VALUE EACH GRAM
HiWEIGH

User Mannual

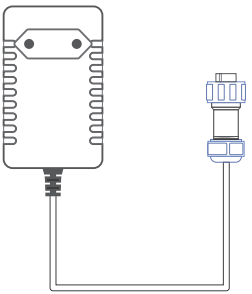
for K7 Indicator


VALUE EACH GRAM
HiWEIGH

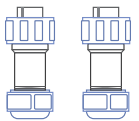
Part 1
UNBOXING

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

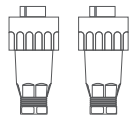
Standard:



Power Adapter

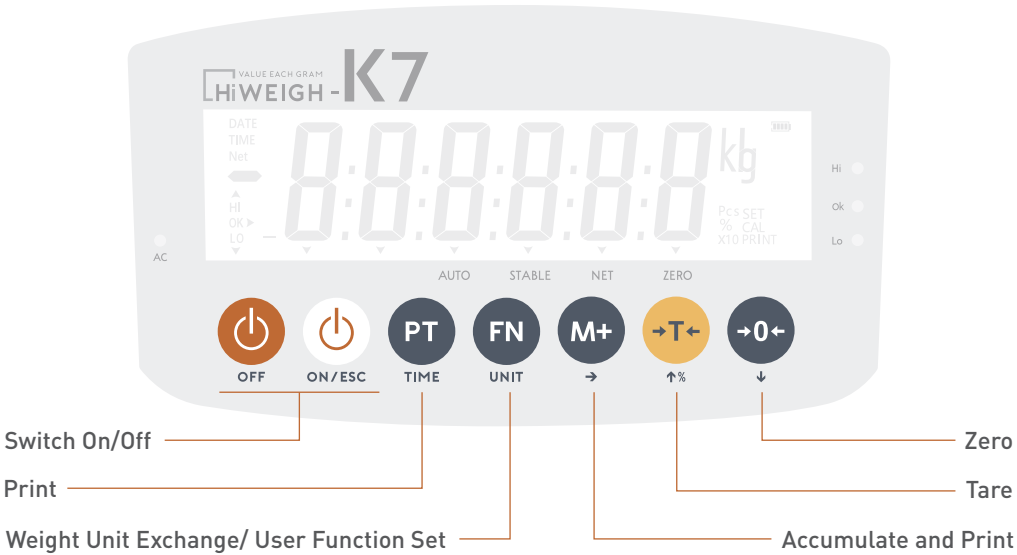


RS232
Data Serial Port



Load Cell Connector

Key Functions



LCD Display


Weight Read
Checkweigh
Battery
Unit
Mode
VALUE EACH GRAM
HiWEIGH - K7
DATE
TIME
Net
HI
OK
LO
kg
Pcs SET
% CAL
X10 PRINT
Hi
Ok
Lo
AC
AUTO
STABLE
NET
ZERO
OFF
ON/ESC
PT
TIME
FN
UNIT
M+
→T←
→0←

Part 2

STANDARD OPERATION

1. Switch On/Off

Press 

key to turn on the indicator

Press 

key to turn off the indicator

2. Zero

If the indicator not on zero point and the weight value <2%F.S., press 

key to zero the scale, and the 

arrow will display.

3. Tare

3.1Manual Tare:

Put the container on the scale (weight>0) and after the read stable (also the tare arrow not appear), press 

the scale will remove the weight read and record as tare, and the scale will display the net weight, press 

again, it will display the gross weight (tare + net weight).

3.2 Repeat Tare:

After the first tare operation, put the 2nd weight on the scale, press 

, it will display the gross weight of 1st+2nd weight and press 

again, it will take that gross weight as new tare weight and start the new net weighing operation.

3.3 Remove Tare:

When the net weight display and the tare arrow appears, press 

, it will remove the tare value and display the gross weight, and the 

disappears.

3.4 Auto Tare:

When the user function (AUT) set to be 10 or 11 and the weight reach to the valve value as it set, the scale will do tare automatically, refer to AUT configuration.

