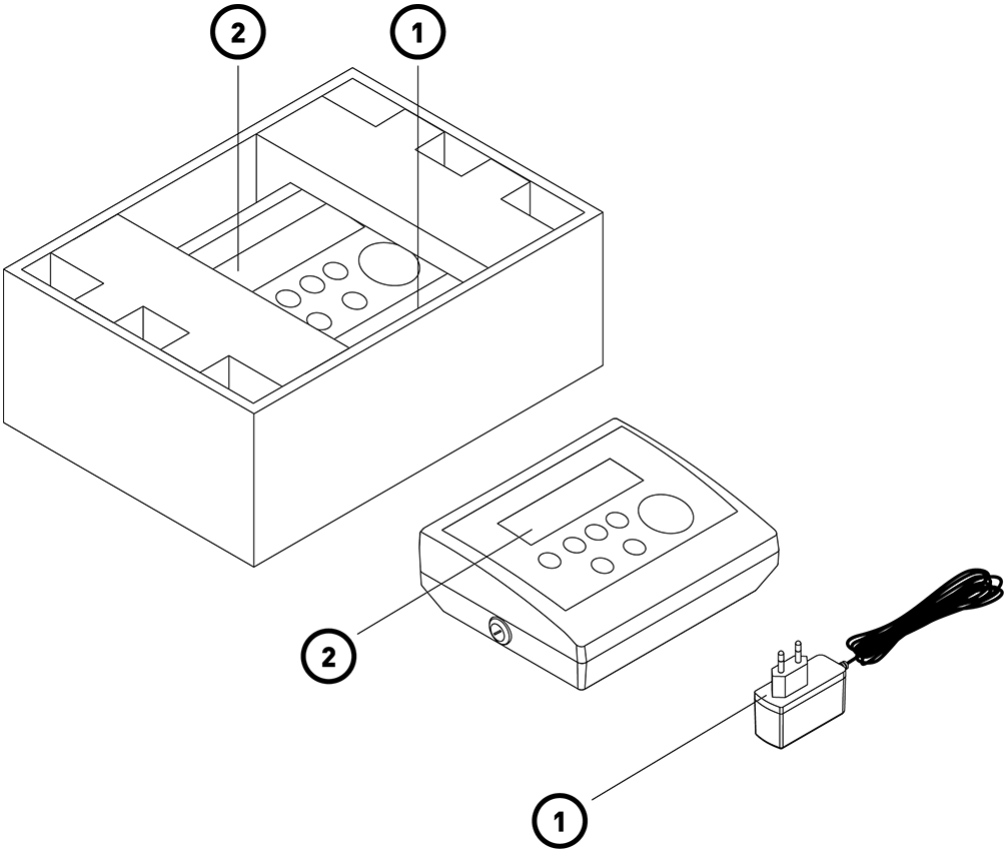
GRAM

K3X

EN



QUICK START GUIDE

PACKAGING

① 1 x 220 V/12 VDC 1A mains adapter.

