Value Each Gram A professional weighing products manufacturer and supplier

WEIGHT INDICATOR X722-X722s

User Manual

v.201811

HiWEIGH Weighing system & solution
An ISO9001 registered company
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Value Each Gram

HiWEIGH
Weighing system & solution

Before Use

1.1 Safety precautions

WARNING!

▲ Do not use X722(s) weighing terminal in hazardous area! Do not use it within areas classified as hazardous division 1/2 or zone 0/1/2/21/22 because of combustible or explosive atmospheres.

▲ Never immerse it in corrosive chemical liquid.

▲ Static sensitive device, it must be handled only by qualified technicians. Improper handling may damage the circuit card and the device, which is not covered by the warranty.

DANGER!

Electric shock hazard!

▲ Make sure the indicator is grounded well.

▲ Always unplug AC cable before performing any service work on the indicator! And wait for at least 30 seconds before any operation on the indicator.

DISPOSAL

In conformance with the European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE), this device may not be disposed of in domestic waste. This also applies to countries outside the EU as per their specific regulations.

Please dispose of this product in accordance with local regulations at the collecting point specified for electrical and electronic equipment.
If you have any questions, please contact the responsible authority or the distributor from which you purchased this indicator.

Should this indicator be passed on to other parties (for private or professional use), the content of this regulation must also be related.

The indicator has a rechargeable internal battery. The battery contains heavy metals. Please observe the local regulations on the disposal of environmentally hazardous materials.

OPERATION

Use an independent electric source to prevent electronic disturbances.

Don't place any object on the platform when switching on the indicator.

Please, warm-up the scale during 2-3 minutes before using it.

Avoid sudden changes in temperature and draughts.

Don't overload the scale; do not exceed its maximum capacity.

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1. Technical Specifications

Model	X722 | X722s
Enclosure Type	ABS | Stainless Steel
Product Dimension	240x180x105mm (X722) 250x205x68mm (X722s)
Accuracy	Class III
Display Resolution	1/3,000 – 1/60,000
Internal Resolution	300,000 – 600,000
Sampling Rate	20times/s
Display	6 digits LCD (40mm) with backlit
Power	100-240V-12V1Ah AC/DC Adapter
Power Consumption:	About 12mA
-with backlight	*About 36mA*
-with backlight and RS232	*About 48mA*
Rechargeable Battery	6V4Ah (around 320hrs without backlight)
Load cell Sensitivity	0.6 – 3.0mV/V
Sensitivity	0.12uV/d minimum
Load Cell Quantity	1-8 * 350OΩ or 1-16*750Ω
Excitation voltage	5 VDC
Units	Kg | lb, g | oz, etc.
Non-linearity	≤ 0.01%F.S.
Operating Temperature	-10℃~45℃
Storage Temperature	-25℃~55℃
Relative humidity	85%Rh non-condensing
Communication	Optional isolated RS232, Bluetooth, WiFi, Relay, etc.
Shipping Weight	2.3-3.2kg

2. Model Identification

Model:	X722	S	-	UK	0	0
Corresponding:	A	B		C	D	E

A = Main model name

B = Enclosure:
- -A (or none): ABS
- -S: Stainless Steel

C = Plug type, examples:

AU = Australia Type
CN = China Type
EU = EU Type
US = USA Type
SA = South Africa Type
UK = UK Type

D = Output:	0 = RS232
	1 = Bluetooth
	2 = WiFi
	3 = Relay
E = Bracket	0 = No bracket
	1 = ABS bracket
	2 = S.S. bracket

3. Packing List

After the weighing terminal received, please open the box carefully and check the following items included:

- Indicator x 1
- S.S bracket with screws x 1 (X722s)
- Connectors and screws bag x 1
- Manual x 1
- Other parts depend

4. Connecting

4.1 LOAD CELL

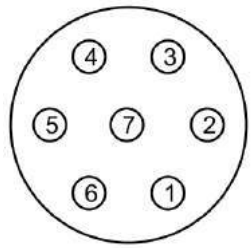
For 6-wire load cells

+EXC	……	Excitation +
+SEN	……	Sense +
+SIG	……	Signal +
SHIELD	……	Shield
-SIG	……	Signal –
-SEN	……	Sense –
-EXC	……	Excitation –

for 4-wire load cells (short connect: **+EXC and +SEN**, –**SEN and -EXC**.)

