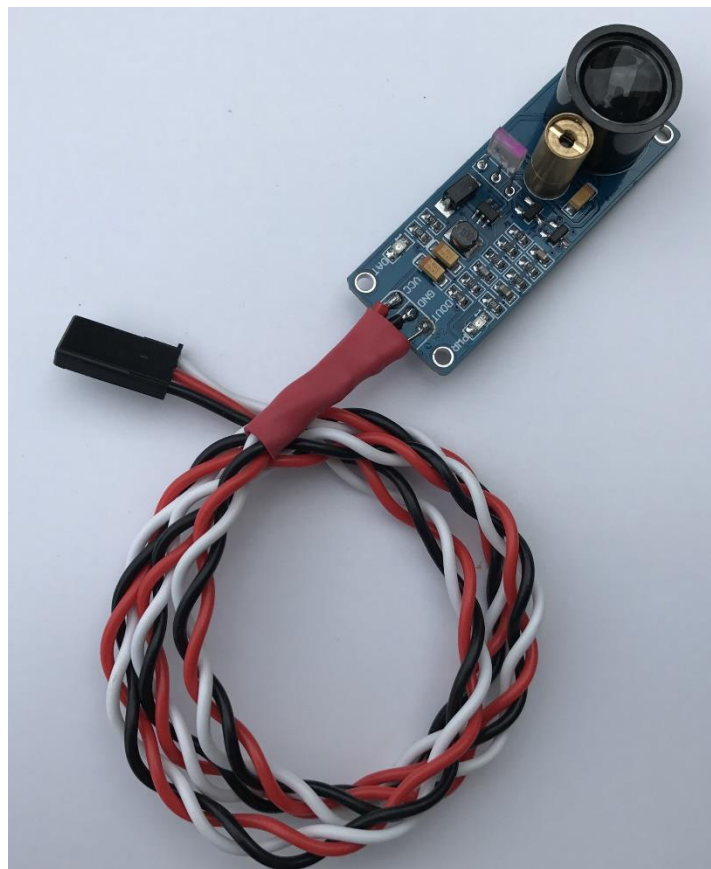


# *DynexHobby*

## *Laser Sensor Module*



## SAFETY FIRST



High speed rotors contain enough energy to cause damage to people and property. Manufacturer's safety precautions **MUST** be adhered to during testing and operation of devices.



Safety goggles must be worn during testing and operation of devices. High speed rotors can expel high velocity debris during an adverse event.



### WARNING!

- ✓ Never stand in front of or alongside a spinning rotor. Stand behind at a safe distance.
- ✓ Ensure bystanders are well away from the test article at a safe distance.
- ✓ NEVER run a rotor at full speed when balancing. Mounting cradles are not designed to restrain running devices at operational speeds.
- ✓ Run devices at the slowest possible speeds to avoid injury.
- ✓ Do not leave loose items nearby that can be caught by a spinning rotor.
- ✓ Secure all loose cables to prevent being caught in moving parts.
- ✓ Always stop running devices before working on them.
- ✓ Never place a limb in front of a rotor to stop it or slow it down.
- ✓ Fasten devices in secure mounts when operating at full speed. Follow the manufacturer's instructions for correct device operation.
- ✓ **Laser** light may cause seizures.
- ✓ Our products were **not** designed for full size vehicles.
- ✓ Do not point laser into **eyes**. Laser beam can cause permanent injury.

### Before you begin

Your safety is your own responsibility, including proper use of equipment and safety gear, and determining whether you have adequate skill and experience. Improper use of

modeling gear is dangerous, unless used properly and with adequate precautions, including safety gear. Some illustrative photos do not depict safety precautions or equipment, in order to show operating instructions more clearly. These products are not intended for use by children. These products are intended for radio control model applications and should never be used on industrial equipment.

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## Introduction

The DynexHobby Laser Module is a substitute for the IR Sensor. It allows users to measure motor speed and phase angle during balancing operations at a safe distance.



