



***Installation user's manual***  
***version 0.1***

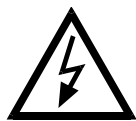
## **CRANE SCALES**

**DTEN 3t / 5t / 10t / 20t**



## SYMBOLS

Here are the symbols used in the manual to draw the reader's attention:



Caution! Risk of electric shock.



Caution! This operation must be performed by skilled personnel.



Pay particular attention to the following instructions.



Further information.

## WARRANTY

24 months from the date of the delivery note. Warranty covers only failures of defective components (due to construction defects or defects in materials) and includes replacement or repair of the components and related labor costs.

Warranty is automatically forfeited in the event of:

- tampering, deletion, removal of the identification label and/or serial number of the product
- misuse, transformation, alteration, repair of products not carried out by Laumas personnel

Laumas provides a 1-year warranty from the date of the delivery note on defects in material or manufacture of the battery.

## GUIDELINES FOR PROPER DISPOSAL



**Sealed Lead Acid  
Battery  
Must be recycled  
Properly**

This symbol on the product or packaging indicates that:

- This is electrical/electronic equipment and cannot be disposed of as municipal solid waste, but must be delivered to a recycling center
- Improper use or disposal can pollute the environment or damage human health
- Non-compliance with these guidelines will be penalized in accordance with the regulations in force in the country of destination
- It is recommended to dispose of the packing and packaging as required by local regulations

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## **USING WARNINGS**

### **SAFETY GUIDE**

The following points must be observed for a correct and safe use of crane scale:

- Do NOT exceed the maximum capacity of the scale (overload). This will damage the load cell and void the guarantee (no guarantee is applicable if overload condition has occurred).
- Do NOT leave the load hung on the scale for long time.
- Inspect shackle and hook before using. Check the clips, pins and screws regularly. In case of damage contact your dealer for replacement with original parts.
- Regularly check the battery charge status. Use the supplied battery charger 230 VAC to recharge.
- Rotate the load rather than the scale itself if needed.
- Do NOT use the scale under thunder or rain.
- Hang scale on shelf in dry and well-ventilated room. Do NOT use the scale in places subject to abrupt rush of wind.
- Do NOT attempt to repair the scale yourself. Contact your dealer.

## MAIN SPECIFICATIONS OF THE INSTRUMENT

- **Great Safety:**

Aluminum-casting case, high firm hook and ring, dedicated weighing load cell for safety installation.

- **Strong Reliability:**

Cutting-edge technology, quality integrated circuit for high performance and long time stability.

- **Broad Applicability:**

Popular and applicable in storage, textile, metallurgy industry, and so forth.

- **Easy Operation:**

Remote control with 9 buttons.

- **Complete Function:**

Division switching, measurement unit conversion, automatic power save, automatic battery inspection, idle mode for battery save, predetermined tare function, weight totalization function, LED display brightness control; memory overload; Hold function, etc.

| NOMINAL LOAD | STANDARD RESOLUTION |
|--------------|---------------------|
| 3000 kg      | 0.5 kg              |
| 5000 kg      | 1 kg                |
| 10000 Kg     | 2 kg                |
| 20000 Kg     | 5 kg                |

## BATTERY

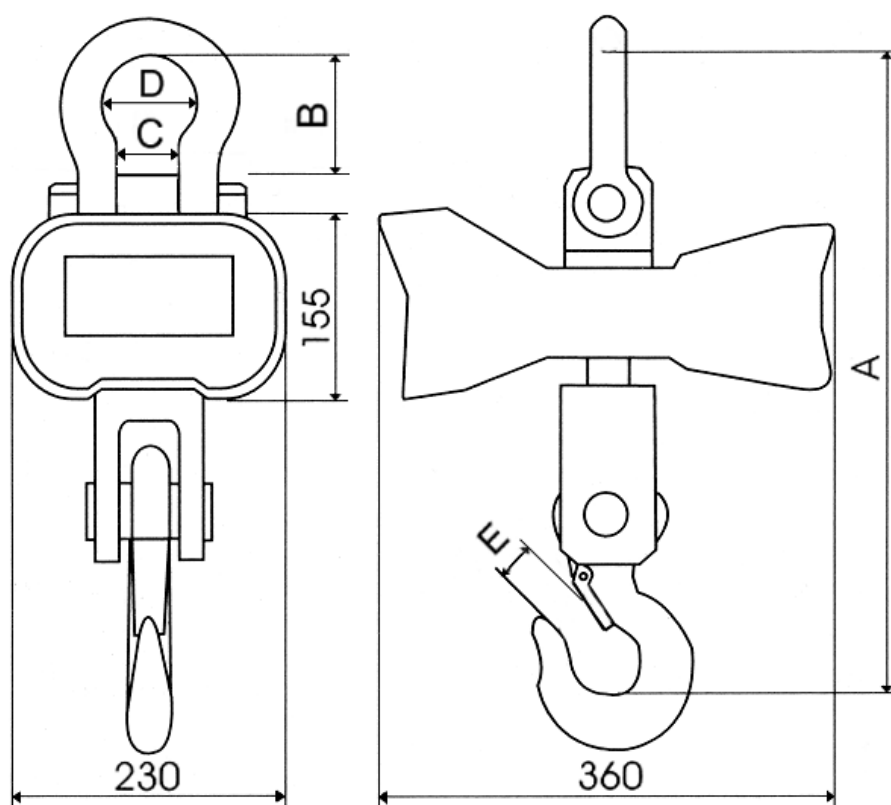
### Use & Maintenance:

