KRS3000
Bar Code Printing Scale

Service Manual

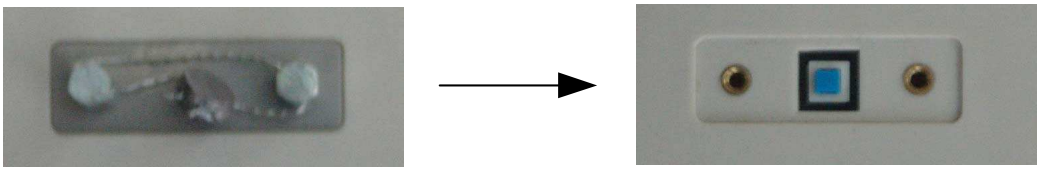
Menu

1 Weight Calibration

1.1 Calibration Flow

1.1.1 Get Into Privilege Mode

Break the seal at the bottom of the scale. Press the key. Then power the scale on



Picture 1-1 Privilege Mode Key of Bar Code Print Scale

Device displays

 or **Privilege Mode**

When it is already get into privilege mode

1.1.2 Get Into Calibration Menu

Press 【Confirm】, device displays “P509”

Press 【Confirm】 again, device get into calibration menu.

1.1.3 Setting Calibration Parameter

Editing Indicator

Picture 1-2 Calibrate Parameter

- 1st windows: The calibrate time. 2 means it has calibrate 2 times before. (Not editing parameter. Printing Scale do not have this winodws).
- 2nd windows: The acceleration of gravity at calibrating area.
- 3rd windows: The acceleration of gravity at using area. **Keep 2nd=3rd if user do not need gravity correction.**
- 4th windows: **Weight Sensor Range**:

  0 = 30kg / 60lb

  1 = 15kg / 30 lb

  2 = 6kg / 12 lb

  3 = 300kg / 600 lb

  4 = 150kg / 300 lb

  5 = 60kg / 120 lb

  6 = 3kg / 6 lb

For example, if sensor is 15 kg, do as follows:

- 【Confirm】 to skip 2nd windows.
- 【Confirm】 to skip 3rd windows.
- Press 【1】,【Confirm】 to finish setting. Device will catch Calibration Zero here. Please keep no weight.

1.1.4 Weight Calibration

Put on weight. (Please put on at least 1/3 of full capability for precision)

Input the number of weight. For example: if you put 10kg on, input 10.00 or 10.000. Using 【F-Prog】+【Shift】 to move radix point if necessary.

1.1.5 Quit Privilege Mode

Press the key at the bottom of the scale again

1.2 Special Capacity & Division

1.2.1 Parameter Calculation

Device can work at special capacity or division. You need to do additional steps in selecting "**Weight Sensor Range**". The device support 3-level divisions.

I will give an example here; I have a 120kg weight sensor. I want it working at:

0 to 50kg x 0.02

50 to 120kg x 0.05

	Total Cap.	Level Cap.	Division	All Steps	Used Steps
	TC	CC	DV	AS=TC/DV	US=CC/DV
Level 1	120	50	0.02	**6000**	**2500**
Level 2	120	120	0.05	**2400**	**2400**
Level 3	Not Used			=Level 2	=Level 3

The value AS and US need be calculated. And these values are need to input device.

1.2.2 Parameter Setting Flow

Picture 1-3 Steps to Get into Special Capacity & Division

- Long Press 【×】 key (4 seconds) at step of Weight Sensor Range
- Input Parameter: Press 【Confirm】 after number input of each step.

Indicator	Information	Number Input	Note
S-01 Unit	Capacity Unit	3	kg=3; lb=6. Refer to Spec212 for more uint
S-02 CAP	Capacity	120	
S-03 Div-1	Level 1 AS	6000	
S-04 Grd-1	Level 1 US	2500	
S-05 Div-2	Level 2 AS	2400	
S-06 Grd-2	Level 2 US	2400	
S-07 Div-3	Level 2 AS	Auto Skiped	Auto skiped while **Level 2 AS** = **Level 2 US**
S-08 Grd-3	Level 2 US	Auto Skiped	

Note 1 The parameter flow may be a little different based on version.

- Device displays as follow after ***Parameter Setting*** of ***Special Capacity & Division***

Picture 1-4 Special Capacity & Division Finish

- Press 【Confirm】 to go on calibtraton same as standard flow.

