## OCS-T

# High Resolution Digital Crane Scale



## Technical Manual

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Please read this manual carefully before using. Version: V1.0B-1

### 1. Scale Configuration

- ✓ Press A twice to enter Password mode. p0000 shows.
  ✓ Press → or and to change digit. Press → or and to right scroll digit. Input password p0258.
  ✓ Press → or to confirm password, and enter Scale
  - Configuration. scale shows.
- Parameters in Scale Configuration are closely related to scale's metrology performance. It is NOT recommended to change any parameters unless you are authorized from your local representative.

#### **Display Resolution**

- $\square$  Press  $|_{HDD}$  or  $\square$  to enter Display Resolution. e---? shows.
- $\blacksquare$  Press  $\frac{20}{2\pi0}$  or 1 and  $\square$  to change resolution value.
- Display Resolution can be set
  - to: )001, )002, )005, )01, )02, )05, )1, )2, )5 , 1, 2, 5, 10, 20, 50.
  - Designed to meet the OIML R76's directive, the scale has the best (default) performance at 2000 to 3000 division.

#### Auto-Zero Range

- Press  $|\mathbf{\hat{h}}|$  or  $\square$  to enter Auto-Zero Range. az--? shows.
- Press  $\stackrel{\bullet 0+}{=}_{zero}$  or  $\bigcirc$  and  $\bigcirc$  to change range.
- Auto-Zero Range can be set to: 0(disabled), 2(±2%FS), 3(± 3%FS), 4(±4%FS), 10(±10%FS), 20(±20%FS), 100(±100%FS). It is set to ±20%FS by default.
  - Upon boot-up, scale automatically zeros.

#### Manual-Zero Range

- to enter Manual-Zero Range. mz--? shows.  $\mathbf{N}$ Press or | +0+ ZERO and 🖵 to change range. Press or
- Manual-Zero Range can be set to: 0(disabled), 2(±2%FS), 3(± 3%FS), 4(±4%FS), 10(±10%FS), 20(±20%FS), 100(±100%FS). It is set to ±4%FS by default.
  - Zero is allowed only when weight is within Manual-Zero range.

#### Zero-Tracking Range

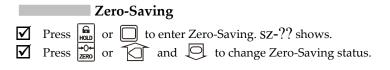
- Press  $|_{HOLD}$  or  $\square$  to enter Zero-Tracking Range. zt|?? shows.  $\mathbf{N}$
- Press or i and to change range.  $\mathbf{\nabla}$
- ſ٢ Zero-Tracking Range can be set to:  $0(disabled), 5(\pm 0.5e), 10(\pm 0.5e)$ 1.0e),  $!5(\pm 1.5e)$ ,  $@0(\pm 2.0e)$ ,  $@5(\pm 2.5e)$ ,  $#0(\pm 3.0e)$ ,  $#5(\pm 3.5e)$ ,  $0(\pm 4.0e), 5(\pm 4.5e), 0(\pm 5.0e)$ . It is set to  $\pm 0.5e$  by default.
- Enabling Zero-Tracking will enhance scale temperature and drift performance.

#### Zero Range

- $\Box$  to enter Zero Range. z???? shows. M Press or |  $\mathbf{\nabla}$ 
  - $\stackrel{\bullet 0+}{\square ZERO}$  or  $\stackrel{\bullet}{\square}$  and  $\stackrel{\bullet}{\square}$  to change digit. Press  $\stackrel{\bullet T+}{\square XEE}$  or Press

🔄 to right scroll digit. Input Zero Range value.

- P Zero Range can be set from to: 0e to 3000e. It is set to 5e by default.
- Zero Range defines the range that scale must fall into before accumulation or printing operation becomes active. When load is removed from scale, left weight must be lighter than the value set.



- Sero-Saving can be set to: **on**(enabled), **off**(disabled). It is set to disabled by default.
  - When Zero-saving is enabled, Auto Zero is disabled automatically. Scale calculates weight based on the last Zeroing action.

