

## DOCK LEVELLER

## **USER MANUAL**

## TYPE:

## TELESCOPIC

Electro-Hydraulic Hinged Lip

### <u>INDEX</u>

TECHINCAL SPECIFICATIONS	PAGE 3
OPERATING INSTRUCTIONS	PAGE 5
OPERATING SEQUENCE	PAGE 7
SAFETY	PAGE 8
MAINTENANCE	PAGE 10
PARTS LIST	PAGE 11
ELECTRICAL CIRCUIT (3 Phase)	PAGE 12
ELECTRICAL CIRCUIT (1 Phase)	PAGE 13
SERVICE RECORD	PAGE 14

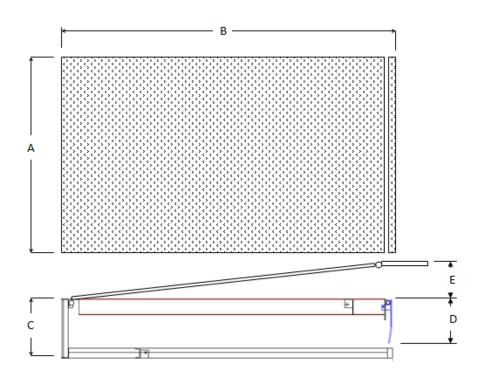
#### **TECHNICAL SPECIFICATIONS**

#### Manufactured in accordance with EN1398



Capacity	6,000Kg dynamic, 10,000Kg static		
Platform Width	To customer requirement (generally 2000 – 2100mm)		
Platform Length	To customer requirement (generally 3000mm)		
Lip Length	430mm long hinged, cranked or flat with chamfered edge		
Platform Material	Non-slip durbar plate finished in any RAL colour or galvanised.		
	Leveller platform designed to flex 100mm laterally in each		
	direction to compensate for vehicle tilt while remaining rigid		
	longitudinally		
Main Ram	Hydraulic single acting with burst valve to prevent platform		
	descending under load, if vehicle inadvertently pulls away, or		
	in the event of hose failure		
Lip Ram	Hydraulic double acting		
Power Pack	0.75KW, 380v/50Hz – 3Ph mounted on leveller base frame.		
	Pre-wired for connection to control panel.		
Control Panel	Rated IP55 – 24v AC with door interlock as standard		
Above/Below Deck	Dependent on platform length – see table in figure overleaf.		
Toe Guards	Galvanised, telescopic		
Maintenance Prop	Included		
Fixing Application	All dock levellers can be manufactured to suit pit mounted,		
	suspended or cast in applications.		

#### Standard dimensions:



Size	А	В	С	D	E
2.0 x 2.5	2000	2500	600	430	300
2.0 x 3.0	2000	3000	600	430	350
2.0 x 3.5	2000	3500	600	430	400
2.0 x 4.0	2000	4000	600	430	450

Options:

- 10,000Kg or 15,000Kg capacity
- RAL colour to customer requirement
- Alternative lip size
- Limit switch
- Galvanised
- Can be made to suit any pit size

#### **OPERATING INSTRUCTIONS**

- Dock levellers should only be used by personnel trained in their operation, and who are authorised to do so.
- Dock levellers should only be used for the purpose for which they have been designed, and should never be operated with goods on or in front of the device.
- No goods or persons should be left on the leveller when the vehicle has disengaged.
- The leveller should only be used for the specific purpose of loading and unloading containers or trucks with the aid of a forklift or pallet truck.
- The vehicle should preferably be prevented from moving by the use of chocks or a vehicle restraining device, during the loading and unloading process.
- According to EEC standards the maximum permitted gradient is ± 12.5% or approximately ± 7°. Always refer to the appropriate forklift truck operator's manual, for the maximum safe working gradient.

#### Using The Dock Leveller:

Before using the dock leveller make sure that the power supply is switched on.

Do not switch the power supply off when the leveller is in use

Please comply with the following sequence of events:

- 1. Ensure that the vehicle is correctly positioned centrally in front of the dock leveller with the rear doors open.
- 2. Press the control button and keep it depressed until the deck has reached its highest position and the lip is extended.
- 3. When the control button is released the deck will lower under its own weight. The lip should remain extended.
- 4. The lip must always provide sufficient support on the loading floor of the vehicle. It should extend no less than 100mm in to the vehicle at all times.