2 Appendix

2.1 Reference Table For Errors and Its Instructions

Number	Alarm instructions	Methods to handle
E0.00	Alarms for measurements	
E0.01	Weight is not stable when the scale start-up.	Make sure there is no heavy goods on the tray and the tray is stable. If scale still warns, the sensor may go wrong.
E0.02	Exceed the allowed start-up zero range	Make sure there is no heavy goods on the tray and the tray is on the bracket, If scale still warns, the sensor may go wrong.
E1.00	Alarms for operations	
E1.01	Prog data is invalid.	Input valid data again.
E1.02	Input passwords of 2 times to amend password are different	Re-amend password, and make sure 2 times input are the same.
E1.03	The selected print format do not exist	Set print format again
E1.10	Sale at 0 price is forbidden.	The sale whose sell price is 0 is forbidden. Refer to Spec070.
E1.11	Exceed the largest sale price.	Total price or grand total price of sold goods exceeds the largest sale price.
E1.12	Need to return to zero point	Return to weight zero before sale. Refer to Spec069.
E1.13	Exceed accumulative limit	The accumulative times are over buffer accumulat limit
E1.14	There is data in buffer and cannot print in single.	Print the data in buffers first. Then print this sale or switch to other buffers.
E1.15	No cashing mode, cannot executethe cashing operation.	The scale is set to be no cashing mode. Refer to Spec060.
E1.16	Cashing mode with zero change default is forbidden.	Execute cashing operation afer inputing payment amount. Refer to Spec060.
E1.17	Payment is less than sale price.	Charge enough money which is larger than sale price.
E1.18	System cannot execute accumulative operations while locking PLU.	Before accumulative operations, system needs to exit lock PLU (or auto mode) first.
E1.19	System cannot switch buffers into buffer with accumulation while locking PLU.	Operate in current buffern, or exit lock PLU (or auto mode).
E1.20	Not allow no weigh sale for weight goods	Refer to Spec071.
E1.21	Less than smallest sale weight	Weight needs to be larger than smallest sale weight.
E1.22	Larger than largest sale weight	Weight needs to be smaller than largest sale weight.
E1.23	Discounted U.Price has to be less than discount lower limit.	Discounted in allowed range, or amend the allowed range.
E1.24	Discounted U.Price has to be higher than discount upper limit.	
E1.25	Discount is forbidden.	Refer to Spec110
E1.26	Manual weight entry is forbidden	Refer to Spec077
E1.27	Manual weight entry failed for weight is not zero.	Take off goods, or press 【Zero】

Number	Alarm instructions	Methods to handle
E1.28	T-Sale is forbidden	Refer to Spec076
E1.29	Sale of Weight PLU or count PLU is forbidden.	Refer to Spec075
E1.30	Can not enter special sale mode	Selected PLU haveconflict with special sale mode, select again
E1.31	Working on forced auto printing after zero-return. PLU Quiting is forbidden.	Finish printing of current PLU.
E1.32	Transfer sale buffer is forbidden under accumulate mode	Press【Confirm】or【Cancell】exit the accumulate mode,then go on transfer
E1.33	Transfer sale mode forbidden	Refer to Spec079
E1.34	The scanned barcode can not be parsed	Confirm the scanned PLU have been edited, interior barcode format station right
E1.35	Tare renew function forbidden	Must turn over tare, then go for tare
E1.36	Salesman is not exist	Login with exist personel
E1.37	Salesman's password can not be 0	Login with personel whose password is not 0
E1.38	Service charge is forbidden	Open the function at Spec307
E2.00	Alarms for forbiddens	
E2.01	Forbid F-Prog of PLU	Refer to Spec080.
E2.02	Forbid F-Prog of PLU shortcut keys	Refer to Spec081.
E2.03	Forbid F-Prog of Spec data parameters	Refer to Spec082.
E2.04	Forbid Re-print	Refer to Spec065.
E2.05	Menu quiting via pressing【Sale】【Prog】【Account】 is forbidden.	Quit the menu by press【Cancel】some times.
E2.06	A44 report forbidden	Refer to Spec141.
E2.07	A6 report forbidden	Refer to Spec141.
E6.00	Alarms for peripheral	
E6.10	PTR: Print sensor calibrate wrong	Do calibrate operation with Ethernet Printer
E6.11	PTR: Gap paper is not taken away.	Take away the printed label paper. **If there is still alarm this problem, do calibrate operation with Ethernet Printer**
E6.12	PTR: Print mouth is not closed tight.	Install the paper and close mouth.
E6.13	PTR: Printer is working.	Please wait for a few seconds and try again.
E6.14	PTR: Lack of plain paper	Reinstall plain paper or the paper type cannot match.
E6.15	PTR: Lack of gap paper	Reinstall label paper or the paper type cannot match. **If there is still alarm this problem, do calibrate operation with Ethernet Printer**
E6.16	PTR: The printer cannot find the gap intervals.	The paper type cannot match and change the type to plain paper or reinstall gap label paper. **If there is still alarm this problem, do calibrate operation with Ethernet Printer**
E6.17	PTR: The printer cannot find gap alignment positions.	Label paper is used up or paper type cannot match with set paper type. Please reinstall label paper.

