NCS & CS SERIES ELECTRONIC CRANE SCALE

OPERATION MANUAL

PLEASE READ THIS MANUAL VERY CAREFULLY
BEFORE OPERATING THIS SCALE

Specifications subject to change without prior notice

CS/OP/08/04 Rev 2

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1. CAUTIONS

- 1. Do not overload this scale.
- 2. <u>Do not perform overhead weighing. Stay clear during</u> weighing.
- 3. <u>Do not perform weighing in any environment where</u>
 strong wind may cause subject matter falls out from the hook.
- 4. <u>Do not attempt to open this scale, no user serviceable</u> parts inside.
- 5. <u>Do not remove the wire rope stopper from hook. For safety reasons, always apply it.</u>
- 6. Remove all loads from hook when not in used.
- 7. <u>Before weighing, check and make sure that all hanging /load- receiving elements/ wire rope / devices are in good condition.</u>
- 8. Always lift loads vertically.

2. ABOUT METROLOGICAL LEGISLATION

Because of metrological legislation, settings of some metrological parameter may only be accessed by authorized personnel only. Do not attempt to change any of these built-in metrological parameters. Contact your dealer for installation and technical assistance.

This scale is legal for trade only when it is sealed (and/or stamped) and bearing a serial number. Do not attempt to break the seal (or stamp) affixed to this scale or remove the serial number. Contact your dealer for more information and after sales service.

For the most accurate weighing results, do not use this scale when any of the environmental conditions is beyond those listed in **SPECIFICATIONS**.

3. INSTALLATION INSTRUCTION

- **3.1 Unpack** this scale very carefully. Check and make sure that the following Items are included. If necessary, keep all packing material for future transportation use.
 - a. This operation manual
 - b. CS series scale x 1
 - c. Power adaptor x 1
 - d. Wireless remote control x 1

Contact your dealer if any items are missing.

3.2 SECURING THE SCALE

This unit must be hanged via a strong media, e.g. a steel wire rope or a metal hook, to a firm support that can withstands at least 5 times of scale capacity. **Make sure** that the scale is hanged vertically.

3.3 POWER THE SCALE

This scale is powered by the built-in rechargeable battery. A power adaptor is included which is used to recharge this built-in rechargeable battery. Before first time use, charge the built-in rechargeable battery until the **CHARGE INDICATOR** turns green.

Before plug in the power adaptor to the electricity outlet, check and make sure the input voltage of the adaptor matches with the output voltage of the electricity outlet. If not, do not plug in, contact your dealer immediately.

4. SPECIFICATIONS

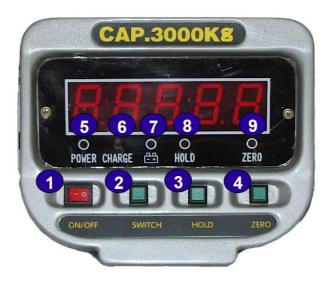
Model	Composite (lea)	Readability (kg)		
Model	Capacity (kg)	Standard	High	
CS-1T	1000	0.5	0.2	
CS-2T	2000	1	0.5	
CS-3T	3000	1	0.5	
CS-5T	5000	2	1	
CS-10T	10000	5	2	
CS-15T	15000	10	5	
Weighing Unit	kg			
Tare Range	To Capacity by Subtraction			
Power Source	Built-In Rechargeable Battery or External Power Adapter			
Operating Environment	0~40°C(32~104°F) Non-Condensed R.H. ≤ 85%			
Specifications subject to change prior to notice				

OTHER FEATURES: -

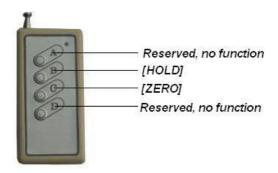
- Easy operation & rugged construction
- 5 x 30mm wide angle super bright LED
- 360-degree rotary safety hanger design
- Battery operating time = 150 hours.
- Battery protection circuits

5. LAYOUT AND DESCRIPTION

PANEL AND KEYS



REMOTE CONTROL



1. [ON/OFF]

Press this key to turn on and off.

2. [SWITCH]

Reserved. No function for end user.

3. [HOLD]

Press this key to hold the weight being displayed.

4. [ZERO]

Press this key to set weight being displayed to zero or to tare off the weight of a container.

5. POWER INDICATOR

This indicator appears to indicate the scale is in operation mode.

6. CHARGE INDICATOR

This dual color is to indicate the battery charging status: -

Red: - Battery charging is in progress.

Green: - Battery charging is completed.

7. LO-BAT INDICATOR

This indicator appears to indicate the built-in battery is low. Recharge the built-in battery by applying the external power adaptor.

8. HOLD INDICATOR

This indicator appears to indicate the **HOLD** function is in effect and the weight being displayed is a frozen value.

9. ZERO/STABLE INDICATOR

This indicator appears to indicate a net zero and/or a stable weight status.

6. INITIAL SETUP

6.1 INTERNAL FUNCTION SETTING

Select desired application parameters listed on the below user selectable internal function table.

