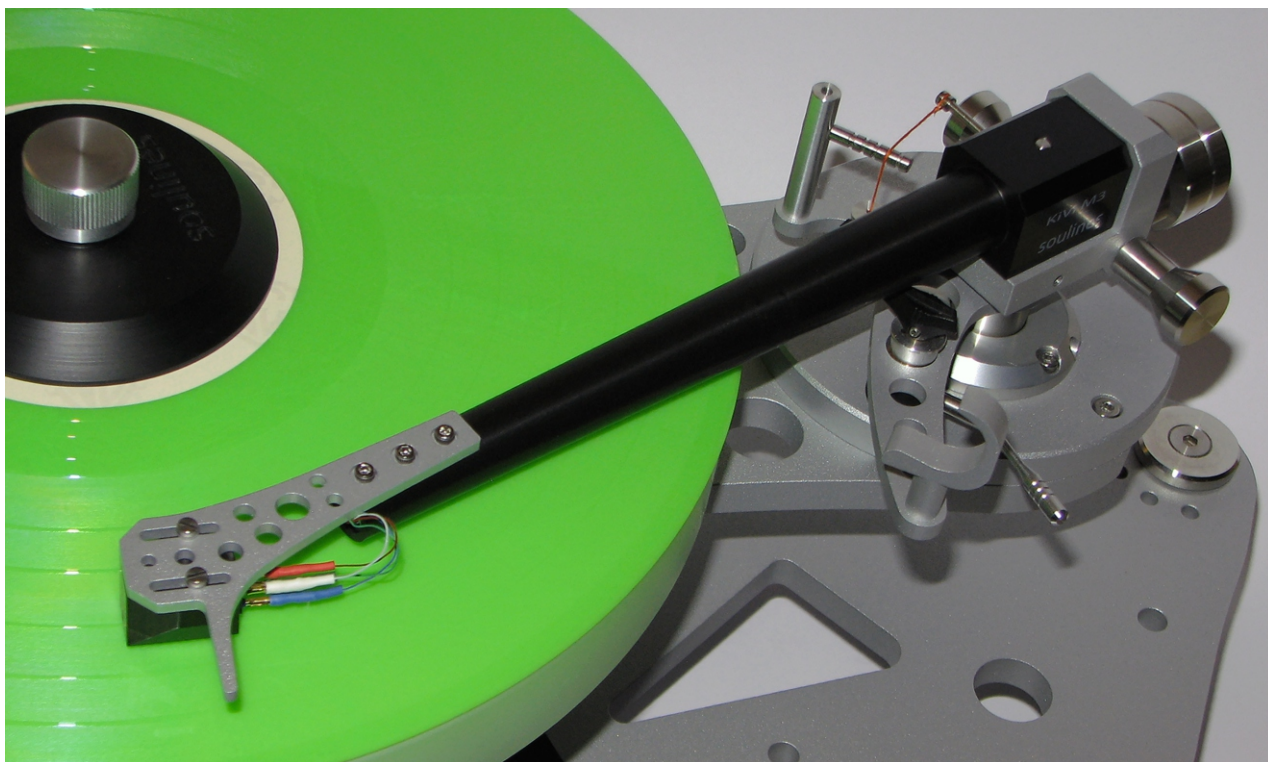


Soulines KiVi M3 tonearm is based on the "mass distribution" principle respect and understanding, which resulted in the unique design of the bearing yoke and arm tube, becoming a one piece element. Following that principle, required also a specifically designed counterweight assembly, as well as a captive uni-pivot bearing, or a "false" uni-pivot.

Combination of all these elements resulted in the tonearm with the impeccable tracking abilities, life-like dynamic response and neutral sound, allowing cartridge to show its virtues.



Captive uni-pivot bearing consists of three hardened stainless steel balls and a precisely machined stainless steel pivot. The pivot point is centred between the balls which are in turn held captive by the Derlin cup. This bearing may look as a "classic" uni-pivot, but in fact it is a more sophisticated design, eliminating the unwanted "skating" of a "classic" uni-pivot bearing. In operation this bearing behaves and "feels" more like "rigid" bearing (gimballed) design tone arms, preferred by the majority of end users, due to easier cueing.

Tapered arm tube (wand) and bearing yoke are designed as a one piece component and machined from a solid Derlin (POM-engineering plastic) block to the highest accuracy and precisely drilled all the way through, afterwards. This is an expensive and complex manufacturing process involving many machining operations, but in turn produces an almost ideally shaped arm tube and in this case a bearing yoke as well. That shape without joints is very stiff, far more so than a standard arm tube and also as the taper extent to the thickness of the arm tube walls as well, with the walls being far thicker near the pivot, it effectively reduces standing waves, spreading them in a way that a parallel sided arm tube can not, and also channels away sound-damaging resonances further from the head shell/cartridge, where they have the most negative impact on the sound. Being a non-resonant material, Derlin (POM) also contributes to the more natural sound, without the ringing/rattling and other disturbing side effects that might occur when the arm tube is made from aluminum, stainless steel and other similar materials.