Number	Alarm instructions	Methods to handle
E6.18	PTR: The printer is overheated and it needs to cool down.	Please wait for a few seconds and try again.
E6.19	PTR: There is no response of the printer.	The printer may not be connected or in the state that the printer could not print.
E6.20	PTR: Print sensor calibrate wrong	Printer process do not follow general time order and finish the working, unknown print error
E6.21	PTR: Communication Error	Checkup the Ethernet cable
E7.00	Alarms for hardwares	
E7.01	Some keys are pressed when the scale starts.	Please confirm that no keys are pressed. In this interface, the last window display pressed keys. 8-5 means the key in 8th column from the left and 5th row from the top is pressed. In this interface, the second window displays the calibrated times.
E7.10	Print sensor calibrate wrong	Refer to chapter **Error! Reference source not found.** to calibrate again
E7.11	Gap paper is not taken away.	Take away the printed label paper. **If there is still alarm this problem, do as the way in chapter** Error! Reference source not found**..**
E7.12	Print mouth is not closed tight.	Install the paper and close mouth.
E7.13	Printer is working.	Please wait for a few seconds and try again.
E7.14	Lack of plain paper	Reinstall plain paper or the paper type cannot match.
E7.15	Lack of gap paper	Reinstall label paper or the paper type cannot match. **If there is still alarm this problem, do as the way in chapter** Error! Reference source not found**..**
E7.16	The scale cannot find the gap intervals.	The paper type cannot match and change the type to plain paper or reinstall gap label paper. **If there is still alarm this problem, do as the way in chapter** Error! Reference source not found**..**
E7.17	The scale cannot find gap alignment positions.	Label paper is used up or paper type cannot match with set paper type. Please reinstall label paper.
E7.18	The printer is overheated and it needs to cool down.	Please wait for a few seconds and try again.
E7.19	There is no response of the printer.	The printer may not be connected or in the state that the printer could not print.
E7.20	The printer over time	Printer process do not follow general time order and finish the working, unknown print error
E7.23	PDS calibration failed, ignore PDS	Try reclibrate, this failure will not effect general use
E7.30	Alarm for full storage of deals records.	Enter Account interface. Calculate reports and then clear the reports.
E7.40	Time error	Time module error, if scale work for years, then it means to change the battery on main board
E7.50	Harware error	Inside examine and repair code, if restart again andagain,

Number	Alarm instructions	Methods to handle
E7.51		but still exist this question, need return to factory for repair
E7.52		
E7.53		
E7.54		
E7.61		
E7.62	Wire-Network module do not exist or working irregular	If no wire-network module in present scheme, please close the network module(set Spec043=0) .
E7.63	Wireless-Network module do not exist or working irregular	If no wireless-network module in present scheme, please choose wire-network module(set Spec050=0) .
E7.70	AD work irregular or loadcell irregular	Confirm loadcell install right
E7.81	DC power is too low	If device is working with battery, please charge it first. If user confirm that power is right, please set Spec235=1 to close the power detect module
E7.82	DC power is too high	If device is working with battery, it means battery is not match with the device. If user confirm that power is right, please set Spec235=1 to close the power detect module
E8.00	Alarms for communications	
E8.11	USB flash disk port do not connect with the scale.	Please confirm that the scale used owns U-Disk port. If it owns, and this alarm cannot be cleared after several times' reboot, please use the guarantee.
E8.12	USB flash disk does not exist.	Please confirm that USB flash disk is correctly inserted. Notice that removable disk cannot be used. And the capability of USB flash disk is less than 2G. In addition, USB flash disks of some brands may not work properly. Please try another USB flash disk of different brand.
E8.13	The file in USB flash disk does not exist.	Confirm that appointed files are inside of USB flash disk.