4. Print

In manual print/accumulate mode, when the weight value >20d and stable, press PT (TIME), it will print the weight bill, and it can be printed once again if you press PT (TIME) again.

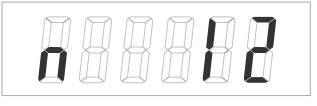
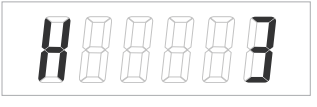
5. Accumulate and Print

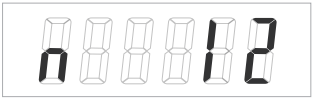
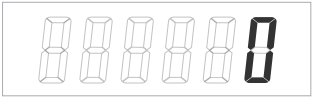
In manual print/accumulate mode, when the weight value >20d and stable, press M+ (→), it will print the weight receipt and accumulate to the record (also it will display the accumulation times like [n 12]), next print/accumulating available only after the weight value <20d.

6. Weight Unit Exchange/ User Function Set

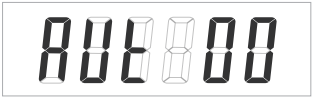
Long press FN (UNIT) key for 2 seconds to exchange between the 1st unit and 2nd unit.Kg and lb, g and oz, t only. Enter function during parameter configuration.

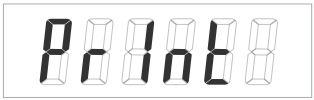
7. Accumulated Record Retrieve and Clean (In weighing mode)

Operation	Display	Explanation
Long press M+ (→)	[n 12] 	Display accumulated times
Press →T← (↑%)	[H 3] 	Display the first 4 digits

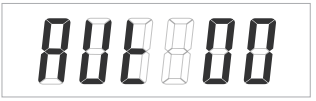
Operation	Display	Explanation
Press →T←	[L506.5] 	Display the following 4 digits, accumulated weight=3506.5
Press →0←	[n 12] 	When it displays the accumulated times, press to clean the accumulated record
Press FN UNIT	[0] 	Return to weighing mode

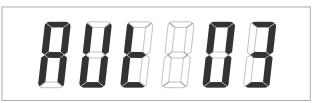
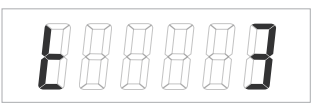
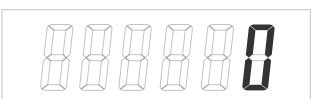
8. User Setting Menu

Operation	Display	Explanation
Press FN UNIT	[Aut 00] 	Weighing mode set
Press FN UNIT	[000200] 	Auto tare valve value (when Aut=10 or 11)

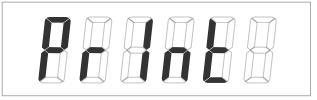
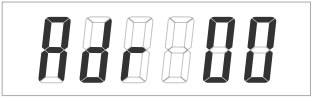
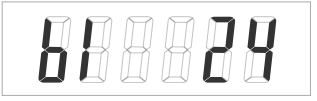
Operation	Display	Explanation
Press FN UNIT	[PrInt] 	Communication, printing format and percentage set
Press FN UNIT	[PErC] 	Set weight value for percentage weighing (100%)
Press FN UNIT	[SEtP] 	Set setpoints
Press FN UNIT	[PCS] 	Set sample quantity (Aut=07)
Press FN UNIT	[0.002] 	10 times resolution
Press FN UNIT	[0.00] 	Return to weighing mode

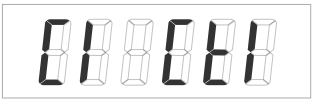
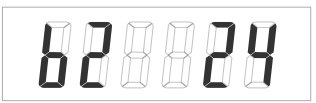
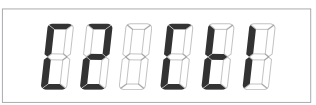
9. Weighing Mode Set

