

Magnet Matcher

What is the OS3 Magnet Matcher?

The OS3 Magnet Matcher is a simple low-cost battery-operated tool that allows you to compare the strength and polarity of all ceramic magnets from Tjets to most LifeLikes to be read on a common voltmeter that you provide. With the addition of plastic spacers it can be modified to read all magnets.

Why should you own an OS3 Magnet Matcher?

Having a calibrated gauss meter is ideal. It will read a wide range of magnets while providing an accurate gauss reading. They will also cost about 400 dollars for a baseline unit. Sending all your magnets out to someone who has one of the meters will provide you with the gauss readings too. BUT not all gauss meters will give the same reading for the same magnet. This fact means that you have to have all your magnets tested by that same meter to be accurate. Once you drop a magnet or run it in a motor that ran hot, you can't be sure what the gauss reading is anymore. Bottom line is that the gauss reading isn't important, being able to accurately and promptly compare your magnets' strengths against one another is. Another useful feature is that you determine how to read your magnets. Professional magnet testers will provide you with an average reading of the strength of your magnet. Your magnet may have strong and weak spots or may be even all around, but you will never know. With your OS3 Magnet Matcher, you will never rely on someone else again to test your magnets.

How to use your OS3 Magnet Matcher.

Your OS3 Magnet Matcher is simple to use. Turn your meter on to DC Volts. Set it to the 2 Volt scale if your meter is not auto-ranging. Insert the red and black leads into the same color jacks on the MM. Turn the MM on by turning the knob clockwise. Continue turning the knob clockwise until the meter reads .000. Use one hand to hold the MM and the other to place your magnet in the desired position over the sensor and read your strength. The sensor range can be increased by placing the spacer over the sensor. The range can be further increased by placing a bigger piece of plastic between the magnet and the sensor. A higher number indicates the magnetic strength is stronger at that point. Positive readings indicate North pole magnets while negative readings indicate South poles.

When should you replace the battery?

The OS3 Magnet Matcher doesn't have an indicator to show when the battery is low. The MM requires very little power so as long as the power is turned off after use the battery will last quite a long time. When you believe your battery is dying use your meter to check the battery voltage while the MM is on. As long as the voltage is at least 6.5 VDC, the MM will function properly.

Proper care for your OS3 Magnet Matcher

1. Ensure the battery is inserted correctly. Reversing the connection may damage the MM. 2. Only connect the output to a high resistance meter. Any meter you can buy will fit this requirement. Use of the output for any other purpose may damage the MM. 3. Take care in transporting or holding the MM while the meter leads are inserted. The lead jacks are designed for providing a reading and not structural rigidity.

General Notes

1. This unit is a non-calibrated unit and is used for making comparisons only. It will not provide an accurate gauss reading.
2. Tjets, AFX, MT and JL/AW have North poles magnets in the front. Green magnets are always North pole.
3. The MM's sensor is not in any particular position which allows a wide range of magnet types to be tested. Just setting a magnet in front of the sensor will not yield useful results.
4. The sensor is most sensitive in the middle of the square on the front.