Model CS Crane Scale
User Instructions

1.0   General Information

Thank you for purchasing the Model CS crane scale. Please read all operating instructions carefully before using and note the following safety items:

- Do not overload the scale. This will damage the loadcell and void the warranty.

- Do not leave weights hanging from the scale for long periods. This could decrease the accuracy of the scale and shorten the life of the loadcell.

- Inspect the shackle and hook regularly.

- Check the battery visually periodically and recharge as needed.

- To maximize battery life, charge it periodically, with the included charger, when not in use for long periods of time

- Do not attempt to repair the scale if you have a problem. Contact your local Salter Brecknell representative.

2.0   Battery and Recharging

To save battery power, the unit will enter a low power mode after a few minutes of stable weight reading. During low power mode, the display will show a flashing segment in the right most part of the display.

If there is no scale activity within 60 minutes, the scale shuts off completely.

When you first receive your scale, plug the AC adapter into a properly grounded 120VAC outlet and plug the charging jack into the receptacle at the top of the scale on the back panel. The red light should come on next to the receptacle to show that charging is taking place. When the light turns green the battery is fully charged.

Battery life should be at least eight hours after charging.

3.0 Key Functions and Annunciators

The Model CS has keys on the front panel and a remote control with keys for more functions. In this manual, instructions that include key names will refer to front panel keys unless **RC** precedes the key name. That will mean the key being referred to is the remote control key of that name.

Figure 1.1 shows the front panel of the scale.

Figure 1.1   Model CS front panel

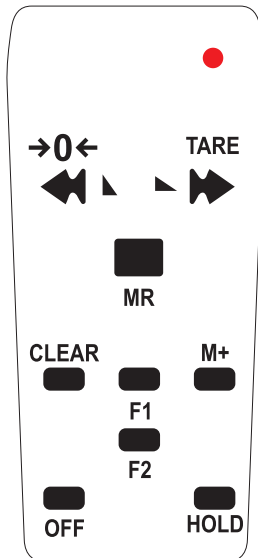Figure 1.2 shows the remote control keypad.

Figure 1.2   Remote control keypad

Below are the functions of each of the keys:

ON/OFF   Press to turn the unit on. Press and hold to turn the unit off.

TARE   Press to tare the weight of a container from the scale. The tare light will illuminate and the display will show net weight. **Warning: Be sure total weight of the container and the contents does not exceed the capacity of the scale.**

ZERO   Press to zero weight from the scale. You can zero up to ?% of the scale capacity. **Warning: Be sure total weight does not exceed the capacity of the scale.**

RC 0   Press this remote control key to zero the scale. This is also used when entering a known tare weight. See "Entering a Known Tare Weight With the Remote Control" on page 5.

RC TARE   Press this remote control key to tare the weight of a container on the scale. See "Performing a Tare Weighment" on page 4.

RC MR   Press this remote control key to access several scale functions. See "Scale Operation" on page 4.

RC CLEAR   Press this remote control key to clear the accumulator. See "Clearing the Accumulator" on page 7.

RC M+   Press this remote control key to add the displayed weight to the memory accumulator. See "Performing, Viewing and Clearing Weight Accumulation" on page 6.

RC F1   Press this remote control key as part of viewing the battery voltage level. See "Viewing Battery Voltage" on page 7.

RC F2   Not used at this time.

RC OFF   Press and hold this remote control key to turn the scale off.

RC HOLD   Press this remote control key to hold the weight on the display even after the weight is removed from the scale. Press this key again to cancel the hold function. Also used when changing the unit of measure. See "Changing Unit of Measure" on page 7.

In addition to keys, the front panel has annunciators; small lights next to words that light when that function is active. Each is described below:

HOLD   This lights when the hold function is active.

STABLE   This lights when the weight on the scale is stable.

Center of Zero   This lights when the weight on the scale is zero.

lb   This lights when pounds is the unit of measure.

kg   This lights when kilograms is the unit of measure.

TARE   This lights when a tare is active. Net weight is displayed when this annunciator is lit.

4.0   Scale Operation

1. Turn the scale on using the **ON/OFF** key on the front panel…

The unit will beep and the display will do a startup test, show the capacity, the battery voltage and then display *0.0* weight.

2. Apply the load to the hook at the bottom of the scale…

The weight is displayed.

3. Remove the weight…

0.0 is displayed.

4. Repeat steps 2 and 3 to weigh the next object.

Performing a Tare Weighment

1. With the scale on and showing *0.0* weight, hang the load to be tared from the hook…

The gross weight is displayed.

2. Press the **TARE** or **RC TARE** key…

The *TARE* annunciator lights and *0.0* is displayed.

3. Apply the load to be weighed on the hook…

The net weight is displayed.

