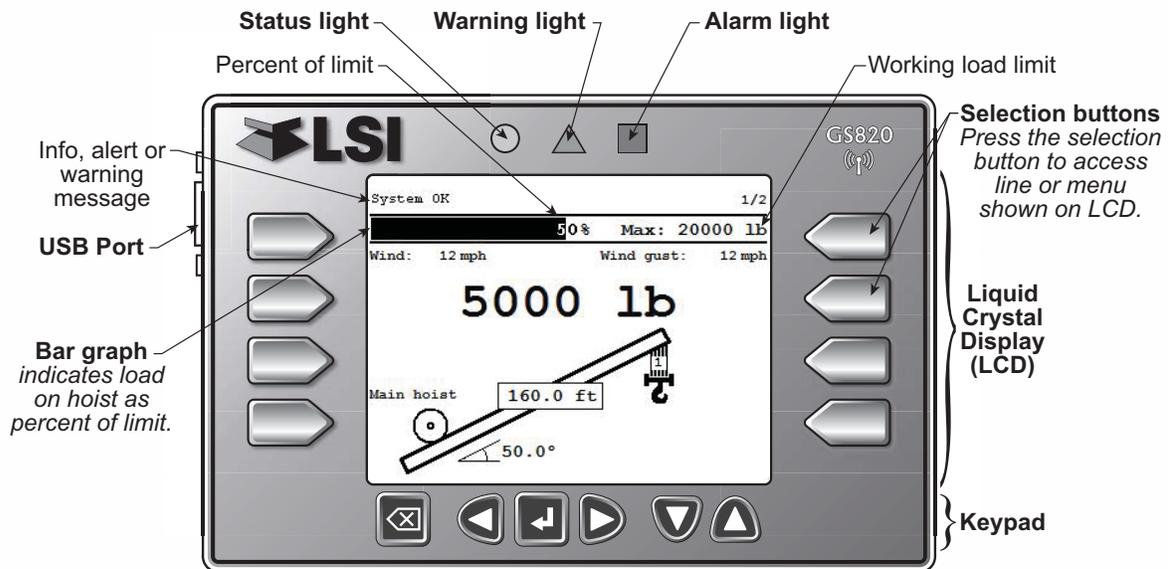# THE GS820 OPERATION DISPLAY

The GS820 displays detailed information on the liquid crystal display (LCD); warnings, alarms, and radio status is also communicated by the display buzzer.

The USB port is used to download data from the data logger or to upload capacity charts using a USB mass storage device (USB key).

Keypad

Bypass / Exit
Override lockout for emergency purposes*. The alarm will remain silent until the next alarm; lockout will re-engage as soon as the button is released. / Exit menu.

Back
Move to the previous page/digit.

Menu / Enter
Access the system menus, refer to Menu System section. / Enter menu, confirm changes to system settings.

Next
Move to next page/digit.

Down
Modify numeric values and move down through a list of choices.

Up
Modify numeric values and move up through a list of choices.

* This applies only if the GS820 has been correctly installed to control crane lockout function.

Display Lights

Status light (green)

The status light stays on when the GS820 has a reliable radio communication link to all programmed sensors.

Warning light (yellow)

The warning light flashes when;

1. the communication with a sensor is not established ("***NoRx***" apears on LCD);

2. a warning threshold has been reached (typically 90% of the maximum limit);

3. an alarm is bypassed;

4. the sensor battery life drops below 10%. Normally several weeks of battery life remains from the moment the low battery message first appears.

A warning message is also generated on the LCD.

Alarm light (red)

The alarm light flashes when a sensor limit is reached (100% and more). An alarm message is also generated on the LCD.

⚠ **WARNING!** Carefully read and understand this manual and the *GS820 Installer and User's Manual* before proceeding.

⚠ **IMPORTANT!** Refer to the "*GS820 Display & GS Series Sensors - Installer and User's Manual*" for complete information about installation, operation, maintenance, certification and warranty.

Troubleshooting

Display Not On

1. Verify the connection between the yellow cable wires and the crane power supply

2. Verify the crane battery, the fuse and the accessory switch.

3. Carefully disconnect the yellow cable from the display unit and reconnect it.

Display In Alarm

1. Identify the sensor in alarm. Place the sensor in safe condition (press **Bypass** if necessary).

2. Verify that the limits, the parts of line and the tare are correctly adjusted.

3. Verify all sensor batteries: see *Battery Diagnostic* troubleshooting section.

4. Verify the red light on the sensor box flashes (release the wire rope of an anti-two-block, change the load on a load sensor, change the angle of an angle sensor, change the boom length of a length sensor).

5. Verify radio communication: see *Radio communication* troubleshooting section.

Sensor Malfunction

1. Verify the sensor batteries: see *Battery Diagnostic* troubleshooting section.

2. Verify the red light on the sensor box flashes (release the wire rope of an anti-two-block, change the load on a load sensor, change the angle of an angle sensor, change the boom length of a length sensor).

3. Verify radio communication: see *Radio communication* troubleshooting section.

Battery Diagnostic

Go to menu *5A) SYSTEM SENSORS*. Select a sensor and press **Enter** to verify the sensor status.

- "*BATTERY: 50%*": 50% of battery life remains (typically several months).

- "*UNABLE TO REACH REMOTE SENSOR*": communi-cation not yet established. Verify the radio ID corresponds to the installed sensor.

- Battery status is usually known within 2 minutes. When 10% or less battery life remains, for any sensor, a message will be generated (the Info alert light will flash). Follow the *battery diagnostic* procedure to identify the sensor. Batteries do not need to be replaced before the *LOW BATTERY* message is generated. Usually several days, or weeks, of operation remain from the moment the *LOW BATTERY* message comes. A new high quality alkaline or lithium 'D' cell battery may be used.

Radio communication

1. Verify that the antennas have a direct clear line of sight to each other.

2. Verify that the antennas do not point directly towards, or directly away from, each other.

3. Verify that the antennas are not in contact with metal other than the sensor itself.

4. Verify the antenna for damage.

5. Go to menu *5A) SYSTEM SENSORS*. Select a sensor and press **Enter** to verify the sensor status. Press **Exit** to select another sensor.

- "*RECEIVED RF POWER: 85%*" means radio reception is at 85%.

Lockout Malfunction

1. Verify the connections of the lockout wire(s) (white, green, orange, blue).

2. Verify lockout coil connections.

3. Verify correct relay installation for lockout systems drawing more than one ampere on the white wire.

4. Carefully disconnect the yellow cable from the display unit and reconnect it.

GS820 Menu Outline