

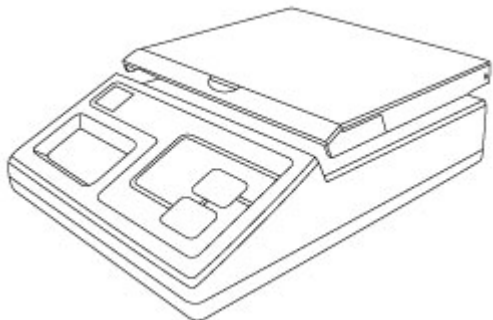


medusa
research Inc.

Engineered Products for the RC Enthusiast

Thrust Cell

THRUST MEASUREMENT FOR THE POWER ANALYZER PRO



Operating Manual

Model: MR-TC-05-5000

Max 5kg (11 lbs) d = 0.5g (0.1oz)

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- User selectable gram and lb-oz mode.
- Tare up to the cell's overload range.
- Operates on either:
 - ⇒ a 9V alkaline battery or
 - ⇒ an AC Power Adapter (supplied)
(9V/100mA DC center ground output)
- Load Cell Technology
- Liquid Crystal Display
- Maximum Capacity 5kg (11 lbs)
- Resolution 0.5g (0.1oz)

Unpacking and Assembling the Thrust Cell

Unpack the thrust cell and take out the small protective closed cell foams taped below the platform of the thrust cell (if any present.) After turning on the thrust cell for first time, let it warm up for about 1~2 minutes, then TARE the scale before weighing.

Using the scale with a battery

If you desire to run the Thrust Cell without the AC Power Adapter you will need a new 9V alkaline battery. Remove the battery compartment cover underneath the thrust cell, and insert the battery as indicated. Ensure that they are inserted the correct way around. Replace the battery compartment cover. It is advisable to remove the battery when using power adapter.



Using the scale with the AC Power Adapter

Connect the supplied AC Power Adapter to the input socket at the rear of the Thrust Cell, and plug it into the AC wall socket. It is advisable to remove the battery when using power adapter.

Be sure that the thrust cell is operated on a flat surface

In order to operate correctly, the thrust cell must be installed on a firm and flat surface. It is advisable to keep the thrust cell on for about 1~2 minutes before use.

Weighing an item or measuring thrust


Touch the  key. A  sign will appear on the display for a short time while the thrust cell performs a self-check/zeroing routine, and then

displays  on the LCD.

Your thrust cell is now ready to measure weight or thrust. For highest accuracy, it is recommended that the scale be on for 1 to 2 minutes, then TARE the scale before measuring.



What is the purpose of the TARE key?

You can tare (set to zero) the weight of a container or of your thrust measurement stand.

If the thrust cell is switched off, press the  key and wait for

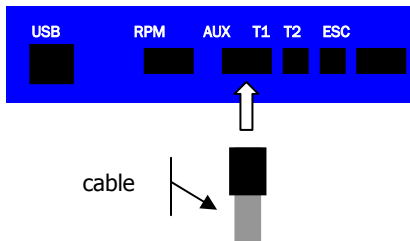


to be displayed. Apply the weight to be tared to the platform,

and then press the  key. The display  will appear. *(Note: Pressing tare key for more than 4 seconds will change the display mode.)*

You are ready to weigh an item or perform a thrust test. The scale will now show the weight or thrust, excluding the weight of the container or test stand.

Connecting the Thrust Cell to your Power Analyzer PRO



First, connect the round DIN connector to the back of the Thrust Cell. The 5 pins on the DIN connector form a half circle, and will only plug into the scale the correct way. Make sure the connector is rotated so the 5 pins are on top before plugging in the connector.

Then, insert the 3-pin connector into the Power Analyzer's **AUX** port, observing the arrows engraved on the Power Analyzer case and on the black connector.

ERROR Messages

Should any of the symbols shown below appear in the LCD, they have the following meaning:



Max Weight Exceeded: The weight capacity of the thrust cell has been exceeded.



Low Battery: When the input voltage is less than 7V, appears on the upper left corner of the LCD.

Switching between gram and lb-oz

The weight is displayed as grams by default. To switch the unit of weighing to lb-oz or vice versa, simply press the ON/TARE key for about 4~5 seconds continuously. The cell will switch its weighing unit and will remain so until the next time you switch it again.

Note: If the ON key is pressed less than 4 seconds in normal mode the thrust cell will tare the weight placed on the platform without switching the weighing unit.

SUPPORT

If you are still having difficulties, or have questions that aren't covered in this manual, you can contact Medusa Research for support.

Our contact information is:

World Wide Web

<http://www.medusaproducts.com>

E-Mail

support@medusaproducts.com

Telephone Support

Hours: Monday-Friday 10am to 5pm eastern time, excluding business holidays
Phone Number: 508.675.0200 (in Fall River, Massachusetts)

RETURNS AND RETURN AUTHORIZATION:

For warranty and repair returns, please download a *returns form* from our website. Instructions for packaging and shipping returns are also on our website. If you do not have access to the internet, please call or fax us at the number below.

Medusa Research Inc.
288 Plymouth Avenue
Fall River, Massachusetts
02721-4226

Phone: 508.675.0200
Fax: 508.675.0202
Email: support@medusaproducts.com
Website: www.medusaproducts.com

LIMITED WARRANTY:

Medusa Research Incorporated warrants the Thrust Cell to be free of manufacturing defects in material and workmanship for a period of 12 months from the original date of purchase. Should any defects covered by this warranty be found, the Thrust Cell shall be repaired or replaced with a unit of equal performance by Medusa Research, Inc. In the event of a product defect during the warranty period, see the *Returns* section for return information.

LIMITS AND EXCLUSIONS:

This warranty may be enforced only by the original purchaser, who uses the Thrust Cell in strict accordance with the information provided in this operation guide.

This Warranty does not apply to:

1. Damage resulting from failure to follow instructions provided in this operations guideline
2. Damage resulting from misuse, reverse polarity on input or output wires, abuse or neglect.
3. Damage occurring as a result of poor solder joints, connector incompatibility, or mechanical failure of user installed input and output connections.
4. Damage resulting from any repair or alteration performed by someone other than Medusa Research, Inc.

LIMITATION OF LIABILITY:

(i) UNDER NO CIRCUMSTANCES WILL MEDUSA RESEARCH, INC. BE LIABLE FOR ANY INDIRECT, THIRD PARTY, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY EXPENSES, COSTS, LIABILITY, LOSS, OR DAMAGE WHATSOEVER IN ANY CONNECTION WITH THE USE OR MISUSE OF, OR INABILITY TO USE THIS PRODUCT;

(ii) that Medusa Research, Inc. shall not be liable for any harm, loss, damages, expenses, costs, suit, claim or demand whatsoever against the user of this product;

(iii) that neither Medusa Research, Inc., nor any of its representatives, employees, officers, directors, agents, distributors, affiliated corporations or any other person, shall be responsible for nor shall incur, any liability, damages, loss, obligations or responsibility whatsoever (whether in equity, contract, tort or otherwise) for any harm, loss, reliance, or damages, whatsoever, that may arise in any connection with or result from any promise, advice, arrangement, agreement, statement, technical support or maintenance, representation, warranty, or information whatsoever, that may have been made to by Medusa Research, Inc.;

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