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ALEXANDRIA MK III
OWNER'S MANUAL

The Fine Art Of Playing Music
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This is your onwer's manual. The following pages will describe as succintly as possible the assembly of your new Alexandria. Although some operations are self explanatory, we strongly suggest you read this booklet to better understand the vital roles so precisely accomplished by the different key components.

A first grade turntable like your new Alexandria or any other turntable for that matter although built with the finest materials is always somewhat vulnerable. Unlike speakers or amplifiers, turntables require mechanical expertise to reach the high standards of accuracy they are capable of. It is important to set up your Alexandria with the utmost care so it can effectively transmute record groove modulations into outstanding musical performance and enjoyment !

FOREWORD

Total accuracy is the only key to success in this matter where the quality of results can only be as good as the worst level of calibration in any step whether it is suspension calibration, tone arm installation or cartridge alignment.

This boolet is divided in three sections, the what if…., the how to…, and finally the what to do…

The what if…is an informative section about mechanical / sound interaction which will give a comprehensive understanding of the different components and their effect on sound.

The how to… is the heart of the turntable set up which exposes throroughly the procedures to achieve the very best results.

The what to do…will give you a quick check list usefull for trouble shooting and maintenance.

WHAT IF….

In this section, we will often refer to vibration. The stylus vibrates when following the complex record groove and transfers this energy into an electrical signal which will become the sound you hear. This vibration however is also a source of potential problems when ignored or misunderstood. In a turntable design everythin is about vibration and mostly keeping it away from the minute signal emerging from the record and stylus interface. There is a reason for everything in your Alexandria and this section is about understanding the mechanical interactions and their effect on sound

The leveling feet

They control the horizontal plane of the turntable and they are terminated in a convex shapes. The leveling of the turntable is vital to its performance. An improperly leveled turntable will have an effect on the platter spindle and bearing by increasing its drage. This increased drag will be similar to something slowing down the spindle. A loss of momentum will occur and cause the sound to smear loosing punch and focus. The increased drag will also mean more noise accessing through the platter's spindle to the stylus playing the record groove. The effect can be sufficient to overlap with and eliminate the subtle informaion in the record groove. The convex shape offers a very small surface contact. This will have the effect of reducing the access of external vibration to the turntable.

The suspension system

If improperly calibrated many problems will emerge from this innocent looking system. The effect of the suspension system on the sound is so great we could compare it to the sonic differences of a dead sounding recording studio to a live and spacious sounding concert hall.

The reason behind this is simple. All we have to understand is that very subtle signals like the sustain ringing of a bell, the echo of the concert hall, the light and delicate sound of chines or any other breeze like signals are of a very low amplitude which could be equaled or impaired by other signals like unfiltered energy accessing though an improperly set up suspension system. This would have the unfortunate effect of being picked up by the stylus playing the record groove resulting in an increased noise floor resulting in cancellation of low amplitude signals. The suspension set up will also have a tremdous effect ont the stability of the turntable system while playing the record.

The bearing assembly

A few problems can effect the performance of the bearing and spindle systems. The first is one of handling when inserting the spindle in the bearing. If not inserted vertically nicks could occur on the upper bushing. Another is lack of lubrification. With time, the two problems would have a relatively similar effect on sound. The nicks will create a worst than what was described in the leveling feet section . The lack of oil over time will allow the bushing surface to become sticky which will accelarate the wear of both the bushing and spindle. These two problems bear a direct impact on noise increase. Some lubricating oils are not appropriate to be used in the bearing well. Their viscosity surface of the bushings causing inconsistent friction, sonically this would translate into irregular wow and possibly flutter.

The drive belt

An oily drive belt will keep the drive systemp from responding sharply to varying loads. On a record the load is the continiously changing modulations in the groove. In order to maintain the platter's momentum a positive drive is absolutely required. A similar problem also develops with time when the belt looses its properties thus loosing its ability to effectively transmit the motor to platter energy. The impact on sound can be serious; lack of punch, loss of focus.

The record clamp

With the purpose of maximizing the record's stability and mechanical energy transfer through the mat, the record clamp will cause damage to your records if overtightened. The outer edge of the record could lifted off the surface of the mat causing sonic problems due to non-horizontal plane. Simultaneously the energy transfer to the mat would be reduced causing the sound to become harsh.

The phono lead

When improperly or not secured to the plinth the phono lead will exert a tension on the suspension keeping it from effectively filtering unwanted energy.
This energy will go past the suspension system and effect the stylus playing the record groove causing confusion in the sound you hear. This will also smear the sound. Another problem is one of feed back where the phono lead offers a direct link to the subchassis.