- This scale is powered by a 6V 10Ah rechargeable lead-acid battery.
- The battery works from 80 hours to 200 hours (depending on LED display brightness setting), before requiring recharging. In order to conserve battery life, the scale includes an Auto Power-Off function which senses operational status for no activity after certain minutes that user sets, and turns the scale off. An additional battery saving feature is the auto Idle function. This feature preserves battery life by dimming the display after specified minute of no scale activity.
- Charging time for a completely discharged battery is approximately 6 hours.
- To obtain maximum service life from your batteries, they should be stored between -20°C (-4°F) and +50°C (122°F). Stored batteries should be recharged every three months. Battery is fully charged when the status indicator is red.

## TECHNICAL SPECIFICATIONS

|                            |                                                          |
|----------------------------|----------------------------------------------------------|
| Accuracy class             | +/- 0,03 % Full Scale                                    |
| Protection rating          | IP64                                                     |
| Max readings per second    | 10                                                       |
| Max static load            | 150% F. S.                                               |
| Breaking load              | 400% F. S.                                               |
| Battery type / Autonomy    | Pb-rechargeable 6V/10Ah battery / 80-hour operating time |
| Operating temperature      | - 10 °C + 40 °C                                          |
| Humidity (condensate free) | 10-90%                                                   |
| Display                    | Five-digit red LED display (30 mm high)                  |

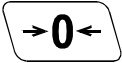
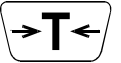
### DIMENSIONS



| mm            | Capacity |         |          |          |
|---------------|----------|---------|----------|----------|
|               | 3000 kg  | 5000 kg | 10000 kg | 20000 kg |
| <b>A</b>      | 500      | 590     | 750      | 950      |
| <b>B</b>      | 92       | 112     | 130      | 220      |
| <b>C</b>      | 41       | 58      | 60       | 80       |
| <b>D</b>      | 74       | 90      | 95       | 140      |
| <b>E</b>      | 32       | 35      | 55       | 75       |
| <b>WEIGHT</b> | 15,8 kg  | 23,2 kg | 41 kg    | 67 kg    |

## KEY FUNCTION

### CRANE SCALE

| MODE                             |  |  |  |  |  |
|----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>POWER OFF</b>                 | Power On                                                                          |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| <b>WEIGHING MODE</b>             | Power Off                                                                         | Zero-setting                                                                      | Tare In                                                                            | Hold                                                                                | “2nd” mode                                                                          |
|                                  |                                                                                   |                                                                                   | Tare Out                                                                           |                                                                                     |                                                                                     |
| <b>“2ND” MODE</b>                | Exit                                                                              | Display Unit Switch                                                               | Predetermined tare Set                                                             | System Setup                                                                        | Password                                                                            |
| <b>PASSWORD</b>                  | Exit                                                                              | ↑ to increase the value                                                           | → to move to the next digit                                                        | Confirm                                                                             |                                                                                     |
| <b>SETTING THE NUMERIC VALUE</b> | Exit                                                                              | ↑ to increase the value                                                           | → to move to the next digit                                                        | Confirm                                                                             |                                                                                     |
| <b>SYSTEM SETUP</b>              | Exit                                                                              | ↑ to increase the value                                                           | → to move to the next digit                                                        | Confirm                                                                             | Save                                                                                |
| <b>IDLE MODE</b>                 | Wake Up                                                                           | Wake Up                                                                           | Wake Up                                                                            | Wake Up                                                                             | Wake Up                                                                             |

