiny weight attached to small piece of fishing line)
- 1 x Allen key to adjust arm lift
- 1 x Allen key to adjust VTA
- 1 x Interconnect cable (20)
- 1 x cartridge alignment guide
- 1 x instruction manual

GETTING STARTED

Thank you for purchasing the Music Hall mmf-11 turntable. The mmf-11 turntable, our flagship model, is a 2-speed belt-driven, audiophile quality turntable with many unique features. It is constructed using a four-plinth design and features two electronic-speed controlled motors driving a single flywheel. The mmf-11 comes in a high gloss black lacquer finish. The table

sits on 4 maglev feet that are made of 2 magnets in opposition causing the whole assembly to 'float'. This further decouples the table from the environment.

THE FOUR-PLINTH DESIGN

The lower plinth is a mass-loaded resonant sink that channels noise and vibration away from the critical sound producing components (arm, cartridge, and platter) mounted on the top plinth. Three platforms are each separated by four Sorbothane hemispheres, which act as a suspension and isolation system. External phono sockets are attached to the top platform. A high quality interconnect is supplied.

THE MOTORS

Two 16-volt synchronous motors connected to an electronic speed control drive a single flywheel. The use of two motors and flywheel increases torque and speed stability while reducing vibration. The electronic speed control runs the motors at 50Hz instead of 60Hz. (A 50Hz motor runs quieter than a 60Hz motor). The motors and speed control are firmly mounted to a separate platform that is connected to the bottom plinth of the turntable. The top three platforms are cut out and float next to but do not touch the motor platform, further isolating them from any possible motor vibration. Placing the motor flywheel system directly opposite the arm stops any motor vibration from entering the cartridge. Speed change from $33\frac{1}{3}$ to 45rpm is done at the push of a button.

THE PLATTER

The belt runs round the perimeter of the 1.5" (38mm) acrylic platter. Acrylic was chosen for its superior sound quality and isolation properties. The platter sits on an incredibly quiet, inverted ceramic bearing.

THE ARM

The tonearm is the 'Project 9cc' Evolution. This is a 9" one piece precision tonearm with carbon fiber arm tube/headshell. Four hardened Swiss ABEC 7 spec ball races are used in an inverted bearing design. The counterweight's center of gravity is level with the stylus tip. It is decoupled from the arm and acts as a resonance damper. The arm also has adjustable azimuth and VTA, a damped arm lift and highly flexible top-grade internal wiring drawn from high purity copper.

This manual provides valuable information that will help you get optimum performance from your system. Please contact your authorized Music Hall dealer for any additional clarifications you may require. **Save the Music Hall mmf-11 shipping cartons and all enclosed packing material for future use.** Shipping or moving the mmf-11 in anything other than the original packing material may result in severe damage that is not covered by the warranty. Be sure to keep the original sales receipt; it is your best record of the date of purchase, which you will need in the event warranty service is required.

SET-UP

The Music Hall mmf-11 is supplied partially disassembled and carefully packaged for safe transport. To assemble the turntable, please follow the instructions carefully.

1. Clear a level (use a spirit level) and suitable workspace to assemble the turntable. This may be the final playing location.
2. Remove the turntable and all parts from the carton.
3. Locate the power adaptor (25) (packaged in a small white box)
4. Plug the small male end of the power adaptor (25) wire into the female receptacle located on the bottom of the turntable near the back left corner. Do not plug the power adaptor (25) into the mains.
5. Remove the 3 transport screws (11) from the turntable and save for future use.
6. Level the turntable by adjusting the feet (24). A bubble level will be necessary for this purpose.
7. Locate the platter (15). Remove the red cap from the bottom. Center the platter (15) over the main bearing and carefully lower it until it rests securely on the main bearing. Locate the felt mat (18) and place on platter.
8. Install the motor/flywheel belt (23). Loop the belt around the motor pulleys (12) and into the bottom groove on the flywheel (14).
9. Install the platter/flywheel (13) belt. Wrap the belt around the platter (15) and into the top groove on the flywheel (14).

- 10. Mount the phono cartridge. If you don't experience mounting phono cartridges, we recommend that you have your cartridge mounted by an experienced technician.**

All cartridges with half inch mounting holes can be fitted. Leaving the stylus guard on, fit the cartridge to the head shell (2) using the screws supplied with the cartridge by passing one screw through each slot in the head shell (2). Snug the nuts.