② 1 x K3X weight indicator

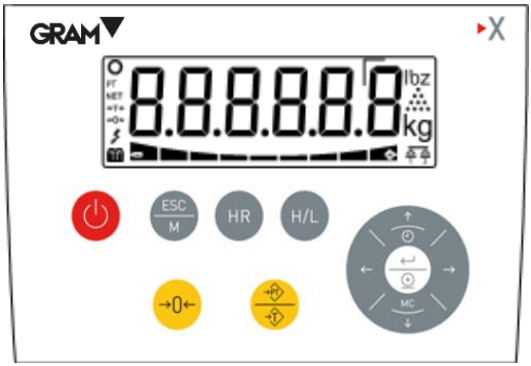
⊕ Accompanying documentation

KEYBOARD & DISPLAY

LCD DISPLAY

8	Displays the weight onto the load receptor.
kg/g	Unit of measurement in which the weight is indicated.
○	Stable weight reading: There is a weight on the platform that is not fluctuating. Intermittent or switched off to indicate that there is movement in the scale.
▬	Negative sign. This reading may be negative if a tare is activated or to indicate a problem when setting it to zero.
NET	Indicates net weight. The net weight is the actual weight on the scale minus the tare. It is only displayed if a tare has been used.
→T←	Tare activated. The reading flashes when "normal" tare mode has been activated. A "pre-set" tare is retained even after the weight is removed from the scale platform.
PT	Memory pre-set tare. The current tare is a value recorded into the indicator's memory; it could be not necessarily a measured value.
→0←	Scale is set to zero (weigh is less than ¼ division)
.8	High resolution mode. Additional digit to show the weight with a resolution of 1/10 of the scale division.
1	Double range mode, when using the scale range 1.
2	Double range mode, when using the scale range 2.
	The weight is below the lower limit. The 4 segments of this indicator are activated proportionally to the difference between the weight on the pan and the value of the lower limit. The thickest segment indicates that the weight is less than the value set as a lower limit in a proportion of 100% or more.
	The weight is within the range between the lower limit and the upper (high) limit.
	The weight is above the upper (high) limit. The 4 segments of this indicator are activated proportionally to the difference between the weight on the balance and the value of the upper limit. The thickest segment indicates that the weight exceeds the value set as the upper limit in a proportion of 100% or more.
	Battery-operated. When not connected to the mains, shows the charge level of the battery.
	Plugged to the mains.

KEYBOARD & DISPLAY



On / Off. Press once to switch the indicator on. Hold the key down for 2 seconds to switch off the terminal.

Esc / Menu. It enters the menu settings mode. When already into the settings menu mode, escapes to the previous menu option or back to the weighing mode.

High Resolution. Activates the high-resolution mode. One more digit is added to the weight value for 4 seconds.

High / Low limits: activates / deactivates the checkweigher mode.). Clicking twice will access the "H/L" mode settings.

Zero. Zero button. It sets the scale to zero.

Tare . A short pulse activates the tare function. This may be "Normal tare" or "Preset tare" depending on the operating mode selected in the settings menu. If there is a preset tare in the memory and the platform is empty, pressing this button deactivates the tare. When clicking twice (double click) the tare mode alternates from "preset tare" to "measured tare".

Left / Right arrow. Selects and edit a tare memory record.

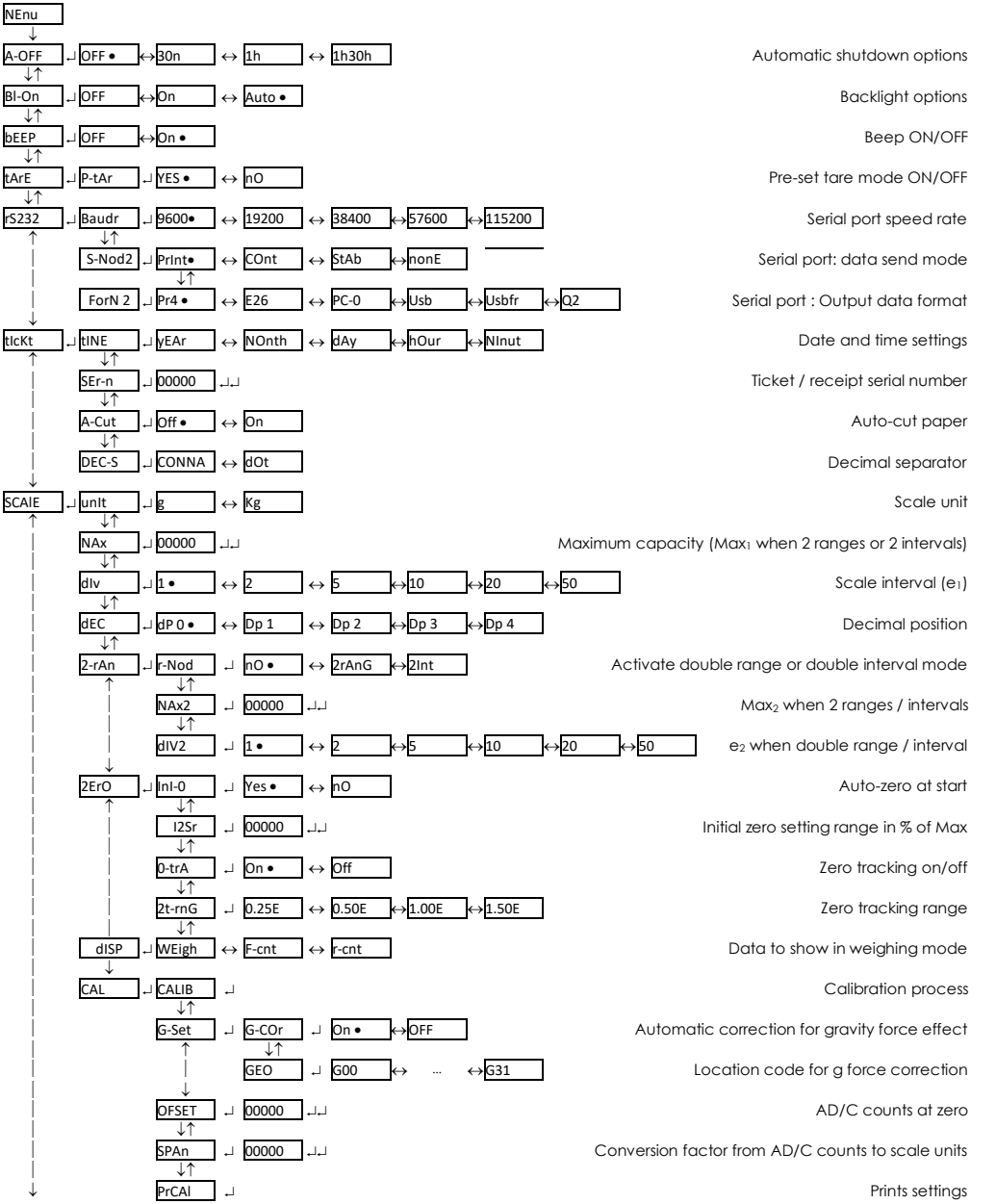
Print / Enter. Pressing this button when in "**Weighing mode**" will print the current weighing data (simple ticket mode). When clicking twice, starts printing a totalisation ticket. When holding pressed for 2 seconds, ends the current totalisation ticket. When in **menu settings mode**, it confirms the selection/modification made.