### MEANING OF LED LIGHT SIGNAL

**HOLD:** Hold function. Lock of the displayed weight.

**STB:** Steady weight.

**TARE:** Net weight displaying (semi-automatic tare / predetermined tare)

**ZERO:** Zero signal.

**lb:** lb displaying.

**kg:** kg displaying.



## REMOTE CONTROL

|                                                                                    | WEIGHING<br>MODE | SETTING<br>THE<br>NUMERIC<br>VALUE | 2ND MODE *                | PASSWORD                       | SYSTEM<br>SETUP                | IDLE<br>MODE |
|------------------------------------------------------------------------------------|------------------|------------------------------------|---------------------------|--------------------------------|--------------------------------|--------------|
|    | Zero             | ↑ to increase<br>the value         | Display<br>Unit Switch    | ↑ to increase<br>the value     | ↑ to increase<br>the value     | Wake up      |
|    | Tare In          | → to move to<br>the next digit     | Predetermined<br>tare Set | → to move to<br>the next digit | → to move to<br>the next digit | Wake up      |
|                                                                                    | Tare Out         |                                    |                           |                                |                                |              |
|    | Hold             | Confirm                            | System Setup              | Confirm                        | Confirm                        | Wake up      |
|    | Totalizing       | ↓ to decrease<br>the value         | Resolution<br>Switch      | ↓ to decrease<br>the value     | ↓ to decrease<br>the value     | Wake up      |
|    | Clear last       | ← to move to<br>the next digit     | Clear total               | ← to move to<br>the next digit | ← to move to<br>the next digit | Wake up      |
|    | View Total       |                                    | Battery Check             |                                |                                | Wake up      |
|  | Data Send        |                                    | RS232 setup               |                                |                                | Wake up      |
|  | Power Off        | Exit                               | Exit                      | Exit                           | Exit                           | Wake up      |
|  | 2nd Mode         |                                    | Password                  |                                | Save                           | Wake up      |

\* **2ND MODE:** This function is designed to make full use of keys on remote control. Different key pressing combination, results in different function.

To enter the 2ND Mode, press  button on scale or  on remote control, when scale is in Weighing Mode. In 2ND Mode, the display keeps flashing the below message, waiting for user's input of key combination.



To access those functions that are not printed on remote control, you must additionally press specified key to access that function.

## CRANE SCALE SWITCHING ON/OFF

### SWITCHING ON

Press  button on crane scale.  
Scale goes through power on test, battery check and initialization.

Power-on test is performed when display flashes the following characters twice. If scale doesn't pass the test, error message will be flashed:



8.8.8.8.8.

The maximum capacity will be displayed. For example, the scale shows its full capacity, 5000 kg :



5000

Battery check is then performed. If battery works well, the display flashes the battery charge value twice :

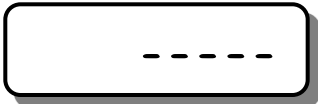


U 6.6.50



**Crane scale must work with battery voltage range from 6.80V to 5.80V. If the battery voltage is lower than 5.80V you have to recharge the battery.**

The display shows detection message while scale detects its load and Auto-Zero itself to Zero status, when the Auto-Zero function is enabled.



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At the end, the scale is completely powered up, it is ready to weigh.

### SWITCHING OFF

The scale must be in Weighing Mode. Press  button on scale or  on remote control. Scale performs the battery check and cut off its power. The display flashes the battery charge value twice.

U 6.6.50

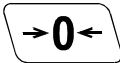


Crane scale must work with battery voltage range from 6.80V to 5.80V. If the battery voltage is lower than 5.80V you have to recharge the battery.

The Power Off message is displayed:

OFF

## ZERO-SETTING

To set a value to zero press  button on scale or  on remote control.

The **ZERO** LED lights on.

0



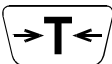
The maximum zeroed value is defined in SEMIAUTOMATIC ZERO paragraph.

## INSTRUMENT COMMISSIONING

### NET WEIGHT FUNCTION (TARE IN)



Before proceeding to make sure that the scale must be in Gross mode. The TARE LED lights off .

To Tare In a tare weight into the scale, press  button on scale or  on remote control. The scale stores a tare weight and shifts to Net mode. The **TARE** LED lights on and the scale will display "0".

0

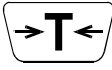


Tareing will reduce the apparent overloading range of the scale. For example, if a 1000kg container is tared and the scale maximum capacity is 5000 kg, the scale will overload at a new weight of 4009kg (5000 – 1000 + additional 9 divisions).

## GROSS WEIGHT FUNCTION (TARE OUT)



Before proceeding to make sure that the scale must be in Net mode. The TARE LED lights on.

To Tare Out the tare weight out of scale, press  button on scale or  on remote control. The scale clears the tare weight, returns to gross mode, and displays all subsequent readings in Gross mode. The **TARE** LED lights off.