Function Code	Description
bEE	Set Built-in Buzzer
X = 0	Disable
X = 1	Enable (Default)
Hod	Set [HOLD] key Function
X = 0	Disable
X = 1	Enable (Default)
Std	Set [ZERO] key Function when Weight is Unstable
X = 0	Allowed (Default)
X = 1	Not allowed
d	Set Readability (Refer to SPECIFICATIONS)
X = 0	Standard (Default)
X = 1	High
YES	Save Changes before Quit
X = 0	Quit without save (Default)
X = 1	Save and quit

6.2 HOW TO ENTER AND SELECT INTERNAL FUNCTION

Follow the below steps to enter and select desired internal function.

- a. Power scale on.
- b. Press [SWITCH] during countdown.
- c. Scale displays **bEE**.
- d. Press [SWITCH] until preferred parameter appears, then press
 [ZERO] to move to next internal function.
- e. Repeat step **d** to until all internal functions are set.
- f. When scale displays **YES: -**
 - Select 0 and press [ZERO] to quit without saving, or
 - Select 1 and press [ZERO] to save and quit.

7. INSTRUCTION FOR USE

7.1 PLACING THE SCALE

Hang this scale with a strong media. Weighing should be performed in where is free from RF interference, vibration, extreme heat, direct sunlight and excessive moisture. For safety reasons and best weighing result, always hang this scale and lift a load vertically.

7.2 POWER ON/OFF THE SCALE

Press [ON/OFF] to turn scale on or off.

7.3 ZERO FUNCTION1

If zero weight value does not appear when scale is unloaded, press **ZERO** to reset weight displayed to zero.

7.4 TARE FUNCTION

If a container is used, follow the below steps to tare off (set to zero) the weight of the container and to obtain the net weight.

7.4.1 To Tare Off the Weight of a Container

Apply the container, then press [ZERO] to tare off the weight of it. After the [ZERO] is pressed, the ZERO/STABLE INDICATOR appears.

7.4.2 To Clear the Weight of a Container

Remove the container from hook then press [ZERO].

7.5 LIFTING A LOAD

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

It is a good practice to remove all loads from hook when not in use. This would prolong the lifetime of weighing sensor.

7.6 WEIGHING FUNCTION

Before weighing, make sure that a zero weight value is being displayed and the **ZERO/STABLE INDICATOR** is on. If not, press **[ZERO]** to set

Refer to ${\bf Internal\ Function\ Setting\ }$ for more information.

¹ Depends on internal setting, **[ZERO]** may be disable when weight is not stable.

weight to zero.

- a. Apply subject matter to hook and the weight of it is displayed.
- b. For best weighing result, refer to Operating Environment section under **SPECIFICATIONS**.
- c. Press [HOLD] to hold the weight value being displayed². For the most accurate result, only press [HOLD] only when the weight is stable. After [HOLD] is pressed, HOLD INDICATOR appears and the weight value will flash.
- d. To disable HOLD function, press [HOLD] again.

7.7 PEAK HOLD FUNCTION

This unit is equipped with **PEAK HOLD FUNCTION**. This function will automatically hold the peak value detected during a weighing process (transaction).

- To enable PEAK HOLD FUNCTION. Press and hold [HOLD] until a long beep is heard.
- b. Release [HOLD]
- c. Start weighing.
- d. When the peak value is reached and stabled, the ZERO/STABLE
 INDICATOR will appear and followed by a stable beep.
- e. This peak value will blink in an interval of 1 second.
- f. To start another weighing, release load, press [ZERO] to clear the display.
- g. To disable **PEAK HOLD FUNCTION**, press and hold **[HOLD]** until a short beep is heard.

² Depends on internal setting, **[HOLD]** may be disable. Refer to **Internal Function Setting** for more information.

7.8 AUTO POWER OFF FUNCTION

Scale will power off automatically if left idle for 30 minutes. To restart, turn off and then turn on scale again.

7.9 SCALE OVERLOAD SIGNAL

Scale overloading is represented by **----** on display panel accompanied by continuous buzzer. Unload immediately. Fail in doing so may cause damages to scale and fatal consequence.

7.10 RECHARGING THE BATTERY

The scale is equipped with a built-in rechargeable battery. When the **LO-BAT INDICATOR** lights on, it means the built-in rechargeable battery is at low voltage status. Recharge the scale immediately by applying the power adaptor. Fail in doing so may cause unrecoverable damage to the rechargeable battery.

In order to protect the built-in battery, the scale may power off automatically.

The **CHARGE INDICATOR** will light up when battery recharging is in process. Battery recharge status is represented by the color of this indicator.

Red color: - Battery charging is in progress.

Green: - Battery charging is completed.

8. DAILY CARE AND MAINTENANCE

- Clean the scale with a soft, damp cloth. If necessary, use a mild detergent in water.
- Do not use any harsh, abrasive material, acetone, volatile solvent, thinner or alcohol for cleaning.
- Verify the accuracy of scale periodically. Re-calibrate the scale if necessary. In some countries, calibration requires authorized / qualified agent. Contact your dealer for more information.
- If it is use in outdoor environment, make sure to bring back indoor afterwards. Do not let the scale stays outdoor overnight to avoid moisture buildup.
- Store scale in a dry and clean place.
- Recharge battery before and every 2 months during long time storage.