



# **OPERATIONAL AND PARTS MANUAL FOR HEIGHT INDICATING SYSTEM**

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# HEIGHT INDICATING SYSTEM



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# HEIGHT INDICATING SYSTEM

## Specifications

### **LASERS:**

Power: 10 to 30 VDC

Measuring range: 0.2-30m (White), 90% remission

Accuracy:  $\pm 3$ mm

Resolution analogue: 12bit

Resolution CAN: 0.1mm

Light source: Laser diode, red light

Laser class: 2(EN 60825/21 CFR1040)

Current output: 0-20mA/4-20mA

Interface: CAN (Layer2)

Baud rate: 20-1000kbits/s

CAN address: 11bits, free selectable

Enclosure rating: IP65

### **CANview® Gateway 2011:**

Power: 10VDC-30VDC

Power input @24vdc: <80 mA

### **System power Source:**

Any 10VDC to 30VDC power source.

# HEIGHT INDICATING SYSTEM

## INTRODUCTION

The unique design of the Height indicating system is a can-bus system that puts accurate information instantly at your fingertips. It is designed to plug into a LevelLiftIIA system. When this happens the display will sense the lasers are connected at which point the operator can scroll to the proper page on the display.

The system consists of the following components. A gateway that the lasers will plug into. Two or four lasers depending on if it's for a two-point or a four-point system and all the appropriate cords. The lasers are equipped with magnetic bases, so they can be place just about anywhere on the lifting units.

## COMPONENTS

### SENSORS



The system consist of one laser for each lifting unit.



One gateway that that lasers connect too so the information can be sent to the display.



100 -foot molded cords that connect the lasers to the gateway.

**HEIGHT INDICATING SYSTEM**

2 meter cord to connect the gateway to the display.



# HEIGHT INDICATING SYSTEM

## SETTING UP YOUR HEIGHT INDICATING SYSTEM

To set up the height indicating system: place the readout for the level lift system near the directional control valve levers at the power unit so the operator can easily see the display. The top of the gauge panel is a good location. The display can be tilted up and down to the desired position. Make sure the display has been fully charged.

The next step is to place the enclosure that is supplied with the height system on the power unit. Take the 2 meter molded cord that is supplied with the system, plug one end into the 5 pin connector that is to the left of the power switch on the gateway, and plug the other end in the five pin connector that is located on the left hand side of the display. However, the display has two additional 5-pin connectors that are located on the back of the display; those are for the level sensors.

Connect the 2 meter cord to the connector on the left hand side of the display.



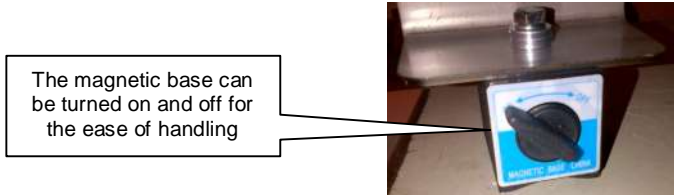
Connect the other end of the 2 meter cord to this connector on the gateway.

Power Switch

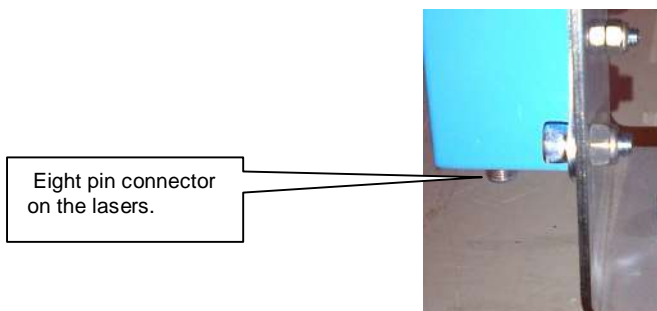


## HEIGHT INDICATING SYSTEM

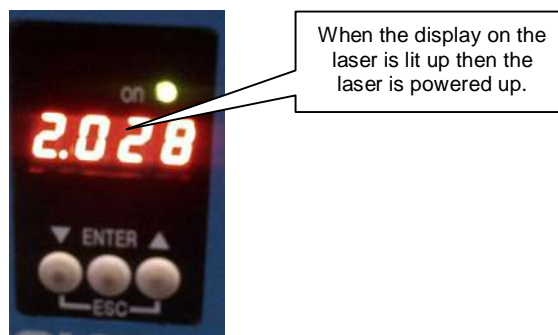
Before placing the lasers, take note that they are numbered. Laser #1 should go on lift unit #1, Laser #2 on unit #2 and so on. Each laser is equipped with a magnetic base that can be turned on and off for the ease of handling.



Take the 100 foot cords, take note that one end of the cord has a 8 pin connector and the other is a 5 pin, the 8 pin goes to the laser and the 5 pin to the gateway. All connectors keyed and can only be plugged in one way.



Take the power plug on the gateway and plug it in. Turn on just the gateway, the displays on the lasers will light up. With the lasers powered up go to each lifting unit and adjust the lasers so that the red beam of light is hitting the center line of the beam. Be sure not to shine the beam into your or anyone else's eyes, doing so will damage the eyes.



### **Warning!**

**Do not shine the lasers into your or anyone else's eyes or ever look directly into lens. Doing so will damage the eyes or cause blindness.**

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Do not look into the lens when the laser is turned on. Doing so can damage the eyes or cause blindness.



Once the lasers are positioned and powered up, turn on the level lift display and use the arrow buttons on the display to scroll to the height page. The lasers will read the actual distance from the laser to the beam or whatever object it is aimed at, this will be shown on the display.



Use this arrow down button to scroll to the laser height page. Use the up arrow to go back to the level lift pages.

Once you know the system is plumb and level the system can be zeroed by pressing the black button on the gateway. This is very useful if one of the lifting units is cribbed up higher than the other. To switch the system back to its default setting press the red button.

Pressing this button will zero the system.



Pressing this button put the system back to its default setting.

It is possible to use the level lift systems with the height system at the same time. However, it will be necessary to scroll back and forth to switch from one to the other. Refer to the operators' manual for the level lift for proper setup and operation.