## HOLD FUNCTION (LOCK OF THE DISPLAYED WEIGHT)

To lock the displayed weight, press  button on scale or  on remote control. The **HOLD** LED lights on.

To unlock current reading, press again  button on scale or  on remote control. The **HOLD** LED lights off. The weight reading is unlocked.

## WEIGHT TOTALIZATION (TOTAL)

To accumulate the displayed weight, press  on remote control. Current weight reading will be accumulated into scale's Total accumulator. The display displays the below message, indicating that the Total is successfully calculated and saved.



The displayed value on scale must return to "0" before next weight reading can be added. This assures that a load on the scale is only added to the Total once.

## VIEW TOTAL MODE

To enter the View Total Mode, press  when scale is in Weighing Mode.

The Total is therefore divided into two parts, the low 5 digits format and the high 5 digits format.

To toggle between the low 5 digits format and the high 5 digits format, press  button on remote control.

For example, the totalized weight reading “129235.0” will be displayed “9235.0” as its low 5 digits format, like below.



9253.0

The high 5 digit format of “29235.0” is like below.



000 12

In View Total Mode, the weight reading keeps flashing to distinguish itself from that in Weighing Mode.

To exit press  button on remote control.

## DELETE LAST TOTAL

In Weighing Mode, to delete the last accumulated weight reading, press  button on remote control. The display shows the below message, indicating that the last Total is successfully deleted.



dEL

## CLEAR TOTAL

In Weighing Mode, to clear the overall Total, press  and  buttons on remote control in turn. The display shows the below message, indicating that the Total is successfully erased.



CLEAR

## DISPLAY UNIT SWITCH

To change the scale's Display Unit, press  and  buttons on remote control in turn.



The **lb** LED lights on, after Display Unit switches to lb. The **kg** LED lights on, after Display Unit switches to kg.

## PREDETERMINED TARE

Press  and  buttons on remote control in turn when the scale is in Gross mode.

Press  and  buttons on remote control to insert a predetermined tare value to be subtracted from the displayed value.

To confirm the input value, press  button on remote control.

At this point the display shows the net weight and the **TARE** LED lights on.

## RESOLUTION SWITCH

To switch scale's resolution, press  and  buttons on remote control in turn when the scale is in Gross mode.

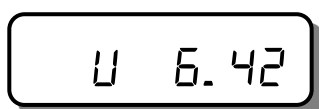
It is possible to change the system's resolution according to the capacity.

This scale has the best performance at 75000 to 2000 divisions.



## BATTERY CHECK

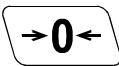
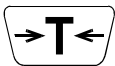
To check scale's battery power, press  and  buttons on remote control in turn. The display flashes the battery charge value in voltage.



Crane scale must work with battery voltage range from 6.80V to 5.80V. Recharge the battery when needed.

## SYSTEM SETUP

Keys function:

To input numeric values, press  and  buttons on scale or  and  buttons on remote control.

To confirm the input value, press  button on scale or  button on remote control.

To save and exit System Setup Mode, press  button on scale or  button on remote control.

To exit System Setup Mode without saving, press ON/OFF button on scale or  button on remote control.

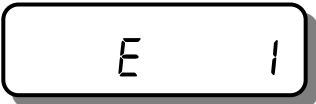
Press  and  buttons on remote control when the scale is in Gross mode. The display displays the welcome message as below.



SETUP

### RESOLUTION

Select the desired resolution, it will be saved when the instrument is turned off.  
The scale displays the weight according to this parameter:



E 1

### AUTO POWER-OFF TIMING

Auto Power-Off function maximizes scale's battery life against people's carelessness not to power off the scale when it's not working. Auto Power-Off starts the scale's Power-Off countdown timer when there's no action or the load is stable. Once the timer's timing reaches the delay user set in System Setup, it automatically power off the scale. Any key pressing or motion in load, will restart the countdown timer. Scale can be timed to auto power-off itself from "01" minutes to "99" minutes, or "never" when Auto Power-Off Timing is set to "00". The default Auto Power-Off Timing is set to "15" minutes.



OFF 15

## **IDLE TIMING**

To maximize its battery life, the scale automatically enters the Idle Mode, when there's no action or the load is stable. In Idle Mode, the scale works in low-power consumption status. "01" seconds to "99" seconds can be set to scale's Idle countdown timer. Once the timer's timing reaches the delay user set, it automatically lowers the brightness of the display. If Idle Timing is set to "00", the scale never goes into Idle Mode. Any key pressing or motion in load, will wake up the scale from Idle Mode (when it is in this mode), and restart the countdown timer. The default Idle Timing is set to "30" seconds.