Derlin arm tube with the upper bearing yoke part also forms the bearing carrier. Mass loaded lower part of the bearing yoke which is aluminum made carries the counterweight stub and the side stainless steel stabilizers and it is rigidly bolted to the Derlin arm tube and the upper bearing yoke part.

Such assembly balances (and stabilizes) masses around the arm in such a way that when the cartridge tries to twist the arm at music frequencies the inertia of the arm alone holds it steady and also contribute to the efficient damping of the resonances which will inevitably reach the pivot bearing end of the arm tube, pointing them out of the Derlin arm tube with the upper bearing yoke part to the mass loaded lower part of the bearing yoke, stainless steel stabilizers and counterweight assembly and not reflecting them back towards the head shell/cartridge.

Further, such arrangement places the center of mass of the moving arm parts just below the pivot point and approximately into the same horizontal plane with the LP record, thus allowing almost perfect LP record grooves tracking, which in turn results in excellent dynamic response and neutral sound.

Being already balanced by its specific design, the KiVi M3 tonearm allows an elegant counterweight and VTF (vertical tracking force) adjustment solution. In order to achieve the required VTF (vertical tracking force) for the wide range of cartridges, from the light (5g) to the heavy ones (up to 15g), the KiVi M3 tonearm is supplied with 4 different stainless steel counterweights which are used in the pairs-combinations. Counterweights are of the same diameter, but different thickness (weight) and fixing the counterweights pair in the desired position (required VTF) is gained by tightening-rotating them towards each other; along with simplicity in use, it also allows precise setting of the VTF up to tenths of a gram.

Central arm pillar is precisely machined from the stainless steel and the phono 5-pin output socket is located at the bottom of it, when the tonearm is acquired separately.

When the tonearm is included with Soulines turntable models, instead of 5-pin output socket the quality phono interconnect cable is permanently attached (soldered) at the bottom of the central arm pillar.

Arm height or VTA (vertical tracking angle) is adjusted by vertical movement of the central arm pillar in the aluminum arm base. Locking the tonearm at the desired height is done by two M4 grub screws located at the vertical collar of the arm base.

The head-shell is machined from aluminum alloy, sand-blasted and powder-coated in order to damp as much as possible the sound damaging resonances transmitted from the cartridge body to the head shell. It is rigidly bolted to the arm tube aluminum insert, in a way where the semicircular upper part of the arm tube wall is clamped between the aluminum insert and head shell. Along with clamping the aluminum insert also serves as a grounding post, effectively grabbing RF and EMI interference occurring close to the cartridge and passing them through the grounding wire all the way to the phono pre-amp chassis.



Cartridge Azimuth is adjusted by the rotation of the Azimuth adjustable counterweight, located at the back of the bearing yoke; Azimuth counterweight's correct position is secured by its M4 grub screw.

The anti-skate thread is attached exactly in the horizontal plane where the pivot tip is in contact with the bearing balls, meaning that it pulls only in that plane, thus not trying to twist the arm as it pulls.

Further, the tonearm wires, which usually represent a problem, as they inevitably offer resistance to the arm movement, because they bent as the arm move, are assembled in a way to enter the central arm pillar below the pivot point and as close to it as possible, so that the effect is minimized.



Mounting requirements

- **pivot to spindle distance** of **222-224mm** (223mm ideally)
- **center hole** of **25mm** in diameter and three holes for fixing screws/bolts of up to 3.5mm in diameter, dotted around the center hole.
- **minimum height** from the **arm board top** to the **platter top** is **30mm**, and **maximum** is about 45mm.
- **mounting plan** is similar to the newer Rega tonearm models (RB202, 220, 303, 330, 808, 880, 1000, 2000) with the same pivot to spindle distance of 222-224mm and center hole of 25mm (Rega's center hole is 24mm in diameter) thus any arm-board cut-out for the newer Rega tonearms could also be suitable for the mounting of the Kivi M3 tonearm

Effective length: 240mm

Effective mass: >15

For cartridges weighing from 5g to 15g

Included with the tonearm:

- tools and accessories - different Allen keys, arm base mounting protractor
- cartridge protractor alignment tool printed on 300gr paper including Baerwald, Lofgren and Stevenson protractors
- quality digital scale where the VTF (vertical tracking force) is measured at the "LP record level"

Kivi M3 user manuals follows, thus you can have better insight into the tonearm construction, features and set-up.