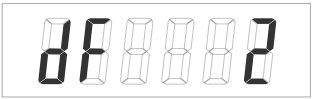
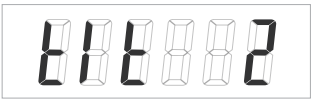
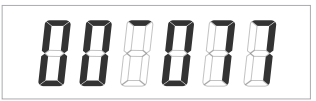
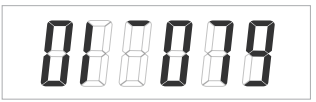
Operation	Display	Explanation
Press FN UNIT	[Aut 00] 	User function set
Press M+ Press →T← or →0← Press FN UNIT	[Aut 01] 	**00:** Normal weighing mode, manual print/accumulate **01:** Normal weighing mode, automatic print/accumulate after the weight stable, auto arrow appears **02:** Normal weighing mode, automatic save the weight value, and print/accumulate it after the load < 20d and auto arrow appears **03:** Dynamic weighing mode, automatic print/accumulate after the weight <20d, auto arrow appears **04:** Peak hold mode, automatic print/accumulate after the weight <20d, auto arrow appears **05:** Dynamic weighing mode, manual print/accumulate **06:** Peak hold mode, manual print/accumulate **07:** Counting mode, manual print/accumulate

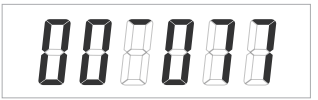
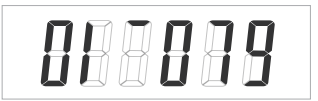
Operation	Display	Explanation
		08: Positive/Negative weighing, use for testing the tension or compression force **09:** Minus weighing mode **10:** Automatic tare mode **11:** Continuous automatic tare mode. Modify the mode and push FN UNIT to confirm
Press FN UNIT Press →T← ↑% or →0← ↓ to modify	[Aut 03]  [t 3] 	If the Aut=03 or 05, there is the time set for dynamic weighing (average weight during the set time).After set done, press FN UNIT to confirm.
Press FN UNIT	[0] 	Return to weighing mode

10. Communication | Print Configuration

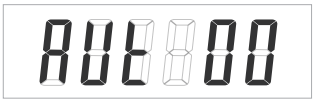
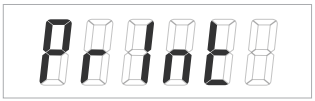
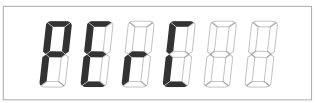
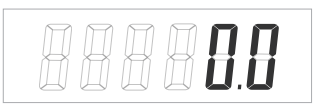
Operation	Display	Explanation
Press FN UNIT	[Aut 00] 	Weighing mode selection
Press FN UNIT	[PrInt] 	Communication, printing set
Press M+ → Press →T← ↑% or →0← ↓ Press FN UNIT	[Adr 00] 	Communication address selection
Press M+ → Press →T← ↑% or →0← ↓ Press FN UNIT	[b1 24] 	COM1 baud rate select: 24=2400 48=4800 96=9600 144=14400 192=19200
Press M+ → Press →T← ↑% or →0← ↓ Press FN UNIT	[CHE1 n] 	COM1 Check mode n: None E: Even check O: Odd check S: Always 0 A: Always 1

Operation	Display	Explanation
Press M+ Press →T← or →0← Press FN UNIT	[C1 Ct1] 	COM1 Output Ct1: Continuous output Cnd: Command (Modbus) F1: Print format 1 F2: Print format 2 F3: Print format 3 Ct2: Stable output(when Aut=01) Ct3: Continuous output (format = Ct2)
Press M+ Press →T← or →0← Press FN UNIT	[b2 24] 	COM2 baud rate select: 24=2400 48=4800 96=9600 144=14400 192=19200
Press M+ Press →T← or →0← Press FN UNIT	[CHE2 n] 	COM2 Check mode n: None E: Even check O: Odd check S: Always 0 A: Always 1
Press M+ Press →T← or →0← Press FN UNIT	[C2 Ct1] 	COM1 Output Ct1: Continuous output Cnd: Command (Modbus) F1: Print format 1 F2: Print format 2 Ct2: Stable output(when Aut=01) Ct3: Continuous output (format = Ct2)