## **DISPLAY FREQUENCY**

Display Frequency decides how frequently the display updates the weight reading. There are optional 5 levels of Display Frequency, "0" to "4". At level 4, the display's weight reading changes slowly, while at level 0, it changes fast. The default Display Frequency is set to level "1".



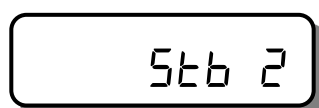
## **DISPLAY BRIGHTNESS**

Lowering the brightness of display can also save scale's battery life. There are optional 3 levels of brightness, "1" to "3". At level 1, the display works at low power, while at level 3, it works at high power. The default Display Brightness is set to level "3".



## **ANTI-MOTION LEVEL**

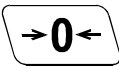
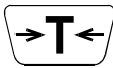
In At the cost of measuring time, Anti-Motion function intelligently settles the weight reading when the scale is in motion. The weaker Anti-Motion is, the faster weight reading displays, but the longer it takes to settle the weight reading. There are optional 6 levels of Anti-Motion, "0", "1", "2", "3", "4", "5", respectively "Off", "weakest", "weak", "normal", "strong", and "strongest". The default Anti-Motion Level is set to "2", namely "normal".





## SETUP MENU - PASSWORD-PROTECTED

Keys function:

To input numerical values, press  and  button on scale or  and  on remote control.

To confirm the input value, press  button on scale or  on remote control.

To save and exit Setup menu, press  button on scale or  on remote control.

To exit Setup menu without saving, press  button on remote control.

Press  button on remote control twice, when the scale is in Gross mode. The display shows the password message as below.



P0000

To access the following password-protected function, insert "0258" password. To confirm it press  button on remote control. The display shows the welcome message as below message.



SCALE

To confirm, press  button on remote control again.

### AUTO-ZERO RANGE

During the power-on procedure, load on scale will be automatically zeroed if the load's weight is in Auto-Zero Range.

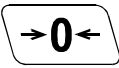
There are optional 6 Auto-Zero Range, "0%", "2%", "4%", "10%", "20%", and "100%" Max. Capacity. The default Auto-Zero Range is set to "20%" Max. Cap.

To disable this feature set "0".

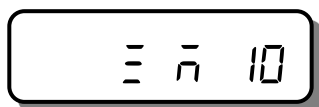


A0 20

## SEMIAUTOMATIC ZERO

After powered on, the scale can be zeroed manually by pressing  button on scale or  on remote control. There are optional 6 Manual-Zero Range, "0%", "2%", "4%", "10%", "20%", "100%" max Capacity.

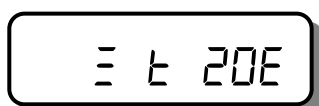
The default Semiautomatic zero is set to "10%" max Cap.  
To disable this feature set "0".



## ZERO-TRACKING

Zero-Tracking function allows the weight zero-setting when weight is in Zero-Tracking Range. There are optional 6 Zero-Tracking Range (expressed in division): "0.0 E", "0.5 E", "1.0 E", "1.5 E", "2.0 E" and "2.5 E".

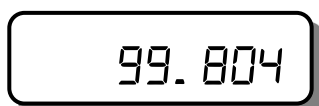
The default Zero-Tracking Range is set to "2.0 E".  
To disable this feature set "0".



## GRAVITY ACCELERATION - PLACE OF USE

Adjust the Gravity Acceleration, only when you use the scale in a place where acceleration of gravity is greatly different from the place where this scale is calibrated.

Gravity Acceleration value can be set from "9.700" to "9.899". The default Gravity Acceleration is set to level "9.80427".



To exit press  button on remote control and returns to Weighing Mode.

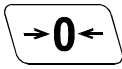
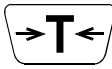


## SCALE CALIBRATION PROCEDURE

(PASSWORD-PROTECTED)

Scale Calibration set-up can be performed by customer with 1, 2 or 3 loads.  
Follow the procedures below:

Keys function:

To input the numerical values, press  and  buttons on scale or  and  on remote control.

To confirm the input value, press  button on scale or  on remote control.

To save and exit Setup Menu, press  button on scale or  on remote control.

To exit Setup Menu without saving, press  button on remote control.



**Completed the calibration procedure, must be set the value of acceleration due to gravity at the place of use.**

Press  button on remote control twice to enter the password interface. The display shows the message as below.

P0000

To access the following password-protected functions, insert "8416" password. To confirm, press  button on remote control. The display shows the welcome message as below.

CLbrt

To confirm, press  button again.

### SYSTEM UNIT

Select the desired system unit: kg (kilogram) or lb (pound).

