OCS-XS(F1) Crane Scale

User's Manual

Summary

The OCS-XS wireless crane scale uses dedicated load-cell of high precision and Σ-Δ A/D converter based on most advanced technology. With the RF and single-chip computer technology combined, this series provides extreme reliable accuracy and complete software function.

From time to time, we raise performances of our products; therefore, please be kindly advised that the actual use of custom products may differ from that mentioned hereby.
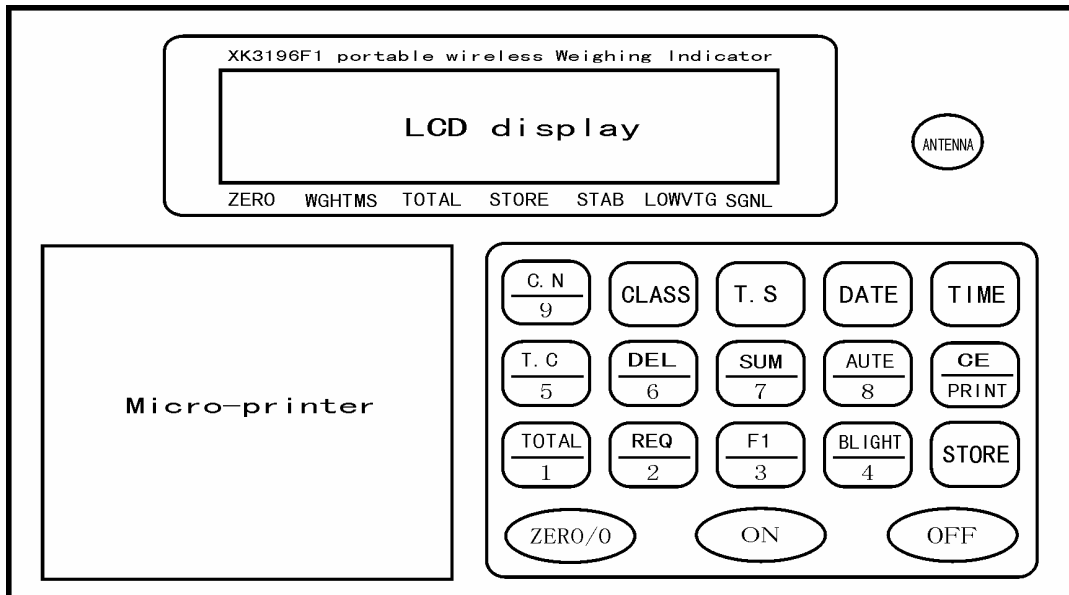
Features

◆ LCD display with backlight makes it clear to read either in the daylight or at night;

◆ Small sized indicator provides portability;

◆ Weighing results are classified into as many as 256 groups; statistics and printing can be performed for each category;

◆ Built-in character printer;

◆ Print out date and category on the report;

◆ Memorize as many as 2730 weighing records;

◆ Weight units (kg/lb) switch;

◆ The clock and calendar are built-in with time and date reliability;

◆ Auto power shutoff when the scale remains static over one hour;

◆ Two-way data transmission. If the indicator is used in the crane scales of OCS-XZ series and digitalized the scale, the indicator is then capable of not only receiving data, but also remote controlling it in tare and other function set-up.

Major technical indexes:

(1) Accuracy: compliant to OIML III standard;

（2）Battery supply： 6V/4AH;

（3）Radio frequency: 430MHZ or 450MHZ; 15 frequency points each;

(4) Displayed refreshing rate: 5 times/sec.;

(5) Excited voltage of load-cell: DC 5V±5%;

(6) Operating temp.: Indicator: 0℃—40℃;

                        scale body: -30℃—70℃;

(7) Continual working hours of scale body per charging: 40 hours;

(8) Unobstructed wireless transmission distance: 200 meters.

Panel

Functions of keys:

【ON】: power on;

【OFF】: power off;

【ZERO】: display 0;

【TOTAL】: to display total weight, also used in report printing;

【REQ】: to recall weighing results, displaying in reversed turn;

【F1】 : auxiliary key;

【BLIGHT】: ON/OFF key of the LCD display backlight; it is economical to
           turn it off in strong light situations;

【T.C】:TTL CLR, push this key 2 times and all the records are cleared;

【DEL】: push this key 2 times and the last weighing record is cleared;

【SUM】: push this key when the weighing is finished; the indicator will then start printing out a summary report on weighing of the current category.