Operation	Display	Explanation
Press M+ Press →T← or →0← Press FN UNIT	[dF 2] 	Date format 0 = d/m/y 1 = m/d/y 2 = y/m/d
Press M+ Press →T← or →0← Press FN UNIT	[tIt 2] 	Printing head 0: None144=14400 192=19200 1: On top 2: On bottom 3: Both (top and bottom)
Press →T← or →0← Press M+ Press PT TIME or ON/ESC to next letter Press FN UNIT to end	[00~077]  [01~079]  .... [25~255] 	Top head input (total 64 letters): 00: The sequence of letter 087: ASCII code, 087 represents M, 079 represents O... (refer to appendix I) and input 255 to end the head

Operation	Display	Explanation
Press →T← or →0← Press M+ Press PT or ON/ESC to next letter Press FN to end	[00¯077]  [01¯079]  .... [25¯255] 	Bottom head input (total 64 letters): 00: The sequence of letter 087: ASCII code, 087 represents M, 079 represents O... (refer to appendix I) and input 255 to end the head
	[0.0] 	Configuration saved and back to weighing mode

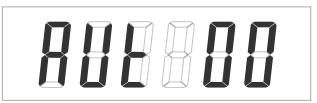
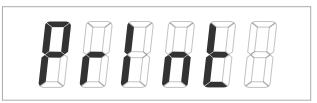
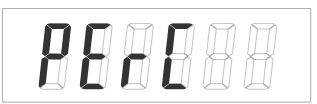
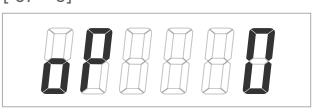
11. Percentage Weighing

Operation	Display	Explanation
Press FN UNIT	[Aut 00] 	Weighing mode selection
Press FN UNIT	[PrInt] 	Communication, printing format and percentage set
Press FN UNIT	[PErC] 	Set weight value for percentage weighing (100%)
Press M+ → Press →T← % or →0← ↓ Press FN UNIT	[3000] 	Input the weight value for 100% index
Press FN UNIT	[0.0] 	Back to the weighing mode

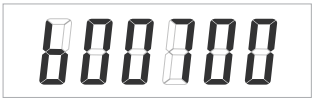
Note: Percentage weighing available only when Aut=00, and long press →T← % for 2 seconds to start the percentage weighing mode.

12. Setpoints

For instructions on setpoints, please refer to **20.Setpoint Output**

Operation	Display	Explanation
Press FN UNIT	[Aut 00] 	Weighing mode selection
Press FN UNIT	[PrInt] 	Communication, printing format and percentage set
Press FN UNIT	[PErC] 	Set weight value for percentage weighing (100%)
Press FN UNIT	[SEtP] 	Set setpoints
Press M+ Press →T← or →0← Press FN UNIT	[oP 0] 	Setpoints mode: oP=0: no output oP=1: 2 setpoints output oP=2: 4 setpoints output (for 3-LED alarming lights) oP=3: 4 setpoints output

Operation	Display	Explanation
Press FN UNIT	[r00050] 	When the fixed output starts weighing, the fixed output does not work.
Press M+ Press →T← or →0← Press FN UNIT	[ALA 0] 	Beeper working mode: ALA=0: No beep ALA=1: It beeps when the weight out of range (Hi/Lo, stable) ALA=2: It beeps when the weight within range (OK, stable)
Press M+ Press →T← or →0← Press FN UNIT	[A00500]  [000000]  [000200] 	A setpoint input