Un . 9

Un. Lb

The LED **lb** lights on, after System Unit switches to lb.  
The LED **kg** lights on, after System Unit switches to kg.

### GRAVITY ACCELERATION – SCALE CALIBRATION SET-UP PLACE

Must be set to the value of acceleration due to gravity at the place of calibration set-up.  
Value ranging from “9.700” to “9.899”.



Completed the calibration procedure must be set to the value of acceleration due to gravity at the place of use.

### MAXIMUM CAPACITY

To set the scale's Maximum Capacity, input the capacity in unit “ton” ( t ). For example, “5” means 5000 kg .

### ZERO WEIGHT CALIBRATION

When the display shows the following message:

Keep the scale unloaded (or with load corresponding to zero weight). To set the value to zero press



button on scale or  button on remote control. The display shows the message as below.

Zero Weight Calibration is finished when the display shows the following message:

## ONE LOAD - CALIBRATION

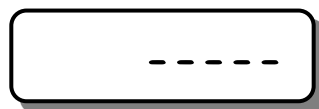
While displaying the following message:



Put on the first sample weight, for example 1000 kg, press  button on remote control. Then input the loaded weight value:



To confirm it press  button on scale or  on remote control.  
The scale displays the below message:



One Load Calibration is finished, then the display shows the following message:



To finish the calibration, press  button on scale or  button on remote control.  
Otherwise continue with the procedure.

## TWO LOADS - CALIBRATION

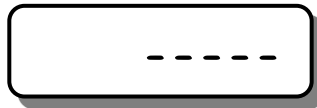
While displaying the following message:



Put on the second sample weight, for example 2000 kg, press  button on remote control. Then input the loaded weight value:



To confirm it press  button on scale or  on remote control.  
The scale displays the below message:



Two Loads Calibration is finished when the display shows the following message:



To finish the calibration, press  button on scale or  button on remote control. Otherwise continue with the procedure.

### THREE LOADS CALIBRATION

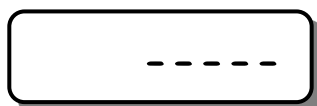
While displaying the following message:



Put on the third sample weight, for example 3000 kg, press  button on remote control. Then input the loaded weight value:



To confirm input value, press  button on scale or  on remote control. The scale displays the below message:



Three Loads Calibration is finished when the display shows the following message:



The calibration is finished. The scale will exit automatically and returns to Weighing Mode.



**Completed the calibration procedure must be set to the value of acceleration due to gravity at the place of use.**

## SYSTEM INFO

### PASSWORD-PROTECTED FUNCTION

In System Info Mode, scale's system information will be displayed, like system version, overload times, manufacturing month, etc.

In Gross Weight Mode press  button on remote control twice to enter the password interface first. The display shows the message as below:



To access the following password-protected functions, insert "1860" password. To confirm, press  button on remote control. The display shows the welcome message as below.



To confirm, press  button again.

### OVERLOAD CONDITION

The display shows many times the scale overloads after the factory calibration.

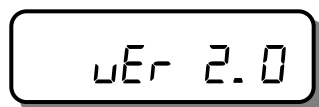
To overload condition means exceeding the maximum capacity value for 9 divisions.

For example, the below message shows the scale has overloaded 5 times.



### SYSTEM VERSION

The display shows the version of scale's hardware and software.



To exit, press  button on scale.