【AUTO】: entry into auto the auto status; when the highest bit of the display is A, the indicator will automatically put results of each weighing into memo and print it out; to exit AUTO, push this key again;

【C.N】: to recall the weighing times concerned in the memo;

【CLASS】: to set the category No.(0~255);

【T.S】:TARE SET, to set tare;

【DATE】: date-set;

【TIME】: time-set;

【STORE】: to store up the weighing result and print it out;

【CE/PRINT】:to clear the incorrect input

Operational directions of indicators

1.Turn-on

Turn on the scale body before the indicator is on.

(1)After turning on the device, the display reads in turn the software edition No. (e.g. 1.0) and maximum capacity. Afterwards, it counts in reverse turn to "11111" and the display will remain the same reading unless it receives a radio signal.

(2)If the radio signals come steady and the display reads "0", it is ready to work.

2.Weighing operations

◆**An operator only needs to push ZERO in the event that printing is unnecessary.**

◆**Simple printing operation:**

In auto status, the indicator automatically records and printing the result out when the scale is stable;

In manual status, the operator only needs to push STORE to accomplish recording and printing;

◆**If the classified statistical function is called for, set up the category before weighing.**

(1)ZERO

If it is necessary to set tare, push ZERO so that the display reads "0" and the light on the bit turns on.

(2)TARE SET

This function is applied when the tare weight is already known. Push T.S, and the display window shows "P   0". Then push T.S again. It is unnecessary to input decimal point; e.g. input 31505 instead of 3150.5kg.

(3)Set up class NO.

Push CLASS to display the original class   No., If the No. is not to be changed, push CLASS   again; otherwise, input a new No. and then Push CLASS to conform it.

(4)Weighing

To weight an object, the operator should suspend it on the hook and read the data shown on the display. The net weight is available by putting the unpacked object on the hook and push ZERO.

(5)Store up and print out the weighing result

After the object is suspended and stabilized, push STORE to record the weight; at the same time, add 1 to the list No.. The indicator will then print out the weighing result. The format is as follows:

001   08:57   2352

It is only effective to push STORE to record one weighing result.

Repeat the above operations, pushing STORE after suspension and the indicator automatically prints out a second result as follows:

002   08:59   1806

For a summary report for several consecutive weighing, push SUM and a heading will be added automatically. The format is as follows:

```
     WEIGH BILL
   DATE: 2000/08/18
  CLASS: 09
    _____
  TOTAL: 1358kg
    SUM: 0021
    _____
  NO.     TIME    NW(kg).
  0021   09:57    2202
  0020   09:53    1906
           .
           .
  0001   08:56    2352
```

(6)Memory display

The built-in memory can store up to 2730 records. Push REQ to check the weighing records. When the memory is used up, delete records in time by pushing T. C two times.

(7)Clear up the memory

It is necessary to clear up the memory when little space is left or the recorded data is out of date.

Push T. C and the display reads

> **Clr...**

Push T. C a second time to conform the above operation if need be.

(8)Clear up the latest record.

When the operator intends to delete the last weighing record, push DEL and the display reads:

$\boxed{\text{Clr...}}$

If need be, push DEL again to conform it.

Note: The records will not be lost at power off unless the above operations are operated.

3.Report printing

This function works in some occasions that re-printing is called for. A variety of combined statistical methods are provided.

(1)Summary report printing

Push TOTAL two times successively, and the printer will print out reports on all the weighing recorded. E.g.

```
            WEIGH BILL
      ————————————————————
TOTAL : 5245kg
SUM:    003
      ————————————————————
   NO.       TIME      NT(kg)
   003       15:12     2101
   002       08:59     1806
   001       08:57     1338
```

(2)Classified summary reports printing.

To print a classified report, the operator must set up class before hands (refer to "CLASS SET"). Push TOTAL and then push CLASS so that the lowest bit on the display shows "H". After that, push TOTAL once again and the printer start printing. The format is as follows:

```
           WEIGH BILL
CLASS: 05
 DATE: 2002/07/12
      ————————————————————
TOTAL: 5245kg
  SUM：   0003
      ————————————————————
   NO.       TIME     NW(kg)
```

```
003      09:12      2101
002      08:59      1806
001      08:57      1338
```

(3)Date summary report printing.

