

# CSB

## OPERATION MANUAL

PLEASE READ THIS MANUAL VERY CAREFULLY BEFORE OPERATING

## CONTENT

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1	CAUTION	2
2	INSTALLATION INSTRUCTIONS	4
3	SPECIFICATIONS	6
4	KEYBOARD LAYOUT	8
5	KEYS AND INDICATORS	9
6	INTERNAL FUNCTIONS	12
7	OPERATING INSTRUCTIONS	14
8	TROUBLESHOOTING	19
9	WARRANTY	23
10	DAILY CARE AND MAINTENANCE	24



## CAUTION

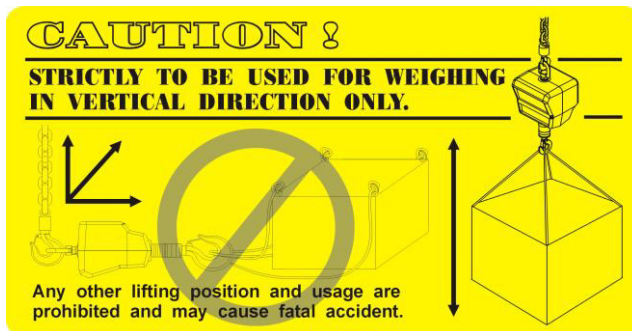
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1. Never attempt to open this scale, no user serviceable parts inside.
2. Remove all loads from hook when not in use.
3. Do not remove the wire rope stopper. For safety reasons, always apply it.
4. Before weighing, check and make sure that all hanging /load- receiving elements/ devices are in good condition. And please replace the necessary component regularly.
5. Crane scale is only suitable for hanging from a mechanical hook, e.g. a crane hook. Check whether the used crane hook or the lifting device is suitable for the suspended load.
6. Make sure that there are no persons or objects under the load; secure Working Area to prevent any possible injury or damage.
7. The scale is not suitable for weighing a person.
8. Load the scale only in vertical traction direction.
9. Always avoid vibration and horizontal

force.

10. Prevent jolts, torsion and oscillation (e.g. by sloping appending) of all kinds. Be sure to prevent overloading the scales (Stated Maximum Load  $\geq$  Object Weight + Tare Weight). Overload could damage the scale (risk of breakage). Do not use the crane scale to transport loads (e.g. traveling crane).
11. Never operate the scale in hazardous locations. The series design is not explosion-proof.
12. Any structural alterations should not be made to the scale. This will lead to incorrect weighing result, to violation of safety regulations and to destruction of the scale.
13. Avoid sudden and jerky acceleration or deceleration of the load (risk of breakage). Please always follow the instruction.



## **INSTALLATION INSTRUCTIONS**

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**2.1 UNPACK** this scale very carefully. Check and make sure that the following items are included:

- a. This operation manual
- b. CSB series scale x 1 (one Power Pack installed)
- c. AC adaptor x 1
- d. Wireless remote control x 1 (optional)
- e. Additional Power pack x 1 (optional)

Contact your dealer if any item is missing.

### **2.2 SECURING THE SCALE**

2.2.1 This unit must be hanged via a strong media, e.g. a wire rope or a metal hook, to a firm support that can withstands at least 5 times of scale capacity.

2.2.2 Make sure that the crane scale is hanged vertically.

### **2.3 POWERING THE SCALE**

- a. This scale is powered by the built-in rechargeable Power Pack and/or by an AC

adapter. An additional Power Pack is available as option.

- b. Check and make sure that the voltage of the AC adaptor supplied matches with the voltage of the main output.
- c. Insert the output plug of AC adaptor firmly into the DC input jack of scale. The DC input jack is located underneath the back of the scale.
- d. Before the first time use, charge the rechargeable Power Pack for at least 8 hours consecutively or until the charging indicator turns green.
- e. For safety reasons, do not share the same mains outlet with other apparatus.

## **2.4 OPTIMAL INSTALLATION REQUIREMENTS**

For optimal results, it is recommended that this product should be installed in a location free from corrosive gas, dust, and electronic interference.

