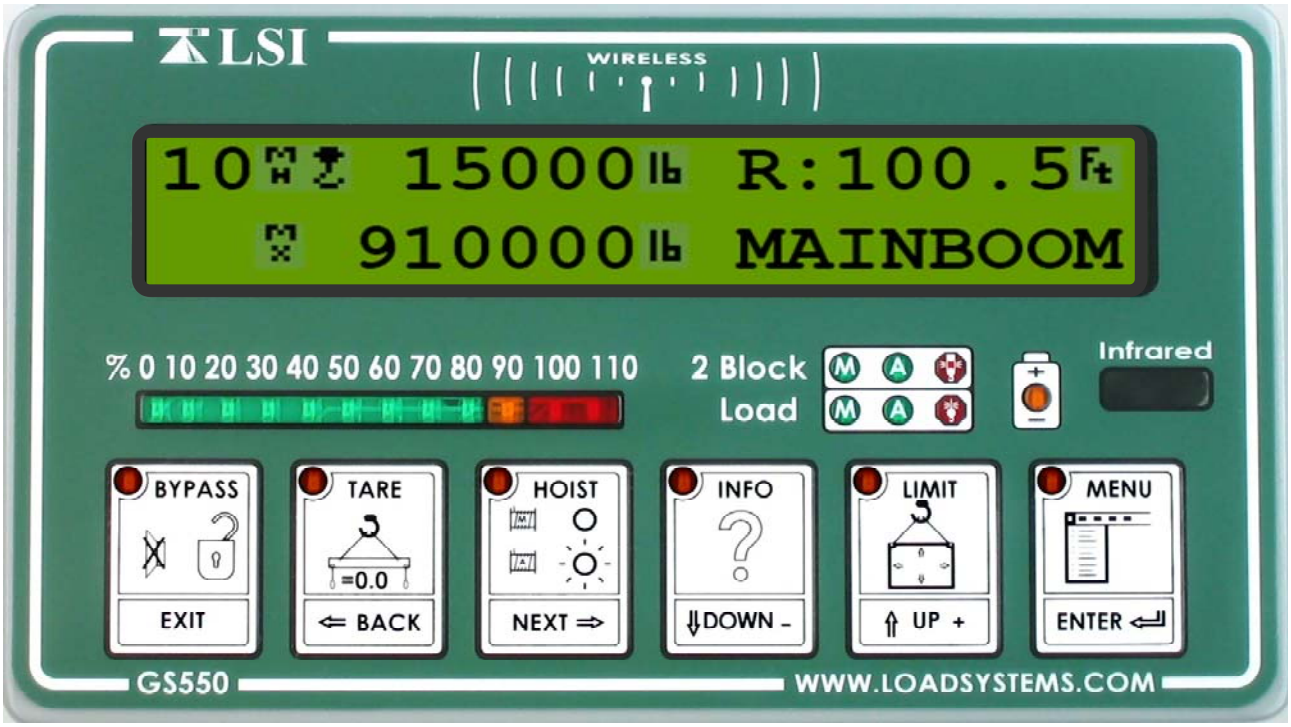
Load Systems International

User Manual

The GS550 System

Document Part Number GM550, Version 2004, Revision B



Engineered weighing solutions for crane and lifting application

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Introduction

Overview

The GS550 system includes the cabin mounted GS550 radio display and compatible crane mounted sensors. The GS550 creates a two-way radio network with the sensors to bring required lift data to the operator. Hoist load, boom and jib angles, boom length, wind speed and pending two-block can be detected and indicated to the operator in real time. Working load radius can be calculated and compared to a rated capacity chart (if programmed). Furthermore the GS550 can be programmed to generate warnings, alarms and lockout commands, all triggered by adjustable thresholds and limits. All these events can be recorded by the data logger with a time and date stamp. The exact operational function of the GS550 system depends on the sensor configuration used and the rated capacity charts programmed (where applicable). The GS550 includes an infrared port to facilitate software and chart updates and data logger downloads using a compatible personal digital assistant (PDA) or cell phone. Compatible sensors include the GS050 anti-two-block, the GC series load cells and GS001 series line rider and load pin transmitters, the GS010 angle sensors, the GS011 angle sensor and length transmitter and the GS020 wind speed sensor. The GS550 system is designed as an operator aide and is in no way a substitute for safe operating practice

Version Compatibility

GS series product with version 2 firmware is not compatible with GS series product with version 1 firmware. For information on upgrading GS series product from version 1 to version 2 firmwares please contact LSI.