2.2 Definitions of Spec data parameters

Default values are different via different version. Value list blow is cfor reference only.

No.	Content	Range	Remarks	Default	Permission
0	Bill 1: Item Print Format	0~99	0 means not to print, 1~99 are to print in appoint Print formats.	1	0
1	Bill 1: Item Barcode Format	0~99	0 means not to print, 1~99 are to print in appoint barcode formats.	2	0
2	Bill 1: Item Barcode flag	0~ 9999999		20	0
3	Bill 1: Item Print Times	0~99		1	1
4	Bill 1: Item Print Reverse	0~1	0: No Reverse, 1: Print 180° Reversed	0	1

No.	Content	Range	Remarks	Default	Permission
5	Bill 1: Sum Print Format	0~99	0 means not to print, 1~99 are to print in appoint Print formats.	4	0
6	Bill 1: Sum Barcode Format	0~99	0 means not to print, 1~99 are to print in appoint barcode formats.	7	0
7	Bill 1: Sum Barcode Flag	0~ 9999999		2099999	0
8	Bill 1: Sum Item Print Times	0~99		1	1
9	Bill 1: Sum Print Reverse	0~1	0: No Reverse, 1: Print 180° Reversed	0	1
10	Bill 2: Item Print Format	0~99	For the second-class Print formats, ordinary users won't use them. Please don't amend them in normal conditions.	0	1
11	Bill 2: Item Barcode Format	0~99		0	1
12	Bill 2: Item Barcode Flag	0~ 9999999		0	1
13	Bill 2: Item Print Times	0~99		0	1
14	Bill 2: Item Print Reverse	0~1		0	1
15	Bill 2: Sum Print Format	0~99		0	1
16	Bill 2: Sum Barcode Format	0~99		0	1
17	Bill 2 Sum Barcode Flag	0~ 9999999		0	1
18	Bill 2: Sum Item Print Times	0~99		0	1
19	Bill 2: Sum Print Reverse	0~1		0	1
20	Print speed decrease	0~99	Reduced % of paper feed	0	1
21	Paper Type	0~1	0: Plain Paper, 1: Gap Paper.	1	0
22	Gray Level of Gap Paper	0~9	0 is lightest, 9 is darkest. The print color lighter, the damage to print header smaller. Suggest users use lighter grey level.	5	0
23	Gray Level of Plain Paper	0~9		5	0
24	Plain Paper: Interval of Each Print	0~99	Unit of setting number is mm.	0	0
25	Plain Paper: Cut-off Position	0~99		35	0
26	Plain Paper: Pre-feed Distance	0~1999	Unit of setting number is dot. Device is reverse feed if number > 1000	16	0
27	Wide of Report Printing	0~99	Unit of setting number is mm.	50	0
28	Font for Report Print	0~2		1	1
29	Printer over-heat protect	0~30	Continuously print appointed time will enter over-heat protect, Please don't amend them without the guidance of professionals.	5	1
30	Feed Sensor Position	0~255	Hardware properties. Please don't amend them without the guidance of professionals.	180	1
31	Point numbers for narrow bar in barcode printing	0~9	0 for default set, Please don't amend them without the guidance of professionals.	0	1
32	Point numbers for wide bar in barcode printing	0~19		0	1
33	Readable character fonts in barcode printing	0~2		0	1
34	Anti-shaking for weighing during printing	0~19	Hardware property, Please don't amend them without the guidance of professionals.	3	1

