

# LOAD INSTRUMENTATION LTD

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## INSTALLATION & OPERATION MANUAL

### MODEL

### LOADWISE 315 SYSTEM

FCCID: OEF - LW 315T5 (TRANSMITTER)

FCCID: OEF - LW 315R5 (RECEIVER)

Load Instrumentation Ltd  
31 Ivanhoe Road  
Hogwood Lane Industrial Estate  
FINCHAMPSTEAD  
Berks  
RG40 4QQ

Load Instrumentation are manufacturers and suppliers of a range of LOADWISE equipment, designed for the purpose of monitoring loads and configurations on cranes and similar equipment.

## UNITED KINGDOM SERVICE FACILITIES

All warranty/service requests should be made through the service department of the manufacturer at Finchampstead on telephone number 01189 328855.

UK sales and service facilities are also available from the following agents:

### LOAD INSTRUMENTATION LTD

Unit 10  
Buckley Road Industrial Estate  
Rochdale, Lancs  
OL12 9EF

Telephone: 01706 860905  
Mobile: 0836 784630

### S & K SLI

4 Millbrook Avenue  
Brislington  
Bristol  
BS4 4SU

Telephone: 01272 776149  
Mobile: 0836 622160

### CRANE & PLANT ENGINEERS

34 Goodliff road  
Grantham  
Lincs  
NG31 7PQ

Telephone: 01476 71890  
Mobile: 0860 478091

### I.A.M ENGINEERING SERVICES

The School House  
Fornightly,  
Nairn  
IV12 5JB  
Telephone: 01667 453509  
Mobile: 0411 552881

### WYCLIFFE ELECTRICAL SERVICES

6 Wycliffe Close  
Newton Aycliffe  
Co Durham  
DL5 4BN

Telephone: 01325 300322  
Mobile: 0850 533981

### GLYNNS TECHNICAL SERVICES

58 Fairfield Road  
Bridgend  
Mid Glamorgan  
CF31 3UD

Telephone: 01656 654722  
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### LEN ALLEN

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### K & W MECHANICAL ENGINEERS

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West Midlands  
WS10 8XE  
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## OVERSEAS SERVICE AND SALES

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2 Tuas Drive 2  
2262  
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Telephone: (010 65) 8622401  
Fax: (010 65) 8615828

**A WIT**  
**PO Box 3000**  
1300 EA  
Almere  
**HOLLAND**

Telephone: (00 31) 365 470578  
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**A NOBLE & SONS**  
80-90 Grand Junction Road  
Kilburn  
SA 5084  
**AUSTRALIA**

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Dammam 31324  
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Jeddah 21521  
**SAUDI ARABIA**

Telephone: (00966) 2 6885244  
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**AFI**  
PO Box 37202  
Riffa Area  
**SAUDI ARABIA**

Telephone: (00973) 772900  
Fax: (00973) 777803

**MOBILE CRANE SALES**  
**11 Mountjoy Street**  
Wilbart  
Germiston 1401  
**SOUTH AFRICA**

Telephone: (010 27) 11 455 4718/9  
Fax: (010 27) 11 455 5197

**KALICSON LIMITED**  
225 Cambridge Plaza  
Lot 50 Sheung Shui  
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### DAPELEC

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## **WARRANTY**

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, MADE BY EITHER THE DISTRIBUTOR OR THE MANUFACTURER ON NEW LOAD INSTRUMENTATION EQUIPMENT, EXCEPT THE MANUFACTURER WARRANTY AGAINST DEFECTS, MATERIAL AND WORKMANSHIP SET OUT BELOW

### **NEW EQUIPMENT WARRANTY**

“The manufacturer warrants each new product made by the Manufacturer to be free from defects in material and workmanship. It's obligation and liability under this warranty being limited to replacing free of charge at its factory, any part proving defective under normal use and service within twelve months from the date of delivery, providing the equipment is on record with the Manufacturer as being installed by the distributor. If the machine is not on record as being installed by the distributor, the Manufacturer will consider the date of shipment from the factory. This warranty is in lieu of all other warranties, express or implied, and the obligation and liability of the Manufacturer under this warranty shall not include any transportation or other charges or consequential damages or delay resulting from the defect. Any operation beyond rated capacity or improper use or application of the product or the substitution upon it of parts not approved by the Manufacturer shall void this warranty. This warranty covers only the products of Load Instrumentation Limited. The products of other Manufacturers are covered only by such warranties as are made by their Manufacturers”.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND OF ANY OTHER OBLIGATIONS OR LIABILITY ON THE PART OF THE MANUFACTURER, AND LOAD INSTRUMENTATION NEITHER ASSUMES NOR AUTHORISES ANY OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH SUCH EQUIPMENT.

