TRONIX GTXC Counting scale parameters setting form, version -HE5.1-

I. Keypad functions instruction.

M+: Accumulation or incremental functions.

CE: Eliminate or move left functions.

ZERO: Zero or confirm functions.

RECALL: Recall or move right functions.

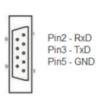
MODE: Mode switching function.

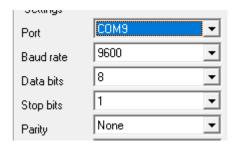
II. RS232 Interface.

In the weighing process, sometimes we need to print our the weighing data or transferring to PC or other equipment. In order to meets the users, in the backside of balance have RS232 interface, the connection method as bellow:

Balance to computer (use the system own Hype terminal or serials port assistant.)

Balance(9 pins)	Computer(9 pins)
TXD(output) 2	2
RXD(input) 3	
GND(ground) 5	





Data format: Data bit 8, stop bit 1, without parity bit, baud rate selectable, default Baud rate is 9600.

III. Communication parameters instruction.

Enter into parameters setting.

Under the off situation, hold press "RECALL"key when screen shows "SET-UP" release the key, then shows "str"

Press "M+" choose parameter incremental, then press "RECALL" enter to next parameter, press CE key return back to the previous parameter, press "ZERO" to confirm and exit it.

1. Str-X Print mode selection.

- Str-0 Close print function.
- Str-1 Continuously transmit the weighing data.
- Str-2 When scale stable to transmit the weighing data.
- Str-3 Press PRINT key to transmit the weighing data.(Default value.)
- Str-4 When scale stable to transmit the alarm value weighing data.
- Str-5 Command to transmit the weighing data.
- PC sends capital letter U, that means do the Units transfer operation to scale.
 - PC sends capital letter T, that means do the Tare operation to scale.
 - PC sends capital letter Z, that means do the Zero operation to scale.
 - PC sends capital letter R, that means do the Print operation to scale.
 - Str-6 NC (Temporarily retain.)
 - Str-7 Fast stabilization to transmit the weighing data.
 - Str-8 Stable for 1s to transmit the weighing data.
 - Str-9 Stable for 2s to transmit the weighing data.
 - Str-10 Stable for 3s to transmit the weighing data.

2. CLA-X Communication data format.

- CLA-1 Weighing data without +/-symbol, without units and with CR LF for example 0.00
- CLA-2 Weighing data without +/-symbol, without units and without CR LF for example 0.00
- CLA-3 Weighing data with +/-symbol, with units and with CR LF for example -0.03g
- CLA-4 Weighing data without +/-symbol, with units and with CR LF for example 0.03g
- CLA-5 Weighing data with +/- NT ST symbol, with units and with CR LF for example ST, NT, +0.000g (Default)
- CLA-6 with extra big size display, only suitable Baud rate 1200 and Mode Str---1.
- CLA-7 Weighing data with +/-symbol, without units and with ENTER for example -199.992 ENTER.
 - CLA-8 Weighing data with N.W, G.W, T.W.
 - for example NO.: 0001 N.W: 100.00g T.W: 200.00g G.W: 300.00g
- CLA-9 Weighing data with wn, +/-symbol, with units and with CR LF for example wn -0.03g

3. Zer-X Weighing data zero or minus whether send it.

- Zer-1 Weighing data zero or minus dont send it.(Default)
- Zer-0 Weighing data zero or minus send it

4. bExxx Baud rate selection

Be1200 Be2400 Be4800 Be9600(Default) Be19200

5. PC---X select the print output equipment

PC-1 choose computer or the common serial port printer (Default)

PC-2 choose editable label printer

PC-3 choose GP3120 label printer

6. PL-X print line selection.

PL-1 Dont output CR LF, suitable for straight line.

PL-2 Out put CR LF, suitable for interface port (Default)

7. PN-X(1~15) edit the label printer output mode selection.(Only for PC-2 mode.)

Only for PC-2 edit label printer, 1~15 it is output code, default number is 1.

8. PT-X print code selection.(Dont used for CLA-8.)

Pt-0 sending weight without code.

Pt-1 sending weight with code.

9. Ti-ON/OFF Date-time switch (Option: date-time IC)

Ti-ON turn on the date-time function, print out with date and time.

Ti-OFF close the date-time function, print our without data and time.

10. When ti-ON function open, setting the original time of date-time IC.

CAL key incremental value, press PRINT key enter into another setting, press MODE key to confirm it and then exit it.

0XX-XX first select the year, then the month.

XX-UUX first select the day, then the week.

HXX-XX first select the hour, then the minute.

The above parameters press "M+" choose parameter incremental, then press "RECALL" enter to next parameter, press CE key return back to the previous parameter, press "ZERO" to confirm and exit it.