## MESSAGE ILLUSTRATION

|                   |                                                                                                                                                                                        |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>8.8.8.8.8.</i> | Power on.                                                                                                                                                                              |
| <i>U 6.50</i>     | Battery left charge.                                                                                                                                                                   |
| <i>-----</i>      | Weighing detection.                                                                                                                                                                    |
| <i>hold</i>       | The display is locked.                                                                                                                                                                 |
| <i>UnStb</i>      | The scale in motion.                                                                                                                                                                   |
| <i>-----</i>      | The weight reading is too great, or out of range                                                                                                                                       |
| <i>-----</i>      | The weight reading is too little, or out of range.                                                                                                                                     |
| <i>2nd</i>        | "2nd " Mode, waiting for key combination.                                                                                                                                              |
| <i>ouLd</i>       | Overloads. Weighing Mode is the default mode after the scale is turned on. If the loaded weight exceeds the maximum capacity for 9 divisions , the display displays the alarm message. |
| <i>PO000</i>      | Password Mode.                                                                                                                                                                         |
| <i>Error</i>      | Incorrect password.                                                                                                                                                                    |
| <i>oFF</i>        | Power Off.                                                                                                                                                                             |
| <i>ACC</i>        | The weight is totalized.                                                                                                                                                               |
| <i>i nULd</i>     | The weight is invalid to be totalized.                                                                                                                                                 |
| <i>noACC</i>      | There is no total.                                                                                                                                                                     |
| <i>dEL</i>        | The last total is deleted.                                                                                                                                                             |
| <i>nodEL</i>      | There is no total, so the last total can not be deleted.                                                                                                                               |
| <i>CLear</i>      | The total is cleared.                                                                                                                                                                  |
| <i>Un P9</i>      | Unit is set to kg.                                                                                                                                                                     |
| <i>Un Lb</i>      | Unit is set to lb.                                                                                                                                                                     |
| <i>tArE</i>       | The scale is tared (in net mode).                                                                                                                                                      |
| <i>E 5</i>        | System's resolution.                                                                                                                                                                   |
| <i>SEtUP</i>      | System setup.                                                                                                                                                                          |
| <i>oFF 10</i>     | Auto Power Off timing.                                                                                                                                                                 |
| <i>1 dL 10</i>    | Idle Timing.                                                                                                                                                                           |
| <i>br 2</i>       | Display brightness.                                                                                                                                                                    |
| <i>dI SP2</i>     | Display frequency.                                                                                                                                                                     |
| <i>Stb 3</i>      | Anti-motion level.                                                                                                                                                                     |
| <i>End</i>        | Save and Exit.                                                                                                                                                                         |



## TROUBLESHOOTING

| SYMPTOMS                          | POSSIBLE CAUSES                              | SUGGESTED SOLUTIONS                 |
|-----------------------------------|----------------------------------------------|-------------------------------------|
| Display flashed at low brightness | Discharged battery                           | Recharge the battery                |
| Display reading not stable        | The scale is in great motion                 | Wait until the scale is stable      |
|                                   | Filter (Anti-Motion) set too low             | Change filter (Anti-Motion) setting |
|                                   | The scale is damped                          | Dry the scale                       |
|                                   | Dust on PCB boards                           | Clean PCB board                     |
| Reading not zero without load     | The load-cell stressed too much and too long | Hang the scale in storage           |
| Large error in weight reading     | The scale is not zeroed before applying load | Zero the scale before loading       |
|                                   | Require re-calibration                       | Re-calibrate the scale              |
|                                   | lb/kg unit in wrong selection                | Set correct unit                    |
| Battery can not be recharged      | Defective battery                            | Replace the battery                 |
|                                   | Defective charging plug                      | Replace the charging plug           |
| Short remote controlling distance | Remote control batteries are dead            | Replace remote control batteries    |



## DECLARATION OF CONFORMITY - EU

**LAUMAS***Innovation in Weighing*

### SISTEMI DI PESATURA INDUSTRIALE - CELLE DI CARICO - BALANCE

LAUMAS Elettronica S.r.l.  
Via I Maggio 6 - 43022 Montechiarugolo (PR) Italy  
C.F. - P.IVA IT01661140341

Tel. (+39) 0521 683124  
Fax (+39) 0521 681091

Email: [laumas@laumas.it](mailto:laumas@laumas.it)  
Web: <http://www.laumas.com>

Fabbricante metrico Prot. N. 7340 Parma - R.E.A. PR N. 169833 - Reg. Imprese PR N.19393 - Registro Nazionale Pile  
N. IT09060P00000982 - Registro A.E.E. N. IT08020000002494 - N. Mecc. PR 008385 - Cap. Sociale € 100.000 int. vers.

SISTEMA QUALITÀ CERTIFICATO UNI EN ISO 9001 - SISTEMA GESTIONE AMBIENTALE ISO 14001 - MODULO D: GARANZIA DELLA QUALITÀ DEL PROCESSO DI PRODUZIONE

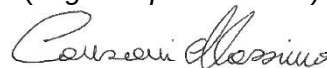
|     |                             |                                                                                                                                              |
|-----|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| I   | Dichiarazione di conformità | Dichiariamo che il prodotto al quale la presente dichiarazione si riferisce è conforme alle norme di seguito citate.                         |
| GB  | Declaration of conformity   | We hereby declare that the product to which this declaration refers conforms with the following standards.                                   |
| E   | Declaración de conformidad  | Manifestamos en la presente que el producto al que se refiere esta declaración está de acuerdo con las siguientes normas                     |
| D   | Konformitäts-erklärung      | Wir erklären hiermit, dass das Produkt, auf das sich diese Erklärung bezieht, mit den nachstehenden Normen übereinstimmt.                    |
| F   | Déclaration de conformité   | Nous déclarons avec cela responsabilité que le produit, auquel se rapporte la présente déclaration, est conforme aux normes citées ci-après. |
| CZ  | Prohlášení o shodě          | Tímto prohlašujeme, že výrobek, kterého se toto prohlášení týká, je v souladu s níže uvedenými normami.                                      |
| NL  | Conformiteit-verklaring     | Wij verklaren hiermede dat het product, waarop deze verklaring betrekking heeft, met de hierna vermelde normen overeenstemt.                 |
| P   | Declaração de conformidade  | Declaramos por meio da presente que o produto no qual se refere esta declaração, corresponde às normas seguintes.                            |
| PL  | Deklaracja zgodności        | Niniejszym oświadczamy, że produkt, którego niniejsze oświadczenie dotyczy, jest zgodny z poniższymi normami.                                |
| RUS | Заявление о соответствии    | Мы заявляем, что продукт, к которому относится данная декларация, соответствует перечисленным ниже нормам.                                   |