No.	Content	Range	Remarks	Default	Permission
35	Auto new line mode	0~1	0: One line mode; 1: Auto new line mode	0	1
36	ITF25 frame mode	0~2	0: no frame; 1: up and down frame; 2: around frame	1	1
37	ITF25 frame width	0~31	Frame dots	8	1
38	ITF25 left and right blank width	0~31	Left and right blank dots	20	1
39	Gap Paper: Pre-feed Distance	0~1999	Unit of setting number is dot. Device is reverse feed if number > 1000	0	0
40	Device Number	0~9999999	They are used to distinguish more than one scale. And they can be printed.	0	0
41	RS232 Baud Rate	0~9	0: 300, 1: 600, 2: 1200, 3: 2400, 4: 4800, 5: 9600, 6: 19200, 7: 38400, 8: 57600, 9: 115200.	5	0
42	USB flash disk Auto Update	0~1	0: No Update, 1: Auto Update	1	0
43	Ethernet Mode	0~2	0: Disable; 1: Server Mode; 2: Client Mode	1	0
44	Ethernet auto connect again	0~65535	0: do not try connect again 1~65535: Device will try to connect with PC each appointed second	0	0
45	Ethernet parameter apply without switch off the scale	0~1	0: Disable, only reset change Ethernet config. 1: Enable, Ethernet config apply immediately.	1	1
46	U-disk connect waiting time	0~99	0: Default wait 2s; 1~99: wait0.1s--9.9s. Suggest clients keep the default set. If some U-disk start slowly, you can try to change the waiting time for longer	0	1
47	USB always power on	0~1	1: USB always power on only used in special appliance	0	1
48	Ethernet Overtime Interval	0~31	Single overtime seconds, over 5 times overtime, Ethernet will disconnect	10	1
50	Ethernet Type	0~1	0: Wire-Network; 1: Wireless-Network	0	1
51	Security Mode	0~2	0: No Security; 1: WEP; 2: WPA/WPA2	1	1
52	Security Option	0~1	0: Open System; 1: Shared Key	1	1
53	Domain Type	0~6	0: FCC; 1: IC; 2: ETSI; 3: Spain; 4: France; 5: JapanA; 6: JapanB	2	1
60	Cashing Mode	0~3	0: No Cashing Mode, 1: Cashing Mode With Zero Change Default, No Display For Zero Change, 2: Cashing Mode With Zero Change Default, Always Display For Zero Change, 3: Cashing Mode Without Zero Change Default.	1	0
61	Drawer In Sale Operation	0~3	0: Not Open Drawer, 1: Open Drawer 1, 2: Open Drawer 2, 3: Open Drawer 1 and 2. For general scale, only drawer 1 is valid, if user have double drawer request, please contact us. The added drawer password only limit the 【Drawer】operation, open the drawer while printing is not limited	3	0
62	Push【Drawer】in Sale Mode	0~3		3	0
63	Push【Drawer】in Prog Mode	0~3		3	0
64	Push【Drawer】in Account Mode	0~3		3	0

No.	Content	Range	Remarks	Default	Permission
65	Reprint	0~4	0: Reprint is forbidden, 1: Print one piece of bill 1, 2: Print one piece of bill 2, 3: Print one piece for each of bill 1 and bill 2, 4: Print bills 1 and 2 same as normal process	3	1
66	Change Display Exit	0~99	0: Push Any Key For Exit, 1~99: Auto Quit Exit Specified Second	0	0
67	Number Tare	0~2	0: Forbidden, 1: Input Value Tare, 2: Floating-point Value Tare.	0	0
68	PLU Tare	0~7	0: PLU tare not use; tare not clear on exit. 1: PLU tare used when current tare is 0; tare not clear on exit. 2. PLU tare used when PLU tare is not 0; tare not clear on exit. 3. PLU tare is always used; tare not clear on exit. 4: PLU tare not use; tare clear on exit. 5: PLU tare used when current tare is 0; tare clear on exit. 6. PLU tare used when PLU tare is not 0; tare clear on exit. 7. PLU tare is always used; tare clear on exit.	1	0
69	Zero-Return For Weight Sale	0~2	0: Always need Zero-Return; 1: Zero-Return is need if Weight Changed; 2: No Zero-Return need, Print "*" before weight	1	0
70	Allowed Zero Purchase	0~1	0: Forbid; 1: Allow	0	1
71	No Weigh Sale for Weight PLU	0~2	0: Forbid; 1: Allow (when weight = 0, It print as by-count PLU. But only single piece is available). 2: Allow(except single piece, user can also press 【×】 to input quantity)	0	0
72	Clear Sale Buffer if Push 【Sale】	0~1	0: Not clear, 1: Clear.	0	0
73	Think【T-Sale】As【U.Price Convert】	0~1	0: Forbid, 1: Allow. This key would convert the input U.Price unit from temporary goods unit to scale unit.	0	0
74	Return of Goods	0~1	0: Forbid, 1: Allow.	0	0
75	PLU transfer forbidden	0~3	0: No forbidden; 1: Weight PLU forbidden; 2: Count PLU forbidden; 3: All PLU forbidden.	0	1
76	T-Sale PLU transfer forbidden	0~3	0: No forbidden; 1: T-Sale Weight PLU forbidden; 2: T-Sale Count PLU forbidden; 3: All T-Sale PLU forbidden;	0	1
77	Manual Weight Entry	0~3	0: Disable, 1-3: Enable	0	0
78	【Auto mode】 corresponding special sale	0~4	0: Auto mode forbidden 1: Swith to batch print mode	2	0