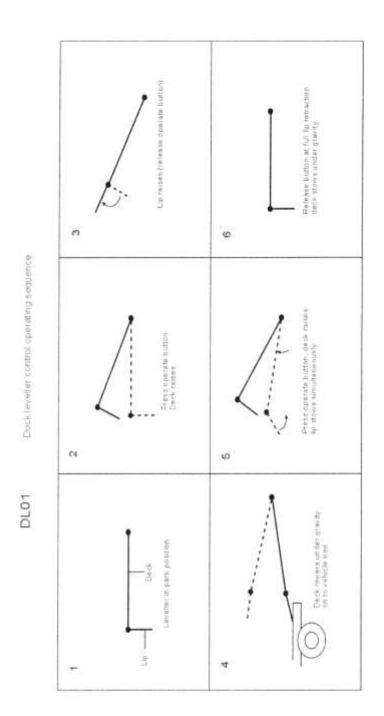
## Returning the deck to its rest position once loading or unloading has been completed:

- 1. Press the control button and keep it depressed until the deck has raised and the lip fully retracted
- 2. When the control button is released, the deck will lower under its own weight until the lip has located on the parking blocks

#### **Emergency Stop ONLY TO BE USED IN AN EMERGENCY**

- This button must never be used during loading or unloading, as the deck is unable to follow the up & down movements of the vehicle, which could lead to a potentially dangerous situation, or damage to the leveller.

### **OPERATING SEQUENCE**



#### <u>SAFETY</u>

#### **Cross Traffic Support:**

The leveller lip, when correctly positioned on the stops, will take the weight of all cross traffic to a maximum of 9000Kg

#### **Toe Guards:**

Toe guards on both sides of the leveller protect the operator and other parties. The toe guards are marked in the yellow and black regulation stripes in conformity with EEC regulations.

#### Safety Stop:

If a vehicle drives away during loading or unloading & there is a heavy load on the dock leveller, the safety stop will be activated automatically.

Once the load has been removed, brief pressure on the control button is sufficient to reset the leveller, which can then be returned to the parked position.

The leveller should not be used again until a thorough inspection has been carried out by the supplier or dealer for any deformity or damage.

#### Lateral Tilt:

The torsional properties of the leveller deck is such, that the leveller lip can remain in contact with the loading surface of the vehicle with a lateral tilt of approximately 100mm either way.

#### **Emergency Stop:**

The emergency stop must only be used in the event of an Emergency.

The emergency stop should never be pressed during loading and unloading as the leveller is then unable to follow the up & down movements of the vehicle.

#### **Maintenance Supports:**

Always use the maintenance support during repairs, adjustments, maintenance and cleaning operations that require personnel to go below the deck of the leveller.

#### **Power Supply:**

Always switch off power supply before proceeding with any maintenance or cleaning work.

#### **MAINTENANCE**

- The user should check for visible signs of damage daily
- The user should check all functions of the leveller weekly
- Cleaning & lubrication should be carried out as below

#### Hydraulic system:

- Check the hoses & unions every six months for leaks or damage
- Check oil level in the tank every six months, top up as necessary
- Full oil change is recommended every 2 years
- Recommended oils for normal applications where the power pack is well sheltered from extremes of temperature are type ISO VG32 viscosity index IP226-150 or better. For applications where the power pack is subject to extremes of temperature use aviation type oils ISO VG26, viscosity index 400 or better

#### Hinges

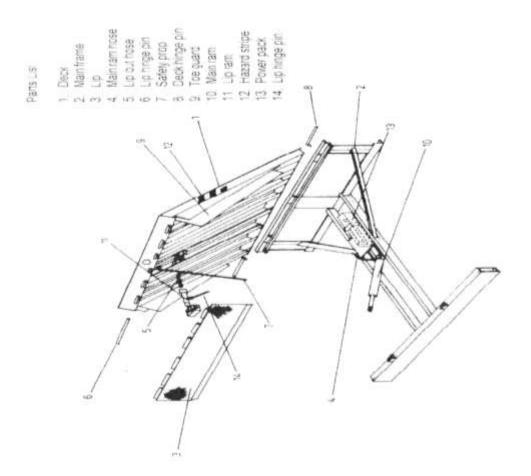
• The hinges should be lubricated every six months or as necessary

#### Cleaning

- The hinges should be cleaned off as necessary
- The leveller pit should be swept out as necessary & any oil spillage mopped up