#### **Anti-Motion Level**

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- Press  $| \mathbf{\hat{h}}_{HOL} |$  or  $\square$  to enter Anti-Motion Level. **stb**|? shows. Press  $| \mathbf{\hat{h}}_{HOL} |$  or  $\square$  and  $\square$  to change level.
- Anti-Motion Level can be set to: 0(disabled), 1(weakest),
  2(weak), 3(normal), 4(strong), 5(strongest). It is set to weakest by default.
- At the cost of measuring time, Anti-Motion intelligently settles down weight reading when scale is in motion. The weaker Anti-Motion is, the faster weight reading displays, but the longer it takes to get stable weight reading.

#### **Dynamic Weighing**

- Press  $\left| \begin{array}{c} \widehat{\mathbf{h}} \\ \mathbf{h} \end{array} \right|$  or  $\left| \begin{array}{c} \end{array} \right|$  to enter Dynamic Weighing. dy?-- shows.
- Press  $\stackrel{\bullet 0+}{\mathbb{Z}\mathbb{R}^{n}}$  or  $\widehat{\square}$  and  $\bigcirc$  to change Dynamic Weighing status.
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- Dynamic Weighing can be set to: **ON**(enabled), **Off**(disabled). It is set to disabled by default.
- In some special application where scale's accuracy is not so important as scale's stability for weight reading and data printing, Dynamic Weighing can be enabled to settle down the weight reading faster.

#### **Gravity Acceleration**



Press  $|_{HOL}$  or  $\Box$  to enter Gravity Acceleration. g---- shows.

- Press $\stackrel{\bullet}{\longrightarrow}$  or $\bigcirc$  and $\bigcirc$  to change digit. Press $\stackrel{\bullet}{\longrightarrow}$  or $\bigcirc$  and $\bigcirc$  to right scroll digit. Press $\bigcirc$  to input decimalpoint. Input Gravity Acceleration value.
- Gravity Acceleration can be set from to: )000 to 9999. It is set to 9.794 by default.
- Adjust Gravity Acceleration, only when you use the scale in a place where acceleration of gravity is greatly different from the place where the scale is calibrated.

#### User Unit

- Press or to enter User Unit. u---- shows.
- Press $\stackrel{\bullet}{\longrightarrow}$  or $\bigcirc$  and $\bigcirc$  to change digit. Press $\stackrel{\bullet}{\longrightarrow}$  or $\bigcirc$  and $\bigcirc$  to right scroll digit. Press $\bigcirc$  to input decimalpoint. Input User Unit value.
- User Unit can be set from to: )000 to 9999. It is set to 1.000 by default.
  - User Unit is a named unit which is usually used in user's region, but not included in scale by default, like kg, lb, etc. It is a ratio to System Unit. For example, if User Unit is set to 1.234 and System Unit is kg, then after switching to User Unit, scale calculates weight (1000kg), and displays the calculated value (1234usr).

### 2. Calibration

- $\checkmark$  Press  $\bigcirc$  twice to enter Password mode. p0000 shows.
- Press  $\stackrel{*0+}{\underset{REV}{\longrightarrow}}$  or 1 and  $\square$  to change digit. Press  $\stackrel{*1+}{\underset{REV}{\longrightarrow}}$  or

 $\square$  and  $\square$  to right scroll digit. Input password p8416.

Press for to confirm password, and enter Calibration.

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It is NOT recommended to enter Calibration unless you are authorized from your local representative.

#### **Calibration Unit**

- Press or  $\square$  to enter Calibration Unit. un|-? shows.
- Press  $\frac{10^{4}}{2800}$  or  $10^{4}$  and  $9^{4}$  to change Calibration Unit.
- Calibration Unit can be set to: kg(kg), lb(lb). It is set to kg by default.

#### **Calibration Gravity Acceleration**

- Press  $\widehat{\mathbb{H}}$  or  $\square$  to enter Calibration Gravity Acceleration. g---- shows.
- Press  $\stackrel{\text{Press}}{=} \text{ or } \cap$  and  $\bigcirc$  to change digit. Press  $\stackrel{\text{Press}}{=} \text{ or } \cap$  and  $\bigcirc$  to right scroll digit. Press  $\stackrel{\text{Press}}{=}$  to input decimal point. Input Calibration Gravity Acceleration value.
- Calibration Gravity Acceleration can be set from to: )000 to 99999. It is set to 9.794 by default.

