BENETECH GM8905 LCD Digital Laser Tachometer Instruction Manual

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Tachometer Instruction Manual

Model: GM8905

Tachometer
Instruction manual

Version: GM8905-EN-00

Contents

I. Introduction

Tachometer is one of the necessary instruments for machinery industry, which is used to detect rotate speed,

linear velocity or frequency of motor. It can precisely measure rotate speed of impeller blade, expansion cylinder and spindle and can be widely used in motor, fan, washing machine, textile, automobile. airplane, ship and other industries.

Features

1. Hold the maximum value, minimum value, average value and the last measured value.
2. Fully display operation instruction and unit symbol, which is concise and explicit.
3. Wide measuring range and high resolution.
4. Battery low power indication, LCD backlight display, and auto shutdown.
5. Adopt the latest microprocessor technology and laser technology, which enables the instrument to be more intelligent and reliable.
6. Oversized screen LCD display, with clear indication.
7. Solid and deliciated structure. The entire machine adopts durable and optimized electronic elements, and the shell adopts light and solid ABS plastic, with beautiful appearance and convenient use.

II. Safety instruction

1. Warning:

   In order to avoid potential harm to users, please comply with the following instructions:

   ► Laser product: please do not watch directly, which may cause blindness. Do not let children play with it.
2. Precautions:

   In order to ensure measuring precision, please pay attention to the following points :

The best measuring distance between instrument and measured object is 50-500mm, and the best angle for instrument aiming at measured object is within 30 degrees, which can effectively multiple reflections on surface of the measured object.
► I f there is no reflection tag, it is necessary to make sure that reflection point on measured object has sufficient reflection. Under this circumstance, the instrument has to be vertically aligned to the measured object to inspect whether the instrument can read.
► Non-reflection area has to be larger than reflection area.
► Before posting reflection tag, the spindle surface has to be clean and smooth.
► I f the instrument has not been used for a long time, please take out the battery to avoid being damaged due to battery decomposition.

III. Operating instructions

1. Firstly stop the rotating body to be measured, cut down a small section of reflection tag, post that on the rotating body to be measured, and then start the rotation.
2. Press the power to start the machine after putting on battery, and long press the button to start laser measurement. Align to the reflection point during measurement, and measurement signal will appear. After the display value is stable, release the power to stop the measurement.
3. Press MEM to switch among MAX, MIN, LAST and AVG memory value.
4. Press backlight to start the backlight, and press it again to shut down the backlight.
5. Press POWER button to turn off the machine.

IV. Battery replacement

When the power is low, battery symbol will be displayed, and please replace battery timely.

1. Open up the battery cover and take out the battery.
2. Correctly install the battery as indicated on the battery box.

V. Key sand LCD display name

1. Key function: as shown in Figure 1

1. Reflection point
2. Light path
3. Triangle laser waning mark
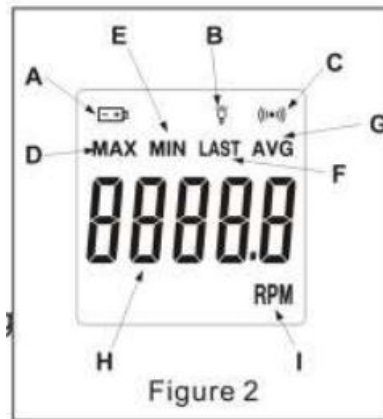4. Display
5. Memory
6. Power
7. Backlight

Figure 1

2. LCD display: as shown in Figure 2

- A. Low power display
- B . Backlight opening
- C. Measurement
- D. Maximum value

- E. Minimum value
- F. Last value
- G. Average value
- H. Rotate speed measurement reading
- I. Rotate speed unit: revolution/min

Figure 2

VI. Low rotate speed measurement

In order to increase measurement precision, when measuring quite low rotate speed, users are recommended to evenly post more reflection tags on the measured objects. At the same time. the actual rotate speed value can be obtained by dividing the readings on the display by the reflection tag quantity.

VII. Memory function

After shutting down, the measured maximum value, minimum value, last measured value and average value will be automatically stored in the instrument. After starting up, press MEM only, and the previously measured memory value will be displayed, wherein MAX represents the maximum value, MIN represents the minimum value, LAST represents the last value and AVG represents the average value. It will display another memory value by pressing MEM each time.

VIII. Technical parameter

LCD display	5-digit large screen LCD display, with word height of 18mm
Unit	rpm
Range	2.5-99999rpm
Resolution ratio	0.1rpm(2.5~999.9rpm) 1rpm(1000~99999rpm)
Basic precision	$\pm(0.1\%n+5d)$rpm;(2.5~999.9rpm) $\pm(1\%n+5d)$rpm;(1000~99999rpm)
Laser power	CLASS II 2-5mW
Sampling ratio	Once/second
Measurement distance	50-500mm
Time base	Quartz crystal
Automatic shutdown	The instrument will shut down after 60 seconds without any pressing.
Operation environment	0~50°C;32~122°F;10%~90%RH
Storage environment	-10~80°C;-14~176°F;10%~75%RH
Power supply	2x1.5V AAA battery
Dimension	55. 7*29. 9*127mm
Weight	106g

Equipped with 3 bars of silver reflection tag (200mm*12mm)

*Please contact the sales department of our company if you need more reflection tags.

Specific Declaration:
Our company shall hold no any responsibility resulting from using output from this product as an direct or indirect evidence.
We reserves. the right to modify product design and specification without notice.

CE

Documents / Resources

BENETECH GM8905 LCD Digital Laser Tachometer [pdf] Instruction Manual
GM8905, LCD Digital Laser Tachometer