# When carrying out maintenance work the support strut must be in place and the power supply must be turned off

#### PARTS LIST

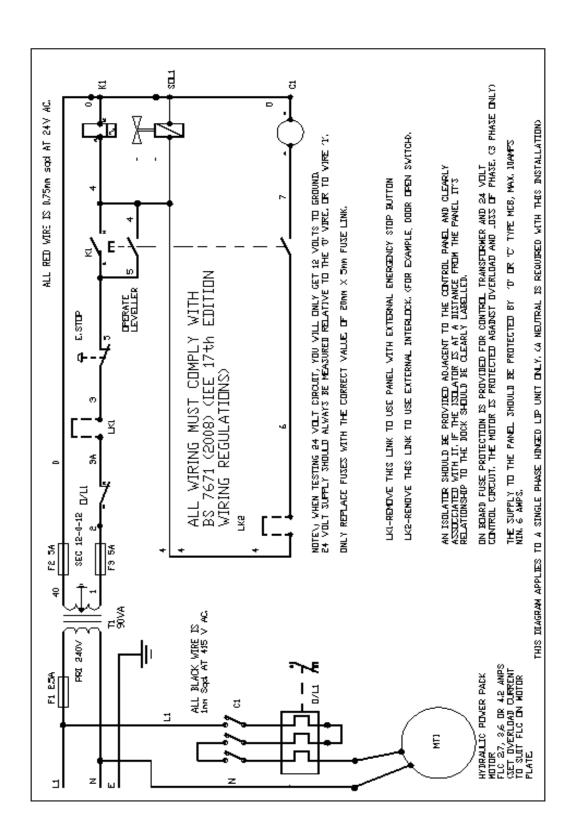


#### ¥ 5 ALL RED WIRE IS 0.75mm and AT 24V AC. X LK2-RENOVE THIS LINK TO USE EXTERNAL INTERLICK, (FOR EXAMPLE, DOOR IPPLN SWITCH). NDTEV, WHEN TESTING 24 VIOLT CIRCUIT, YOU VILL DNLY GET 12 VOLTS TO GROUND. B4 VIOLT SUPPLY SHOULD ALWAYS DE MEASURED RELATIVE TO THE VY WIRE, OF TO VIPE 14. THE SUPPLY TO THE PANEL SHOULD BE PROTECTED BY "O' OR 'C' TYPE MCB, MAX, 1044PS NIN, 6 AMPS. TO A 3 PMASE HINGED LIP UNIT ONLY, (NO NEUTRAL IS REQUIRED VITH THIS INSTALLATION) ON BOARD FUSE PROTECTION IS PROVIDED FOR CONTROL TRANSFORMER AND 24 VOLT CONTROL CIGCUIT, THE MOTOR IS PROTECTED AGAINST OVERLOAD AND LOSS OF PHASE. AN ISOLATOR SHOULD BE FROVIDED ADJACENT TO THE CONTROL PANEL AND CLEARLY ASSOCCIATED MITH IT, IF THE ISOLATOR IS AT A DISTANCE FROM THE PANEL IT'S Relations-of to the Dock S-duuld be clearly labelled. LKI-REMOVE THIS LINK TO USE PANEL WITH EXTERNAL ENERGENCY STOP BUTTON r-DNLY REPLACE FUSES VITH THE CORRECT VALLE. OF 20nn X 5nn FUSE LINK. 4 E Z, ALL WIRING MUST COMPLY WITH BS 7671 (2008) (IEE 17th EDITION ហ OPERATE LEVELLER WIRING MUST COMPLY WITH E, 910 đ-WIRING REGULATIONS> e ¥ œ a -U L 3EC 12-0-12 R F3 5A F.4 5.4 THIS DIAGRAM APPLIES ş ≓8 8⊐ ALL BLACK WIRE IS Inv Sept AT 415 V AC <u>5</u> h HYDRALLTC POWER PACK NOTOR FLC 27, 3.5 DR 4.2 ANPS SET DVERLOAD CLRRENT TO SUIT FLC DN NOTOR PLATE α F ᢪᢇ᠊ᡛ E F1 25A F2 25A 1/1 5 3 o Ē Ч А Ξ æ ៗ 9 I

#### **CIRCUIT DIAGRAM 1 (3 PHASE)**

ш

#### **CIRCUIT DIAGRAM 2 (1 PHASE)**



Page 13

#### SERVICE RECORD

DATE	ENGINEER	COMMENTS

NOTES