The hardware

The mounting hardware for the tone arm or the cartridge also bears an important responsibility with regard to the sound quality. A muddly sound can often be related to this. Loosde mounting screws increase vibration resulting in muddiness of the sound you hear.

The cartridge alignement

The final element in what if…section is often taken with a grain of salt. Being in the ball park is far from sufficient: for this the calibration has to be dead in the middle of home plate. Minute positionning of the cartridge away from the exact position in any direction bears a tremendously detrimental impact of the sound quality…beware !

How to pack and unpack your Alexandria turntable

- *remove the inner box by lifting it straight up and out. Open the flaps on both ends of the inner box and slide out the styrofoam packaging assembly.*

- *Remove the straps binding the packaging assembly together.*

- *select a clean, flat work surface, lie a table or counter top for setting up the turntable*

Note 1. Your Alexandria packaging has an important role to fulfil

- *The front piece is designed to stabilize the platter and the forward movement of the plinth. The rear piece on top of stabilizing the platter contains the accessories, the record clamp, the power supply, the tool kit, the drive belt and the oil. It also stabilizes the plinth from moving back in the packaging.*

- *the side pieces support the dust cover and stabilize the turntable against vertical and lateral movement.*

The unpackaging procedure must be as follow

- *remove the dust cover*
- *remove the front piece of the packaging*
- *remove the rear piece with all accessories secured and set is aside*
- *remove the platter by sliding it our from the front of the turntable*
- *standing in front, lift the turntable from underneath with your right hand the left side piece of the packaging and push it out toward the rear.*
- *Repeat the operation on the right side.*

To pack your Alexandria, repeat the above procedure in a reverse sequence. Do not forget to protect the plinth side edges with polyethylene wrapper or 2 lawyers of " plastic wrap" before sliding the side pieces of the packaging. Failing to do so could result in scratching the delicate surface of the plinth.

Note 3: Do not forget to drain the bearing well before shipping the turntable.

Note 4: Do not forget to protect the accessories individually when putting in the rear piece of packaging and to secure them with a wide piece of tape.

Note 5: If any counter weights or other loose parts must be sent with you Alexandria, they must be fitted from the rear of the turntable in one of the side piece cavity under the plinth. Make sure to protect each parts individually and to secure them with wide tape to keep from flying loose!

Note 6: Your Oracle's packaging has been designed to protect is from the abusive normally encountered during shipping. Please save all packaging materials for use in any future shipping.

Assemble your Alexandria

- *Install the platter without the drive belt being carefull to insert the spindle vertically in the bearing assembly.*
- *note 1: Do not remove the transit screws*
- *note 2: Do not pour the oil in the bearing well at this time*
- *Put the mat on the platter*

Install the tone arm and phono cartridge

Note: We begin the assembly section with this topic because it is simpler to work on the turntable without accessories. Furthermore, with the transit screws in place the mounting plateform is rigid making all adjustments safer.

- *Install the tone arm following the manufacturer recommendations.*

-note 1: The cutting of the arm board can sometimes be troublesome on top of being a potential hazard. The use of an adequate tolling is important to both accuracy and safety. Oracle can supply a pre-drilled arm board for mostly any tone arms available.

- *Make sure to properly secure the arm mounting hardware.*
- *Mount the cartridge to the head-shell using steel or aluminium screws to allow a rigid installation.*
- *Tighten the screws so the cartridge can be moved in the headshell.*

Precisely align the phono cartridge

- *Block the platter to prevent it from turning*
- *Aime the calibrator disc on the platter over the mat*
- *Adjust the stylus pressure to approx. 1 gram.*
- *Move the tone arm and cue it down on the alignment grid*
- *Check for the arm tube to be horizontal with the surface of the platter and adjust the height accordingly*
- *Bring the tone arm over the center of the grid again and lower it. The stylus tip must fit in the pin hole in the center of the grid. If not, position the cartridge so it does.*
- *Precisely align the body of the cartridge with the lines on the grid.*
- *Secrure the cartridge screws and repeat the preivous operation.*
- *Check the azimuth by lowering the stylus over the black portion on the calibrator disc. The reflection will help determine if the cartridge is off its vertical axis.*
- *Note: The azimuth is the vertical position of the stylus relative to the record groove when viewing it from the front. The proper setting is 90degrees.*
- *Check the stylus pressure and adjust to specifications*
- *Install the stylus guard to complete the assembly of your Alexandria*

Note: Do not install the phono lead at this time.