It is unnecessary to set up date printing on the same date; otherwise, refer to DATE setting. Push in turn the keys TOTAL, DATE and TOTAL, The printer then prints out a report of weighing in a day. The printing format is as follows:

```
          WEIGH BILL

      DATE: 2002/07/12
      _____

      TOTAL: 5245kg
       SUM:    0003
      _____

      NO.      TIME      NW(kg)
      003      09:12      2101
      002      08:59      1806
      001      08:57      1338
```

Note: Once the date set is changed, make sure to re-set it to report the actual date.

(4)Multi-parameters report printing.

Sometimes multi-classified printing is required, e.g. to print out weighing report of one category in a day. We thus offer this function which once appeared only in weighing systems that worked with a computer.

Set up the parameters required and push TOTAL, PARAMETER 1, PARAMETER 2 and TOTAL again. For instance, to print out a report on the weighing operated by Mr. Zhang on August 18, 2002 with the class No. 07. The parameters involved are class No. and date. Therefore, the operational steps are as follow:

class NO. set-up: push CLASS, 07 and CLASS again.

DATE set-up: push DATE, 020818, and DATE again.

Input classified statistical commands: TOTAL, CLASS,DATE, and TOTAL.

(5) Recall/weighing results printing.

This function is set to recall weighing history and re-print reports in reversed turn.

Push REQ, and the indicator will display net weights recorded. Push PRINT to print those records out.

Push REQ to check the next weighing result. At the end of the memory, the display will designate "End". Push ZERO to exit recalling.

4.Other operate

(1)Auto storing up.

It is optional to set up auto storing up. After pushing AUTO and the highest bit on the display reads "A", the indicator enters into AUTO status. The indicator exits AUTO status if AUTO is pushed again or it is powered off.

In the AUTO status, the indicator automatically records the weighing result and prints it out after the scale stable for 4 seconds(The time period can be set; therefore, please request to our suppliers if need be.)

(2)Feeding paper to the printer

As it is quite complicated to feed paper to the printer, therefore, new users could seek advice with local suppliers.

Step 1: Shut off the power supply and discover the covering plate of the printer.

Step 2: Loose the screw that fix paper and take out

Step 3: Insert paper to the paper feeding slot, power on the machine and push SUM. The printer then automatically feeds paper.

Step 4: Cover the plate on the printer.

(3)Time display/set-up.

The indicator has a built-in clock. Push TIME to enter into set-up status. After setting up the real time, push it again to conform it, otherwise, push TIME to

exit it directly. E.g. to set time 12:08:20, the operator should input "120820", "0" between the hour and minute should not be omitted. The clock loses less than 1 second per day.

(4)Date display/set-up

A calendar is built in the indicator. Push DATE to enter into set-up. After setting up the date, push the key again to conform it. Otherwise, exit set-up directly by pushing DATE again. E.g. input "020328" for the date March 28, 2002.

The built-in clock and calendar reporting is not subject to the influence of power on/off.

(5)Recharging

The scale body and indicator are battery supplied and should be charged respectively with the batteries either unloaded from the system or recharged directly in the system. As over discharging will shorten the working life of the battery, it should be charged in time when the display shows "L" on the highest bit representing low battery.

The battery should be recharged by 220V/50Hz power supply for about 8 hours.

Auto shutoff

When no operation is exerted on the indicator over one hour, it will automatically shut off power supply.

The indicator backlight will automatically turn off when no operations are performed in 30 seconds. The light automatically recovers if the keys are pushed or the scale begin to hoist weights.

The indicator will automatically shut off in 30 minutes when no operations are exerted.

Maintenance

1. The electric crane scale is a high precision instrument. Good and thoughtful

maintenance can raise its reliability, which is very important to elongate its service life.

2. Although the scale body is proof to water and impacts, it should be protected from strong impacts and rain for a long time. Pay attention that the scale does not falls from the hook to suffer a violent hit or cause accidents.

3. Unless the scale is specially designed to work in high temperature, do not leave it in such an environment for too long a time. It is worth mentioning that if the scale works all right if the enclosure does not feel too hot (less than 70 ℃).

4. It is prohibited to perform welding on the scale surface to protect the indicator and load-cells.

5. Never overload the scale.

6. To elongate the service life of batteries, it is better to turn off the backlight in the daylight.

7. The weighing system uses lead-acid accumulators that should not be over discharged.

8. Protect the display from rain.