Manuals+ — User Manuals Simplified.

sellEton Scales com SL-7517 Weighing Indicator

sellEton Scales com SL-7517 Weighing Indicator User Manual

Contents

sellEton Scales com SL-7517 Weighing Indicator

Product Specifications

- **Model:** SL-7517
- **Type:** Weighing Indicator
- **Main Function:** Basic weighing functions, Peak hold, Hold function, Auto hold, Animal function, Battery capacity indication, RS232 function
- **Power:** Battery operated (with battery capacity indication) or optional power adapter
- **Interface:** User-friendly display
- **Additional Features:** Power efficiency, Cost-effectiveness, Optional real-time clock for RS232 function

Product Usage Instructions

Installation

- **Installation:** Install the SL-7517 weighing indicator within the body of the floor scale as per the provided installation picture.
- **Electrical Connection:** Connect the indicator to power using either batteries or an optional power adapter. Ensure proper electrical connection for accurate functionality.

Operation

Ensure the indicator is securely installed within the floor scale body. Use the user-friendly interface to perform basic weighing functions like Zero, Tare, Total Peak hold, Hold function, and Animal function.

Calibration & Parameter Setting

- **Enter Calibration:** Follow the calibration instructions provided in the manual to calibrate the indicator for accurate weighing.
- **Key's Function:** Familiarize yourself with the key functions for the efficient operation of the indicator.

Maintenance

- **Regular Error and Maintain Method:** Refer to the manual for troubleshooting common errors and maintaining the indicator.
- **Daily Maintenance:** Perform daily maintenance tasks to ensure optimal performance of the indicator.
- **Battery Maintenance:** If using batteries, follow the maintenance instructions for battery longevity.
- **Restore Default Parameters:** In case of any issues, restore default parameters as instructed in the manual.

Frequently Asked Questions

Q: How do I calibrate the SL-7517 weighing indicator?

A: To calibrate the indicator, follow the calibration instructions provided in section 4 of the user manual.

Q: Can I use a power adapter instead of batteries to operate the SL-7517?

A: Yes, you can use an optional power adapter to operate the SL-7517 weighing indicator.

Q: What is the main function of the SL-7517 indicator?

A: The main functions include basic weighing operations, peak hold, hold function, animal function, battery capacity indication, and optional RS232 function with a real-time clock.
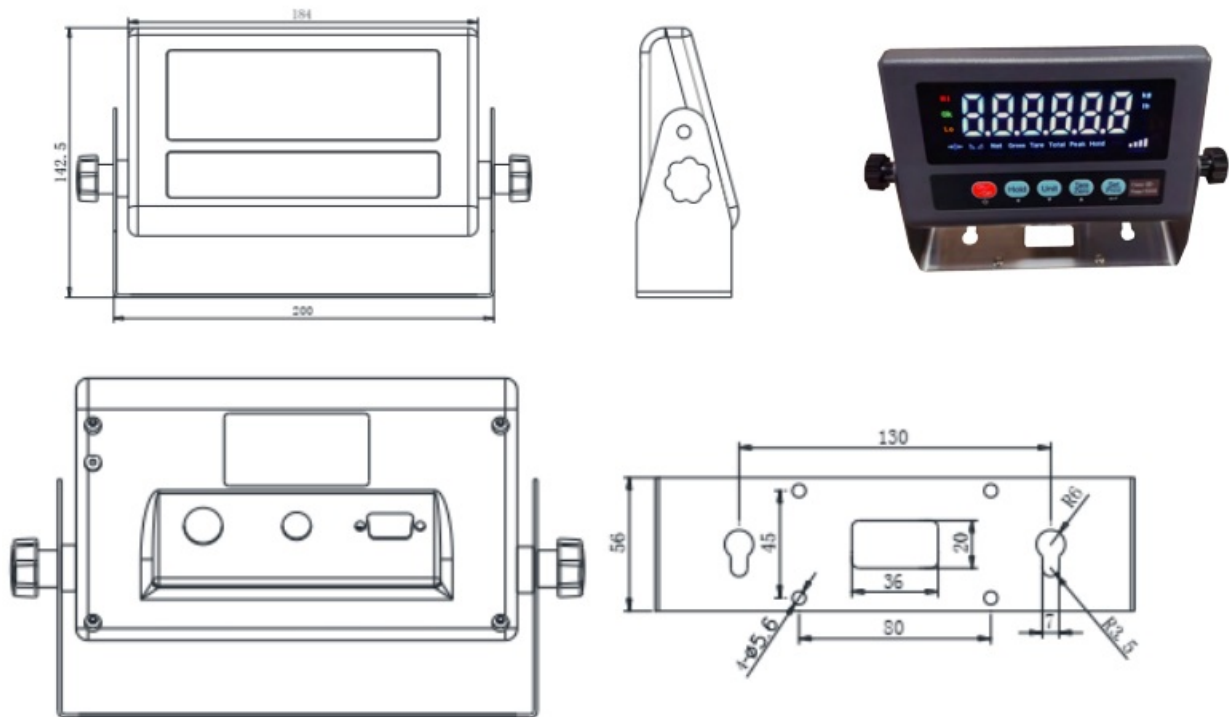
SAFETY INSTRUCTIONS