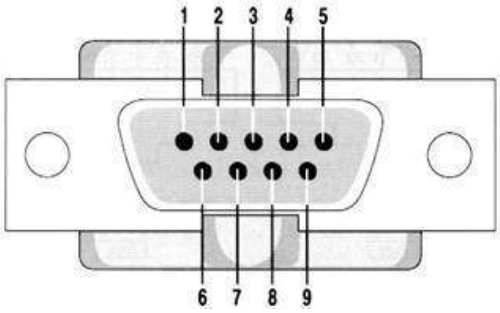
+EXC	……	Excitation +
+SEN	……	Excitation+
+SIG	……	Signal +
SHIELD	……	Shield
-SIG	……	Signal –
-SEN	……	Excitation –
-EXC	……	Excitation –

Connect the load cell to the 7-pin connector, for 4-wire load cells, short connect +EXC and +SEN, –SEN and -EXC.) as above instruction.



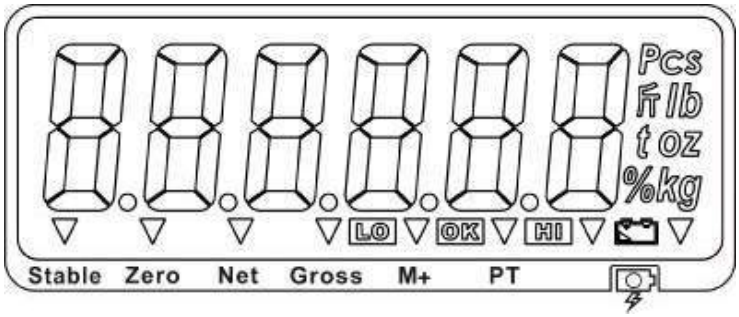
+EXC (1)	……	Excitation +
+SEN (2)	……	Sense +
+SIG (3)	……	Signal +
-SIG (4)	……	Signal –
-SEN (5)	……	Sense –
-EXC (6)	……	Excitation –
SHIELD (7)	……	Shield

4.2 RS232



INDICATOR		COMPUTER
Pin2 (TXD)	---	Pin3 (RXD)
Pin3 (RXD)	---	Pin2 (TXD)
Pin5 (GND)	---	Pin5 (GND)

5. Display



6. Keypad

BASIC FUNCTION OPERATION

Press and hold this key for 2 seconds to turn off the balance.

Press this key to turn on the balance

Function 1. To select the desired weight unit.
Function 2. To exit from setup mode.

Function 1. To reset the weight to zero “0”, but the display value has to be lower than ± 2% of maximum capacity.

Function 2. To move one space to the left or downward in setup mode.

Function 1. To subtract the container´s weight.

Function 2. To move one space to the right or upward in setup mode.

Function 1. To view gross or net weight when the balance is on tare status. All other keys will be disabled when gross weight is activated.

Function 2. To increase values upward in setup mode.

Function 1. Key of confirmation in setup mode.

Function 2. Manually transmitting data through RS232 to computer or printer.

If you know the weight of the container, press this key and input the container weight value, then put the goods into the container, the display will show the net weight only.

To set the value of high limit

To set the value of low limit.

To program check weighing High / Low conditions (remark-)

To accumulate weights, the max of the weight times is 9999

To introduce sample value.

To recall accumulations

To enter in counting pieces function.