No.	Content	Range	Remarks	Default	Permission
	mode		2: Swith to prepack print mode 3: Swith to lock PLU mode 4: Swith to auto print mode		
79	Sale mode select	0~1	0: Forbid, 1: Allow.	1	0
80	PLU Fast-Prog	0~1	0: Forbid, 1: Allow.	1	0
81	ScPLU Fast-Prog	0~1	0: Forbid, 1: Allow.	1	0
82	Spec Fast-Prog	0~1	0: Forbid, 1: Allow.	1	0
83	Unit Price Fast-Prog 【-@】 or 【@Price】	0~3	0: Forbid; 1: long press【-@】 change PLU saved unit price 2: press【-@】change PLUsaved unit price 3: press【-@】change PLUsaved unit price, long press to enter interfaceand change PLUsaved cargo name	1	1
85	Stable Waiting: Set Zero	0~99	Wait several seconds after pressing the key to set zero. If it's stable in time, execute setting zero. If not stable, error beep would sound. The set number is 10 beeps for 1 second.	20	0
86	Stable Waiting: Sale	0~99	Wait several seconds after pressing accumulative or print to sale. If it's stable in time, execute setting zero. If not stable, error beep would sound. The set number is 10 beeps for 1 second.	20	0
87	Dummy PLU	0~1	0: Disable 1: Use dummy PLU, when try to transfer one do not exist PLU, device will use this PLU number or other PLU item empty way to transfer a dummy PLU. For example:: PLU156 do not exist, when transfer, you will get a cargo name PLU-0156 's PLU.	0	1
88	Dummy ScPLU	0~1	0: Disable 1: use dummy ScPLU, if one shout cut key have been edited, then when it is transferred, scale will transfer PLU according to its short cut code.【SC1】refer to PLU101,【Shift】【SC1】refer to PLU201. Etc.	0	1
89	PLU fast prog and PLUprog use same skip step	0~1	0: Disable; 1: Enable, P331 and P332 do same effect	1	1
90	Calculating Account Backgroud	0~1	Allow the scale to calculate report data in background. Suggest clients do not edit this item	1	1
91	Log record function	0~1	0: Enable, 1: Disable	0	1
92	Dummy PLU number	0~1	0: use old version, PLU from 10~5999 1: PLU from 1~9999999, temporary PLU number decided by Spec093 and 094	1	1
93	Dummy number for Temporary weight PLU	0~ 9999999	Refer to Spec092	9999999	1
94	Dummy number for Temporary count PLU	0~ 9999999		9999998	1