4. Remove the net load and repeat step 3 to weigh the next object.

5. To cancel a tare, remove all weight from the scale and press the **TARE** or **RC TARE** key…

The *TARE* annunciator turns off and the display shows *0.0* weight.

Entering a Known Tare Weight With the Remote Control

You can key in a tare weight before placing an item on the scale by using the remote control. Follow these steps:

1. With the scale on and showing *0.0* weight, press the **RC MR** key…

   SHIFt is displayed.

2. Press the **RC TARE** key…

   0000.0 is displayed with the left digit flashing. This is a prompt for you to enter a known tare weight.

3. Press the **RC TARE** key to move the flashing digit to the right. Press the **RC M+** key to move the flashing digit to the left. When the digit you want to change is flashing, press the **RC 0** key…

   The digit will increment each time you press the **RC 0** key.

4. Repeat step 3 until you've finished entering the known tare value. Press the RC MR key to accept this value and return to net weighing mode…

   The *TARE* annunciator lights and the value you entered is displayed as a negative number.

5. Hang the container, of the known tare weight you've entered, from the hook…

   0.0 is displayed.

6. Place the load to be weighed into the container…

   The net weight is displayed.

7. To cancel the tare, press the **TARE** or **RC TARE** key. Repeat the process as needed.

Using the HOLD Function

To hold a weight display after the load is removed, use the Hold function described below.

1. With the scale on and showing *0.0* weight, hang the load from the hook…

   The gross weight is displayed.

2. Press the **RC HOLD** key…

   The scale beeps, the *HOLD* annunciator lights and the gross weight is still displayed.

3. Remove the load from the hook…

   The display remains unchanged. The weight will remain on the display until you press the **RC HOLD** key again.

4. Repeat steps 1 through 3 to perform another hold weighment.

Performing, Viewing and Clearing Weight Accumulation

You can accumulate displayed weight to a memory channel. The minimum weight that can be accumluated each time is 10 lb / 4 kg. *Err 10* will be displayed if you try to accumulate a weight less than the minimum.

You can view the accumlation data by using the remote control. You can see the last accumulated weight, the number of weighments accumulated and the total weight accumlated.

Remember, a new weight cannot be added to the accumulation memory until the previous weight has been removed from the scale and the display has dropped to 0.

1. With the scale on and showing *0.0* weight, hang a load greater than the minimum (10 lb / 4 kg) from the hook…

    The gross weight is displayed.

2. To accumulate the weight, press the **RC M+** key…

    As the weight is accumlated to memory the scale beeps, *no 001* is displayed, then *HXXXX* is displayed briefly then *LXXX.X* is displayed. These displays repeat and then the scale returns to normal weighing mode with the current weight displayed.

    no 001 is the number of accumulations done so far.

    The *HXXXX* is the first four digits of the accumulated weight. *LXXX.X* is the last four digits of the accumulated weight. For example, if you had accumulated 615.5 lbs, the display would show *H0000* then *L615.5*.

3. Remove the weight from the scale and repeat steps 2 and 3 for each weighment you want to accumulate.

To View the Accumlated Weight Information

Once you've accumlated weight to memory you can view the information by following these steps:

1. With weight accumulated, press the **RC MR** key…

    SHIFt is displayed.

2. Press the **RC M+** key…

    The display will continuously cycle through the following information:

    The number of accumulated weighments.
    The last accumulated weight.
    The first four digits of the accumulated weight.
    The last four digits of the accumulated weight.

3. Press the **RC MR** key to cancel the cycling of information and the scale returns to normal weighing mode.

Clearing the Accumulator

1. To clear accumulated weight from the scale, press the **RC CLEAR** key…

    CLr is displayed.

2a). To exit without clearing the accumulator, press the **RC CLEAR** key again.

    no CLr is briefly displayed and then the scale returns to normal weighing mode.

    OR

2b). To clear the accumulator, press the *RC MR* key…

    CLr is briefly displayed, the accumlator is cleared and then the scale returns to normal weighing mode.

Changing Unit of Measure

You can change the displayed weight from lb to kg by following these steps:

1. With the scale on, press the **RC MR** key…

    SHIFt is displayed.

2. Press the **RC HOLD** key…

    If the unit is in kg unit of measure, the display will show *un=1* briefly, the *lb* annunciator lights, and the scale returns to normal weighing mode with lb as the active unit of measure.

    If the unit is in lb unit of measure, the display will show *un=0* briefly, the *kg* annunciator lights, and the scale returns to normal weighing mode with kg as the active unit of measure.

Check Number of Overloads

You can check the number of times that the weight applied to the scale has exceeded the maximum limit (9 divisions over full capacity).

1. With the scale on, press the **RC MR** key…

    SHIFt is displayed.