#### Models: DTEN

| Mark Applied | EU Directive                        | Standards                                                                            |
|--------------|-------------------------------------|--------------------------------------------------------------------------------------|
| CE           | 2014/35/EU<br>Low Voltage Directive | Not Applicable (N/A)                                                                 |
| CE           | 2014/30/EU<br>EMC Directive         | EN 55014-1:2007<br>EN 55014-2:2015<br>EN 61000-6-3:2007+A1:2011<br>EN 61000-6-1:2007 |
| CE           | 2006/42/EU<br>Machinery Directive   | EN13155:2020                                                                         |

Montechiarugolo (PR), 25/09/2025

LAUMAS Elettronica s.r.l.  
M. Consonni  
(Legal Representative)



# DECLARATION OF CONFORMITY - UKCA

**LAUMAS**

Innovation in Weighing

## SISTEMI DI PESATURA INDUSTRIALE - CELLE DI CARICO - BILANCE

LAUMAS Elettronica S.r.l.  
Via I Maggio 6 - 43022 Montechiarugolo (PR) Italy  
C.F. - P.IVA IT01661140341

Tel. (+39) 0521 683124  
Fax (+39) 0521 681091

Email: [laumas@laumas.it](mailto:laumas@laumas.it)  
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|     |                             |                                                                                                                                              |
|-----|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| I   | Dichiarazione di conformità | Dichiariamo che il prodotto al quale la presente dichiarazione si riferisce è conforme alle norme di seguito citate.                         |
| GB  | Declaration of conformity   | We hereby declare that the product to which this declaration refers conforms with the following standards.                                   |
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| D   | Konformitäts-erklärung      | Wir erklären hiermit, dass das Produkt, auf das sich diese Erklärung bezieht, mit den nachstehenden Normen übereinstimmt.                    |
| F   | Déclaration de conformité   | Nous déclarons avec cela responsabilité que le produit, auquel se rapporte la présente déclaration, est conforme aux normes citées ci-après. |
| CZ  | Prohlášení o shode          | Tímto prohlašujeme, že výrobek, kterého se toto prohlášení týká, je v souladu s níže uvedenými normami.                                      |
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| P   | Declaração de conformidade  | Declaramos por meio da presente que o produto no qual se refere esta declaração, corresponde às normas seguintes.                            |
| PL  | Deklaracja zgodności        | Niniejszym oświadczamy, że produkt, którego niniejsze oświadczenie dotyczy, jest zgodny z poniższymi normami.                                |
| RUS | Заявление о соответствии    | Мы заявляем, что продукт, к которому относится данная декларация, соответствует перечисленным ниже нормам.                                   |

### Models: DTEN

| Mark Applied     | UK legislation                                           | Standards                                                                                        |
|------------------|----------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>UK<br/>CA</b> | <b>Electrical Equipment (Safety) Regulations 2016</b>    | <i>Not Applicable (N/A)</i>                                                                      |
| <b>UK<br/>CA</b> | <b>Electromagnetic Compatibility Regulations 2016</b>    | BS EN 55014-1:2007<br>BS EN 55014-2:2015<br>BS EN 61000-6-3:2007+A1:2011<br>BS EN 61000-6-1:2007 |
| <b>UK<br/>CA</b> | <b>The Supply of Machinery (Safety) Regulations 2008</b> | BS EN 13155:2020                                                                                 |

Montechiarugolo (PR), 25/09/2025

LAUMAS Elettronica s.r.l.  
M. Consonni  
(Legal Representative)

*Consonni Massimo*



On our website [www.laumas.com](http://www.laumas.com) there are videos on the guidelines for correct installation of weighing systems and video tutorials on configuring our transmitters and weight indicators.

All Laumas product manuals are available online. You can download the manuals in PDF format from [www.laumas.com](http://www.laumas.com) by consulting the Products section or the Download Area. Registration is required.

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