- **WARNING** Set, calibrating, inspecting, and fixing the weighing indicator is prohibited by non-professional staff.
- Please make sure the weighing display is well-earthing.
- The indicator is an electrostatic-sensitive device.
- Please power off during electrical connections, internal components touched by hand are prohibited, and please take the anti-static measure.

SUMMARY

- The SL-7517 is a slim plastic indicator, custom-designed by our company for floor scale applications. This indicator can be installed within the body of the floor scale, making it convenient for transportation and packaging.
- The interface of the indicator display is user-friendly, offering straightforward operation, stable performance, power efficiency, and cost-effectiveness.
- **Main Function**
    - Basic weighing function: Zero /Tare /Total
    - Peak hold/Hold function/Auto hold/ Animal function
    - Battery capacity indication
    - Automatically power OFF
    - RS232 function can be optional by a real-time clock
- **Technical Parameters**
    - Stimulating voltage +3.3 VDC
    - A/D converting speed 10 times/sec

- Load capacity It can connect 4 pcs 350Ω load cell at most
- Resolution 5000e
- Interval 1/2/5/10/20/50
- Display 6-digit LED word height: 20.3mm
- Key ON/OFF TOTAL TARE ZERO SET
- Load Signal range: -7 12.8mV
- Ambient temperature: -10 40°C
- Optional power Built-in power supply 3.7V/2Ah Lithium battery life of 25 hours

Outline and Installation Picture

INSTALLATION & CALIBRATION

Installation

- Please open and inspect the accessories listed in the included packing list as per the instructions.
- If any parts are missing or damaged, kindly contact the company's after-sales service department promptly to ensure the proper use of the indicator.
- The indicator can be positioned directly on a desktop surface.

Electrical Connection:

- Power Supply: The indicator is powered by a 5V/1A adapter.
- To power it, simply plug the adapter directly into the "DC" pin on the back cover of the indicator.
- This will provide the necessary power supply for the indicator to function properly.

Connection indicator with loadcell:

It can connect 4 pcs 350Ω Load cells at most with an M16-5 connector. As shown below
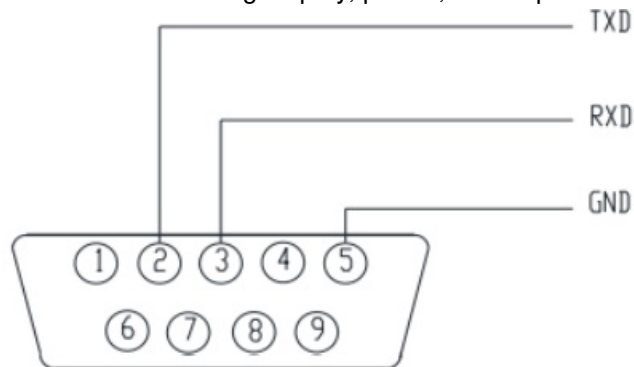
Load cell interface definition
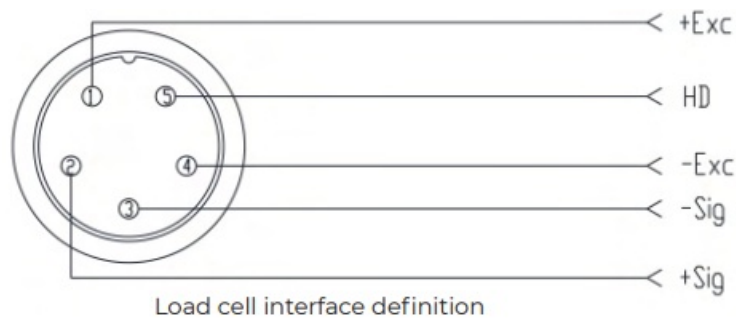
Power connection:

The indicator is powered by a 5V/1A adaptor, If you plug the adapter directly into the "DC" pin at the back cover the indicator is ok.

Communication interface:

Serial port RS232 uses the DB9 to connect to a big display, printer, or computer. As shown below:
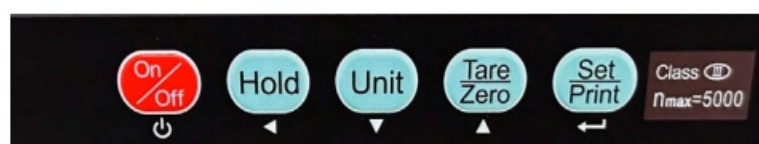

Pin	Definition	Instructions
2	TXD	Transmit data
3	RDX	Received data
5	GND	Ground

BASIC OPERATION

Key and display

DISPLAY

KEY

Weighing Indicator Key's Function

Key symbol	Key name	Key function
On/Off	ON/OFF	1. Press 3 seconds to power on or power off 2. Press key to convert units
Hold	HOLD	Enter and exit "Hold" mode.
Total	TOTAL	1. Accumulating operation 2. Work with "Print" to check the total weight
Tare Zero	TARE/ZERO	1. Clear weight within zero range 2. Exceed zero range, tare function 3. Long press to preset tare
Set Print	PRINT	1. Press with On/Off enter the calibration 2. Long press to print 3. Work with "Tare/Zero" weight 10 time

Weighing indicator display instructions

LED display	Instructions
8	Weighing data display
Total	Accumulating
Hold	Hold weighing data
Peak	Hold the peak weight
Tare	Display tare weight
Net	Display net weight
Gross	Display gross weight
◁▷	Display data keep still
⇨0⇦	Zero, indicating zero weight
Hi	Over setting weight
OK	Within setting weight
Lo	Below setting weight
Kg, lb	Weight uni kg, lb

Operation:

- Press [On/Off] for 3 seconds to power on or power off.

- **Kg/Lb Conversion:** If you choose kg/lb conversion, in normal weighing mode, you can press [On/Off] a key to achieve kg/lb conversion.

- **TARE/ZERO:** When weighing exceeds the zero range ±2% and is stable, press [Tare/Zero] to enter into net weighing mode, display net weight zero, Tare and Net light on,
- Gross light off.

- When weighing in the zero range ±2% and stable, press back to gross weighing mode, display gross weight zero, Gross light on, Tare, and Net light off.
- Preset tare.
- Press "Tare" for 2 seconds and enter the Tare weight to the Tare function.