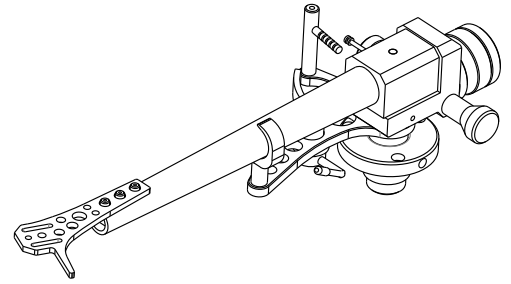


KiVi M3 tonearm

soulines

Thank you for purchasing the Soulines KiVi M3 tonearm!

Before unpacking and installing your tonearm, read this manual carefully and with understanding. Strictly following the instructions in this manual will help you to minimize the possibility of damage to the tonearm and/or cartridge during unpacking, assembling and setting. This tonearm is designed and manufactured to the highest specifications and rigorously tested, but only its correct installation and set-up will reward you with many years of listening pleasure.



General & Cautions

Soulines KiVi M3 tonearm utilizes uniquely designed **captive uni-pivot bearing**, which may look like a "classic" uni-pivot, but in fact it is a more sophisticated design, eliminating the unwanted "skating" of a "classic" uni-pivot bearing. In operation this bearing design behaves and "feels" more like "rigid" bearing (carrdan) design tonearms, preferred by the majority of end users.

The **captive uni-pivot bearing** assembly is **very delicate**, so please **take utmost care not to accidentally damage it**.

Never apply and **excessive force** to the **bearing yoke**, or try to pull it straight up from its normal position (pivot "seating" in ball bearing), cause it will most certainly damage the delicate signal wires running inside of tonearm and might damage the captive uni-pivot bearing delicate parts, the pivot point and the bearing balls.

When installing the tonearm **do not remove** the **bearing yoke transit screws** and **protective Acrylic insert** till the moment it is **instructed to do it by this manual** (chapter 8).

Please **avoid handling** the tonearm **by the bearing yoke and arm tube**; instead, please **handle it by the lower supporting plate**.

Do not undo or **tighten** any of the **bolts and screws** which are **indicated** as "**not user serviceable parts**".

Please **note** that **the sound** of **brand new** tonearm will **improve** over the **first 40-100 hours** of **running time** as **wires burn in**.

GUARANTEE

Your Soulines KiVi M3 tonearm is guaranteed against any defect in materials and workmanship for a period of two years from the date of purchase.

There are no user-serviceable parts inside your Soulines KiVi M3 tonearm.

If a fault should develop, refer any servicing to your appointed Soulines dealer, distributor or Soulines approved service agent.

All claims under this guarantee must be made through an authorised Soulines retailer.

If equipment returned for repair to Soulines is found on inspection to comply with the product specification Soulines reserves the right to make a charge for examination and return carriage.

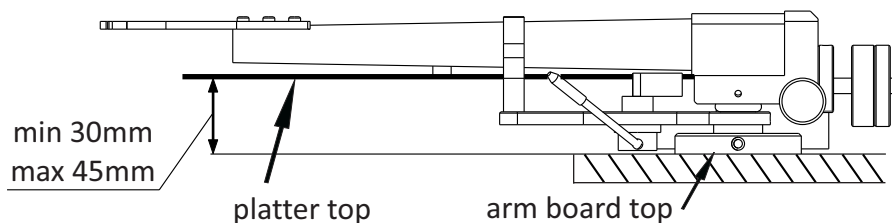
This guarantee excludes:

1. Damage caused due to accident, misuse, neglect and incorrect installation, adjustment or repair.
 2. General wear & tear
 3. Liability for damage or loss during transit from the retailer or purchaser to Soulines or its authorised distributor for the purposes of repair or inspection.
- Carriage costs to Soulines shall be borne by the consignor.

Mounting requirements

Tonearm mounting varies depending on the make of your turntable.

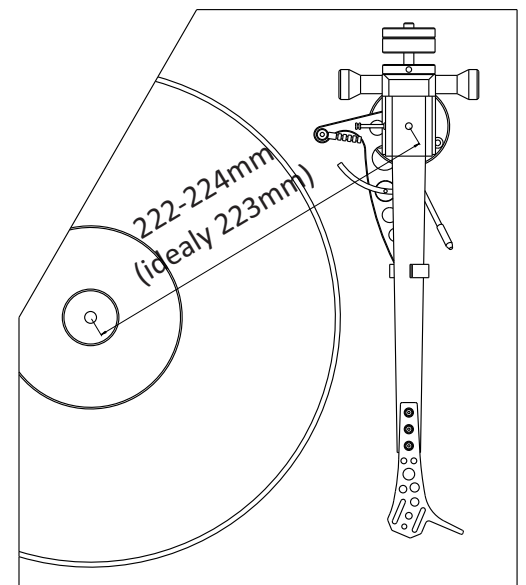
KiVi M3 utilizes the mounting plan with the required **pivot to spindle distance** of **222-224mm** (223mm ideally), **center hole** of **25mm** in diameter and three holes for fixing screws/bolts of up to 3.5mm in diameter, dotted around the center hole.