## SPECIFICATIONS

Model No.	Capacity	Division	Test Ultimate Overload	Net Weight
CSB-3T	3000kg/6600lb	1kg/2lb	300% of R.C.	13.6kg
CSB-5T	5000kg/11000lb	2kg/5lb	300% of R.C.	19.5kg
CSB-7.5T	7500kg/16000lb	5kg/10lb	300% of R.C.	29.6kg
CSB-10T	10000kg/20000lb	5kg/10lb	300% of R.C.	29.6kg
CSB-15T	15000kg/30000lb	5kg/10lb	300% of R.C.	73.1kg
CSB-20T	20000kg/40000lb	10kg/20lb	300% of R.C.	73.1kg
Power Source	By Built-in Rechargeable Power Pack and/or, DC12~15V, 500mA or 1A.			
Hook Type	Fixed type for <b>CSB</b> models and Wire Rope Stopper Included			
Tare Range	Full Range			
Zero Range	Maximum = 2% of Rated Capacity			
Options	Wireless or Cable Remote Control, Optional Power Pack (24 Hours Non-stop Operation)			

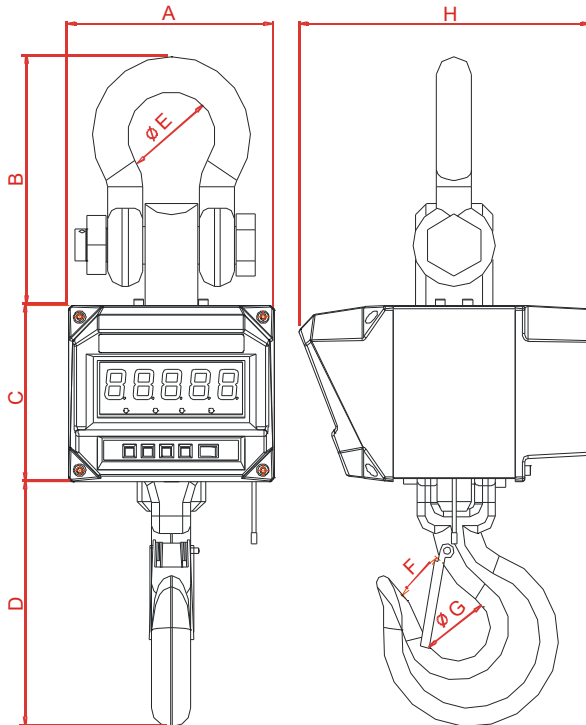
*\*To comply with the law of certain countries, the pound unit may be disabled. AC Adaptor might differ from country to country.*

*Specifications and functions subject to change without prior notice.*

## DIMENSIONS FOR CSB (mm)

DIMENSIONS (mm) :

Model Cap.	A	B	C	D	E	F	G	H	HOOK
CSB-3T	211	118	181	183	58	36	50	264	6.5T
CSB-5T	211	164	181	188	72	43	60	274	9.5T
CSB-7.5T	211	254	181	255	90	48	70	298	13.5T
CSB-10T	211	254	181	255	90	48	70	298	13.5T
CSB-15T	211	361	181	462	150	88	95	304	35T
CSB-20T	211	361	181	462	150	88	95	304	35T

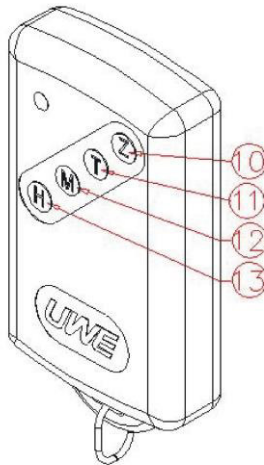
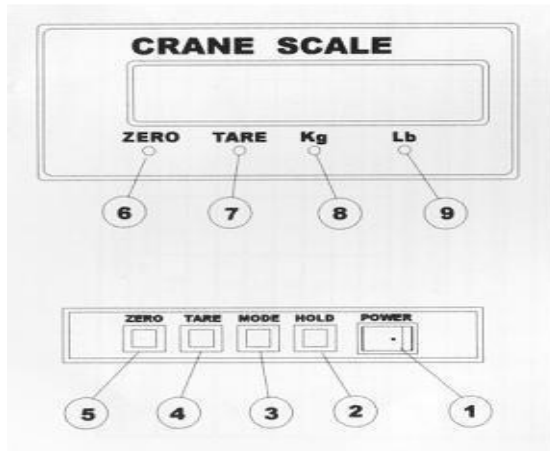