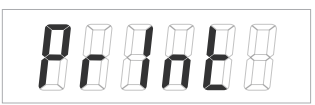
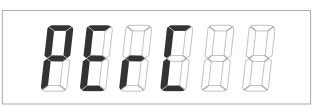
Operation	Display	Explanation
Press M+ Press →T← or →0← Press FN UNIT	[b00700]  [000000]  [000300] 	B setpoint input
Press M+ Press →T← or →0← Press FN UNIT	[C00100]  [000000]  [000400] 	C setpoint input

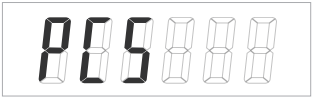
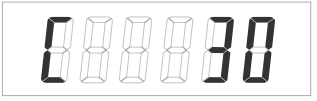
Operation	Display	Explanation
Press M+ Press →T← or →0← Press FN UNIT	[D01200]  [000000]  [000500] 	D setpoint input
	[0.0] 	

13. Counting

13.1 Sampling

Put the sample on the scale (if the scale is not zero, please zero or tare the scale firstly) and it's more precise if there are more samples counted (1-999)

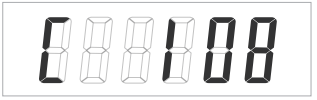
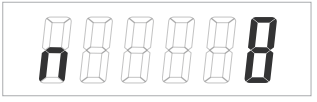
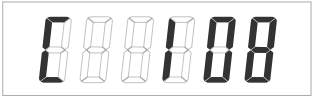
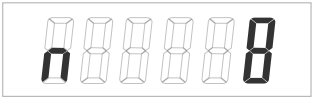
Operation	Display	Explanation
Put the sample on the scale	[26.0] 	Display the weight of the sample
Press FN UNIT Press M+ Press →T← or →0←	[Aut 00]  [Aut 07] 	Select Aut=07 (counting mode)
Press FN UNIT	[PrInt] 	Communication and printing set
Press FN UNIT	[PErC] 	Set weight value for percentage weighing (100%)

Operation	Display	Explanation
Press FN UNIT	[SEtP] 	Set setpoints
Press FN UNIT	[PCS] 	Set the number of sample, this menu appears when Aut=07
Press M+ Press →T← or →0←	[Cnt000]  [Cnt030] 	nput the sample number Example = 30
Press FN UNIT	[C 30] 	Save the sample number Ready for counting operation

13.2 Counting

After sampling saved, put the goods on the scale, it will display the quantity of the goods, like **[C 108]**, press ON/ESC to shift the display between the quantity or the weight of the goods, and after the weight stable, press PT TIME to print the receipt or accumulated receipt.(Requires to set output in print format)

13.3 Counting Records and Clean

Operation	Display	Explanation
	[C 108] 	In counting mode
Long press M+	[n 8] 	Display the accumulated times
Press →T←	[C 532] 	Display the total quantity
Press FN UNIT	[C 108] 	Back to counting mode
Press →0←	[n 8] 	When it displays the accumulated times, press →0← to clean the accumulated value and back to counting mode

14. Positive/Negative Weighing

(Aut=08)
In this mode, the indicator can accept the positive or negative signal, when it displays the positive weight, tare operation is available, when it displays the negative weight, the tare operation can't access. Accumulating and printing is unavailable for this mode.

15. Minus Weighing

(Aut=09)
In this mode, the indicator will display the removed load.
Put the object on the scale, long press →0← to zero the scale, now remove the object and the scale will display the removed weight. Tare/Accumulate/Print is available for this mode.

16. Automatic Tare

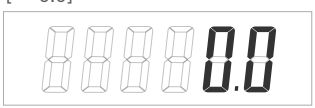
After Aut=10 or 11 configured, press FN (UNIT), it will display the valve value [000200], set the value by M+ (→) →T← (↑%) or →0← (↓), if the decimal point set as 0.0, the [000200]=20.0

(Aut=10) Auto Tare
In this mode, when the weight > the valve value, it will do tare automatically.
When the scale back to zero (empty), it will clean the tare automatically.