KiVi M3 can be raised approximately 15mm using tonearm height (VTA) adjustment.

Minimum height from the **arm board top** to the **platter top** is **30mm**, and **maximum** is about **45mm**. However, the **performance** is **optimized** with the tonearm **raised as little as possible**.

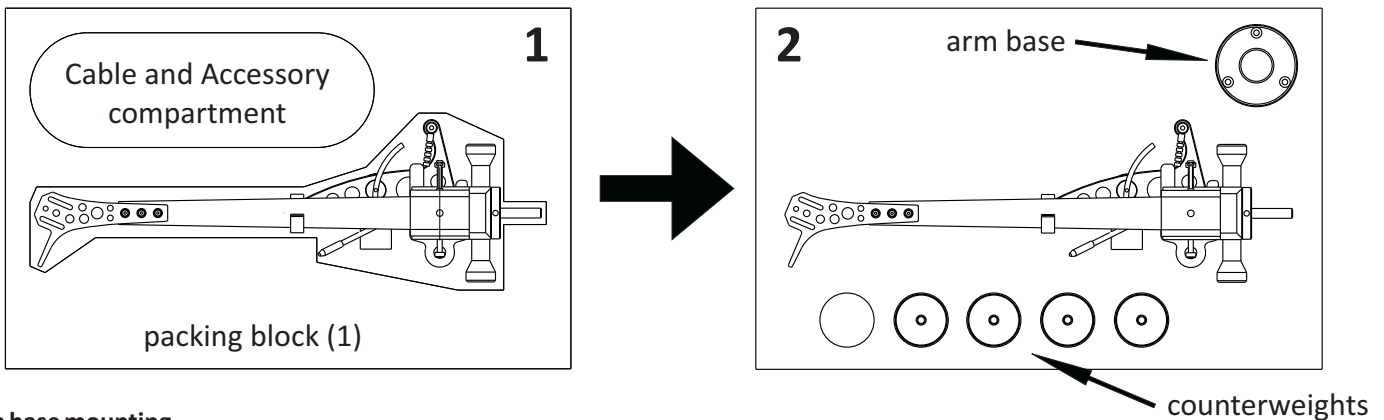
KiVi M3 mounting plan is similar to the newer Rega tonearm models (RB202, 220, 303, 330, 808, 880, 1000, 2000) with the same pivot to spindle distance of 222-224mm and center hole of 25mm (Rega's center hole is 24mm in diameter) thus any arm-board cut-out for the newer Rega tonearms could also be suitable for the mounting of the KiVi M3 tonearm.



UNPACKING

Your KiVi M3 is carefully packed so that packing can be re-used whenever you need to transport it. Please store all the packaging material for future use. After removal of the top packing block, the tonearm itself, interconnect cable (if included) and Accessory zip plastic bag will become exposed;

1. Please remove the tone-arm interconnect cable and Accessory zip plastic bag from their compartment and put aside.
2. Carefully remove the packing block (1) surrounding the tonearm itself, leaving the tonearm in the pack, to be taken out later on; removal of packing block (1) will expose the arm base (3) and 4 different counterweights; Please remove all of them from the packing.



3. Arm base mounting

Please use the supplied **arm base mounting protractor** to mark the centers of the holes (center hole of 25mm and three holes for the locking screws/bolts) which should be drilled/machined on your turntable/arm board, so the **arm base** can be mounted. It's best to use a longer **sewing needle** as a **marking tool**, punching/passing it through the centers of the holes on the supplied arm base protractor and mark the centers for the holes which have to be drilled.