#### Max. Cap.

Press  $\mathbf{\hat{h}}$  or  $\mathbf{\Box}$  to enter Max. Cap.. 00000 shows.

Press  $\xrightarrow{\bullet 0^+}_{ZERO}$  or  $\overrightarrow{\bigcirc}$  and  $\bigcirc$  to change digit. Press  $\xrightarrow{\bullet 1^+}_{WE}$  or  $\overrightarrow{\bigcirc}$  and  $\bigcirc$  to right scroll digit. Press  $\bigcirc_{M}$  to input decimal point. Input Max. Cap. value.

- ✤ Max. Cap. can be set from to: )0000 to 99999.
- Do NOT attempt to set Max. Cap. greater than scale's actual capacity. Overloading causes severe harm to scale, and is very dangerous.

#### **Zero Detection**

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Press  $|_{HOLD}$  or  $\Box$  to enter Zero Detection. load 0 shows.

- Keep scale no load. Press 💼 or 🔲 to display weight code  $\mathbf{N}$ 12345. Wait until weight code is stable. Press or to start  $\mathbf{\nabla}$ weight detection. Scale automatically enters Load1 Detection. Load1 Detection  $\mathbf{\nabla}$ load1 shows. Load standard weight, press  $\left| \begin{array}{c} \widehat{\mathbf{h}} \\ \mathbf{h} \end{array} \right|$  or  $\left| \begin{array}{c} 00000 \\ 00000 \end{array} \right|$  shows.  $\mathbf{\nabla}$  $\mathbf{N}$ Press  $\downarrow_{\text{TERO}}^{+0+}$  or  $\downarrow_{\text{TERO}}^{+1}$  and  $\bigcirc$  to change digit. Press  $\downarrow_{\text{TERO}}^{+T+}$  or  $\square$  and  $\bigcirc$  to right scroll digit. Press  $\square$  to input decimal point. Input weight value. Keep load stable. Press in to display weight code  $\mathbf{\nabla}$ 23456. Wait until weight code is stable. Press or to start  $\mathbf{\nabla}$ weight detection. Scale automatically enters Load2 Detection. Load2 Detection  $\checkmark$ Load2 shows. If one weight calibration is enough, press  $\bigcup_{wwwF}$  or  $\bigcup_{v}$  to exit Calibration. Load standard weight, press  $\left| \begin{array}{c} \widehat{\mathbf{h}} \\ \mathbf{h} \end{array} \right|$  or  $\left| \begin{array}{c} 00000 \\ 00000 \end{array} \right|$  shows. М  $\mathbf{N}$ Press  $\downarrow_{TRB}^{+0+}$  or  $\downarrow_{TRB}^{+1+}$  and  $\bigcirc$  to change digit. Press  $\downarrow_{TRB}^{+T+}$  or  $\bigcirc$  and  $\bigcirc$  to right scroll digit. Press  $\bigcirc$  to input decimal point. Input weight value. Keep load stable. Press in to display weight code 34567.
- Wait until weight code is stable. Press in or to start weight detection. Scale automatically enters Load3 Detection.

#### **Load3 Detection**

$\checkmark$	Load3 shows.
····	If two weights calibration is enough, press $\bigcup_{www marked marked with marked $
	Calibration.
$\checkmark$	Load standard weight, press 📠 or 🔲. 00000 shows.
$\checkmark$	Press 200 or and to change digit. Press 100 or
	$\square$ and $\bigcirc$ to right scroll digit. Press $\square$ to input decimal
	point. Input weight value.
$\checkmark$	Keep load stable. Press 💼 or 🔲 to display weight code
	45678.
$\checkmark$	Wait until weight code is stable. Press 📓 or 🔲 to start
	weight detection. Scale automatically exits Calibration.