# KEYBOARD LAYOUT

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## CSB



## **KEYS AND INDICATORS**

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### **1. POWER ON/OFF KEY**

Press this key to turn scale on/off.

### **2. HOLD KEY**

Press this key to hold/release the current weight being displayed/held.

### **3. MODE KEY**

Press this key to switch between measurement units, or to convert a weight reading into the other unit of measurement. (In Metric System Countries, this key will be without any function.)

### **4. TARE KEY**

Press this key to tare off the weight of a container or decrease value during function setting.

### **5. ZERO KEY**

Press this key to set weight to zero, or increase value during function setting.

## **6. ZERO INDICATOR**

When the weight detected is at true zero, ZERO indication will appear (ON).

## **7. TARE INDICATOR**

When the tare function is being employed, a TARE indication will appear (ON).

## **8. METRIC INDICATOR**

When this indicator is on, the metric weight unit is being employed.

## **9. POUND INDICATOR**

When this indicator is on, the pound weight unit is being employed. (This indicator may not be available in certain countries).

## **KEYS ON REMOTE CONTROL (OPTION)**

### **10. ZERO KEY**

Press this key to set weight to zero (max. zero range = 2% of rated capacity).

### **11. TARE KEY**

Press this key to tare off the weight of a container.

## **12. MODE KEY**

Press this key to shift between weight units.

## **13. HOLD KEY**

Press this key to hold/release the current weight being displayed/ held.

## **INTERNAL FUNCTIONS**

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### **6.1 INTERNAL FUNCTION TABLE**

Function	Symbol	Description	NOTE
1	Fun-1	Scale configuration setting and dealer Calibration.	<b>**</b>
2	Fun-2	Display segment check.	
3	Fun-3	Offset value and span value reading.	<b>**</b>
4	Fun-4	Auto power off setting	

**NOTE \*\*:**

For dealer and authorized personnel only. Inappropriate setting(s) will cause system failure. Contact your dealer for more information or service.

### **6.2 HOW TO ENTER THE REQUIRED FUNCTION MODE**

- a. Turn scale off.
- b. Press and hold **TARE**, then turn scale on.  
Scale displays Fun-1
- c. Press **TARE** until the required function number appears.
- d. Press **MODE**

- e. Press **MODE** until the required setting appears.
- f. Press **TARE** to confirm.
- g. Repeat step c to f for other function setting,  
or
- h. Press **ZERO** to save settings and return to normal operation.

### **6.3 INTERNAL FUNCTIONS DESCRIPTION**

**Fun-1** Contact your dealer for more information.

**Fun-2** To check all display segments work properly.

**Fun-3** Contact your dealer for more information.

**Fun-4** To set Auto Power Off Function.

Two modes are available: (Default = 4\_OFF)

0.\_OFF = Auto Power Off Function is disabled.

4.\_OFF = Scale will automatically turned off after 4 minutes unused.

## **OPERATING INSTRUCTIONS**

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### **8.1 PLACING THE SCALE**

Hang this scale with a strong enough media where is free from RF interference, vibration, fire, direct sunlight and excessive moisture.

For safety reasons and best weighing result, always hang this scale and lift a load vertically.

### **8.2 POWER ON/OFF THE SCALE**

Press **ON** to turn scale on.

Press **OFF** to turn scale off.

### **8.3 ZERO FUNCTION**

If **ZERO INDICATOR** does not appear when scale is unloaded, press **ZERO** to reset weight displayed to zero. Refer to general specification table for maximum zero range.