Clock and top arrow. In weighing mode, press to show the totalization amount. When keep pressed for 2" will show the date and time. In menu mode, when editing a value, it increases the value (digit) of the display.

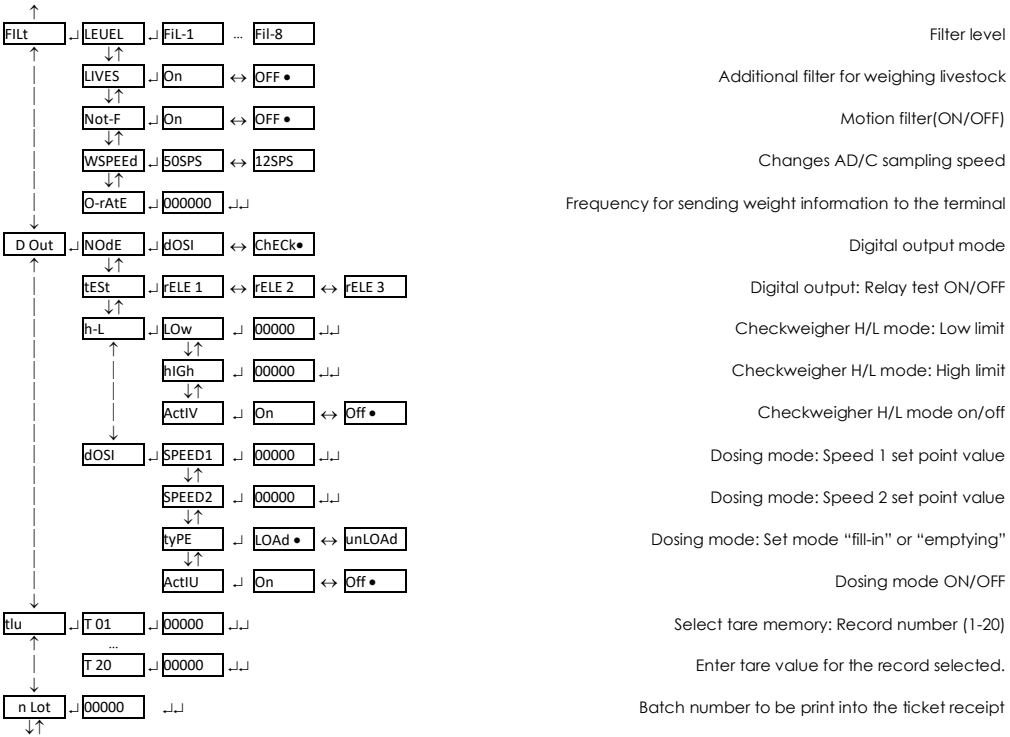
MC and bottom arrow. When in weighing mode, keep pressed for 2" to perform the "Clear" function: Cancel the tare, and resets the total weight. In menu mode, when editing a value, it decreases the value (digit) show on the display.