Connect the tonearm (3) wires to the cartridge pins as follows:

white left channel positive (L+)
red right channel pos. (R+)
green right channel return (R -)
blue left channel return (L -)

- 11.** The MMF-11 comes with 3 counterweights. You may need to experiment with one or more to find the correct counterweight for use with your cartridge. Place the counterweight (8) onto the tonearm (3). To do this, position yourself in front of the turntable. Hold the counterweight (8) so that the numbers are nearer you. Carefully, screw the counterweight (8) counterclockwise onto the back of the tonearm (3).
- 12.** Remove the tonearm-locking strap. Place it in a safe position for possible future transport.
- 13.** Make sure the tonearm (3) is in the tonearm rest (4). Carefully, remove the stylus guard (if your cartridge has one). Save the guard for future use.
- 14.** You will now set the stylus tracking force. For demonstration purposes let's assume we are setting a stylus tracking force of 1.75g. Please note; the tracking force scale (8a) on the counterweight (8) has no decimal point. 10 on the tracking force scale (8a) is actually 1.0 g. 15 is actually 1.5g, etc. 1.75 g is between 17 and 18g on the scale (8a). To set the tracking force you must first balance (zero) the tonearm (3).

The objective of balancing or zeroing the tonearm is to get the tonearm to float parallel to the platter.

First, **lower the tonearm lift lever** (5).

Using your left hand, lift, position, and hold the tonearm (3) between the tonearm rest (4) and the platter (15). To avoid damage, be careful not to allow the cartridge to contact the plinth (the turntable base).

With your free hand turn the counterweight counterclockwise or clockwise until the tonearm (3) floats freely, without the aid of your hand, in mid-air and parallel to the platter. Don't worry about the number on the tracking force scale (8a), you will soon

calibrate and set it properly. Once you have balanced the tonearm, return it to the tonearm rest.

You are now going to set the ring with numbers on the counterweight to zero. This is called the tracking force scale.

The tracking force scale (8a) turns independently of the counterweight.

IMPORTANT

With your right hand hold the rear part of the counterweight to make sure that it does not move.

With your left hand, lightly grip and turn the tracking force scale (8a) until the number zero is in the twelve o' clock position (dead center on top of the counterweight).

The tonearm is now zeroed. Check it, by once again floating the tonearm between the tonearm rest and the platter. If the tonearm doesn't float parallel to the platter with the tracking force set at zero, return to the previous steps and make the necessary adjustments until it does.

Return the tonearm (3) to the tonearm rest (4).

IMPORTANT

Do not touch the tracking force scale (8a) again.

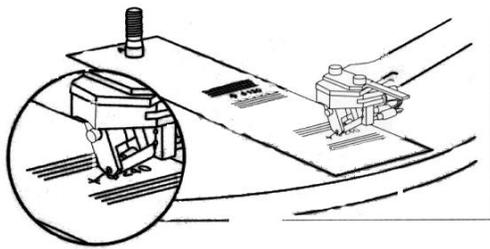
Turn the counterweight counterclockwise with your right hand.

You will notice that the tracking force scale will also turn.

Turn it through numbers 5, 10, 15 to the position centered between 17 and 18 on the scale). This is equivalent to 1.75 grams. The correct tracking force has now been set.

Every arm and cartridge combination has an optimum tracking force. This can easily be set by ear. Increments of 0.1g can produce significant differences. Once the cartridge has run-in (usually about 24 -50 hours of playing time) feel free to experiment with a slightly higher or lower tracking force and pick the one you prefer.

To achieve the best sound reproduction, the cartridge must be positioned precisely in the head shell. To do this, fit the tangency guide (you'll find this in the parts bag. It's a white rectangular piece of cardboard with black lines) over the spindle at point 'A' and onto the platter (15), black lines side up (See diagram below). Remove the stylus guard. Move the tonearm (3) (adjusted for the correct tracking force of your cartridge) to the pattern. When the stylus tip of the cartridge is at points 130mm and 250mm, the front of the cartridge should be parallel to the lines on the pattern. If necessary, slide the cartridge back and forth until the stylus tip is positioned correctly. Tighten the cartridge mounting screws.



VTA Adjustment: To adjust the VTA, lay a record on the platter (15). Slacken the horizontal adjustment screws (two **Allen** screws located in the 11 and 1 o'clock position in the tonearm (10) base with the Allen Key provided.

Move the tonearm (3) up or down until it is parallel to the record surface (As viewed from the side with the tonearm on a non-spinning record in playing position). To do this you will need to alternately loosen and snug the horizontal adjustment screws prior to setting the tonearm on the record. Once the correct position has been found, firmly tighten the screws without excessive force.

VTA like Tracking Force can also be set by ear. Feel free to experiment with VTA positions slightly above or below parallel and choose the position you prefer. If you have any further questions regarding the adjustment of your turntable, please contact your Music Hall dealer.

