# Equipment Maintenance - Tips for NMT System Maintenance and Repair!

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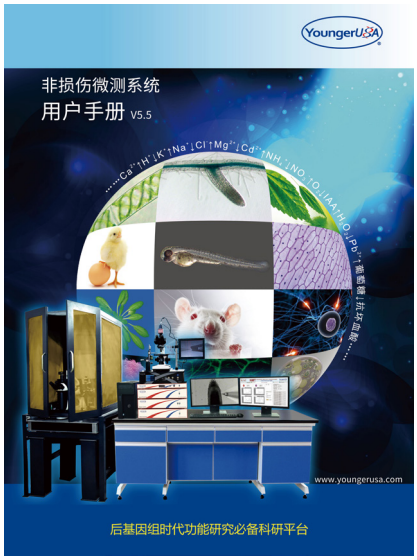
The best way to prolong the service life of the NMT system is to strictly follow the procedures and practice good habits as directed in the user manual!




Anyone who has purchased a Non-invasive Micro-test System should be familiar with this user manual. As long as the user purchases a system, no matter the model, a copy will be provided with the system (the image shown above is that of the latest version of the Chinese manual).

But how many actually read this manual from cover to cover? I'm guessing not very many. After the system operation training, most people have mastered the basic test operation process, and may never read this manual again, thinking they don't need it.

In fact, this is a big mistake! This manual is the accumulation of more than 10 years worth of experience from YoungerUSA and Xuyue (Beijing) Sci. & Tech. Co., Ltd.'s use and knowledge of the technology. In addition to basic testing operations it also records in detail some important precautions to take during the test and solutions to problems you may encounter. Especially in the process of system operation, there are some operating procedures and usage specifications that you may not pay much attention to on a regular basis, but if you don't pay attention for too long, it may cause great damage to the system hardware, shorten the service life of accessories, and/or cause system failures and other problems.

Therefore, before actually operating the system, carefully reading the user manual is a necessary step, please take it seriously. Strictly follow the procedures and specifications in the manual during operation, and develop good usage habits. This will not only prolong the service life of the system, but also greatly help your experiments. At the same time, new users should choose Xuyue (Beijing) Sci. & Tech. Co., Ltd.'s formal training courses when learning the system operation to ensure the best results from your training.

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# Daily use and maintenance of the 3D Manipulator

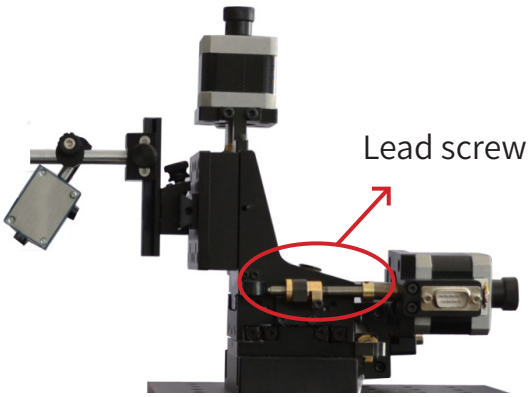
The 3D Manipulator is a very important accessory in the NMT system. It is responsible for the important function of guiding the sensor to automatically move to the designated position and collecting flux data. Therefore, the daily maintenance of the 3D Manipulator is also very important:

**1. Pay attention to dust**

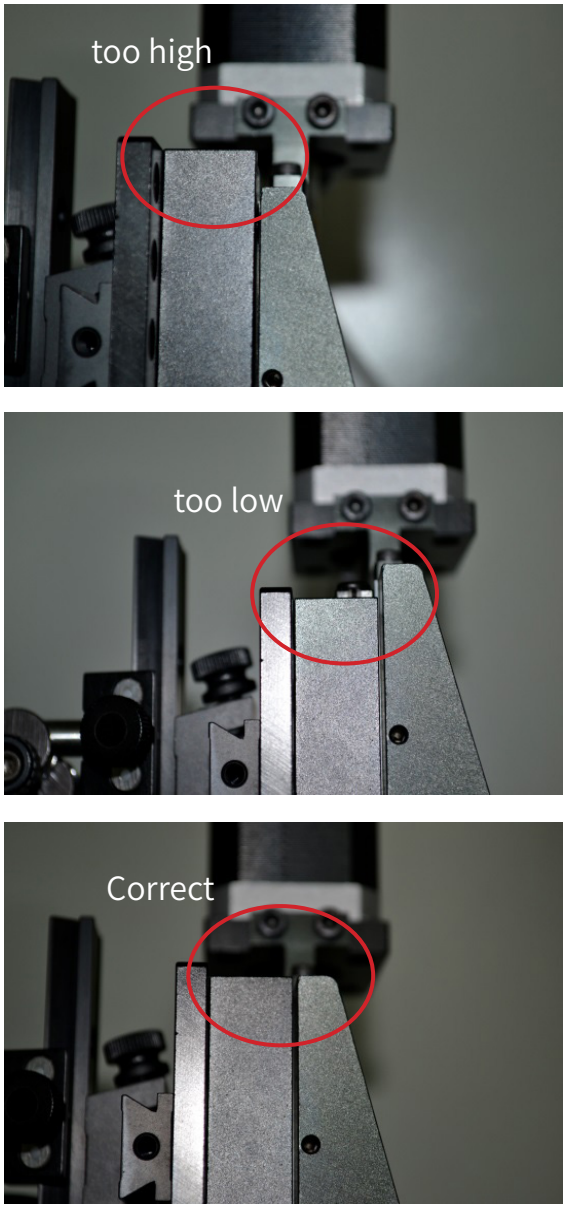
It is necessary to regularly blow off the dust on the 3D Manipulator with an air squeeze blower or an air compression can (purchased separately). This is especially important on the three lead screws.

**2. Maintenance of the lead screws**

First blow off any dust with a squeeze blower / air compression can, then wipe the entire lead screw thoroughly with a cotton swab dipped in absolute ethanol.




Electric 3D Manipulator




Electric 3D Manipulator

**3. Reset the motion translation stages**

During normal use, be careful not to let any motion translation stage of X/Y/Z stay close to the range for a long time (you can use the slider to make rough adjustments, and then use the 3D Manipulator knob for fine adjustment). After each use, it is necessary to restore all motion translation stages to their original positions, as shown in the images:

**4. Routine maintenance**

If you find that the sensor is shaking, isn't going straight, is stuck or the movement distance is inconsistent, it means there is a problem with the electric 3D Manipulator, and you need to repair it yourself (see Chapter 2, Section 3 of the manual) or contact the manufacturer for after-sales maintenance.

**5. Routine maintenance**

There are some small sliders attached to the 3D manipulator, which may become loose. These sliders have a small hexagon socket screw to adjust the tightness when the slider moves. If the slider is too loose for a long time, it can be improved by tightening the screw using the hexagonal screwdriver provided with the system (Metric 1.3mm), as shown in the picture

Slider and adjusting screw on the 3D Motion slider

**6. Motion Controller**

Never manually rotate the knob of the electric 3D manipulator when the motion control switch is turned on!


Motion Controller switch turned on

(Editor in charge: Xuefei Li)