Hold Functions

- This indicator includes peak hold, hold, auto-hold, animal function, and trails of animal function.
- C11=0 no hold function
- C11=1 Peak hold C11=2 Data hold
- C11=3 Auto-hold
- C11=4 Animal function
- C11=5 Trails of animal function
- C11=6 Stable hold function
- **Peak-hold:** Press the **HOLD** key, then the Hold light is on, and show the maximum data on the weighing indicator. Press the **HOLD** key again to exit the hold function
- **Hold:** Press the **HOLD** weighing indicator. Press the HOLD key, then the Hold light is on and show the data on the key again to exit the hold function.
- **Auto-hold:** If the weight on the scale is above 20d and keeps stable, the indicator will show the data for 6 seconds and the **(HOLD)** light is on, after 6 seconds the indicator back to general weighing, and the HOLD light is off.
- **Animal function:** Press the HOLD key, and the indicator will show "LOC" for 5 seconds, average the collected weight, and show the calculated animal weight the (light is on.
- Press the HOLD key again to exit it. The **HOLD** light is off.
- **Trails of animal function:** In the trails, animals are automatically weighed with the front legs placed on the scale. The duration of the animal weighing process can be configured using C40.
- Once the animal's weight has been determined, the indicator will briefly display "LOC" for 5 seconds.
- During this time, the collected weights are averaged to calculate the animal's weight. After the animal steps off the scale, the indicator returns to its standard weighing mode, and the "Hold" light turns off.
- **Stable hold function:** Once the animal is on the scale, it will automatically stabilize, and the indicator will calculate the weight of the animal.
- This automatic animal weighing function, when compared to the trial of animal function, doesn't require any manual triggering and offers a quicker response.
- It also can support the weighing of multiple animals on the scale simultaneously.
- However, it is important to note that this function may not be suitable for very active animals.
- To use this function effectively, it is necessary to configure the parameters C28 and C29 for digital filtering.

TOTAL

- **Accumulation operation:** At Zero mode, load weight till stable, press the **TOTAL** key to go to accumulating mode, **TOTAL** light on, display "n001", and then display loaded weight; unload weight, back to zero, load weight again till stable, press
  then show the loaded weight. Repeat it a maximum of 999 times. **TOTAL** display "nO02",

- **Check the total weight operation:** Press PRINT hold it then press **TOTAL** at the same time, display "n (accumulating times) then display total weight. If the total weight does not exceed 6 digits, it is displayed as 6 data total, otherwise, the total weight is 8 data total, and it shows the first 4 digits, then the last 4 digits. For example, the first 4 digits are 0012 the last 4 digits are "34.56", which means the actual weight is "1234.56

- **Exit accumulate function:** At TOTAL (accumulate) mode, press a **TOTAL** key the indicator shows cir n which means don't clear the total weight, press the key to confirm it and exit;

- If clear the total weight is when displaying "cir n", press **TARE ZERO** to change it to "cir y" It means a clear total weight display. Press mode. **PRINT** to clear the total weight and exit accumulating

Ten times higher resolutions

Press the **PRINT** and **TARE ZERO** keys at the same time, and you will get 10 times higher resolutions. And it will back to normal weighing after 3 seconds

Up and Under limit alarm

Please. set C13= Up limit, C14=Under limit, when the weight is over the up limit, the "Hi" light will on, and the indicator will make a sound to alarm
When the weightis below than the low limit, the "Lo" light will be on. When the weight is within the limit, the "OK" light is on

Print

When the data is stable, the connection to the printer will be printed after pressing **PRINT** 1 second.

Calibration and Parameter Settings

Enter setting

- There are two methods to enter the settings menu.

- When the switch "CAL" is off, press **PRINT** then press at the same time, hold it, and you will enter the C08-C39 setting.

Key Functions

Steps of calibration operation:

Before going to the next step, kindly press **PRINT**

Step	Display	Remarks
1.	[C01]	After you enter calibration mode, it displays [C01]. Press Print.
2.	[C1 1] [C1 2]	Weight unit option 1=kg option:2=lb
3.	[C02] [C02 1] [C02 2] [C02 3] [C02 4]	Set decimal digits option 0/1/2/3/4 Select decimal digit example two decimal points [C02 2]
4.	[C03] [C03 1] [C03 5] [C03 10] [CO3 20] [CO3 50]	Division setting option 1/2/5/10/20/50 Select required disvion exampl e division 5 [C03 5]
5.	[C04] [0100.00] [0100.00]	Max capacity example max weighing 100kg: [0100.00]
6.	[C05] [C05 0] [C05 1] [CAL 10] [CAL 0] [0000.00]	Zero calibration option 0=non-calibration zero 1=need calibration zer o calibration zero please choose 1 and ensure the scale is empty and the "stable" light is on Ensure zero calibration and countdown. Till show[0.00](example for two decimal points)
7.	[C06] [C06 0] [C06 1] [SPAN] [0100.00] [0080.00] [CAL 9] ...... [0080.00] [CALEnd]	Loading calibration Press "TARE/ZERO", change to [C6 1], press"print" show [SPAN] Basic on max capacity setting, add suitable weight on scale. close to the max capacity, heavier than 10% max at least. For example: the weight is 80kg As bellows: enter loading calibration, count down over, indicator shows loaded weight , loading calibration finish. If you want to set application Function parameter. Press "PRINT" if you want to exit press "ON/OFF"
8.	[C07] [07 0] [07 1]	Default parameters setting option:0=non-restore default parameters 1=restore default parameters

NOTE: After completing the configuration of the parameters mentioned above, it is advisable not to frequently reset the default parameters. Doing so can help avoid the loss of the original parameter settings.

Application parameters setting chart

Functions	Setting Items	parameters setting and instruction
Warning tone	**C08** warning tone	Options: 0 = close warning tone 1 = open warning tone
Automatic power off	**C09** Automatic power off	Option 0=close auto power off 10= keep still within 10 min. power off automatically 30= keep still within 30 min. power off automatically 60 = keep still within 60 min. power off automatically
Power saving setting	**C10** Power saving setting power off	Option 0= close power saving setting 1= Close the backlight after 3 minutes 2= Close the backlight after 5 minutes
Hold function	**C11** Hold mode	Option 0=close hold function 1=Peak hold /2=Data Hold /3=Auto-hold /4=Animal weighing /5=Trails of animal function Hold it shows the current weight value. Mainly application for animal weighing.

Hold time	**C12** value	Hold time (if you choose C11=4, you can set the time) Enter a sampling time of 0-9 seconds
Upper/lower limit alarm	**C13** Upper limit alarm value	At setting function mode, after directly entering C15, the indicator will show the inner code
	C14 Lower limit alarm value value	
Inner Code display	**C15** Check the inner code value	At setting function mode, after directly entering C15, the indicator will show the inner code
Date and time	**C16** Date value	At setting function mode, after directly entering C15, the indicator will show the inner code
	C17 Time value	At setting function mode, after directly entering C15, the indicator will show the inner code

Communication Setting

Communica-tion setting	C18 Serial interface data output method	Option：0= Close serial interface data output 1= Continuous sending, connect big display 2=print method, connect printer. 3= Command request method , connect computer. 4=PC continues to sending format, con-nect computer.
	C19 Baud rate value	0= 1200bit/sec 1= 2400bit/sec 2= 4800bit/sec 3= 9600bit/sec 4= 600bit/sec

Application setting

Zero range	C20 Manually zero range value	1=±1% Max. Capacity 2=±2% Max. Capacity 4=±4% Max. Capacity 10=±10% Max. Capacity 20=±20% max capacity 100= ±100% Max. Capacity

	C21 Initical zero range value	1=±1% Max. Capacity 2=±2% Max. Capacity 5=±5% Max. Capacity 10=±10% Max. Capacity 20=±20% max capacity 100= ±100% Max. Capacity
Automatic zero tracking	**C22** Automatic zero tracking range	option：0.0= close automatic zero tracking 0.5=±0.5d 1.0=±1.0d 2.0=±2.0d 3.0=±3.0d 4.0=±4.0d 5.0=±5.0d Automatic zero tracking range can not exceed manual zero setting range
	C23 Automatic zero track- ing time	option：0= close automatic zero tracking time 1=1 second 2=2 seconds 3=3 seconds
Overload range	**C24** Overload range	Over 9d than Max. Capacity
Negative display	**C25** Negative display	Option：0=-9d 　10=Less than -10% Max. Capacity 　20=Less than -20% Max. Capacity 　50=Less than -50% Max. Capacity 　100=Less than -100% Max. Capacity
Standstill setting	**C26** Standstill time	Option：0= quick 　1= medium 　2= slow
	C27 Standstill range	Option：1=1d 2=2d 5=5d 10=10d Note: d=division
Digital filter	**C28** Dynamic filter Instruction：Dynamic filter is collecting the data filter before loaded weight stable. When loaded weight easily shaking (for example animal) , you can set this filter to make weight display more stable	Option：0= close dynamic filter 1=Low dynamic filter 2=Medium dynamic filter 5=High dynamic filter