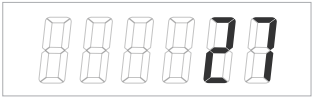
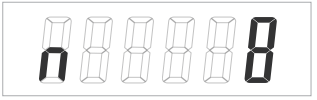
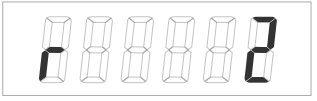
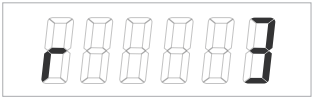
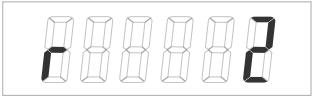
(Aut=11) Continuous Auto Tare
In this mode, when the weight > the valve value, it will do tare automatically, and now put more objects on the scale, and after the weight stable, press PT (TIME) or M+ (→) to print or accumulated print, the scale will do tare again by itself.
When the scale back to zero (empty), it will clean the tare automatically.

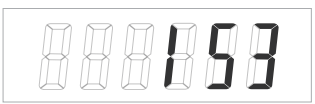
17.Clock Adjust

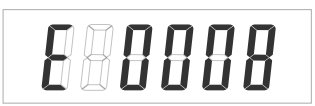
When it display time or date, press →T← to shift display of time or date.

Operation	Display	Explanation
	[27] 	In weighing mode
Long press PT (TIME) Press M+ Press →T← or →0←	[00:00:80]  [09:30:01] 	Display time (hour/minute/second) After modifying, press FN (UNIT) to confirm
Press →T← Press M+ Press →T← or →0←	[00.01.01] 	Press →T← to display the date After modifying, press FN (UNIT) to confirm
Press →0←	[0.0] 	Back to the weighing mode

18.Weight Record Retrieve and Print

Operation	Display	Explanation
	[27] 	In weighing mode
Long press M+	[n 8] 	Display the accumulated times
Press M+ Press →T← or →0←	[000008] 	Input the serial number of the weight record
Press FN UNIT	[r 2] 	Display the sequence number of that record
Press PT TIME Press ON/ESC	[r 3]  [r 2] 	Display the next record Display the previous record

Operation	Display	Explanation
Press →T←	[16.06.03] 	Display the date of that record
Press →T←	[14:53:02] 	Display the time of that record
Press →T←	[30.06] 	Display the gross weight of that record
Press →T←	[20.00] 	Display the tare weight of that record
Press →T←	[10.06] 	Display the net weight of that record
Press →T←	[153] 	Display the quantity of that record (for counting)

Operation	Display	Explanation
Press FN (UNIT)	[27.00] 	Push FN (UNIT) to return to weighing mode during any data display (date-time-gross weight-tare weight-net weight-quantity)
Press PT (TIME)	[16.06.03] 	Press PT (TIME) to print the record during any data display (Requires to set output in print format)
Press M+ (→) Press →T← (↑%) or →0← (↓)	[b 0001] 	Press M+ (→) to input the start number of the records (for retrieve)
Press FN (UNIT)		
Press M+ (→) Press →T← (↑%) or →0← (↓)	[E 0008] 	Input the end number of the records (for retrieve)
Press FN (UNIT)	[27.00] 	It will print all records from 0001 to 0008 and back to weighing mode after the printing ends. (Requires to set output in print format)

19.Communication Protocol

Byte format: 8 bits; if there is check bit, it's the first digit; one stop bit
Output format:

19.1 Continuous format (Ct1, Ct2, Ct3): if the display weight = -123.45

Ct1: no matter the weight stable or not, output continuously:
Adr=00-98: =54.3210-=54.3210-=54.3210-...
Adr=99: =-0123.45=-0123.45=-0123.45...

Ct2: When the weight stable, output the following ASCII code:
A B CCCCCC D EE F G
02, 2D, 30, 31, 32, 33, 2E, 34, 35, 20, 6B, 67, 47, 0D

A	B	C	D	E	F	G
Start 0x02	Sign >=0, 0x20	Weight include decimal point	Space 0x20	Unit kg/lb/t	G/N	Enter 0x0D

Ct3: No matter the weight stable or not, continuous output the Ct2 data.

