

StroboTek

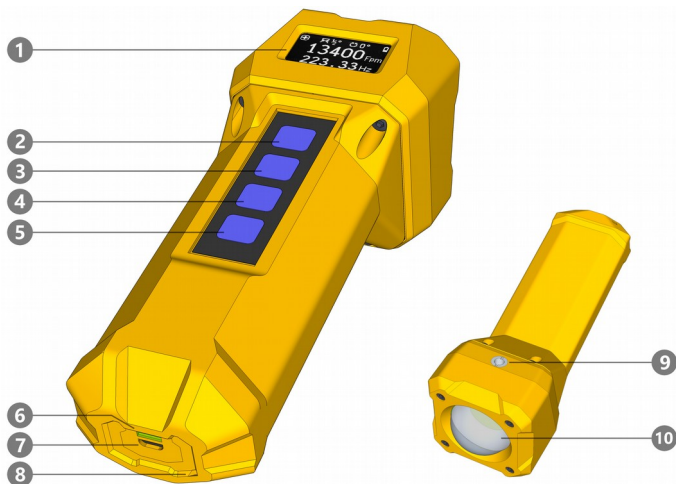
PRO 01



StroboTek PRO 01 is a precision portable digital LED stroboscope essential in:

- vibration analysis in research laboratories
- inspection of rotating or reciprocating machinery without stopping them (motors, gear teeth, bearings, shafts, injector patterns, turbine fan blades, etc.)
- quality control in textile, printing, packaging and many other industries
- academic applications

FEATURES



- | | | | |
|---|------------------------------|---|-------------------------|
| ① | OLED display | ⑥ | Charging indicator |
| ② | On-Off / Light button | ⑦ | Micro USB charging port |
| ③ | Up button | ⑧ | Wrist strap hole |
| ④ | Down button | ⑨ | 1/4" tripod mount hole |
| ⑤ | Menu / OK button | ⑩ | Power LED lens |

BUTTONS

On-Off / Light button

- long press (2-3 seconds) to power on and shut down the stroboscope
- short press to turn on and off the strobe light

Up and Down buttons

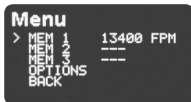
- in Main screen, increment or decrement the selected value (frequency, flash time, phase)
- in Menu and Options screens, advances to the next or previous menu item, option or value

Menu / OK button

- in Main screen, short press to switch between frequency, increment mode, flash time and phase shift modes
- in Main screen, long press to enter Menu screen
- in Menu and Options screens, short press to confirm the selected menu item, option or value

DISPLAY

The stroboscope's user interface has three pages or *screens*, pictured below: the Main screen, the Menu screen and the Options screen.



- To navigate from the Main screen to the Menu screen, push and hold **Menu / OK** button for 2-3 seconds.
- To navigate from the Menu screen to the Options screen, select **OPTIONS** with **Up** or **Down** buttons then press **Menu / OK**.
- To go back to the previous screen, select **BACK** with **Up** or **Down** buttons then press **Menu / OK**.

Main screen

The screen displayed after starting the stroboscope is the Main screen. In the upper part of the display there are several icons and values indicating the Increment mode, the Flash time (in degrees), the Phase and the battery level.

While in the Main screen, press **Menu / OK** to switch between different parameters:

- **Frequency** - The current stroboscope frequency is displayed in both Fpm and Hz, with the preferred (main) unit in the center of the display. Pressing **Up** or **Down** buttons increases or decreases the flashing frequency.



- **Increment mode** - The lower part of the display shows the current increment mode for the frequency. *Plus / Minus* mode increments or decrements the frequency by one step for each pressing of Up or Down buttons. *Double / Half* mode doubles or halves the flashing frequency for each pressing of Up or Down. To change between the two modes, press **Up** or **Down** buttons.



- **Flash time** - The lower part of the display shows the current flash (light pulse) duration, in degrees. A lower value means a sharper image, while a higher value makes the stroboscope flash brighter, but the image will be somewhat blurred. To increase or decrease the flash time, press **Up** or **Down**.



- **Phase shift** - After obtaining an apparent stationary image, it can be rotated one way or the other by increasing or decreasing the phase. Press **Up** or **Down** to change the phase value in steps of 1, 5, 10 or 15 degrees, selectable in Options screen.

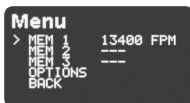


Menu screen

In this screen you can save and load values to and from memory, and access the Options screen (described above).

Accessing the memory

1. First use **Up** or **Down** buttons to select the desired memory (MEM 1 | MEM 2 | MEM 3)
2. Press **Menu / Ok**
3. Select one of the operations (Load | Save | Back) by using **Up** or **Down** buttons
4. Confirm the desired action by pressing **Menu / Ok**



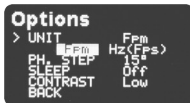
The values saved and loaded include the frequency, the main unit, the increment mode, the flash time, the phase shift step, the auto-shutdown interval and the display contrast.