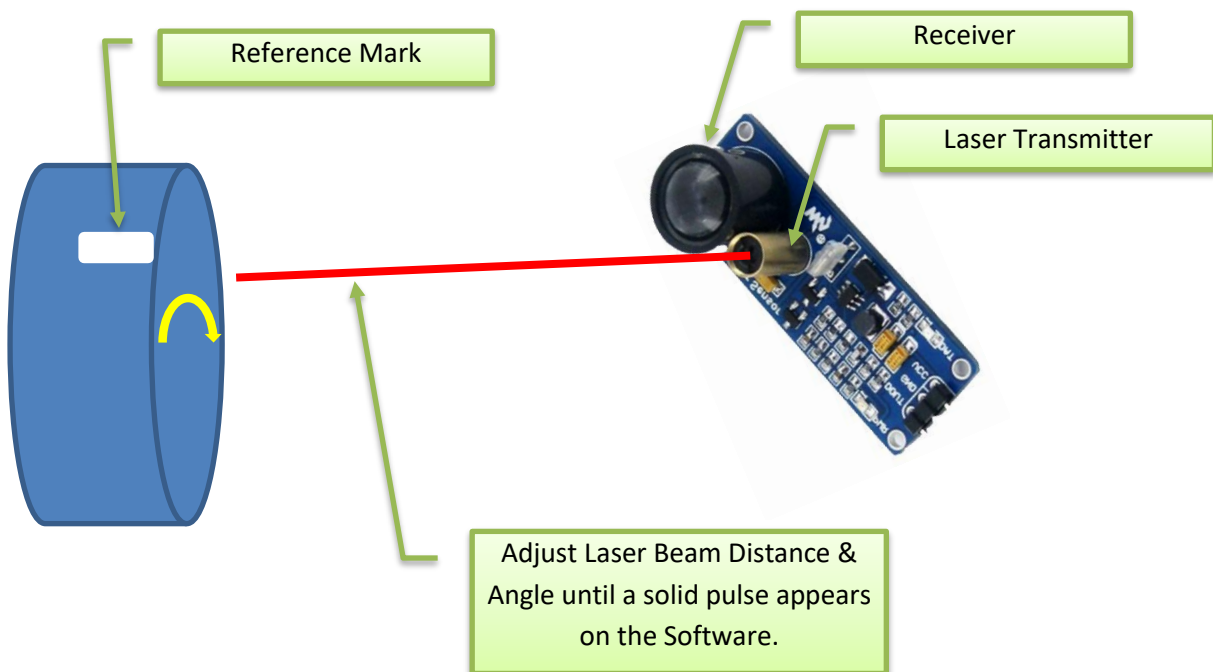
**Laser Module**



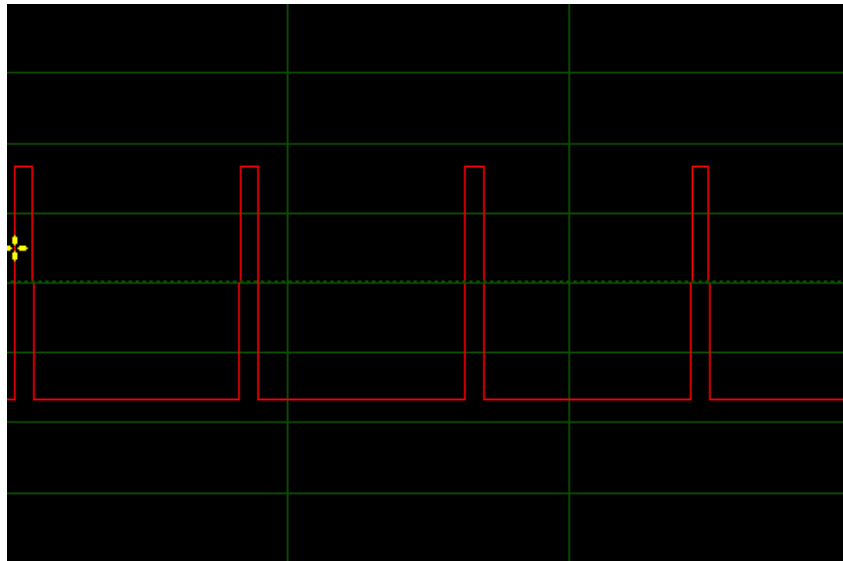
**IR Sensor**

To obtain best results when using the laser sensor module, it is recommended to:

1. Ensure that the phase position marker on the rotating device has a distinctive color contrast to the rotating hub. This will allow the laser sensor module to identify the marker and trigger a solid signal.
2. Experiment with the distance and angle of the laser pointer. Once the correct distance and angle is obtained, a solid pulse signal will be observed in the DynexHobby software.



The following is an example pulse signal. The shape and clarity of the pulse will vary depending on the setup. ***Pulse signal peaks should be equally spaced to produce correct readings.***



## SPECIFICATIONS

Item	Quantity
Laser Module	<ul style="list-style-type: none"><li>• Effective distance: 0.8m(typ), 1.5m(max)</li><li>• Power: 2.5V ~ 5.0V</li><li>• Dimension: 47.7mm * 17.9mm</li><li>• Mounting holes size: 2.0mm</li></ul>

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