No.	Content	Range	Remarks	Default	Permission
94	Dummy number for Service Charge PLU	0~ 9999999		9999997	1
97	Index keyboard barcode	0~2	0: Forbidden; 1: Allow use number index 2: Allow use number and character index	1	1
98	Single count deal: discount sum and rounding sum'smanage	0~5	0: Not record to report; 1: Independent record discount sum, not record rounding sum 2: Seperately record discount sum, not record rounding sum 3: Independent record discount sum and record rounding sum 4: Independent record discount sum and seperately record rounding sum 5: Seperately record discount sum and record rounding sum	3	1
99	Accumulate deal: discount sum and rounding sum'smanage	0~5		3	1
100	Rounding Method for Single Total Price	0~1	0, Common Rounding For Redundancy Digit 1, Common Rounding For Last Digit 2, Common Rounding For Last 2 Digits 3, Banker's Rounding For Redundancy Digit 4, Banker's Rounding For Last Digit 5, Banker's Rounding For Last 2 Digits 6, Rounding Down For Redundancy Digit 7, Rounding Down For Last Digit 8, Rounding Down For Last 2 Digits 9, Rounding to 0/5 For Last Digit 10, Rounding to 0/5 For Last 2 Digits 11, Rounding to 0/5 For Last 3 Digits	0	0
101	Rounding Method for Sum Tota Pricel	0~11		0	0
102	Print with accumulated data	0~1	0: Enable, 1: Disable	0	1
103	Equal Reparation of Tare, Net and Gross	0~3	0: No Reparation, rounding independently. 1: Tare=Gross-Net 2: Net=Gross-Tare 3: Gross=Net+Tare	3	1
104	Date Type	0~5	0: YYYY.MM.DD; 1: YY.MM.DD 2: MM/DD/YY; 3: MM-DD-YY 4: DD/MM/YY; 5: DD-MM-YY	0	1
105	Shelf life days print	0~2	0: Print according to PLU set 1: priority print according to PLU set, if PLU donot have print set, print according to Spec106 2: Print accroding to Spec106	0	0
106	Shelf life days data	0~999	Shelf life days after intraday. 0 means only for intraday	0	0
107	Number of sale buffer	0~99	0: maximum allowed buffer	0	0
108	Most accumulate of sale buffer	0~65535	0: maximum allowed accumulate	0	0
109	Unit price converse manage	0~1	1: unit price account by division	0	Not open

No.	Content	Range	Remarks	Default	Permission
110	Manual Discount: Forbidden	0~3	0, All Allowed 1, Forbidden U.Price Discount 2, Forbidden T.Price Discount 3, Forbidden All Discount	0	1
111	Manual Discount: Lower Limit (Percent Number)	0~255	0: no lower limit, discount freely; 1~99: Take the percent of U.Price as the lower limit of the discount. 100~255: Don't allow the price after manual discount is lower than original U.Price.	0	0
112	Manual Discount: Upper Limit (Percent Number)	0~255	0: no upper limit, discount freely; 1~100: Don't allow the price after manual discount is higher than original U.Price. 101~255: Take the percent of U.Price as the upper limit of the discount.	0	0
113	Manual percent discount	0~1	0: Subtracter, 1: Addition	0	1
114	Fast percent discount	0~99	0: Manual input number 1~99: Discount with this number	0	1
115	Auto Discount: Price tracking	0~3	0: Disable 1: Track for auto-discount aactive PLU 2: Track for with auto-discount set PLU 3: Track for all PLU Price change and discount is disable when price is tracking.	1	1
116	Global tax rate sort	0~3	0: No global tax rate 1: Default is exclude Tax with Excluded Rate 2: Default is include Tax with Excluded Rate 3: Defaultx with included Rate	1	0
117	Global tax rate（‰）	0~9999	0.01% tax rate, for 17%, need input 1700	1	0
118	Amend mode in sale	0~2	0: Manual 1: Record and clear 2: Not record and clear		
119	Scanner checkout	0~2	0: Not checkout, ignore reduncdance information 1: Checkout, ignore reduncdance information 2: Checkout, not ignore reduncdance information	2	1
120	Bar code match calculation	0~3	0: Not match 1: Only do exterior bar code match 2: Only do interior bar code match 3: Do all match	3	1
121	When note code is 0's match	0~2	0: Search user PLU 1: Think as temporary by-weight PLU 2: Think as temporary by-count PLU	1	1
122	Interior bar code 1: format	0~99	Group 1 interior bar code format, if Spec122=0, device auto use Spec1 and Spec2 as Group 1 interior bar code format	0	0
123	Interior bar code 1: global flag	0~ 9999999		0	0

