



USER MANUAL

Gocator 2375 (Supplemental)

Document revision: A

Copyright

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Information contained within this manual is subject to change.

This product is designated for use solely as a component and as such it does not comply with the standards relating to laser products specified in U.S. FDA CFR Title 21 Part 1040.

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Introduction

This documentation provides supplementary information for Gocator 2375.

See *Gocator 2300 & 2880 Series User Manual* for information on how to configure and use the Gocator web interface with a Gocator 2375, as well as for reference information on the device's protocols and configuration files. Sections cited from *Gocator 2300 & 2880 Series User Manual* are shown in italics.

Notational Conventions

This guide uses the following notational conventions:



Follow these safety guidelines to avoid potential injury or property damage.



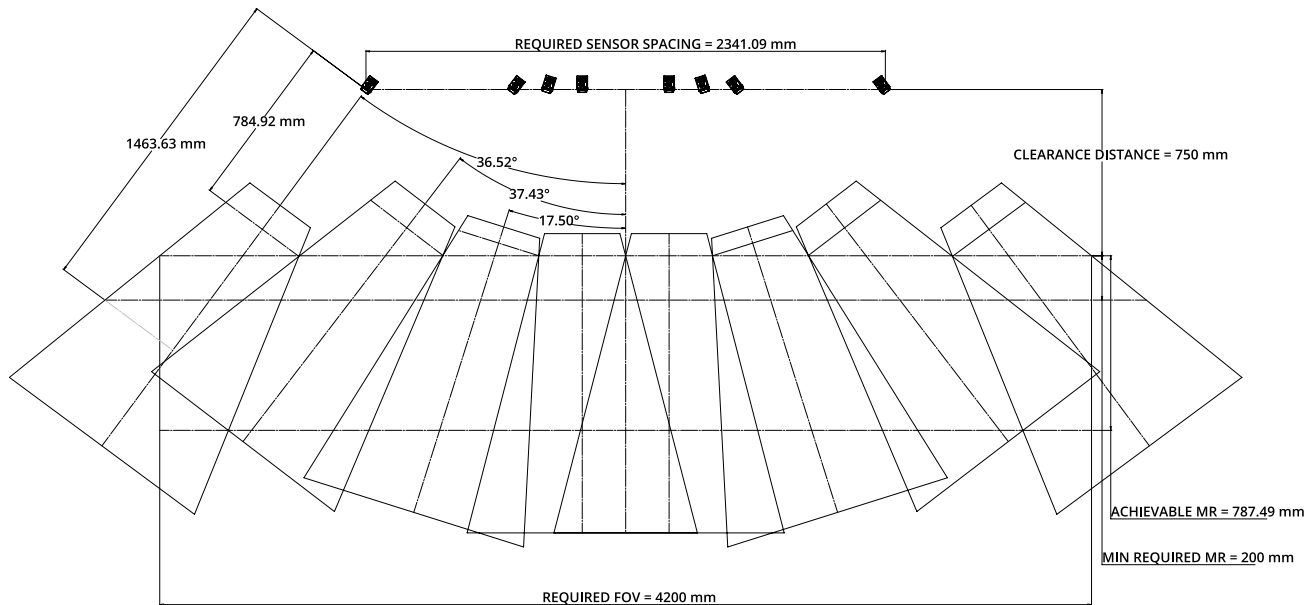
Consider this information in order to make best use of the product.

Rut-Scanning System Setup

The following sections describe how to set up a rut-scanning system.

Layout

The Gocator 2375 is designed to cover a scan width of up to 4.2 m by using 8 sensors mounted in parallel.