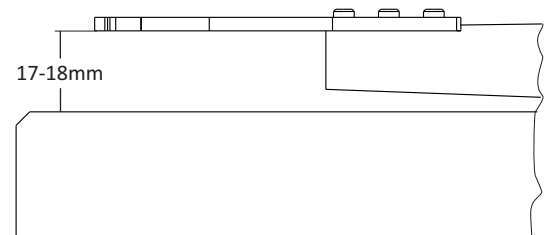
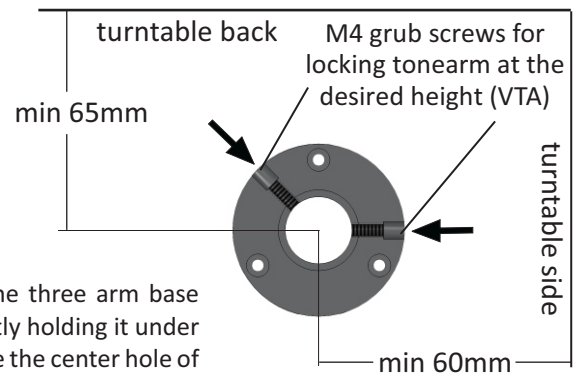
Please take care that the arm base should be mounted onto the turntable in such a way to allow easy access to the two M4 grub screws which lock the tonearm at the desired height (VTA). Recommendations for the minimum distances from pivot to the back edge of turntable and from the pivot to the side edge of the turntable are 65mm and 60mm, respectively. Please observe carefully figure on the right, before you start any marking/ drilling/ machining on your turntable.

Please note that the arm base fixing bolts/screws should be tightened enough to avoid any undue movements of the arm base, but not over tightened.

4. Once the **arm base (11)** is **mounted** onto your **turntable** and **secured** with the three arm base **fixing/locking screws**, please **take out** the KiVi M3 tonearm **from the packing**, gently holding it under and around the **lower supporting plate (2)**, center the tonearm **main pillar (5)** above the center hole of the **arm base (11)** and gently slide it down the central hole in the arm base.

5. Tonearm height (VTA) INITIAL setting

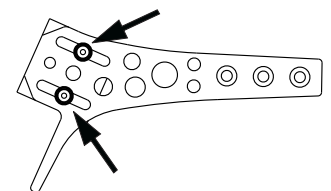
INITIAL height of the tonearm should be **17-18mm** above the turntable platter plane up to the **head shell (13)**. Use two **M4 grub screws (12)** located at the vertical collar of the arm base to lock the tonearm at the initial height (VTA) and in preferred position relative to the turntable platter and chassis/sub-chassis/armpod; Please use supplied Allen key to tighten/untighten the arm base M4 grub screws; do not apply any excessive and/or undue force.



6. Cartridge installation and connection to the phono pre-amp

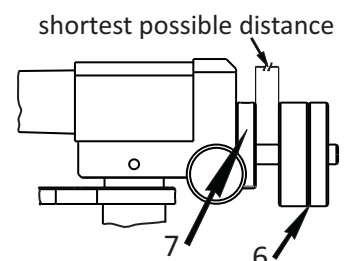
Once your KiVi M3 is secured in the arm base, please mount your desired cartridge in the **head shell (13)** using mounting bolts supplied with the cartridge. Set the **initial position** of the **cartridge** with **mounting bolts approximately midway** along the **slots** at the **head shell (13)**. At this stage the cartridge mounting bolts should be just tightened sufficiently to hold the cartridge against the head shell, but loose enough for the cartridge to be rotated and moved.

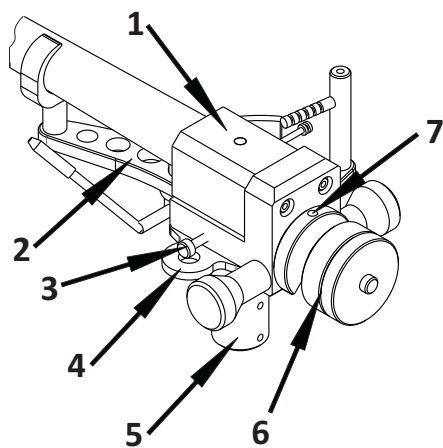
Connect the head shell wires to the cartridge pins as follows: **White - left channel positive (L+)**; **Blue - left channel negative (L-)**; **Red - right channel positive (R+)**; **Green - right channel negative (R-)**. Connect the phono interconnect cable to the standard phono 5-pin output socket located at the bottom of the tonearm **main pillar (5)**.



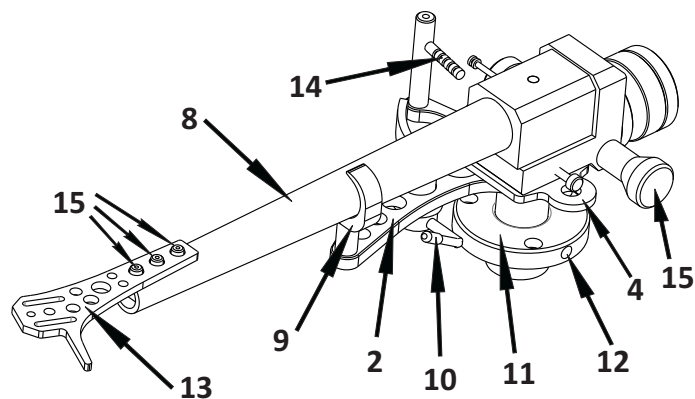
7. VTF (vertical tracking force) INITIAL setting

