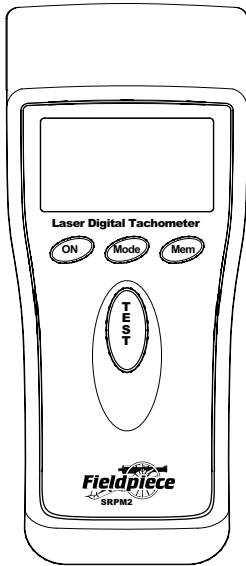


Fieldpiece

Laser Digital
Tachometer
Model: SRPM2



OPERATOR'S MANUAL

Specifications

Autorange: 1.5 rpm to 99999 rpm,
0 to 99999 counts

Resolution: (at 75°F ambient) 0.1rpm, 1count

Accuracy: $\pm(0.03\%+3\text{digit})$

Laser power: less than or equal to 2mW

Battery: 1.5V(AAA) x 3 (installed)

Battery life: 35 hours (operating), 1 year (off)

Auto-off: 25 seconds without use.

Operating temp: -0.4°F to 104°F

Base time: 12MHz

Display: 13mm 5digits LCD

Suggested distance from target: less than 40
inches when using 0.5" x 0.5" strip

Accessories: 2 reflective strips, batteries
(installed), ANC2 carrying case, operator's
manual.

Description

SRPM2 is a portable standalone digital, laser tachometer. Point the laser at a fan blade or motor shaft and the RPM shows up immediately on the LCD.

Operation

SRPM2 works by reading reflected light from the laser. Each time the reflection is interrupted, a count is taken. Place a small piece of the supplied reflective strips on the target to make sure the laser is being reflected directly back to the instrument.

1. Press and hold **ON** for 1 second to turn on SRPM2.
2. Press **Mode** to toggle between RPM (revolutions per minute) and total count (total amount of revolutions).
3. Press **TEST** once to turn on laser and start testing. Steadily aim meter so that laser hits the reflective strip.
4. Press TEST again to turn off laser and stop testing.
5. Press **Mem** after taking RPM readings to cycle through that set of readings' Max, Min, and Last. A new set begins each time you press TEST.
6. Quickly tap ON once to power down, or wait 25 seconds for auto-off.

E.E.E.E.E displayed

If "E.E.E.E.E" is shown on the display, the measurement is invalid. You will need to restart the SRPM2 and retest.

Reflective strips

SRPM2 requires a reflection of its laser to work. Proper use of reflective strips is critical to get accurate readings. To sense the reflected light, the reflective strip must be big enough, you must aim the laser accurately enough, and you must be close enough. Typically a reflective square 0.5" on a side read at under 4 feet works well. Care must be taken so that light doesn't reflect from either the surface of the target (other than the reflective strip) or from the background or foreground. For example, the fan blades of a fan running in front of a reflective background could cause multiple counts per revolution, multiplying the actual RPM.

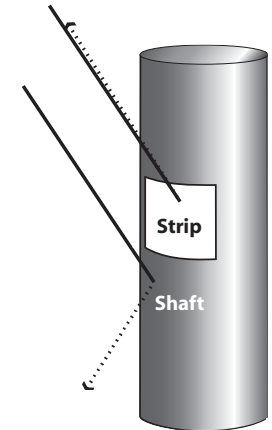
If you find your measurement unstable or a multiple of what you think it should be, you may be "seeing" extra reflections of the laser.

The reflector strip is designed to reflect the laser light back to the instrument, irrespective of the incident angle of the light. Therefore, to minimize extra reflections from the target or fan blades, don't point the laser perpendicular to the reflective strip. This will help deflect unwanted reflections from fan blades or shaft away from the SRPM2 sensor (see diagram).

A screen in front of the target can cause problems by reflecting the laser light directly back to the laser, thus interfering with the laser light reflected from the reflector.

Additional reflective strips (3pcs, 6" x 0.6") are available, model RREF16.

Only apply one small piece of a strip and don't place one on each blade of the fan. If you do, and there are three blades, your readings will be three times the correct reading. When working with a very reflective surface, try to find a place that isn't reflective (e.g. the shaft) and place the strip there. You may need to wrap unglassy tape around the shaft and place the reflective strip on the tape to eliminate unwanted reflections.



Warranty

The product is warranted to the original purchaser against defects in material or workmanship for a period of one (1) year from the date of purchase. During the warranty period, Fieldpiece Instruments will, at its option, replace or repair the defective unit.

This warranty does not apply to defects resulting from abuse, neglect, accident, unauthorized repair, alteration, or unreasonable use of the instrument. Any implied warranty arising out of the sale of Fieldpiece's products including but not limited to implied warranties of merchantability, and fitness for purpose, are limited to the above. Fieldpiece shall not be liable for incidental or consequential damages.

Service

Any defective SRPM2 should be returned to Fieldpiece Instruments for warranty service along with proof of purchase. Call Fieldpiece for a return material authorization (RMA). For out of warranty service, send the SRPM2 along with a check or money order for \$45.00 to Fieldpiece. Your SRPM2 will be repaired or replaced at Fieldpiece's option.



Fieldpiece Instruments, Inc.
580 West Central Ave. Suite A
Brea, CA 92821
Phone: (714) 257-9060 Fax: (714) 257-9069
www.fieldpiece.com



WARNINGS



Never shine the laser at your eye.
Significant eye damage may occur.