IV. The instruction of communication data format.

1. CLA-1 data format.

Weighing data without +/-symbol, without units and with CR LF for example:

Screen shows: -50.09g

Output data ASCII (hex):2D 20 20 35 30 2E 30 39 0D 0A

Instruction:

The first character 2D or 20 means "-" or shows space.

The 2~8 character show the number and decimal point.

The 9~10 character OD 0A, the CRLF and finished.

2. CLA-2 data format.

Weighing data without +/-symbol, without units and without CR LF for example:

Screen shows: -50.09g

Output data ASCII (hex):2D 20 20 35 30 2E 30 39

Instruction:

The first character 2D or 20 means "-" or shows space.

The 2~8 character show the number and decimal point.

3. CLA-3 data format.

Weighing data with +/-symbol, with units and with CR LF

for example:

Screen shows: 50.10g

Output data ASCII (hex):2B 20 20 35 30 2E 31 30 67 20 20 0D 0A

Instruction:

The first character 2D or 2B means "-" or "+"

The 2~8 character show the number and decimal point.

The 9~11 character show unit

The 12~13 character OD 0A, the CR LF and finished.

4. CLA-4 data format.

Weighing data without +/-symbol, with units and with CR LF for example:

Screen shows: -50.10g

Output data ASCII (hex): 20 20 35 30 2E 31 30 67 20 20 0D 0A

Instruction:

The 1~7 character show the number and decimal point.

The 8~10 character show unit

The 11~12 character OD 0A, the CR LF and finished.

5. CLA-5 data format.

Weighing data with +/-symbol, GS,NT,ST, with units and with CR LF for example:

Screen shows: 21.23g
Output data ASCII (hex):

53 54 2C 47 53 2C 2B 20 20 32 31 2E 32 33 67 20 20 0D 0A

Instruction:

The 1~3 character show US or ST: US means not stable, ST means stable.

The 4~6 character show GS or NT, GS means gross weight, NT means net weight.

The 7 character show +/2B/2D.

The 8~14 character show the number and decimal point.

OD 0A, the CR LF and finished.

The 15~17 character show unit

The 18~19 character OD 0A, the CR LF and finished.

6. CLA-8 data format.

Weighing data with N.W, G.W, T.W. TIMES 5

For example:

No.:0005

N.W: + 10.00kg T.W: + 20.00kg

G.W:+ 30.00kg

Output data ASCII (hex):

4E 6F 2E 3A 30 30 30 35 0D 0A

4E 2E 57 2E 3A 2B 20 20 31 30 2E 30 30 6B 67 20 0D 0A

54 2E 57 2E 3A 2B 20 20 32 30 2E 30 30 6B 67 20 0D 0A

47 2E 57 2E 3A 2B 20 20 33 30 2E 30 30 6B 67 20 0D 0A

The fist line, 1~4 character: NO.: 5~8 character: Serial no. 9~10: OD 0A the CRLF.

The second line, 1~5: N.W: 6: 2D/2B means - /+ 7~13: number and decimal point. 14~16: show unit. 17~18: OD 0A the CRLF.

The third line, $1\sim5$: T.W: 6: means -/+ $7\sim13$: number and decimal point. $14\sim16$: show unit. $17\sim18$: OD 0A the CRLF.

The forth line, 1~5: G.W: 6: 2D/2B means -/+ 7~13: quantity. 14~16: show unit. 17~18: OD 0A the CRLF.

7. CLA-9 data format.

Weighing data with wn, +/-symbol, with units and with CR LF.

Screen shows: wn -500.00g

Output data ASCII (hex): 77 6E 2D 35 30 30 2E 30 30 67 20 20 0D 0A

The 1~2 character: wn

The 3 character: 2D means -/+

The 4~9 character: align left shows data and point, at less 1pcs character, at most 8pcs characters.

The 10~12: show unit.

The 13~14: OD 0A, the CRLF finished.

8. Command mode

PC sends capital letter T(ASCII HEX: 54), that means do the Tare operation to scale.

PC sends capital letter Z(ASCII HEX: 5A), that means do the Zero operation to scale.

PC sends capital letter R(ASCII HEX: 52), that means scale send the weighing data to PC.

PC sends capital letter U(ASCII HEX: 555), that means do the units transfer operation to scale.

V. Selection of internal parameters functions.

A. In zero state, hold press TARE key until the screen shows "SET-UP", then input the password 302 (press number choose 302, then press ZERO confirm it.) then enter into the internal parameters setting.

Press M+ key to choose parameter incremental, then press "RECALL" enter to next parameter, press CE key return back to the previous parameter, press "ZERO" to confirm and exit it.

1. C-X zero tracing function selection.

C-0~7 C-0 without zero tracing, C1-C7 zero tracing point from 1d~7d.

2. A-X the capacity tracing function selection.

A-0~7 A-0 without capacity tracing, A1~A7 capacity tracing point from 0.5d~3.5d.