SCALE SETTINGS – MENU OPTIONS

For access the settings menu press the Esc / M key.
↵ validate the current setting / moves to the next digit when editing a numeric value
↵↵ validate a manually input value.
ESC Returns to the menu's previous level without making any change.
← → change to the next / previous option.
↓↑ changes between the different values that can be assigned to a specific option.
● Factory setting



SCALE SETTINGS – MENU OPTIONS



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● Factory settings

SCALE CALIBRATION

At the SCAIE menu you will find the settings needed to define and adjust the measurement scale of the instrument: Measurement unit, maximal capacity, scale interval (division), decimal point, as well as different options related to the operation of the auto-zero device.

Access to these configuration options is reserved for technical personnel and is protected by a keyword to avoid accidental changes that would cause the instrument to malfunction.

It is possible to directly access the adjustment (calibration) function of the instrument when the indicator is turned on.

To do this, turn on the indicator, and while the LCD test appears with all segments on, press the  and  keys at the same time (one short press, not sustained).

Once you have entered the access code to the scale settings menu, with the scale empty, select the option CALIB.

1. The display will show that the acquisition of the initial zero value is in progress with the blinking message "CAL 0".
2. Once the zero value has been adjusted, place the adjustment weight (a standard weight) on the load receptor.
3. Enter the weight value in the indicator, including the decimal positions. Use the cursor movement keys to move through the different positions on the display.
4. Once you enter the weight value, double click the ↵ key to validate and move to next step. The display will show the blinking message "-CAL-" while acquiring the adjustment value.
5. Lastly, it will show the message "GEO" for a few seconds, asking for the code of the geographical location where you did the adjustment.

   The geographical location code is a value from 0 to 31, which you must choose from the attached table. Use the ↑ and ↓ keys to change the value and validate by clicking on the ↵ key.
6. Lastly, the message "SAVE" will briefly appear, indicating that the adjustment has been saved in the non-volatile memory. The indicator returns to normal use mode, displaying the weight on the load receptor.

If the automatic correction of the weight according to the geographical latitude and height ("G-COR option") is set to ON, the next time you switch on the indicator after an adjustment, once the display test and initial welcome message is completed, the user will be asked to enter the value corresponding to the geographical area where the scale will be used.

Once the value has been entered for the geographical area where the scale is placed, it is recorded in the non-volatile memory of the indicator, and the user will not be asked for it again.

The geographical area where the scale is used can be modified later whenever you wish by entering the menu with NEnU →SCALE → CAL → G-SET → GEO → G nn (being nn{0-31}).

The automatic correction of the setting according to geographical area can be disabled by entering the menu with NEnU →SCALE → CAL → G-SET → G-Cor → OFF