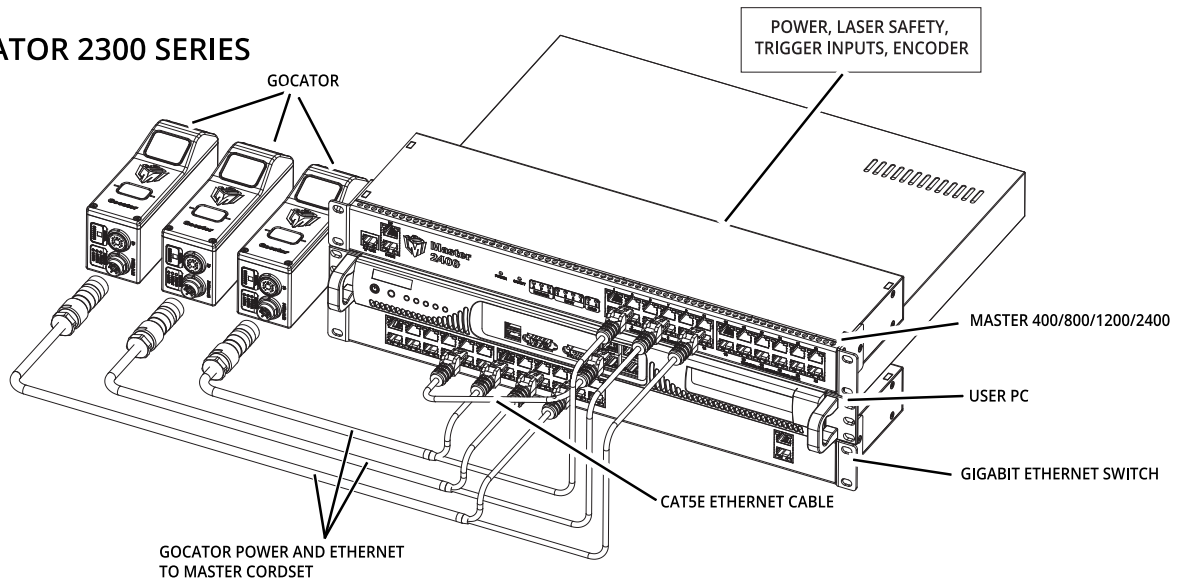


The diagram above shows the clearance distance and measurement range required in a typical setup. You can use the specification estimator (Gocator-2375_Specification_Estimator.xlsx) to calculate the X and Z resolution of the sensors with different combinations of clearance distance and measurement range.

System Setup

A typical Gocator 2375 system is set up as a multi-sensor system. The sensors are powered up using a Master 400/800/1200/2400.

GOCATOR 2300 SERIES



To wire up a Gocator 2375:

1. Connect the Gocator Power to Master cordset between the Power connector and an unused port on the Master.
2. Connect the Gocator Ethernet cordset between the LAN connector and an Ethernet switch.

See the *Master 400/800* and the *Master 1200/2400* sections in *Gocator 2300 & 2880 Series User Manual* for more information on how to install a Master.

Software Configuration

Each sensor is shipped with a default IP address of 192.168.1.10. Before you add a sensor to a multi-sensor system, its firmware version must match that of the other sensors, and its IP address must be unique.



All sections referenced in the following procedure are found in *Gocator 2300 & 2880 Series User Manual*.

To configure a Gocator 2375 for the first time:

1. **Set up the sensor's IP address.**
 - a. Follow the steps in the *Running a Standalone Sensor System* section.
 - b. Make sure that there is no other sensor in the network with the IP address 192.168.1.10.
2. **Upgrade the firmware.**
 - a. Follow the steps in the *Firmware Upgrade* section.
 - b. Visit <http://www.lmi3d.com/support/downloads/gocator-2375-for-road-rut-scanning> to download the latest firmware.

3. Set up profiling parameters.

- a. Follow the steps in the *Setup and Calibration* section to set up profiling parameters. Typically, trigger, active area, and exposure will need to be adjusted.

System Operation

An isolated layout should be used. Under this layout, each sensor can be independently controlled by the SDK. The following application notes explain how to operate a multi-sensor system using the SDK.

APPNOTE_Gocator_4.x_Multi_Sensor_Guide.zip

Explains how to use the SDK to create a multi-sensor system, and multiplex their timing.

Gocator-2000-2300_appnote_multi-sensor-alignment-calibration.zip

Explains how to use the SDK to perform alignment calibration of a multi-sensor system.

Example code is included with both of the application notes above.

Specifications

For the specifications of the Gocator and associated hardware such as cordsets and Masters, see *Gocator 2300 & 2880 Series User Manual*.

Support

For assistance regarding a component or product, please contact LMI Technologies.

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