Azimuth Adjustment: Azimuth is the angle of the stylus to the record groove. Viewed from head-on, you want the stylus to be perpendicular to the record groove so as to not favor one channel over the other. Keep in mind that azimuth is properly set at the factory and rarely needs to be adjusted. You can check the azimuth by performing a visual inspection. Place the tonearm (3) in the middle of a non-spinning record and look (with the aid of good magnifying glass) to see that the stylus is perpendicular to the record groove. If it is off to one side or the other, you will need to adjust the azimuth. Start with the tonearm (3) in the tonearm rest (4).

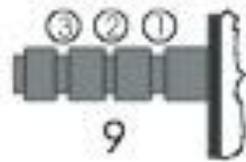
A small Allen setscrew located on the side of the tonearm (3) is used to adjust azimuth. The setscrew is near the rear of the tonearm just aft of the collar that houses the tonearm bearings and in front of the counterweight (8). Slacken this screw just enough to be able to revolve the tonearm (3) from side to side without applying force. **Do not remove the screw completely!**

Under no circumstances should azimuth be adjusted with the needle in the record groove! Irreparable damage may be caused to the cantilever suspension. The arm must be lifted to make each adjustment and lowered afterwards to check it.

Adjust the azimuth by revolving the tonearm (3), small movements are best, until it is vertical in the groove (perpendicular to the record's surface). Once the correct position with the stylus perpendicular to the record groove is found, tighten the setscrew.

Play a record and listen. You are listening for a balanced soundstage with the greatest area and depth. You may need to go back and forth a couple of times to achieve the best setting. Please note that small changes in azimuth make a big difference in the sound.

15. Locate the anti-skating weight (7). You will notice a small fishing line attached to the anti-skating weight (7). Slip the looped end of the fishing line over the anti-skating weight adjustment rod (9) and into notch number 2 (See diagram below). Lift the anti-skating weight (7) over the anti-skating weight hanger (6). The anti-skating weight (7) should now be dangling in free space to the left of the hanger. Refer to the tonearm diagram for better clarification.



16. The dust cover (16) is packed separately and for use when not playing the turntable.

Save all packing materials, parts, and screws for possible future transport

SITING

FLOOR MOUNTING - Place the deck on a small, light, rigid table, e.g., coffee table. Ensure that the table is level on the floor and not rocking.

WALL MOUNTING - Wall mounting may be preferable when the floor is springy or when there is risk of damage by children or pets. The shelf should be light and rigid, and fully supported by, but not firmly screwed or glued to its brackets.

AUDIO CONNECTION

Plug the interconnect cable (20) (found in parts bag) into the turntable output connectors (17) matching black (L) to black and red (R) to red. Attach the small ground wire to the thumbscrew connection. Connect the other end of the interconnect cable to the phono input on your pre-amplifier in the same fashion.

MAINS CONNECTION

Plug the power adaptor (25) into a power outlet and check that the platter (15) spins. To adjust speed ($33 \frac{1}{3}$ - 45rpm) push the correct button on the Speed Control (21). Push the STBY-STOP (22) button to stop the platter spinning.

OPERATION

Place a record on the platter (15) and push the '33' button on the speed control (21). Remove the stylus guard and lift up the tonearm (3) with the tonearm lift lever (5).

Position the cartridge stylus tip above the initial groove of the record. Gently lower the lift lever (5) to lower the stylus (3) onto the record.

To stop play, lift the tonearm lift lever (5) to raise the tonearm (3) and then move the arm back to the tonearm rest (4). Push the STBY-STOP button (22).

To play 45rpm records, first get the platter (15) spinning at 33 1/3 rpm then simply push the '45' button on the Speed Control (22). The platter will increase its speed to 45rpm. Please note, for singles (7-inch records with a large center hole) you will need to use the 45rpm adaptor. Simply, center the adaptor over the spindle and set it on top of the cork mat. Place the single on the platter (15) and play.

MAINTENANCE

The mmf-11 is designed for a long operational life. To preserve the appearance of your deck and maintain its performance, you should note the following points:

*** Make sure the stylus guard is on before you begin cleaning ***

PLINTHS - The plinths are constructed from medium density fiberboard, therefore they should not be subjected to extremes of temperature or direct sunlight. The finish may change slightly with age. A damp cloth or soft duster is ideal for cleaning the plinths: polish, particularly wax-based, can be hard to remove.

PLATTER - The acrylic platter can be cleaned with a soft dry lint-free cloth.

MOTORS - The motors are equipped with self-lubricating bearings. The motor pulleys should be cleaned periodically to remove deposits of rubber shed by the belt. Remove the belt and gently clean with a cotton swab or lint-free cloth dampened with isopropyl alcohol.

BELT - The belt should last for many years. The belt can be cleaned at the same time as the pulleys. The best way to clean the belt is to pull it gently through a damp cloth. If the turntable is not going to be used for a long period of time, it is advisable to remove the belts from the motor pulleys and from the platter rim to prevent stretching.

