

TRACEABLE® LASER/PHOTO TACHOMETER INSTRUCTIONS

SPECIFICATIONS

Range:	10 to 99,999 RPM
Resolution:	0.1 below 1,000 RPM 1 above 1,000 RPM
Accuracy:	±1 RPM or 0.05%
Sampling Time:	1 second (over 60 RPM)
Time Base:	Quartz crystal
Measuring Distance*:	2 to 78 inches (50-2000 mm) (*Measurement distance will vary depending on ambient light, environmental conditions and the size of the reflecting surface.)
Laser Output:	1mW
Laser Wavelength:	600-700 nm

LASER TARGETING

Laser targeting is always active when the Measurement button is being pressed. Each time the Measurement button is pressed and held, the laser beam will be emitted.

CAUTION: Class II Laser Product. Do not stare into the laser beam.

OPERATION

1. Cut a strip of the reflective tape into a 0.5" square.
2. Stop the rotation of the object to be tested.
3. Make certain that the surface of the rotating object is smooth and clean so that the reflective tape will adhere properly and place the reflective tape on the object. The reflective tape may be placed on either the end of the rotating object or circumference (surface) of the rotating object.

Measurement Notes—

The non-reflective area of the object must be greater than the reflective tape surface. If the object to be tested is normally reflective, it must be covered with black tape or black paint before attaching the reflective tape.

Use particular care when measuring the rotation of the flat end of a shaft with a relatively small diameter. Completely cover the flat end with non-reflective black tape. Place the 0.5" square reflective strip on top of the black tape as close to the edge as possible.

If the rotation being measured is less than 50 RPM, increase the accuracy of the measurement by applying additional reflective tape on the rotating object. Place the additional reflective tape approximately 180 degrees from each other (on opposite sides of each other). To determine the actual RPM of the rotating object, divide the displayed RPM reading by the number of reflective tape pieces.

4. Allow the object to rotate. Press and hold the Measurement button (located on the right side of the unit) and point the laser beam at the reflective tape.
5. Verify proper alignment by observing the location of the laser and by checking the display. When properly aligned, each time the reflective tape passes through the laser beam ((•)) will flash in the top right corner of the display.
6. Wait 2 to 10 seconds for the reading to stabilize before recording the results.
7. Release the Measurement button.

MEMORY RECALL

The memory feature allows the last, highest, and lowest readings to be recalled. Readings are normally retained in memory for several minutes.

Upon completion of measurement—

1. Press and hold the MEMORY button to display the last reading recorded prior to releasing the Measurement button. The display will alternate displaying the RPM value and *L R* (last).
2. Release the MEMORY button.
3. Press the MEMORY button a second time to display the highest reading recorded. The display will alternate displaying the RPM value and *U P* (highest).
4. Release the MEMORY button.
5. Press the MEMORY button a third time to display the lowest reading recorded. The display will alternate displaying the RPM value and *D N* (lowest).

ALL OPERATIONAL DIFFICULTIES

If this tachometer does not function properly for any reason, replace the batteries with new high quality batteries (see Battery Replacement section). Low battery power can occasionally cause any number of "apparent" operational difficulties. Replacing the batteries with new fresh batteries will solve most difficulties.

BATTERY REPLACEMENT

Erratic readings, faint readings, no display, or *L D* appearing on the display are all indications that the batteries must be replaced. Open the battery compartment by sliding the battery cover in the direction indicated by the arrow. Remove the exhausted batteries and replace them with four (4) new AA alkaline batteries. Make certain to install the new batteries in the directions indicated in the battery compartment (improper battery placement may cause damage to the electronics). Replace the battery cover.

WARRANTY, SERVICE, OR RECALIBRATION

For warranty, service, or recalibration, contact:

CONTROL COMPANY

4455 Rex Road
Friendswood, Texas 77546 USA
Ph. 281 482-1714 • Fax 281 482-9448
E-mail sales@control3.com • www.control3.com

Control Company is ISO 9001 Quality-Certified by DNV and ISO 17025 accredited as a Calibration Laboratory by A2LA.