Start-Up

The GS550 must be correctly programmed for the system sensors installed. The GS550 powers up with several green lights flashing, this indicates that the display is waking up programmed sensors and creating a radio communication link with each. Once a reliable radio communication network is established, all green lights will remain lit without flashing.

This process may take up to one minute. The delay is created by the battery management function and does not affect system security. If an anti-two-block switch detects a pending two-block event, if a load cell detects a change in load, or if an angle sensor detects a change in angle, the appropriate radio link will be established in less than 0.1 seconds. To immediately wake-up a load cell, lift the hook with a load; to immediately wake up an angle sensor, change the boom angle.

In special conditions of lockout created by a missing sensor, you may bypass that sensor until the next display power up by pressing bypass for 10 seconds. That sensor green light should stop flashing and then turn off.

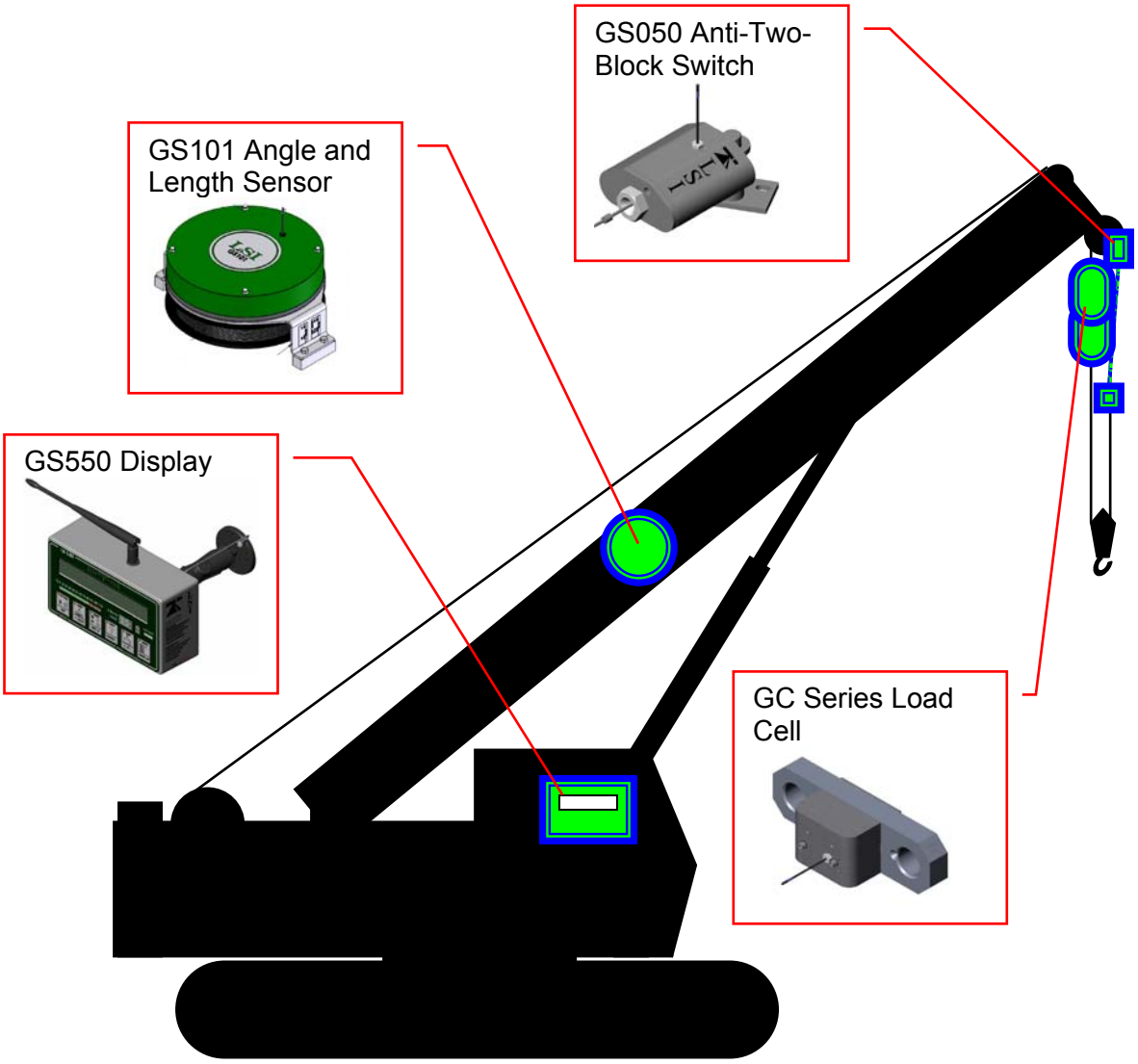

Figure: Key components in a typical system