OIL - The oil supplied for the main bearing provides life-long protection. If oil is lost from the bearing housing, replace it with one drop of Mobil 1 or other synthetic oil containing Teflon.

DUST COVER - This can be cleaned using any commercial acrylic or plastic cleaners. The simplest approach is to remove any dust with a damp, lint-free cloth without rubbing and then use a soft duster. Dust covers are more often damaged in cleaning than in use.

STYLUS - Remove the stylus guard. We recommend a dry, vibrating-pad cleaner. Wet cleaners or soft stylus brushes are not recommended.

TECHNICAL SPECIFICATIONS

speed of turntable: 33 1/3 or 45 r.p.m.
change speed: electronically, luminous buttons
deviation speed: < $\pm 0.1\%$
variance speed: < $\pm 0.08\%$
mechanical distance: > -45dB
electrical distance: > - 65dB
drive: silicone belt over pulley
motor: 2 x synchronous motors, the motor is controlled via
microprocessor
platter: acrylic (11.8 in., 300 mm) weight – (7.4lbs., 3.35 kg)
power: switching power supply (90 – 246 VAC, 47-63Hz) type EU,
UK,USA
electric input: 23W DC
effective arm length: 9in. (230 mm)
effective arm mass: 8.5 g
mounting distance: 8.3 in (212 mm)
overlap: .71 in (18 mm)
angle crank: 24°
course zero error angle: \varnothing 130.5, \varnothing 243.7
force on the tip: 0-3 g
material of plinth: MDF
material of belt: silicone rubber

dimensions of turntable: 21.3 x 13.8 x 7.8 in (540 x 350 x 197 mm)
weight of turntable: 39.5 lbs. (17.9 kg)

Music Hall reserves the right to make technical modifications.

TROUBLESHOOTING

Music Hall turntables are manufactured to the highest standards and undergo strict quality controls before leaving the factory. If, for some reason your turntable is not working properly, please take a few moments to review this list of potential causes.

THE PLATTER DOESN'T TURN, ALTHOUGH THE DECK IS SWITCHED ON:

- The turntable is not connected to the mains power supply.
- No mains at the socket.
- The belt is not fitted or has slipped off.
- The speed control is in standby.

NO SIGNAL IN ONE OR BOTH CHANNELS:

- No connection between the turntable and amplifier.
- Phono input not selected at amplifier.
- Poor contact or broken connection.
- Amplifier not switched on.
- Amplifier or speakers defective or muted.
- Cartridge not wired into the head shell.
- Loudspeakers not connected.

LOUD HUM ON PHONO INPUT:

- No earth connection from cartridge, tonearm, or audio cable to amplifier.
- Ground loop.
- Turntable too close to one or both speakers.

DISTORTED SOUND FROM ONE OR BOTH CHANNELS:

- Record player connected to wrong input of amplifier.
- MM/MC switch on pre-amp incorrectly set.
- Dust on the stylus.
- Needle or cantilever damaged.
- Wrong speed
- Dirty or over-stretched belt.
- Platter bearing dry, dirty, or damaged.

SERVICE

Should you encounter a problem that you cannot solve, please contact your Music Hall dealer. Never return a record player without authorization and without safely disassembling it and correctly packing it in the original packaging. Repairs will only be made under warranty if the unit is returned correctly packaged.

PACKING INSTRUCTIONS

Please remove and store the following parts: the dust cover (16), counterweight (8) and anti-skating weight (7). Fit the stylus guard on the cartridge and attach the tonearm

locking strap to the tonearm (3). Insert and tighten the transport screws (11). Package the turntable carefully and correctly in its original box.

WARRANTY

This entitles you to have the Music Hall mmf-11 repaired free of charge, at our discretion, for one year after the date of purchase, at any authorized Music Hall service center, provided the unit was purchased from an authorized dealer. Your original sales receipt is proof of purchase date. Music Hall takes no responsibility for defects arising from accident, misuse, abuse, wear and tear, neglect or unauthorized repair and/or adjustment. Music Hall cannot accept responsibility for damage or loss that occurs during transit.

The warranty does not cover transportation costs.

CLAIMS UNDER WARRANTY

The mmf-11 should be packed in the original packing and returned to the dealer from whom it was purchased, or, upon authorization, to a Music Hall service center. It should be sent by a reputable carrier, carriage prepaid. Do not send the turntable via USPS (United States Postal Service). Since no responsibility will be accepted for a unit in transit to the dealer, customer, or authorized service agent, customers are advised to insure against loss, damage, or theft.

FOR FURTHER INFORMATION CONTACT:

Music Hall
108 Station Road
Great Neck, NY 11023
Tel: 516-487-3663
Fax: 516-773-3891
<http://www.musichallaudio.com>