KiVi M3 tonearm is supplied with the **4 different counterweights**, which have to be used in **pairs-combinations (6)** in order to achieve the **required VTF** (vertical tracking force) for the wide range of cartridges, from the very light (up to 5g) to the heavy ones (up to 15g). Counterweights are of the same diameter, but different thickness (weight) of 6, 7, 8 and 9mm. The goal is to have the **shortest possible distance** between **azimuth counterweight (7)** and the **counterweights pair (6)** to optimize the mechanical stability of the tonearm. It's **STRONGLY RECOMMEND** always to **put (screw-on)** the pair's **thicker** (heavier) **counterweight** first, on the threaded bar.





- 1 - bearing yoke
- 2 - lower supporting plate
- 3 - transit M3 bolt(s)
- 4 - transit Acrylic insert
- 5 - main pillar
- 6 - counterweights pair
- 7 - azimuth adjustable counterweight
- 8 - arm tube
- 9 - arm rest
- 10 - arm lift
- 11 - arm base
- 12 - M4 grub screw for locking the tonearm height (VTA)
- 13 - head shell
- 14 - antiskating range bar
- 15 - not-user serviceable parts



- Table 1 -

total weight of the cartridge with mounting bolts plus VTF (vertical tracking force)	Counterweights combination pair	Distance from Azimuth CW to closer thicker CW	Counterweights combination pair	Distance from Azimuth CW to closer thicker CW
CW = counterweight; numbers 6,7,8 and 9 represents thickness of counterweights in mm				
7.00 - 7.50g	CW 7 & CW 6	4.50mm		
7.50 - 8.00g	CW 7 & CW 6	6.00mm		
8.00 - 8.50g	CW 7 & CW 6	7.50mm	CW 8 & CW 6	4.00mm
8.50 - 9.00g			CW 8 & CW 6	6.00mm
9.00 - 9.50g			CW 8 & CW 6	7.00mm
9.50 - 10.00g	CW 9 & CW 6	4.50mm	CW 8 & CW 6	9.00mm
10.00 - 10.50g	CW 9 & CW 6	6.00mm		
10.50 - 11.00g	CW 9 & CW 6	7.50mm		
11.00 - 11.50g	CW 9 & CW 6	9.50mm	CW 9 & CW 7	4.50mm
11.50 - 12.00g			CW 9 & CW 7	6.50mm
12.00 - 12.50g			CW 9 & CW 7	9.00mm
12.50 - 13.00g	CW 9 & CW 8	6.50mm	CW 9 & CW 7	10.00mm
13.00 - 13.50g	CW 9 & CW 8	8.50mm		
13.50 - 14.00g	CW 9 & CW 8	9.50mm		
14.00 - 14.50g	CW 9 & CW 8	10.50mm		
14.50 - 15.00g	CW 9 & CW 8	11.50mm		

Please calculate the **total weight** required for the mounted cartridge, **adding together** the **cartridge weight** itself, weight of the **cartridge mounting bolts** (usually about 0.75-1.00g for the pair) and **manufacturer recommended VTF** (vertical tracking force), and using the **table** shown on the **right** determine which two counterweights to use and what the **initial distance** of the **counterweights pair (6)** to the **azimuth counterweight (7)** should be.

Once determined which counterweights to use, please screw them on their threaded bar to the **adequate distance**, according to the **data** shown in the **table**.

First, screw-on the pair's thicker counterweight. **Locking the counterweights pair (6)** at the desired **position** on the threaded bar is **gained by tightening-rotating them towards each other**, so they will stay in the desired (correct) position.

8. Transit bolts removal

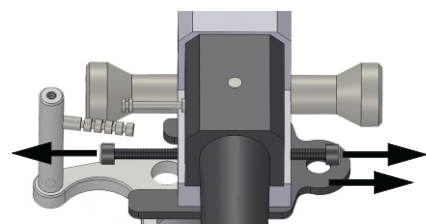
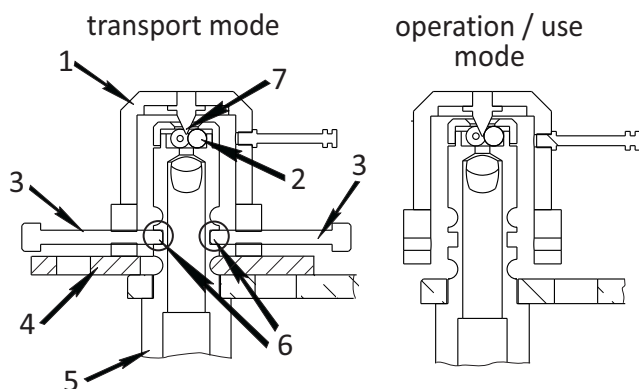
Once the **initial tonearm height (VTA)** and the **VTF (vertical tracking force)** are set and the **cartridge** mounted in its **initial position**, the **transit M3 bolts (3)** should be removed. Please **observe** the figures shown on the right in order to understand how the **transit bolts (3)** and the **Acrylic insert (4)** together **lock the bearing yoke (1)** for the transport, thus saving the **pivot point (7)** and the **bearing balls (2)** from accidental damage.