Noise filter	**C29** Noise filter	Option：0=close noise filter 1=Low noisy filterh 2=Medium noisy filter 3=High noisy filter
Date format	**C30** Print date	C30=0 yy.mm.dd C30=1 mm.dd.yy C30=2 dd.mm.yy C30=3 yy.mm.dd
kg/lb Conversion	**C31** Kg/lb conversion	0=Prohibit kg/lb conversion 1=Allow kg/lb conversion
Print fromat	**C35** Print format	Enter 0~99
Gravitational acceleration	**C36** Local gravitational acceleration	Enter local gravitational acceleration
	C37 Destination gravita-tional acceleration	Enter destination gravity acceleration
Version number view	**C38** Version number view	Displays the date, software version, and hardware version, respectively
Multi-interval application	**C39** Multi-interval applica-tio	0=normal mode 1=multiple interval mode
Animal scale delay	**C40** Animal scale delay	Enter the scale delay of 0 to 9 seconds
	C41~C49	Print related configurations

Exit setting

For example [C10 1], press, confirm it and then press to exit and save it.

OUTPUT DATA FORMAT

Computer continuous sending format

	,		,										CR	LF

S1　　　S2　　　S3　　　　　Data　　　S4
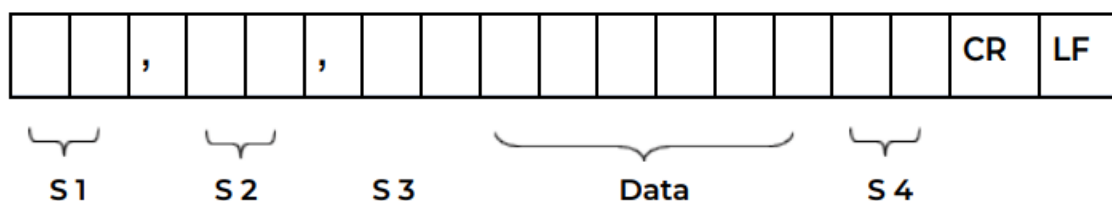
- **S1:** weight status, ST= standstill, US= not standstill, OL= overload
- **S2:** weight mode, GS=gross mode, NT=net mode
- **S3:** weight of positive and negative, "+" or " –"

- **S4:** measurement unit, "kg" or "lb"
- **Data:** weight value, including decimal point
- **CR:** carriage return
- **LF:** line feed

Serial interface reception command

RS232COM serial interface can receive simple ASCII commands.

Command word and role as follows:

Command	Name	Role
T	Tare command	Save the weight
Z	Zero command	Zero the weight
P	Print command	Print the weight
R	Read gross/net weight	Read gross/net weight

Print output format

- **Net** 10.00kg
- **Tare** 18.88kg
- **Gross** 28.88kg

Computer continuous sending format

Output continuous format															
STX	SWA	SWB	SWC	X	X	X	X	X	X	X	X	X	X	X	X	C R	C K S
1	2			3						4						5	6

State A			
Bits0,1,2			
0	1	2	Decimal point position
1	0	0	XXXXXX0
0	1	0	X
1	1	0	XXXXX X
0	0	1	XXXX XX
1	0	1	XXX XXX
Bits3,4			Division
0		1	X1
1		0	X2
1		1	X5

State B	
Bits**S**	function
Bits**0**	gross=0 net=1
Bits**1**	symbol positive=0 negative=1
Bits**2**	overload or lower zero =1
Bits**3**	dynamic=1
Bits**4**	unit lb=0,kg=1
Bits**5**	Constant 1
Bits**6**	Constant0