To view the total accumulation weighing

Backlight

To clear data

BASIC PARAMETER SETTING

To access to functions setting, press the →0← and key at the same time.

Press the key to select the parameter (UF-1 ~ UF-9)

.

UF-1 A/D count

1. Press the key to view the A/D count.
2. To move to next parameter press the ► key.
3. To exit and return to normal weighing press the U ESC key.

UF-2 High / Low limits setting

1. Press the key to enter.
2. The display will show the message “000000L”
3. Use the keys and →0← to move cursor and press the N/G to select number.
4. Press the key to confirm.
5. The display will show “00000H”
6. Use the keys and →0← to move cursor and press the N/G to select number.
7. Press the key to confirm.
8. Buzzer beep see remark (-)

UF-3 Auto-power off

Modes:

- **AoFF 00** – Auto-turn off disable.
- **AoFF 01** – The balance will automatically turn off after 1 minute of non use.

1. Press the key to access to auto-power configuration.
2. Use the keys and →0← to move from one digit to other and the key N/G to select the desired mode.
3. Press the key to confirm.

UF-4 Backlight setting

Modes:

- **A**: Automatic
- **ON:** Backlight on

- **OFF:** Backlight off

1. Press the  to access to backlight configuration.
2. Use the  key to select the desired mode.
3. Press the  key to confirm.

UF-5 HOLD function (keeps the reading fixed on display for few seconds after removing the load from the platter)

Modes:

- **HOLD 0** : Disable.
- **HOLD 1** : Weighing animals mode.

1. Press the  key to access to HOLD function configuration.
2. Use the  key to select the desired mode.
3. Press the  key to confirm.

UF-6 RS-232 Output

232 0 - RS-232 disable
232 1 - Stable output – Format 1
232 2 - Stream output – Format 1
232 3 - Manual output – Format 1
232 4 - Stable output – Format 2
232 5 - Stream output – Format 2
232 6 - Manual output – Format 2

RS232 Baud rate

b 1200 Baud rate 1200
b 2400 Baud rate 2400
b 4800 Baud rate 4800
b 9600 Baud rate 9600
b 19200 Baud rate 19200
b 38400 Baud rate 38400

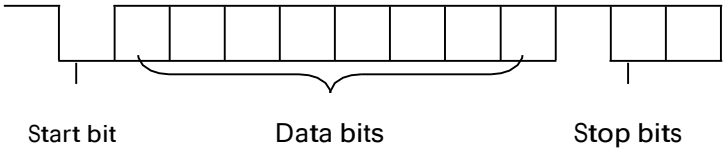
1. Press the  to enter
2. Press the  to select the baud rate

3. Press the  key to confirm.

Communication Protocol

UART signal of EIA-RS232 C
Format:

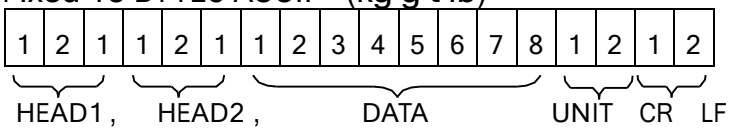
1. Serial output: 1200/2400/4800/9600/19200/34800 BPS
2. Data bits: 8 bits
3. Parity bits: None
4. Stop bits: 1 bit



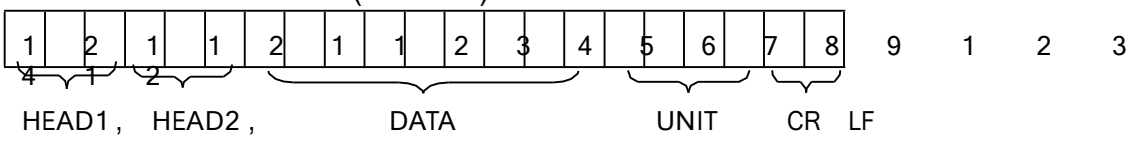
Format 1 (232 1 – 3):