When the **Acrylic insert (4)** is inserted in its place, it lifts up the **bearing yoke (1)** together with the **pivot (7)**, so the **transit bolts (3)** exactly fits into the two, side positioned **blind holes (6)** at the **main pillar (5)**, firmly locking the **bearing yoke (1)** to the **main pillar (5)**, and in the same time lifting the **pivot point (7)** above the **bearing balls (2)**, so the **tonearm** can be **safely transported**. In "operation/use" mode, the **pivot point (7)** and the **bearing balls (2)** are in full **contact**, ready to be used.

Please use the supplied Allen key to unscrew **transit bolts (3)**. While firmly holding the **bearing yoke (1)** from above in its position, slightly pushing it down towards **Acrylic insert (4)**, carefully unscrew the **transit bolts (3)**, unscrewing both sides (bolts) evenly and alternately; While the **transit bolts (3)** have being unscrewed, the **bearing yoke (1)** will disengage from its locked transport position and it'll become loosen and moveable, thus please hold it firmly. Once the **transit bolts (3)** are completely removed, please carefully slide out the **Acrylic insert (4)** while firmly holding the **bearing yoke (1)**, and when the **Acrylic insert (4)** is removed, gently place the **bearing yoke (1)** down into its position, where the **pivot point** will sit in the ball bearing.

When the **pivot point (7)** sits in the correct position in the center of the ball bearing, the tonearm should become freely moveable in all directions.

For the **transport purposes**, please reverse the process described above; Gently lift up the **bearing yoke (1)** and in the **same time** slide in the **Acrylic insert (3)** underneath, while **Acrylic insert (3)** lift and supports the **bearing yoke (1)**, firmly holding the **bearing yoke (1)** screw the **transit bolts (3)**, until the **bearing yoke (1)** is firmly locked to the **main pillar (5)**, and the tonearm ready for transport.



Before starting the **FINAL set-up** of the KiVi M3 tonearm, please check if your **turntable** is **horizontally leveled**; use a good quality **spirit-level**. Being a **captive uni-pivot** design, the **KiVi M3** tonearm is highly **dependable** on the perfect **horizontal leveling** of the turntable.

Digital scale included with the KiVi M3 requires quality **alkaline 1.5V AAA battery** (not included) and needs to be accurately set-up; please set it up according to the included digital scale manuals.

When selecting the type of **digital scale** we chose this one considering some of its important features:

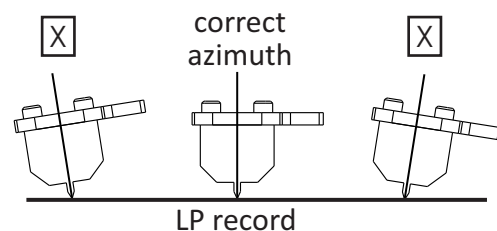
- **VTF** (vertical tracking force) is **measured at the "LP record level"** which is the only right way to measure it, getting the true results
- a **polymer pad** on the **measuring platform** protects the stylus tip and allows **accurately centering** the **stylus tip** on the measuring platform
- the **housing** of the scale is manufactured from a **durable plastic**, the **detachable cantilevered extension arm** is made from **316 stainless steel**, both **non-magnetic** materials, thus **reducing interaction** with the highly **directional magnets** used in some MC cartridges.

9. Checking and setting the **TEMPORARY VTF** (vertical tracking force)

Please check the **VTF** using the supplied **digital scale** by placing the digital scale on the platter of the turntable, and the stylus tip on the measurements platform at the scale; the **VTF reading** on the **scale** should be **close** to the **cartridge manufacturer recommendations**, if the **recommendations** from the **Table 1** of this manual, were **followed**. Please **re-adjust** the **VTF** until the readings are in the range of the **cartridge manufacturer recommendations**. **VTF** is **adjusted** by rotating/screwing the **pair of counterweights** on their threaded bar; **Clockwise** rotation, looking from the head shell direction, i.e. **moving** of the **counterweights pair (6)** further from the **bearing yoke (1)** will **decrease VTF**. **Counter clockwise** rotation, looking from the head shell direction, i.e. **moving** of the **counterweights pair (6)** closer to the **bearing yoke (1)** will **increase the VTF**; Don't forget to **lock** the **counterweights** pair at the **correct position**, by **tightening/rotating** them **towards each other**.

