OWNERS MANUAL
Circle 25 Turntable
A.C.T. 25 Tonearm
Nanotube One Tonearm
Turntable Hardware Pack
Comprising: 1 x Turntable Drive Belt
1 x 1.5mm Allen Wrench
1 x 2.0mm Allen Wrench

Tonearm Hardware Pack
Comprising: 1 x Counter-Balance Unit*
1 x Anti-Skate Weight*
1 x 1.3mm Allen Wrench
1 x 2.0mm Allen Wrench
2 x M3 Cartridge Washers
2 x M3 Cartridge Screws

* The Nanotube One’s counter-balance and anti-skate weight come pre-assembled. Allen wrenches and cartridge screws are supplied as detailed above.
Step 1
Carefully remove the turntable from the packaging, taking care to remove the protective card and dressing which has been placed under the suspension and around the bearing to protect the product during transport.

Place the upper and lower plinth on a clean, flat surface that is free from vibration.

Ideally this would be a pre-leveled audio table such as the Circle stand that has been designed for highly sensitive source equipment.

Running your fingers around the outside of the Circle ensure that the upper and lower plinth are concentric.

Step 2
Remove the belt from the packaging, being careful not to stretch this sensitive element.

Attach the belt by holding it in the pulley groove first. Then using the other hand, wrap the belt around the outside edge of the sub-platter.

It is essential that the belt remain free from grease and dirt at all times.

The smaller groove on the pulley should be used for 33RPM and the larger groove 45RPM.

Step 3
Gently place the platter on top of the turntable ensuring that it sits correctly and level on top of the sub-platter.

At this stage it can be useful to insert the supplied power lead and ensure that everything is running smoothly before installing the tonearm.
**Step 4**

Thread the tonearm lead through the hole in the arm hub. This can only be achieved by threading one plug at a time.

Be very careful not to damage the arm hub with the phono plugs on the end of the lead.

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**Step 5**

Insert the tonearm into the arm hub. Take note of the groove around the barrel of the stem. For the correct height, this groove should be just about visible when viewed from the side, in the plane of the surface of the arm hub. The arm clamping screw can now be tightened using the supplied 2.0mm allen wrench inserted through the access hole to the rear of the arm hub.

If you are fitting the tonearm to another turntable then the supplied arm collar will need to be fitted to the arm hub of the turntable using the alignment gauge and geometry supplied with this manual.

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**Step 6**

Carefully remove the cartridge from it’s packaging. You are now ready to attach it to the tonearm. Ensure the tonearm is secured using the clip.

Holding the cartridge by its body, offer it up to the four coloured plugs at the end of the tonearm. Simply slot each plug to it’s corresponding coloured pin. The pins are usually a tight fit, so great care must be taken not to damage delicate pins or the wire. A slip at this stage could easily damage the cartridge.
Step 7
With one M3 cartridge screw, inserted through one M3 washer in one hand, and the cartridge in the other. Thread the screw from above through one of the slots in the end of the tonearm. The end of this screw should then be screwed into the corresponding hole in the upper face of the cartridge body. You may find it easier to start the screw off by hand and then finish it off with the supplied 2.0mm allen wrench. Don’t tighten the screw too firmly as you will be adjusting the cartridge position later. Repeat this process with the other screw.

Step 8
At this stage the bearing can be setup.

Hold the bearing housing with one hand, and unscrew the grub screw at the side of the locking collar using the 1.3mm allen wrench. Lower the locking collar down to the arm platform and retighten the grub screw to secure it.

Step 9
The next stage is to install the counter-balance unit. If you are fitting an A.C.T. 25 tonearm, you will notice a small spring-loaded pin inside the main hole. In order to engage this you must tilt the counter-balance back a little as you slide it onto the balance beam.

Once the pin has passed the end of the beam, the Counter-Balance should straighten up and grip the beam sufficiently to be positioned where required. By rotating the counter-balance on the beam, fine adjustments of azimuth can be made.
Step 9 (Nanotube One only)
The Nanotube One counter balance comes with the beam in place as part of the design and should be carefully screwed with the lightest of pressure. The grub screw is located on the side of the bearing housing that is out of view, adjacent to the anti-skate beam.

Step 10
With the cartridge alignment gauge/shim in position, you can now begin to fine-tune the cartridge position. The first adjustment should be the direction. With the needle tip placed at the cross marked 'X', the cartridge body should run parallel with the grid of lines on the gauge. The cartridge pins at the rear of the cartridge are a good indicator of direction and should aid you with this process.

Due to the way that the tonearm wire has been dressed in the Nanotube One tonearm, it will require the platter to be removed before the next stage can be completed. This allows the arm park mechanism to be rotated to facilitate the setting of the cartridge over-hang.

Step 11
The second adjustment related to cartridge position involves setting the distance between the needle tip and the tonearm pivot. This adjustment must be such that as the arm is moved across the alignment gauge, the needle tip tracks the printed arc. Once this has been adjusted, it is good practice to re-check Step 10. You may find it necessary to alternate between Steps 10 & 11 until you are satisfied with the cartridge position, before finally tightening the cartridge screws.

Do not over-tighten the screws, as the allen wrench will exert a lot of torque with relative ease so moderate finger pressure is more than adequate.
Step 12
If you are fitting an A.C.T. 25 or Nanotube One the next step is to thread the anti-skate weight through the hole in the anti-skate beam.

Step 13
Slide one rubber ‘O’ ring down the bias arm and then follow this with the anti-skate loop and the second ‘O’ ring to hold this in place.