## **LOAD INSTRUMENTATION LTD**

Transmitter: FCC ID: OEF-LW315T5

Receiver: FCC D: OEF-LW315RF

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any modification or change to the equipment without the expressed permission from Load Instrumentation in writing will void the users authority to operate the equipment.

This equipment should not be connected to any public utility.

## **WHAT IT IS**

An FM radio link that allows a remote safety switch to be sensed.

## **WHAT IT DOES**

It monitors a safety switch and the state of its battery and transmits a signal coded to include the transmitter identity.

The receiver displays the safety switch state, the battery state and whether a regular transmission is being received.

## **WHAT IT CONSISTS OF**

1. In THE CAB is the DISPLAY UNIT giving:

- (a) Safety switch state.
- (b) Battery state.
- (c) Signal state.
- (d) An audible alarm associated with the safety switch state.
- (e) An over-ride key switch for inhibiting any externally connected alarm action.

2. On THE BOOM is

- (a) The transmitter box with integral batteries.
- (b) The safety switch and weight.

## **OPERATION**

1. The transmitter being permanently powered is transmitting approximately every 75 minutes whilst the safety switch is closed. It will transmit when the safety switch is opened or closed and if the battery is becoming low. It will not transmit whilst the switch is continuously open.
2. The display when power is applied will go into alarm until a transmission is received. This may be by deliberately activating the safety switch to test its function or waiting up to 75 minutes for a regular transmission to happen (even then only if the safety switch is closed).

The system will not reset if:-

- (a) The safety switch is open.
- (b) The battery is too low.
- (c) The transmitter is masked by a metal object.

3. When the battery LED illuminates there is enough power for approximately 7 days usage. This gives sufficient time for the batteries to be replaced.
4. If the system is being used within close proximity of other systems then they should be encoded with system identifiers to stop interference between different cranes.

## **INSTALLATION**

### **1. THE DISPLAY UNIT**

Must be mounted in clear view and reach of the operator. The top rear edge of the display should have a 'LINE OF SIGHT' to the transmitter at all times, (i.e. all boom lengths and boom angles), which should not be obscured by any metallic objects (including the cab roof).

### **2. THE TRANSMITTER**

Should be positioned under the boom head with the indicated lid edge parallel and towards the display unit. This lid edge should be as far as possible from the boom (within the constraint of sensible and unintrusive brackets).

### **3. THE SAFETY SWITCH**

Should be positioned according to the manufacturer's instructions. The LOADWISE 310 system instructions may be used as an example.

### **4. ELECTRICAL CONNECTIONS**

See the appended drawing.

## **MAINTENANCE**

1. The DISPLAY UNIT is maintenance free and should be replaced in the event of failure.

2. The TRANSMITTER BOX

Is of polyester/fibreglass construction with stainless steel screws and is also maintenance free. However on the occasion of changing batteries the lid seal and fixing screws should be lightly greased before reassembly.

3. The batteries are 1.5 volt size AA and should be replaced every year of sooner. The replacements should be of an ALKALINE type and not NICAD or LITHIUM. All six batteries should be changed together by:-

- 1) Undoing the four lid screws.
- 2) Undoing the battery strap.
- 3) Removing the old batteries.
- 4) Replacing the batteries being aware of the polarity size on each holder.
- 5) Clipping the elasticated strap together.
- 6) Greasing the screw threads and lid seal.
- 7) Replacing the lid and tightening the screws.

4. Where the system requires IDENTITY selection these modules should be fitted at the time of ordering but can be fitted later following the instructions supplied with each module pair.

# CONNECTIONS