HEAD1 (2 BYTES)	HEAD2 (2 BYTES)
OL – Overload	
ST – Stable	NT – Net weight
US – Unstable	GS – Gross weight

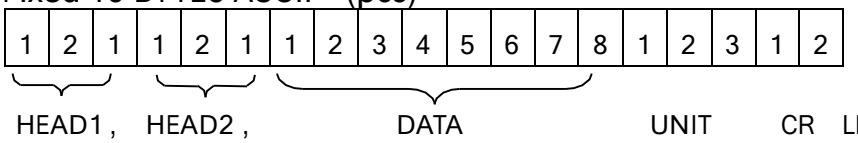
Fixed 18 BYTES ASCII (kg g t lb)



Fixed 21 BYTES ASCII (tl.T lboz)



Fixed 19 BYTES ASCII (pcs)



1. Example +0.876 kg Stable net weight :

S	T	,	N	T	,	+	0	0	0	.	8	7	6	k	g	0D	0A

2. Example -1.568 lb unstable gross weight :

U	S	,	G	S	,	-	0	0	1	.	5	6	8	l	b	0D	0A

3. Example -20. 5.40 lb oz unstable gross weight :

S	T	,	G	S	,	-	1	0	.	0	5	.	4	0	l	b	o	z	0D	0A

4. Example +1000 pcs stable net weight :

S	T	,	N	T	,	+	0	0	0	1	0	0	0	p	c	s	0D	0A

Format 2 (232 4 ~ 6) :

Fixed 12 BYTES ASCII (kg g t lb)

1	2	3	4	5	6	7	8	1	2	1	2
DATA								UNIT		CR	LF

Fixed 15 BYTES ASCII (tl.T lboz)

1	2	3	4	5	6	7	8	9	1	2	3	4	1	2
DATA									UNIT				CR	L

Fixed 13 BYTES ASCII (pcs)

1	2	3	4	5	6	7	8	1	2	3	1	2
DATA								UNIT			CR	LF

Output examples :

1. Example +0.876 kg stable net weight :

+	0	0	0	.	8	7	6	k	g	0D	0A

2. Example -1.568 lb unstable gross weight :

-	0	0	1	.	5	6	8	l	b	0D	0A

3. Example -20. 5.40 lb oz unstable gross weight :

-	1	0	.	0	5	.	4	0	l	b	o	z	0D	0A

4. Example +1000 pcs stable net weight :

+	0	0	0	1	0	0	0	p	c	s	0D	0A

UF-7 RS-232 Speed setting

1. Press the key  to enter.

2. Press the key 

to select the desired mode.

Mode 1 : Normal

Mode 2: Fast
Mode 3: Slow

3. Press the key  to confirm.

UF-8 Zero average

1. Press the key  to enter.
2. Press the key  to select.
3. Press the key  to confirm.

UF-9 G Value setting

1. Press the key  to display the G value of manufacture place.
2. If set the G value of local press the  key and then the  or  keys and key  to input the new G value.

ADVANCED FUNCTION SETTING

1. In weight mode, press the  and  keys, the display will show ECF – 1.
2. Press the  or  keys to select ECF-1, ECF-2 or ECF-3

*** ECF-1 Check weighing (SPAN)**

Press the  to enter, display will show CALZ.

Press the  to zero the display.

Use the keys  and  to select the digit.

Press  key to input the weight value.

Put the calibration weight on the platter and press the  key to calibrate.

*** ECF-2 Zero Calibration**

Press the  key to enter.

The display will show CALZ.

Press the  key to zero.

Press the  key to calibrate.

GUARANTEE

This scale is guaranteed for one year from the delivery date. The guarantee covers any fabrication defect of the material.

During this period, we cover the manpower and the spare parts necessary for the reparation of the scale.

This guarantee does not cover the failures caused by an inappropriate use or overcharge.

The guarantee does not cover the freight cost (transport) necessary to repair the scale.

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