Options screen

This screen allows you to change the preferred unit (Fpm or Hz), the phase shift step (1°, 5°, 10° or 15°), the auto-shutdown interval (2, 5, 10, 30 minutes or turn it off) and the display contrast (High or Low)

Changing an option

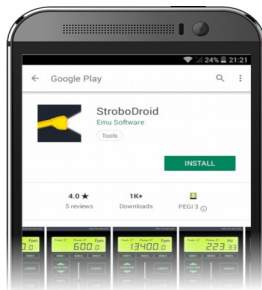
1. Use **Up** or **Down** buttons to select the desired option (UNIT, PHASE STEP, SLEEP or CONTRAST)
2. Press **Menu / Ok**
3. Select the desired value by using **Up** or **Down** buttons
4. Confirm the value by pressing **Menu / Ok**



REMOTE CONTROL

StroboTek devices have a unique feature, enabling them to be remote controlled from an Android smartphone, via a Bluetooth link. To use this feature, follow the steps below:

1. First, you need to install **StroboDroid** application from Google Play Store on your Android smartphone. You can search for it in Play Store, or use the QR code below.

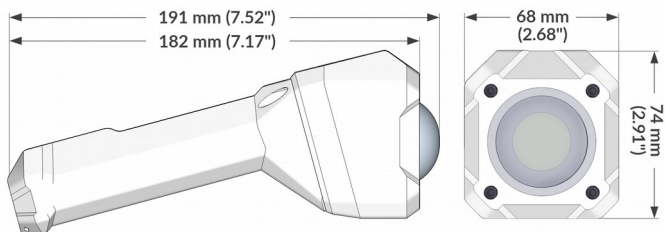


2. Power on the stroboscope.
3. Start **StroboDroid** application. The application will turn Bluetooth radio on and try to connect to the Strobotek device.
 - The first time the application discovers the StroboTek device, it will need a password to complete the Bluetooth pairing. The password is **1234**.
 - Alternatively, you can manually pair the smartphone's Bluetooth with the StroboTek device using the password above, before launching **StroboDroid** app.
4. While **StroboDroid** application is connected to the stroboscope, this will be indicated in the lower part of the stroboscope's display and the physical buttons of the stroboscope will be disabled.



SPECIFICATIONS

Frequency Unit	Fpm or Hz (Fps)
Flash Frequency	
Range	60.0 - 300,000 Fpm 1.00 - 5000 Hz
Accuracy	0.01 % (1 - 2000 Hz) 0.02 % (2000 - 5000 Hz)
Fpm Resolution	0.1 Fpm (60.0 - 999.9 Fpm) 1 Fpm (1000 - 9999 Fpm) 10 Fpm (10,000 - 99,990 Fpm) 100 Fpm (100,000 - 300,000 Fpm)
Hz Resolution	0.01 Hz (1.00 - 99.99 Hz) 0.1 Hz (100.0 - 999.9 Hz) 1 Hz (1000 - 5000 Hz)
Flash Pulse Duration	4°, 2°, 1°, ½°, ¼° (adjustable)
Phase Shift Step	1°, 5°, 10°, 15° (adjustable)
Light Source	50W High Intensity LED Lamp
Emission Output	5000 lumen
Light Color	6000 K (cool white)
Light Beam Angle	60°
Display	OLED Monochrome Graphical Display
Battery	Panasonic Li-Ion 3350mAh
Battery Life	>16 hours (@ 100Hz, 1° flash duration)
Charging Port	Micro USB
Charging Time	6 hours
Bluetooth Name	StroboTek
Bluetooth Password	1234
Tripod Mount	1/4"-20UNC Screw (photo tripod)
Weight	260 grams (9.1 oz.)
Dimensions (L x W x H)	191 x 68 x 74 mm (7.5 x 2.7 x 2.9 in.)
Operating Temperature	-10 °C to +40 °C (+15 °F to +105 °F)
Storage Temperature	-20 °C to +50 °C (-5 °F to +122 °F)



WARNINGS

- **Do not touch the moving object when you use stroboscopes.** In stroboscopic light, object movement can appear still or slowed.
- Use of stroboscopes may trigger epileptic seizures in persons susceptible to these. Do not use stroboscopes around them.
- StroboTek PRO 01 is a precision device, handle with care. Do not use the stroboscope if it is damaged.
- Do not use StroboTek PRO 01 in an explosive atmosphere or in damp or wet environments.
- Do not open the stroboscope. StroboTek PRO 01 contains no user-serviceable parts.
- **Do not expose to temperatures above 50°C (122°F).** This device has an outer shell made of biodegradable plastic that softens when exposed to higher temperatures.