### **8.4 TARE FUNCTION**

#### **8.4.1 To Tare Off the Weight of a Container**

Apply a container to hook, then press **TARE** to tare off the weight of it. After the **TARE** is pressed, the **TARE INDICATOR** appears.

#### **8.4.2 To Clear the Weight of a Container from memory**

Remove the container from hook then press **TARE**. The tare indicator will go off indicating no container weight is resided in memory.

#### **8.5 PLACING A LOAD**

Always apply a load to hook gently. Sudden shock, excessive force or overloading the scale may cause damage to the weight sensor inside.

It is a good practice to remove all loads from hook when not in use.

This would prolong the lifetime of weight sensor.

#### **8.6 WEIGHING FUNCTION**

- a. Before weighing, make sure that the Zero Status Sign is on.
- b. Press **MODE** until the required weight unit appears.
- c. Apply subject matter to hook and the weight of it is displayed.
- d. For best weighing result, refer to general specification table for recommended minimum weight to be applied.



## **8.7 HOLDING THE WEIGHT BEING DISPLAYED**

- a. Press **HOLD** to hold the weight being display. For accuracy considerations, only press **HOLD** when weight is stable.
- b. After **HOLD** is pressed, the flashing weight value appears.
- c. To release weight value being held, press **HOLD** again.

## **8.8 AUTO-HOLD FUNCTION**

This function provides a smart way to reduce the waiting time for stable weighting.

While the weight is placed on the hook, an average weight value will be calculated and held on the display for few seconds depending on the Auto-Hold Time Period setting.

Auto-Hold Time Period setting:

1. Press **HOLD** key for about 2 seconds, the display will read "Hod.\_0"
2. Press the **HOLD** key to increase the time period for 3, 5, 8, 10, 12, 15, 17, 20 (sec.) in sequence.
3. Choose the time period, then wait for about 5 sec., it will be switched back to normal operation automatically.

## **8.9 SHIFT BETWEEN DIFFERENT WEIGHT UNITS**

Press **MODE** to shift different weight units.

**NOTE:** The pound unit may not be available in certain countries.

## **8.10 SWITCHING BACKLIGHT ON/OFF**

**Method 1:** During operating process, the backlight can be switched ON/OFF by pressing the **MODE** key to shift to the desired status.

**Method 2:** When unloaded (weight=0), press and hold the **ON/ZERO** key for about 2 seconds to set backlight ON/OFF.

## **8.11 RECHARGING THE SCALE**

**8.11.1** When low battery signal appears, insert a charged Power Pack or apply the AC adaptor to recharge the inserted Power Pack. Failure in doing so may cause irrecoverable damage to the rechargeable Power Pack.

**8.11.2 Low battery** signal is represented by either case of the follows depends on operating status.

**8.11.2.1 Low battery is detected when power**

**on**

Scale shows LOBAT after self-test down count but displaying zero weight.

### **8.11.2.2 Low battery is detected during operation**

Weight display flashes once every 5 seconds.

## **8.12 REMOTE CONTROL**

- a. Pressing the corresponding key on the remote control can attain same control results.

**NOTE:** All internal function settings can only be operated through scale panel keys.

- b. Operation distance from CSB scale to wireless remote control is 10 meters unobstructed.
- c. When remote control distance decreases, change the battery located inside the wireless remote control.
- d. Unique radio frequency is assigned to specified unit. Never change DIP switch setting of the wireless remote control.

## **TROUBLESHOOTING**

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### **SCALE CANNOT BE TURNED ON**

- ✓ **CHECK:** Is the rechargeable Power Pack properly charged and plugged?  
**ACTION:** **Reexamine the Power Pack and make sure that the** Power Pack is charged (8 hour charging time is recommended during first time use).

### **ZERO WEIGHT CANNOT BE ATTAINED WHEN TURNED ON**

- ✓ **CHECK:** Is the scale hanged vertically?  
**ACTION:** Check and try again.
- ✓ **CHECK:** Is any load applied to the hook?  
**ACTION:** Remove all loads from hook. Turn scale off and turn on again.
- ✓ **CHECK:** Is the scale affected by airflow, vibration or RF interference?  
**ACTION:** Place scale away from all disturbances and try again.

## **RATED CAPACITY CANNOT BE ATTAINED**

- ✓ **CHECK:** Is TARE function being utilized?
- ACTION:** Remove all loads from hook, press **TARE** and try again.

**SCALE DISPLAYS** 00000

- ✓ **CHECK:** Is the scale overloaded?
- ACTION:** Remove all loads from hook immediately and check again.

## **SCALE DOES NOT WEIGH CORRECTLY**

- ✓ **CHECK:** Is the correct weight unit being utilized?
- ACTION:** Select the correct weight unit.
  
- ✓ **CHECK:** Is min. weight applied to scale?
- ACTION:** Refer to General Specifications for recommended min. load applied and try again.
  
- ✓ **CHECK:** Is the load lifted vertically?
- ACTION:** Remove all loads and retry.

- ✓ **CHECK:** Is the scale affected by airflow, vibration or RF interference?  
**ACTION:** Place scale away from all disturbances.
  
- ✓ **CHECK:** Does the scale have the correct calibration?  
**ACTION:** Contact your dealer.

#### **SCALE TURNED OFF AUTOMATICALLY**

- ✓ **CHECK:** Is the AUTO POWER OFF function being utilized?  
**ACTION:** Disable the AUTO POWER OFF function.
  
- ✓ **CHECK:** Is the LOW BATTERY sign on?  
**ACTION:** Insert a charged Power Pack or use AC adaptor.

#### **WIRELESS REMOTE CONTROL DOES NOT FUNCTION**

- ✓ **CHECK:** Is the distance between the scale and the wireless remote control exceeding maximum transmission range?

**ACTION:** Try again in a shorter distance.

✓ **CHECK:** Is the battery of the wireless remote control low?

**ACTION:** Change the battery with a new one.

✓ **CHECK:** Does the transmission frequency matches with the receiving frequency?

**ACTION:** Contact your dealer.

✓ **CHECK:** (For **CSB** models only) Is the antenna correctly attached to the scale?

**ACTION:** Attach the antenna to the scale and try again.

## WARRANTY

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Warranty varies from country to country. In general, all products carry a one-year warranty from factory shipment (**Battery is guaranteed for three months only**). If other consumer protection laws are applied, please refer to your local dealer/representative for more information.

The warranty only applies to product failures due to defective materials and/or workmanship. **Wear-out caused by frequent use is not considered as a result of defective material (it highly depends on the frequency and load applied to the scale)**. The warranty will be rendered invalid if, upon inspection, it is found that the product was abused; used in a way for which it was not designed; mishandled; placed in a hostile environment; repaired by unauthorized personnel; improperly installed or not adjusted in accordance with instructions given in this manual.

For service, please contact your local dealer.



## **DAILY CARE AND MAINTENANCE**

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- a. Do not open scale for any reason. Contact your dealer for servicing.
- b. Avoid exposing scale to direct sunlight or excess moisture.
- c. Do not submerge scale in water or drop scale.
- d. Remove all loads from hook before transportation.
- e. Clean the scale with a soft and damp cloth, if necessary with mild detergent.
- f. Do not use any harsh, abrasive material; violate solvent thinner or alcohol for cleaning.
- g. Verify the accuracy of scale periodically. Re-calibrate the scale when needed.

**NOTE:** In some countries, calibration is restricted to be done by qualified or authorized agent only. Contract your dealer for more information.

- h. If the hanging hook or the hanging ring wears down due to attrition or appears defective, such as cracks or a change in shape, stop the use immediately and send it to an authorized dealer for repairs or for the replacement of the part, before resuming usage.
- i. Store scale in a dry and cool place.
- j. Charge the rechargeable Power Pack once every 3 months when not in use in order to keep the Power Pack functioning properly.