- *Carefully remove the platter.*
- *Remove the three transit screws*
- *Install the platter without the drive belt*

Assess the suspension calibration

Note: The correct approach to assess or calibrate the suspension system is the following:

- *Always start with the suspension module located near the tone arm then move to the rear left module and finally to the front left module*
- *Never remove more than one supsension cover at the time. When the assessement or calibration is completed install the suspension cover on that module before moving to the next.*
- *Remove the cover on the right suspension module*
- *Locate the suspension gauge in the packaging*
- *Position the suspension gauge on the subchassis. If the lip is above or below the level of the plinth, a suspension calibration will be required.*
- *Proceed to step one of the next topic if the lip of the gauge falls below the surface of the plinth.*
- *Proceed to step five of the next topic if the lip of the gauge is above the surface of the plinth.*

Calibrate the suspension

The springs supplied with your Alexandria are the following:

Grey_ in the front left module
Red_ in the rear left module
Green_in the right module

This spring combination will accommodate most tone arms. In the unlikely event that you require a different spring that the one supplied, we can supply a yellow spring which is between the grey and red in strenght and a blue spring which is stiffer then the green. The color coding can be seen from the inside prt of the spring at the wider en.

Step One

Removing a suspension module from the plinth.

- *Unscrew the upper cover.*
- *With one hand lift the plinth, hold the lower cover with the other.*
- *Pull the module out from under the plinth and use the upper cover to gently seat the plinth on.*

STEP TWO
Pre-loading the spring.

Note 1: The spring holder has a deep thread to offer a positive hold of the spring.

Note 2:The reference to clockwise or counter-clockwise must always take into account viewing the spring from above.

Note 3: By hand the spring can only be rotated counter-clockwise in its holder but, using pliers, it can be held near the tip at the wider end. It is then possible to move it backwards. If this can not be done, rotate the spring counter-clockwise until it comes out and thread it back in from under the holder to the recommended adjustment. Carefully install the spring so it is threated straight in the holder.

- *Adjust the spring so three coils are showing below the holder.*

Note 4: Before installing the spring back into the module pull on the spring at the wider end to stretch it, this will have the effect of allowing it to seat well in the thread.

STEP THREE
Preparing the spring module

Note: The upper spring damper ismounted on a nylon sleeve.

- *Install the two felt dampers in a criss-cross pattern in the slotted section of the stem.*
- *Install the upper spring damper over the stem.*
- *Install the sorbothane damper over the spring holder and seat it well around the lip.*
- *Install the spring assembly over the upper spring damper.*

STEP FOUR
Mounting the spring module to the plinth.

- *Lift the plinth and remove the upper cover.*

- *Insert the module from under the plinth making sure to properly fit the sorbothane damper in the recess of the subchassis.*

- *Guide the lower cover to seat in the counterbore of the plinth.*

STEP FIVE
Loading the suspension

Note1: Before moving into this step the mat, an old record and record clamp must be in place on the platter.

Note2: Do not install the drive belt nor the phono lead to prevent any bias in the interpretation of the calibration.

- *Install the suspension calibration gauge on the subchassis,near the springs.*

Note3: With the spring adjusted as per step 2, the lip of the gauge should be well above the surface of the plinth. If the lip is bleow, this is an indication that the spring used is not suited for this tone arm application, it is too weak. Identify the color code anduse the following stiffer spring. Start the procedure from step one.

- *Rotate the spring counter-clockwise by increments of ¼ of a turn. Apply a pressure on the record clamp to stretch the spring prior to taking a new reading.*

- *Repeat this operation until the lip of the gauge is nearly flush with the surface of the plinth. At this time, reduce the increments to 1/8 of a turn or less until the lip is perfectly flush with the surface plinth.*

Note4: In the event that the lip of the gauge goes below the surface, start the procedure from step one, gain.

Note 5: Once the proper adjustment is achieved, it is important as a final check to verify the relative position of the bottom of the spring with its holder. This can be done by simply lifting the plinth just enough so you can see the spring. If you can see the spring anywhere from almost flush to the spring holder to up to 3 soils out, the spring is in a safe range and the risk of collapsing is non existant. If the spring can not be seen showing below the holder a carefull inspection should be performed on this spring to make sure it is still at less than ½ turn inside the holder, This is an indication that the spring is approaching its limit. The use of a softer spring should be considered. Failing to do so could eventually cause the spring to slip out ot its holder reuslting in potential damages to your record and your phono cartridge.