3. FA-X weighing speed selection.

FA-1 slow FA-2 fast

4. Z-X zero return range.

Z-0 without zero return, Z-1~4 the larger the value, the larger zero return range.

5. LP-X higher than standard tracking range.

LP-0 without tracking, LP-1~15 tracking 1d~15d.

6. LN-X lower than standard tracking range.

LN-0 without tracking, LN-1~15 tracking 1d~15d.

7. LS-x Arbitrary tracking function.

LS-0 without arbitrary tracking function.

LS-1 with arbitrary tracking function.

8. Beep-X switch of buzzer.

Beep-0 buzzer button off beep-1 buzzer button on.

9. Per-x percentage function switch.

Per-0 open percentage function.

Per-1 close percentage function.

10. ZERO-X Strengthen zero tracing.

ZERO-0 zero tracing without strengthen, ZERO-1 zero tracing strengthen to 1d or 2d.

11. AUG-X Unit weight average function switch.

AUG-0 close the unit weight average function.

AUG-1 open the unit weight average function.

12. PST0-X whether scale stable to checking the upper and lower limit alarm.

PST0-1 when stable to checking the upper and lower limit alarm

PST0-0 checking the upper and lower limit alarm, no matter it is stable or not stable.

B. The common parameters setting.

Under zero state, hold press "1" until screen shows "SET-UP", then enter into parameter setting.

Press M+ key to incremental value, press RECALL key to next one parameter, press CE key go back to the previous parameter, press ZERO key to confirm it and exit it.

1. bl-X the backlight mode selection(Only for LCD display).

BL-1 the backlight always shining.

BL-2 close the backlight.

BL-3 save battery backlight, when shining for 1 minute if without any operation of scale, the backlight will be off.

2. PASS-X check weighing mode.

PASS-0 when the objects is higher the low limit value and lower the high limit value, the buzzer will be sound.

PASS-1 when the objects is lower the low limit value and higher the high limit value, the buzzer will be sound.

3. APST-X APST alarm.

Apst-0 Quantity alarm mode.

Apst-1 weight alarm mode.

4. HOLD animal weighing mode.

HOLD-0 without animal weighing function.

HOLD-1 dynamic weighing a peak value retaining, take down the object scale will be back to zero after press O/T key.

HOLD-2 dynamic weighing a stable value retaining, take down the object scale will be back to zero after press O/T key.

HOLD-3 dynamic weighing a stable value retaining, take down the object scale back to zero.

VI. Open/close the units operation.

Turn off the scale then hold press CE key to turn on scale until it shows "-UNIT-", scale will shows units press M+ key to choose YES or NO, press RECALL to next unit, then press ZERO to confirm it and exit it.

YES: means to open this unit.

NO: means to close this unit.

VII. Calibration.

1. Single point calibration, take 6kg/0.2g for example, the calibration value is 5kg.

When scale goes to zero, hold press RECALL key until the screen shows CAL(press about 3 seconds), then shows "5000.0g" flash, put on 5000g weight on pan, showing "-----", when stable press ZERO key to confirm it, then it will show "5000.0g" again, then take down the weight, calibration finished.

PLS: if after calibration also have some point error, please do this calibration process one or two times.

2. Arbitrary calibration value setting.

Take 6kg/0.2g for example, the calibration value is 5kg, but without 5kg weight only have 2kg weight, we can modify the value.

But please note that in order to make sure the accuracy of scale, the calibration value must be higher one third of maximum capacity.

Operation	Screen shows content
When scale goes to zero, hold press RECALL key until screen show CAL,	"5000.0g" all digit flashes
then screen shows CAL value.	
Press "ZERO" key	05000.0g the first digit flashes
	from the left place.
Press "CE" key eliminate the original cal	2000g
value, press number choose 2000g	
Press "ZERO" key confirm it.	2000g flashes.
Put the 2000g weight on the pan, when	2000.00g static.
stable press ZERO key to confirm	
it, then shows weight value.	
Take down the weight, calibration	0.0g
finished.	

3. Linear calibration.

Take 6kg/0.2g for example, the value is 6kg, 5kg and 2kg, prepare the standard weight.

When scale goes to zero, hold press RECALL key until screen shows CAL, then shows "5000.00g" flash, then hold press CE key until screen shows CAL again, now enter into linear calibration. Screen shows "6000.00g", put the 6000g weight on the pan, showing "------", when stable press ZERO key, it will show "6000.00g" again, then take down the weight, screen will shows "5000.00g" put the 5000g weight on the pan, showing "------", when stable press ZERO key, it will show "5000.00g" again, then take down the weight, screen will shows "2000.00g" put the 2000g weight on the pan, showing "------", when stable press ZERO key, it will show show "2000.00g" again, then take down the weight, scale goes to zero, the linear calibration finished.