Maintenance

Regular Error and maintain method:

Error	Reason Instructions	Solutions
Display UUUUUU	1. The loaded weight exceeds the overload range of the maximum capacity. 2. Wrong connection with load cell or no connection with it. 3. Load cell unworkable	1.Decrease loaded weight 2. Check load cell connection 3. Checking load cell：check input and output resistance to judge it is good or not.
Display ΠΠΠΠΠΠ	1. Calibration is no good 2. Cell single line is connect a wrong line. 3.The load cell is out of order.	1. Check scale is resisted or not, foot is kept level or not. 2. Check load cell connection. 3. Checking load cell：check input and output resistance to judge if it is good or not.

Err	1	During calibration, do not add any weight or exceed the scale's maximum capacity..	Input the correct weight
Err	2	During calibration, the added weights may not be sufficient.	Added weight at least 10%of Max. capacity, Recommended weights is 60-80% of Max. capacity
Err	3	During calibration, input single is negative.	1.Check if connection is correct or not. 2.Check load cell is damaged or not. 3.Renew calibration, if its still wrong. please replace the PCB
Err	4	During calibration, single is unstable	Ensure the added weight and scale is stable, start calibration
Err	5	EEPROM check error	Change PCB.
Err	6	Exceed Zero range	Unload weight
Err	AD	AD chip fault	Change PCB.

Daily maintenance

To ensure a clear display on the indicator and extend its lifespan, please observe the following guidelines.

1. Avoid placing the indicator directly in sunlight.
2. Ensure a proper connection between the load cell and the indicator. The system should have a robust ground and be kept away from strong electric or magnetic fields.
3. Refrain from using the indicator outdoors in rainy conditions, and it is recommended to keep it powered off in such situations.

Battery

- In the lower right corner of the indicator, there's a visible battery voltage display.
- If the battery voltage becomes too low, the last grid will begin to blink, indicating that it's time to recharge.
- During the charging process, the battery grid will flicker, and typically, it takes around 6-8 hours to fully charge.
- Once the battery is fully charged, all the power grid lights will illuminate.
- It's worth noting that the indicator features a built-in intelligent charge management chip, which allows it to continue using the power supply after reaching a full charge, preventing overcharging of the battery.

Restore default parameters

- Enter the setting menu, set C07= 1, press **PRINT** then press ⊘ exit saving setting, all parameters will be back to the default setting
- **Note:** Please avoid restoring default parameters if you lack professional knowledge and do not have experience with scale calibration.

Default parameter form

Parameter	Instruction	Default value
C01	Calibration unit	1
C02	decimal digits	0
C03	Division value	2
C04	Max capacity	10000

C05	Empty scales	0
C06	Capacity calibration	0
C07	restore the default parameters	0
C08	Warning tone	1
C09	Automatic power off	0
C10	Power saving mode	3
C11	Hold function	2
C12	Animal weighing mode	5
C13	Upper limit warning	000000
C14	Lower limit warning	000000
C15	Inner code display	
C16	Date	
C17	Time	

C18	Serial interface data output method	0
C19	Serial interface Baud rate	3=9600
C20	Manual zero setting	2
C21	Initial zero setting	10
C22	Automatic zero tracking range	0.5
C23	Automatic zero tracking time	1
C24	Overload range	9
C25	Negative display range	10
C26	Standstill time	1

C27	Standstill range	2
C28	Dynamic filter	1
C29	Noisy filter	2
C30	Date format	0 (1*)
C31	kg/lb conversion	0 (1*)
C35	Print format	1
C36	Local gravitational acceleration	9.7936
C37	Destination gravitational acceleration	9.7936
C38	Version number view	
C39	Multi-interval application	0
C40	Animal scale delay	

NOTE: means this option is only for NTEP version

- **info@selletonscales.com**
- **(844)-735-5386**
- **www.selletonscales.com**

Documents / Resources

sellEton Scales com SL-7517 Weighing Indicator [pdf] User Manual
SL-7517, SL-7517 Weighing Indicator, Weighing Indicator, Indicator

References

- **User Manual**