TABLE OF GEOGRAPHICAL ADJUSTMENT VALUES

Geographical latitude in the northern or southern hemisphere in degrees and minutes.	Elevation above sea level in metres										
	0 325	325 650	650 975	975 1300	1300 1625	1625 1950	1950 2275	2275 2600	2600 2925	2925 3250	3250 3575
	Elevation above sea level in feet										
	0 1060	1060 2130	2130 3200	3200 4260	4260 5330	5330 6400	6400 7460	7460 8530	8530 9600	9600 10660	10660 11730
00°00' - 05°46'	5	4	4	3	3	2	2	1	1	0	0
05°46' - 09°52'	5	5	4	4	3	3	2	2	1	1	0
09°52' - 12°44'	6	5	5	4	4	3	3	2	2	1	1
12°44' - 15°06'	6	6	5	5	4	4	3	3	2	2	1
15° 06' - 17°10'	7	6	6	5	5	4	4	3	3	2	2
17°10' - 19°02'	7	7	6	6	5	5	4	4	3	3	2
19°02' - 20°45'	8	7	7	6	6	5	5	4	4	3	3
20°45' - 22°22'	8	8	7	7	6	6	5	5	4	4	3
22°22' - 23°54'	9	8	8	7	7	6	6	5	5	4	4
23°54' - 25°21'	9	9	8	8	7	7	6	6	5	5	4
25°21' - 26°45'	10	9	9	8	8	7	7	6	6	5	5
26°45' - 28°06'	10	10	9	9	8	8	7	7	6	6	5
28°06' - 29°25'	11	10	10	9	9	8	8	7	7	6	6
29°25' - 30°41'	11	11	10	10	9	9	8	8	7	7	6
30°41' - 31°56'	12	11	11	10	10	9	9	8	8	7	7
31°56' - 33°09'	12	12	11	11	10	10	9	9	8	8	7
33°09' - 34°21'	13	12	12	11	11	10	10	9	9	8	8
34°21' - 35°31'	13	13	12	12	11	11	10	10	9	9	8
35°31' - 36°41'	14	13	13	12	12	11	11	10	10	9	9
36°41' - 37°50'	14	14	13	13	12	12	11	11	10	10	9
37°50' - 38°58'	15	14	14	13	13	12	12	11	11	10	10
38°58' - 40°05'	15	15	14	14	13	13	12	12	11	11	10
40°05' - 41°12'	16	15	15	14	14	13	13	12	12	11	11
41°12' - 42°19'	16	16	15	15	14	14	13	13	12	12	11
42°19' - 43°26'	17	16	16	15	15	14	14	13	13	12	12
43°26' - 44°32'	17	17	16	16	15	15	14	14	13	13	12
44°32' - 45°38'	18	17	17	16	16	15	15	14	14	13	13
45°38' - 46°45'	18	18	17	17	16	16	15	15	14	14	13
46°45' - 47°51'	19	18	18	17	17	16	16	15	15	14	14
47°51' - 48°58'	19	19	18	18	17	17	16	16	15	15	14
48°58' - 50°06'	20	19	19	18	18	17	17	16	16	15	15
50°06' - 51° 13'	20	20	19	19	18	18	17	17	16	16	15
51°13' - 52°22'	21	20	20	19	19	18	18	17	17	16	16
52°22' - 53°31'	21	21	20	20	19	19	18	18	17	17	16
53°31' - 54°41'	22	21	21	20	20	19	19	18	18	17	17
54°41' - 55°52'	22	22	21	21	20	20	19	19	18	18	17
55°52' - 57°04'	23	22	22	21	21	20	20	19	19	18	18
57°04' - 58°17'	23	23	22	22	21	21	20	20	19	19	18
58°17' - 59°32'	24	23	23	22	22	21	21	20	20	19	19
59°32' - 60°49'	24	24	23	23	22	22	21	21	20	20	19
60°49' - 62°09'	25	24	24	23	23	22	22	21	21	20	20
62°09' - 63°30'	25	25	24	24	23	23	22	22	21	21	20
63°30' - 64°55'	26	25	25	24	24	23	23	22	22	21	21
64°55' - 66°24'	26	26	25	25	24	24	23	23	22	22	21
66°24' - 67°57'	27	26	26	25	25	24	24	23	23	22	22
67°57' - 69°35'	27	27	26	26	25	25	24	24	23	23	22
69°35' - 71°21'	28	27	27	26	26	25	25	24	24	23	23
71°21' - 73°16'	28	28	27	27	26	26	25	25	24	24	23
73°16' - 75°24'	29	28	28	27	27	26	26	25	25	24	24
75°24' - 77°52'	29	29	28	28	27	27	26	26	25	25	24
77°52' - 80°56'	30	29	29	28	28	27	27	26	26	25	25
80°56' - 85°45'	30	30	29	29	28	28	27	27	26	26	25
85°45' - 90°00'	31	30	30	29	29	28	28	27	27	26	26

CONNECTIONS

Xtrem scale module

PIN No.	SIGNAL
PIN 1	+Vcc
PIN 2	TxD
PIN 3	RxD
PIN 4	Not connected
PIN 5	GND

RS-232 serial interface

PIN No.	SIGNAL
PIN 4	+Vcc
PIN 5	TxD
PIN 6	RxD

MORE INFORMATION

Download the full manual from the following link:

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https://gram-group.com/wp-content/uploads/2022/02/MU_K3X_V6_001_ENG.pdf

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