- *Install the upper cover making sure to seat it well in the counterbore of the plinth.*

Dress the phono lead

- *Attache the phono lead to the base of your tone arm.*
- *Secure the lead to the strain relief clip below the plinth.*

Note 1: The lead must create a loop from the base of the tone arm to the strain relief clip. This is done to prevent any interferences of the lead with the suspension system.

Note 2: In some application , the phono wire might be too stiff, it is then recommended to split the molded wire from the plug to the strain relief.

Note 3: If the loop is too long, the lead might come in contact with the table below the turntable. If it is too short, it might keep the suspension system from moving freely. In both cases, it will be detrimental to the sound.

Lubricate the bearing assembly

Note 1 : The special lubricating oil supplied with your Alexandria is designed to protect and preserve the mating parts for many years.

- *Remove the platter*
- *Porr the content of one vile (appx.2 cc) in the bearing well.*

Note 2: Unless contaminated with dirt or alcohol, this lubrication will last for many years.

Install the belt

Note 1: To reduce contamination problems, wash your hands prior to handling the drive belt.

- *With the platter upside down, place the belt around the hub.*
- *Bring the platter over the bearing and lower it straight down holding the belt stretched beyond the machined groove in the platter.*
- *Guide the drive belt around the motor pulley when the spindle first stop over the oil in the bearing.*

Note 2: Do not attempt to rotate the platter at this time since it is not yet fully seated against thrust pad. The spindle will first rest over the oil creating an hydraulic lock and the weight of the platter will gradually allow if to seat against the thrust pad. This whole process should be completed withtin one minute.

Note 3: In the event that the drive belt becomes contaminated, clean it with denatured alcohol. Clean the motor pulley and the drive hub at the same time.

Remove the platter with the drive belt installed

-Place one hand at the rear over the motor, one hand at the front, lift the platter about 25cm (one inch) and with one finger pull the belt off the motor pulley, then lift the platter straight up.

Install the dust cover

Note:The hinges are already mounted to the dust cover.

- *Slide the hinge flap in the anchor plates at the rear of your Alexandria.*

Connect the power supply

- *Plug the supply output to the turntable input receptacle at the rear of the turntable.*
- *Plug the input cord to an AC outlet.*

Note: Keep the power supply away from the signal carrying leads

Adjust the 33 and 45 speed

Note 1: All ajustments are located at the front right of the turntable and are accessible from below the plinth.

- *Select the 33 speed and check for accuracy, if a slight adjustment is required, do not correct it yet.*

- *Select the 45 speed and check for accuracy.*

- *I f both need to be corrected, select the 33 speed again using the small screwdriver supplied, rotate the potentiometer located directly below the speed indicating light until the strobe mark on the calibrator disc come to a standstill position,*

Level your Alexandria

Your turntable is now ready to be moved to its final emplacement. It is most probable that the level will differ with the location where the turntable was set up.

- *Level the plinth by turning the leveling feet terminating to the lower cover. The use of a carpenter level will be required.*

WHAT DO TO IF….

IF THE TURNTABLE DOES NOT START AND THE SPEED INDICATING LIGHT DOES NOT GO ON.

- *Check AC connection to the wall outlet*
- *Power supply output plug to the input receptacle of the turntable*
- *Power supply output , if no output, replace the fuse inside.*

IF THE TURNTABLE DOES NOT START AND THE SPEED INDICATING LIGHT GOES ON

- *Check the drive belt*
- *Motor connection plug for a broken wire*
- *Drive module for a broken wire*
- *Defective drive module*

IF THE PLATTER IS NOT PARALLEL WITH THE PLINTH

- *Check the suspension calibration using the suspension gauge*
- *Note: if a relatively important change occurred in one particular suspension module, this could be the sign of an improperly seated spring or sorbothane ring, analyze each part carefully prior to calibrating the supsenion*
- *Read: section How to….assess the suspension calibration*
- *Read: section How to….calibrate the suspension*

IF AN EVEN UP OR DOWN MOTION CANNOT BE OBTAINED WHEN GENTLY PRESSING ON THE RECORD CLAMP.

- *Check leveling of the base*
- *For the phono lead interference with the movement of the suspension. If uncertain, unplug the lead.*
- *Previous topic: …do if the platter is not parallel with the plinth.*

We are confident your new Alexandria will give you many years of satisfaction.
You are not ready for the real and only purpose of all this…to sit down and relax, to just listen and enjoy beautiful music.

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