# **AC or DC Motor Turntable Stutters**

## **Problem**

Using my Iconasys AC or DC turntables (referred by Iconasys as USB Turntables, which are NOT the Silver or Platinum series turntables) I encounter one of the following issues:

- 1. Upon powering my turntable, I hear it stutter i.e. the table stutters forward as I enable continuous turn. Is there anything I can do?
- 2. Using the large table I see the table start in the opposite direction first and then it goes in the correct direction. Sometimes I hear a fairly loud popping sound. Is this normal?

## Solution to the First Problem

The Iconasys medium and large turntables are made almost entirely of plastic. While these tables go through a thorough testing process before being delivered to our customers, we have ran into a few issues that we believe are important to mention. Some of these issues, like table stuttering, sometimes have a simple solution.

Here is a list of things to keep in mind:

- 1. Please make sure that the table is mounted on a flat surface and that the feet are all flush against the flat surface. If one of the support feet is not flush against the support surface, then please move the table so that they are. A non flush support would mean a twist in the table and because the table is made of plastic, that twist could cause enough additional friction where the stutter will be introduced.
  - a. As a followup to this idea, please make sure that the table sits flush against a solid surface and not one covered by a cloth. Wrinkles in the cloth could cause stutter issues. Best surface would be hard wood, glass or any solid counter-top.
- 2. The turntables are made of plastic and they are supported by a large, solid plastic bearing that is lubricated internally.
- 3. If the table is left out in the cold, the plastic will shrink and the lubricant will become more viscous, sometimes causing additional friction in the table bearing.
- 4. The additional friction can cause the motor to stutter, especially when the table is loaded with a heavier object, which further amplifies the frictional forces.
- 5. The solution is to let the turntable reach room temperature before trying it again.
- 6. Iconasys recommends that the turntable is run at room temperature, **between 68 degrees F and 80 degree F** please allow the table to reach room temperature at least 12 hours.
- 7. If the table continues to stutter at room temperature, please contact the Iconasys support team.
  - a. Before contacting the support team, please also test the table stutter with a 10Lb weight and without. Does the stutter behave any differently?

## Solution to the Second Problem

The popping sound should only be noticed on the large Iconasys turntables. The large turntables use an AC (alternative current) motor while the medium turntables use a DC (direct current) motor. When using the AC motor, the ground and power voltage differentials alternate at the AC frequency. This causes the AC motor to sometimes (not always, depending on the voltage differential) start in the wrong direction. The fix in the Iconasys turntables is to add a mechanical break such that as soon as the motor turns the wrong direction, it is stopped and forced to turn in the correct direction. This mechanical break can manifest itself into a "loud" popping sound. It is perfectly normal to hear this sound and this will not affect the overall performance of the table.

The popping sound is not detected in the medium turntables since these tables use a DC motor, which always starts its turn in the same direction.

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