Step 14
If you are fitting an A.C.T. 25 tonearm, the anti skate is set as follows:

Each groove groove on the bias arm corresponds to an increase of 0.5 grams in cartridge weight (starting from the bearing housing as shown in the diagram below). Therefore the correct position for the a cartridge with a weight of 1.8 grams is mid-way between the third and fourth grooves. The two rubber ‘O’ rings on the bias arm should grip the looped end of the thread to hold it in position. The remainder of the thread should then hang over the pulley, seated in the groove.
Step 14 (Nanotube One only)
If you are fitting a Nanotube One then a rule should be used to set the correct bias. The measurement should be taken from the nearside of the bearing housing or “egg” as shown in the table below.

The thread should be held by the rubber O-rings to prevent the position changing.

### ANTI-SKATE POSITIONING (NANOTUBE ONE)

Distance measured in mm from the side of the egg shaped bearing housing.

<table>
<thead>
<tr>
<th>Distance (mm)</th>
<th>Weight (g)</th>
</tr>
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<tbody>
<tr>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>1.25</td>
</tr>
<tr>
<td>14</td>
<td>1.5</td>
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<tr>
<td>17</td>
<td>1.75</td>
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<td>20</td>
<td>2</td>
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<tr>
<td>23</td>
<td>2.25</td>
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Positioning of the anti-skate in the above image is shown for illustration purposes only.
GENERAL MAINTENANCE

The Circle 25 and tonearm system requires little to no adjustment or routine maintenance once it has been assembled. The synthetic lubricant in the bearing will last for tens of years without any need for changing. It will not evaporate or degrade like a mineral oil. Moreover the high precision bearing will be much less likely to be damaged by being taken apart, an undertaking that should be avoided.

The tonearm bearing requires no service and is a lifetime design. The motor is assembled using shell bearings that are not designed to withstand any on-axis loading. Such a load will damage the bearings.

Under normal circumstances the motor will last for tens of years. As long as the drive pulleys and belt are clean the stability and function of the system will be completely consistent year after year.

To clean these items use a cleaning product like pure alcohol. This will remove any grease that may have built up from the atmosphere. A soft brush, such as a calligraphy brush can also be used to clean the Circle 25 and tonearm, taking great care not to scratch any elements.
Wilson Benesch Analogue Product Guarantee

Subject to the conditions set forth herein, Wilson Benesch warrants its Analogue products to be free of manufacturing defects in material and workmanship for the Warranty Period. The Warranty Period is a period of 90-days from the date of purchase by the original purchaser, or if the following requirement is met, the Warranty Period is a period of two (2) years from the date of purchase by the original purchaser:

Requirement No. 1. No later than 30-days after product delivery to the customer, the customer must have returned the Warranty Registration Form to Wilson Benesch;

FAILURE TO COMPLY WITH REQUIREMENT NO. 1 WILL RESULT IN THE WARRANTY PERIOD BEING LIMITED TO A PERIOD OF 90 DAYS ONLY.

Conditions
This Limited Warranty is also subject to the following conditions and limitations. The Limited Warranty is void and inapplicable if the product has been used or handled other than in accordance with the instructions in the Wilson Benesch owner’s manual, or has been abused or misused, damaged by accident or neglect or in being transported, or if the product has been tampered with or service or repair of the product has been attempted or performed by anyone other than Wilson Benesch, an authorised Wilson Benesch Dealer Technician or a service or repair centre authorised by Wilson Benesch to service or repair the product.

In instances where return to Wilson Benesch’s factory is required, the dealer or customer must first obtain a return authorisation. The purchaser must pay for shipping to Wilson Benesch and the return shipping of the product to the purchaser. A RETURNED PRODUCT MUST BE ACCOMPANIED BY A WRITTEN DESCRIPTION OF THE DEFECT. Wilson Benesch reserves the right to modify the design of any product without obligation to purchasers of previously manufactured products and to change the prices or specifications of any product without notice or obligation to any person.

Remedy
In the event that the product fails to meet the above Limited Warranty and the conditions set forth herein have been met, the purchaser’s sole remedy under this Limited Warranty shall be to: (1) contact an authorised Wilson Benesch Dealer within the Warranty Period for service or repair of the product without charge for parts or labour, which service or repair, at the Dealer’s option, shall take place either at the location where the product is installed or at the Dealer’s place of business; or (2) if the purchaser has sought timely service or repair and the product cannot be serviced or repaired by the Dealer, then purchaser may obtain a return authorisation from Wilson Benesch and return the product at the purchaser’s expense return the product to Wilson Benesch where the defect will be rectified without charge for parts or labour.

Warranty Limited to Original Purchaser
This Limited Warranty is for the sole benefit of the original purchaser of the covered product and shall not be transferred to a subsequent purchaser of the product.
Demonstration Equipment
Equipment, while used by an authorised dealer for demonstration purposes, is warranted to be free of manufacturing defects in materials and workmanship for a period of two (2) years from the date of shipment to the dealer. Demo equipment needing warranty service may be repaired on-site or, if necessary, correctly packed and returned to Wilson Benesch by the dealer at dealer’s sole expense. Wilson Benesch will pay return freight of its choice. A returned product must be accompanied by a written description of the defect.

Miscellaneous
ALL EXPRESS AND IMPLIED WARRANTIES NOT PROVIDED FOR HEREIN ARE HEREBY EXPRESSLY DISCLAIMED. ANY LEGALLY IMPOSED IMPLIED WARRANTIES RELATING TO THE PRODUCT SHALL BE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. THIS LIMITED WARRANTY DOES NOT EXTEND TO ANY INCIDENTAL OR CONSEQUENTIAL COSTS OR DAMAGES TO THE PURCHASER.
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