10. Checking and **TEMPORARY** setting of the **cartridge azimuth**

Please place a flat **LP record** onto the **platter**, lower the cartridge onto it using a track position approximately midway across the record and observe the **cartridge-headshell assembly** from the **front**; **vertical axis** starting on the record surface and **passing through** the **stylus tip, cantilever, cartridge** and **front** surface of the **head shell** should be **perpendicular** to the **LP record** surface/platter horizontal plane, as it is shown at the right.



Azimuth is **adjusted** by **rotation** of the **Azimuth adjustable counterweight (7)** (already mounted and secured with its locking M4 grub screw); It should **only** be **rotated CW** (clockwise) or **CCW** (counter clockwise) from the **central position** (locking M4 grub screw positioned straight vertically) to **adjust** the **cartridge azimuth** and **should not be moved axially**. **Azimuth counterweight (7)** correct **position** is **securing** by its **M4 grub screw**; Please use supplied Allen key to tighten/untighten this M4 grub screw and remember to never apply any excessive and/or undue force when tighten it.

11. Checking and **FINAL** setting of the **tonearm height (VTA)**

Please place a flat LP record onto the platter, lower the cartridge/stylus tip onto it, using a track position approx midway across the record and **looking sideways across** the **tonearm** observe if the **head shell (13)** and **bearing yoke (1)** top surfaces are **parallel** to the **LP record**. If the top surface of the bearing yoke is down at the rear then increase the height of the tonearm at the arm base and vice versa. To **raise/lower** the **tonearm height (VTA)** please use two **M4 grub screws (12)** at the **vertical collar** of the **arm base** and supplied Allen key to tighten/untighten those grub screws; do not apply any excessive and/or undue force.

12. **FINAL** Cartridge alignment

Please use the **Protractor alignment tool** (included) to **do** the **final cartridge alignment**. Gently lower the cartridge/stylus tip onto the Protractor alignment tool and follow the instructions printed on it. Move **forward/backward** and **twist** the **cartridge body** in the **head shell** till the body and or **stylus tip/cantilever** aligns with the **grid**. Repeat procedure if necessary till desired result is achieved.

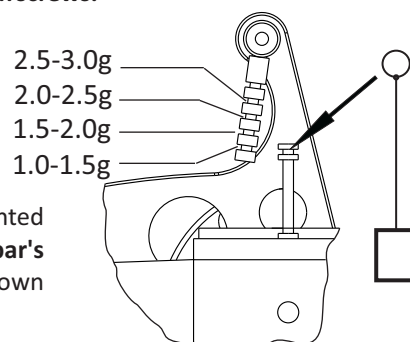
When all adjustments are correct, **carefully tighten** the **cartridge mounting screws** keeping a **firm grip** on the **cartridge** and **head shell** **together** so **nothing shifts**. Gradually tighten each screw alternately until they are tightened; do not apply any excessive and/or undue force. Tightening one screw fully before tightening the other will most certainly cause the cartridge to move out of the alignment. However careful you have been in this procedure, please **check** the **alignment once again after tightening both screws**.

13. Checking and **FINAL** setting of the **VTF** (vertical tracking force)

Using the supplied digital scale **please re-check** and **set-up** the **final VTF** according to the cartridge manufacturer recommendations. Please follow the instructions for the VTF setting explained in **chapter 7** of this manual.

14. **Antiskating** set-up

Please place the Anti-skate Weight thread "eye" loop over the anti skate thread fixing rod mounted sideways on the bearing yoke and pass the Anti-skate Weight thread over the **antiskate gauge (14)** bar's corresponding value of the required anti-skate force and let it hang/rest naturally down, as it is shown on the right.



15. Checking and **FINAL** setting of the **cartridge Azimuth**

After all the **final settings** are done, the **tone-arm height (VTA)**, the **VTF** (vertical tracking force), **cartridge Alignment** and **Antiskating**, it's strongly recommended to **re-check** the **cartridge azimuth** and to re-adjust if needed; To do it, please follow instructions for the **cartridge Azimuth** setting explained in **chapter 10** of this manual.

Maintenance

Do not use any kind of abrasives or solvents on any parts of your KiVi M3 tonearm. Please clean it carefully using dry soft cotton cloth or soft brush (for painting or make-up).

Serial No: