

CRANE SCALE

User Manual



SAFETY GUIDES

Before using your Crane Scale, please take note of the following important safety guides:

1. Do not overload your crane scale.
2. Minimize using long crane weights as this will decrease the accuracy and will shorten life span of your crane scale.
3. Always check the battery voltage before using your crane scale.
4. Always check the ring, hook, and conjunction parts for safety.
5. If the crane scale was not used for a long time, you need to check and maintain its battery.
6. Do not try to open and fix the crane scale in case it malfunctions.
7. Use only the power adapter that comes with your crane scale.

PRODUCT CHARACTERISTICS

Model	Display	Type of Use
CS-A	30 mm (1.2") LED	For extensive use
CS-L	30 mm (1.2") LCD	
CS-M	30 mm (1.2") LED	For use in small capacity weighing
CS-LM	30 mm (1.2") LCD	
CS-H	30 mm (1.2") LED	For use in steel industries

FEATURES AND FUNCTIONS

- HOLD function
- Gross Weight or Net Weight display
- Displays weight in kilograms (kg) or pounds (lb)
- Weight accumulation function
- Auto-shut off feature
- Remote control calibration
- Easy-replaceable batteries
- Remote weighing up to a distance of 10 meters

TECHNICAL SPECIFICATIONS

Accuracy Grade	OIML III
Display	30 mm (1.2") LED or LCD
Tare Scope	100% FS
Display Stability Time	<10 seconds
Overload Warning Value	Maximum Capacity +9E
Safe Load Limit	125% FS
Extreme Load Limit	400% FS
Continuous Usage Time	= 80 hours
Battery (CS-A/L/H)	6v/10Ah
Battery (CS-M/LM)	6v/5Ah
Power Adapter	AC 220v/DC 9V, 1.5A
Usage Temperature Range	-10°C - +40°C
Usage Humidity Range	20°C, = 90% RH

WEIGHT CAPACITY AND DIVISION

Maximum Capacity (kg/lb)	Minimum Capacity (kg/lb)	Division (kg/lb)	Number of Divisions (n)
100/220	1/2	0.05/0.1	2000
200/500	2/4	0.1/0.2	2000
300/700	2/4	0.1/0.0.2	3000
500/1100	4/10	0.2/0.5	2500
1000/2200	10/20	0.5/1	2000
2000/4500	20/40	1/2	2000
3000/7000	20/40	1/2	3000
5000/11000	40/100	2/5	2500
10000/22000	100/200	5/10	2000
15000/35000	100/200	5/10	3000
20000/45000	200/400	10/20	2000

DIMENSIONS AND WEIGHT

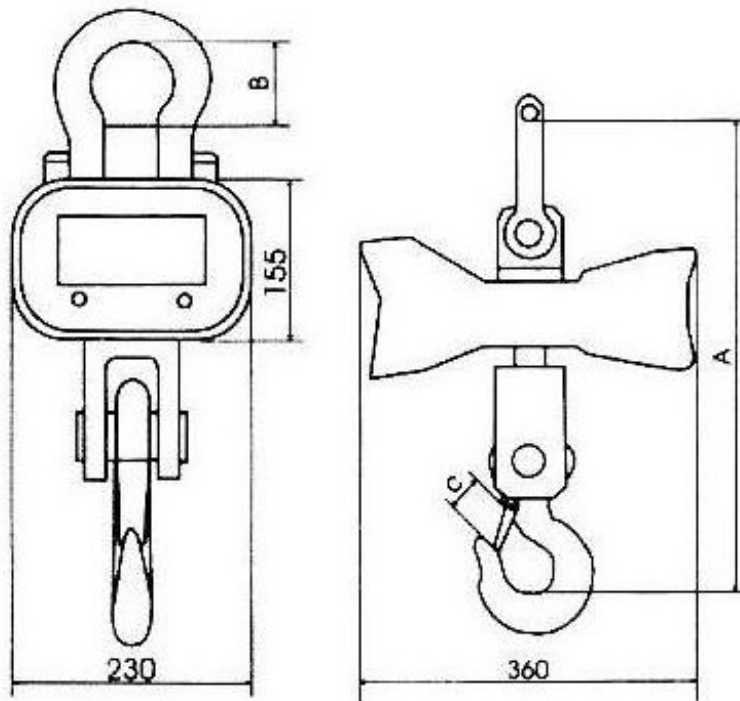


Fig. 1 – For CS-A/CS-L

Model	A (mm)	B (mm)	C (mm)	Net Weight (kg)
CS-05-A/L	420	65	35	12
CS-5-A/L	420	65	35	12
CS-2-A/L	420	65	35	12
CS-3-A/L	600	80	45	14
CS-5-A/L	730	100	55	24
CS-10-A/L	850	120	70	44
CS-15-A/L	900	140	70	60
CS-20-A/L	900	140	70	60

*Specifications may subject to changes and improvements without prior notice.

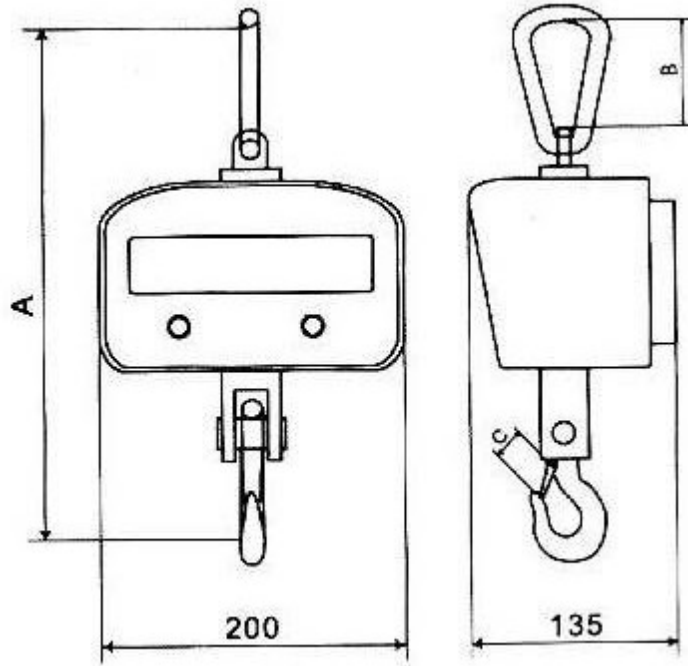


Fig. 1 – For CS-M/CS-LM

Model	A (mm)	B (mm)	C (mm)	Net Weight (kg)
CS-01-M/LM	360	80	20	4
CS-02-M/LM	360	80	20	4
CS-03-M/LM	360	80	20	4
CS-05-M/LM	380	85	25	4.5
CS-1-M/LM	380	85	25	4.5

*Specifications may subject to changes and improvements without prior notice.

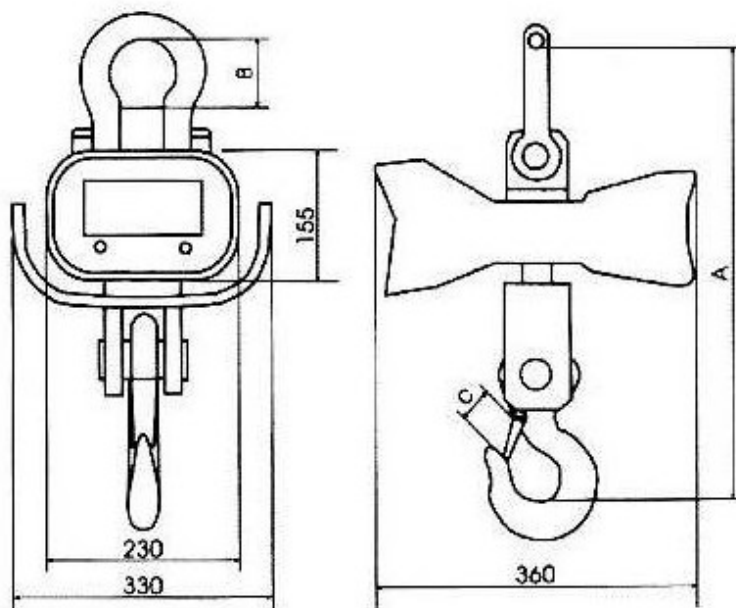


Fig. 1 – For CS-H

Model	A (mm)	B (mm)	C (mm)	Net Weight (kg)
CS-1-H	600	80	45	18
CS-2-H	600	80	45	18
CS-3-H	730	100	55	28
CS-5-H	850	120	70	48
CS-10-H	850	130	70	64
CS-15-H	900	140	70	68

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CRANE SCALE OPERATIONS

TURNING ON OR OFF THE CRANE SCALE

1. Press OFF/ON key and the crane scale will display its battery voltage:
2. Then it will display the following in turn:
3. The crane scale is now ready for weighing.
4. To turn off the scale, press OFF/ON key on the scale or OFF key on the remote control for 3 seconds. The scale will also automatically turn off after 60 minutes of no change in weight or display.

USING THE TARE FUNCTION

The tare function is used to zero out any weight display or to weigh items that need to be placed in a container.

1. Press the **TARE** key or **0** key in the remote control to zero out any weight display (even negative weights) after scale start up. Scale display now becomes .
2. Press the **TARE** key when the container of the item to weigh has been placed on the crane scale. Scale display now becomes . Then, place the item on the container to show the net weight of the item (less the container's weight).

CHECKING THE BATTERY

Generally, the crane scale's battery voltage should be above 6.0V. To check the scale's battery, you may do one of the following:

- A. Press OFF/ON key and it will display the battery voltage of the scale. Example:
- B. Press MR key. Then display will become . Press F1 key and it will display the battery voltage of the scale. Example: Press MR key.

RECHARGING THE CRANE SCALE'S BATTERY

Turn off the crane scale and insert charger's line at the rear socket of the scale. The light on the rear socket will now turn to green as it starts recharging the battery. This light will turn to red when battery charging is finished. Alternatively, the battery can be removed and recharged separately. It will take about eight (8) hours or more to recharge the battery.

BATTERY LOW VOLTAGE WARNING

The display flickers when the battery voltage is lower than 5.80V. It may still work but after it has reached the minimum voltage, the scale will turn off automatically. The battery needs to be recharged.

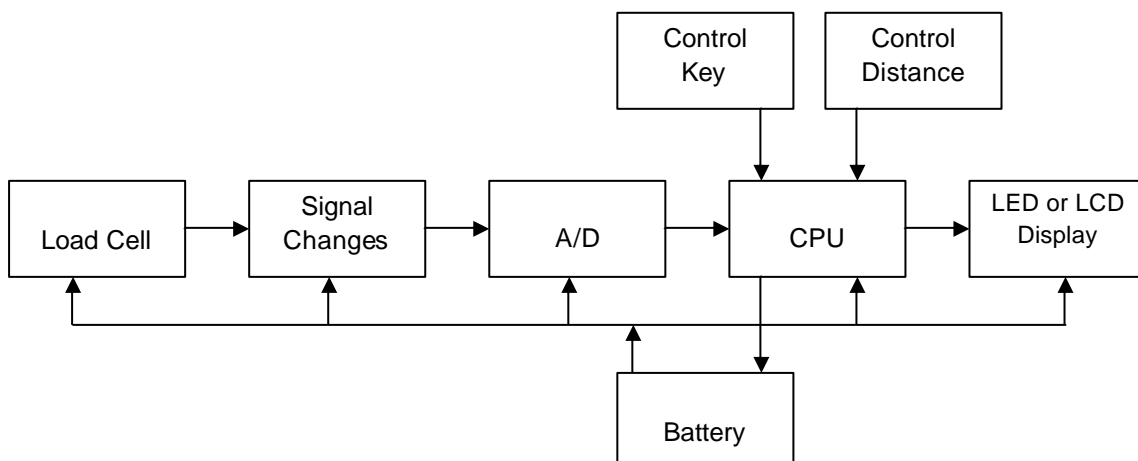
OVERLOAD WARNING

The crane scale will display when the weight (tare + net weight) on the scale exceeds the maximum capacity. To guarantee safety, the crane scale should be used only for weights up to its maximum capacity.

ENERGY SAVING FUNCTION

After 15 minutes of no change in weight and display, the scale will go to energy saving function and will display . After 60 minutes of no change in weight and display, the scale will automatically turn off.

ELECTRONIC PRINCIPLE DIAGRAM



SCALE DISPLAY

Display	Explanation
SCALE	Adjustment
OvER	Overload warning
AdErr	Load cell damage
CALSP	Enter adjustment function
-----	Display when in adjustment functions
CLr	Clear
SHIFt	Conversion
U 6.00	Battery voltage
End	End
OFF	Scale off

SCALE TROUBLESHOOTING

Problem	Cause	Possible Solution
No display	Bad battery set	Recharge or replace battery set
	Loose battery	Fit in the battery into its slot
Display flickers	Low battery voltage	Turn off then on to refresh
Cannot turn on or off	OFF/ON key is damaged	Replace the key
Tare does not function	TARE key is damaged	Replace the key
Battery light is dim	Power adapter is damaged	Replace the power adapter
	Power adapter is incorrectly inserted	Re-insert power adapter and check electrical outlet
Display is unstable	Load is unstable	Wait for the load to stabilize
	Load cell exceeds max load	Replace the load cell
	Damp influence on the scale	Keep scale in dry places
No weight but display is not 0	Used immediately after opening	Wait for 3 to 5 minutes
	Scale stayed for long time on the ground	Hang the scale when keeping it
Big error or difference in weight	Incorrect hanging of the scale	Check that the hook can swing
Battery voltage cannot increase	Bad battery set	Replace the battery set
	Bad electric outlet	Repair the electrical outlet
Short remote distance	Display window is dirty	Clean the display window
	Remote control battery is bad	Replace remote control battery

IMPORTANT TIPS WHEN USING THE CRANE SCALE

1. Use only the crane scale according to its prescribed functions.
2. Do not rotate the crane scale.
3. Avoid using the crane scale outdoor when thunder, lightning, or rain occurs.
4. Check that all parts of crane scale are in good conditions before using.
5. For damaged battery, replace it with battery of same specifications.
6. Hang the scale when it is not in use.

USING THE CRANE SCALE'S REMOTE CONTROL FUNCTION

[0] (Tare Function)

Press 0 to zero out the scale display.

[TARE]

Press [TARE] to tare or un-tare weight on the scale. If [TARE] is pressed and tare light is on, the scale displays the net weight. On the other hand, if [TARE] is pressed and tare light is off, the scale displays the gross weight.

PROGRAMMING TARE WEIGHT IN ADVANCE

It is possible to program or set the scale's tare weight in advance (before weighing the item).

To do this, simply:

1. Press MR key and display will become .
2. Press TARE key and display will become .
3. Press TARE key and 0 key to input the tare weight.
4. Press MR key to program the entered tare weight. The scale will now display the net weight.
5. Press 0 key to clear tare weight.

[M+]

The crane scale has weight accumulation function that can be used to add up the weights of several items.

Weigh the item or object then press [M+] key. The weight of this item or object is automatically added to the current total weight and is also saved.

To browse or search accumulated weights in memory, simply do the following:

1. Press [MR] key and display will now become .
2. Press [M+] key and the scale will display the number of accumulated weights in memory.
3. First press of [TARE] key will show the highest portion (1st 4 digits from the left) of the sum or total of all weights saved in memory. Next press will show the lowest portion (last 4 digits from the right) of the sum or total of all weights saved in memory. Example (total: 10367 kg): First press will show and second press will show .
4. Succeeding presses of [TARE] key will show the number (according to weighing sequence) and weight that was measured and programmed into the scale's memory.
5. Pressing [ZERO] key will browse the list backwards while pressing [MR] key will end the search.

[HOLD]

Press [HOLD] to freeze the weight display on the scale and the HOLD light will turn on. Press [HOLD] again to unfreeze the weight display and the HOLD light will turn off.

[CLEAR]

Press [CLEAR] key together then [MR] key to clear weight values in memory. To cancel this operation, press [CLEAR] key again.

Displaying the Battery Voltage

Press MR key. Then display will become

SHIFt

 . Press F1 key and it will display the battery voltage of the scale. Example:

U 6.00

 Press MR key.

kg/lb

Press [MR] and [HOLD] keys together to switch to another weight unit. When in kilogram display, this will change the weight display to pounds (lb). When in pound (lb) display, this will change the weight display to kilograms (kg).

[OFF]

Press [OFF] key to turn off the crane scale.

TIPS ON USING THE CRANE SCALE'S REMOTE CONTROL

1. Do not knock or tap the remote control.
2. Replace the battery once the remote control is not functioning for distance 6 meters (and below) away from the scale.
3. Clean the display window of the scale as this has effect on the remote control.