2. Press the **CLEAR** key…

    OL=XX is displayed. *XX* being the number of times the scale has been overloaded.

Viewing Battery Voltage

To see the current battery voltage level, follow these steps:

1. With the scale on, press the **RC MR** key…

    SHIFt is displayed.

2. Press the **RC F1** key…

    U X.XX is displayed. This stands for the voltage.

3. Press the **RC MR** key again to cancel the display and return to normal weighing mode.

Turning the Scale Off

To turn the scale off, press and hold the **ON/OFF** key or **RC OFF** key until the unit beeps. The scale will briefly show the battery voltage and then will turn off.

Adjusting the Display Brightness

To set the brightness of the display, follow these steps:

1. Press the **RC F1** key…

    bL=X is displayed. X stands for the brightness level (X =1 through 5).

2. Press the **RC F1** key to increment the brightness. When the level you want is shown, stop pressing the key and the display will automatically return to normal weighing mode.

5.0   Troubleshooting

Table 1: Troubleshooting Guide

Symptom	Reason	Solution
No display when turned on	Battery dead or loose contact	Check the battery Tighten the contacts
Display flashes	Low battery	Recharge the battery
Scale won't turn on or off	ON/OFF button damaged	Return unit for service
Scale won't tare	TARE button damaged	Return unit for service
Recharge light does not come on	The recharger may be damaged or it is not plugged into proper outlet	Check the recharger and the connection to the AC power source
Displayed reading changes	The load is unsteady	Stabilize the load
	The loadcell is damaged	Check and replace loadcell
	Humidity too high	Place unit in dry environrment
Scale will not show 0	Scale has not had sufficient time to warm up after power up	Let the scale stand for 3-5 minutes after power up before weighing
	Scale has been off the hook for too long	Hang the scale and wait 3-5 mintues
Large weighing error	Scale is not hung properly.	Check the scale and the shackle
Battery won't recharge	Battery is damaged or outlet is not working properly	Replace the battery or check the outlet
Remote distance reduced	Receiver window obscured by soil	Clean receiver window
	Batteries low in remote.	Replace batteries

6.0   Display messages

There are several messages which may appear on the scale display. Below is a list of those messages and what they mean.

Err10   You are trying to accumulate a weight smaller than the minimum required.

Err11   You are trying to accumulate more than 30 weighments. 30 is the limit.

Err12   Accumulated weight exceeds 99999. 99999 is the upper accumulated weight limit.

CLr   This is a prompt to see if you really want to clear the accumulated weight.

noCLr   This means you aborted the clearing process.

8.8.8.8.8.   This confirms deletion of the accumulated weight.

noACC   Displayed when you check accumulated weight and none has been accumulated yet.

SHIFt   Displayed after pressing the **RC MR** key.

U X.XX   The current battery voltage.

-OL-   Displayed when the scale is overloaded.

-LB-   Low battery warning.
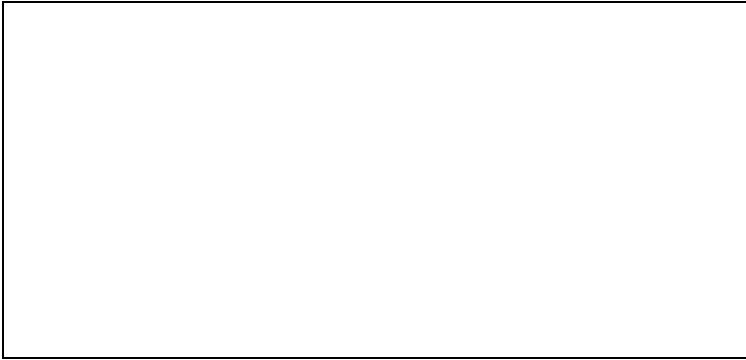
OFF   Displayed as unit powers off.

7.0   Specifications

Capacity	1000lb x 0.5lb / 500kg x 0.2kg
	or
	2000lb X 1 lb/1000kg x 0.5kg
Display	Five digits, 1.2" / 3cm character height LED
Accuracy	±0.3% of reading
Zero range	4% of full capacity
Tare range	100% of full capacity
Overload	9 divisions over full capacity
Max. safety factor	125% of full capacity
Ultimate load	400% full capacity
Battery life	Approximately 20 hours (room temp.)
Battery type	Sealed lead-acid, 6V / 5Ah
Adapter	DC9V / 1500mA
Operating Temp.	-10° F to 104°F (-10° C to 40°C)
Operating Humidity	≤85% RH under 68°F (20°C)
Remote Distance	Up to 10 yards / meters
Remote Batteries	2 AA Alkaline
Unit Weight	10lb / 5kg
Headroom	17.2inches / 360mm (measured from bearing surfaces on top and bottom hook.

FCC Statement:

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.

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