19.2 Command (Cnd)

COM1: Modbus
COM2: Handshaking, the computer send the request (ASCII) as below:

P – print gross/tare/net weight
G – Print gross weight
B – Print tare weight
N – print net weight
A – Print quantity
Z – Zero
T- Tare
C – Clean tare

19.3 Print format (F1)

Weighing Bill	Counting Bill (Aut=07)
HIWEIGH TECHNOLOGIES 03-06-2017 14:58:26 No.0002 G: 7.73kg T: 4.82kg N: 2.91kg	HIWEIGH TECHNOLOGIES 03-06-2017 14:58:26 No.0002 G: 7.73kg T: 4.82kg C: 54pcs

19.4 Print format (F2)

Weighing Bill	Counting Bill (Aut=07)
No.0002 03-06-2017 14:58:26 7.73kg	No.0002 03-06-2017 14:58:26 7.73kg 54pcs

19.5 Print format (F3)

Weighing Bill
0002 03-06-2017 14:58:26 7.73kg 4.82kg 2.91kg
Counting Bill (Aut=07)
0002 03-06-2017 14:58:26 7.73kg 4.82kg 2.91kg 54pcs

19.6 Accumulated format

Weighing Bill	Counting Bill (Aut=07)
03-06-2017 14:58:26 No.0002 S: 25.02kg	03-06-2017 14:58:26 No.0002 C: 108pcs S: 25.02kg

19.7 Countinous ouput (Ct4)

Send continuously regardless of stability. If the screen shows 12.34kg, send: ST,+00012.34kg

19.8 Manually output (FC1)

Press PT TIME to send, the format is the same as CT1

19.9 Manually output (FC3)

Press PT TIME to send, the format is the same as CT2

19.10 Manually output (FC4)

Press PT TIME to send, the format is the same as CT4

19.11 Countinous ouput (Ct5)

Send continuously regardless of stability, the format is the same as Fox's Ct1

20.Setpoints Output

A B C D 4 setpoints, A<B<C<D
Relay board optional, not included in standard package

24.1oP=1 (2 relay output 1# and 2#)
W<A or W>D: Hi/Ok/Lo LED lights off and no relay output
A¯W¯B: Lo LED on, 1# relay output
B<W<C: OK LED on, no relay output
C¯W¯D: Hi LED on, 2# relay output

Relay connecting (sharing with RS232C DB9 interface):
Pin6 & pin7: 1# relay NO (normally open
Pin8 & pin9: 2# relay NO (normally open)

24.2oP=2 (4 relay output 1#, 2#, 3# and 4#)
If connecting to the 3-LED alarming lights:
1# - yellow, 2# - green, 3# - red, 4# - beeper
W<A: Lo LED lights on, 1# and 4# relay output
A¯W<B: Lo LED on, 1# relay output
B¯W¯C: OK LED on, 2# relay output
C<W¯D: Hi LED on, 3# relay output
W>D: Hi LED on, 3# and 4# relay output
Relay connecting (sharing with RS232C DB9 interface):
Pin1: COM
Pin6: 1# relay NO (normally open) Pin8: 3# relay NO (normally open)
Pin7: 2# relay NO (normally open) Pin9: 4# relay NO (normally open)

24.3oP=3 (4 relay output 1#, 2#, 3# and 4#)
W¯A: Lo LED lights on, 1# and 2# relay output W≥C: Hi LED on, 3# relay output
W¯B: Lo LED on, 2# relay output W≥D: Hi LED on, 3# and 4# relay output
B¯W¯C: OK LED on

Relay connecting (sharing with RS232C DB9 interface):

Pin1: COM

Pin6: 1# relay NO (normally open)

Pin7: 2# relay NO (normally open)

Pin8: 3# relay NO (normally open)

Pin9: 4# relay NO (normally open)


VALUE EACH GRAM
HiWEIGH