No.	Content	Range	Remarks	Default	Permission
124	Interior bar code 2: format	0~99	Group 2 interior bar code format	0	1
125	Interior bar code 2: global flag	0~ 9999999		0	1
126	Interior bar code 3: format	0~99	Group 3 interior bar code format	0	1
127	Interior bar code 3: global flag	0~ 9999999		0	1
128	Interior bar code 4: format	0~99	Group 4 interior bar code format	0	1
129	Interior bar code 4: global flag	0~ 9999999		0	1
130	Total Price Masked before Printing	0~1	0: Not enable 1: Enable. Total Price only displays after printing	0	1
131	Auto Printing after Zero-return	0~4	0: Not enable. 1: Auto record after Zero-return. Can press 【Cancel】to exit, do not record after exit 2: Forced auto record after Zero-return. Force operator to print the trade or take record. 3: Auto Printing after Zero-return. Can press 【Cancel】to exit, do not record after exit 4: Forced Auto Printing after Zero-return. Force operator to print the trade or take record.	0	1
132	Sale mode when keyboard transfer by-count PLU	0~1	0: Non-accumulate mode 1: Accumulate mode	0	1
133	Sale mode when exterior bar code transfer by-count PLU	0~1		1	1
134	Sale mode when interior bar code transfer by-count PLU	0~1		1	1
135	Salesman mode	0~5	0: No salesman mode, log in with salesman 0. 1: Log in V1~V4 with salesman 1~4, no need password 2: need password, V1~V4 use same salesman 3: need password, V1~V4 use different salesman 4: need password, V1~V4 use same salesman, not allow salesman with password 0 to log in. 5: need password, V1~V4 use different salesman, not allow salesman with password 0 to log in.	1	0
136	Waiter Mode	0~2	0: Disable 1: Enable, forbidden dummy personnel 2: Enable, allowed dummy personnel	0	1
137	Waiter Memory Mode	0~2	0: Always clear; 1: Memory last one 2: Memory in buffer	0	1
139	EAN/UCC CRC	0~1	0: Standard，1: Non-standard	0	1
140	SID auto clear	0~6	0: No auto clear 1: Half day clear(12:00 and 0:00) 2: Each day clear 3: Each Saturday clear	2	1

No.	Content	Range	Remarks	Default	Permission
			4: Each Monday clear 5:Each month clear 6: Each quarter clear		
141	Stock report	0~1	0: not open stock report(A44 report open) 1: open stock report(A44 report not open)	1	1
142	Stock change unit mode	0~2	0: only allow related PLU appointed default unit 1: allow use count and weight default unit 2: allow use all own unit	1	1
143	FID/SID Print Mode	0~9	0: Print as number 1~9: Print in specified length with '#'	6	1
150	Scale's Ethernet IP	0~255	When Spec153 is 0, device will connect to network by DHCP. Otherwise use appointed IP to connect the network	192	0
151		0~255		168	0
152		0~255		0	0
153		0~255		0	0
154	PC's Ethernet IP	0~255	When the network under clients state(Spec043=2) , appoint PC's IP.	0	0
155		0~255		0	0
156		0~255		0	0
157		0~255		0	0
158	Scale's Ethernet gateway	0~255	Getway: not use DHCP to connect to network	192	0
159		0~255		168	0
160		0~255		0	0
161		0~255		1	0
162	Scale's Ethernet mask	0~255	Getway: not use DHCP to connect to network	255	0
163		0~255		255	0
164		0~255		255	0
165		0~255		0	0
166	Scale's server port	0~65535	Do not change such setting unless there are expert! Irrelevant change will make the network do not work	33581	1
167	Scale's clients port	0~65535		33582	1
168	Scale's UDP local port	0~65535		33583	1
169	Scale's UDP remote port	0~65535		33584	1
180	Display and Printing of Radix Point	0~1	0: Dot'.'; 1: Comma','	0	2
181	Printing of Kilocharacter	0~3	0: Not printing; 1: Dot'.'; 2: Comma',' 3: Quotation Mark' ''	0	2
182	Display of Kilocharacter	0~1	0: Not display 1: Display based on Spec181	0	2
185	Unit Printing of Weight	0~1	0: No printing; 1: Printing	0	1
186	Unit Priting of Unit Price	0~1	0: No printing; 1: Printing	0	1
187	Unit Priting of Money	0~1	0: No printing; 1: Printing	0	1
188	Unit Price Length	0~6	0: Use System Length 1~6: Specified Length	0	1
189	Total Price Length	0~7	0: Use System Length 1~7: Specified Length	0	1

No.	Content	Range	Remarks		Default	Permission
190	5-Windows Scale: PLU Name Display	0~3	0: Auto Fix 1: Font 1 Display 2: Font 0 Display 3: 2-Line Mode		3	1
191	5-Windows Scale: AD-Message display				3	1
192	5-Windows Scale: Display in Idle Mode	0~23	0: Display Time 1~3: Reserved 4~23: Global String data of Scale (0~19)		3	1
193	5-Windows Scale: Display in accumulated mode		0: Display Accumulation Information 1: Display AD-Message		3	1
200	Decimal Point: Tare	0~3	In default state, decimal digits of tare.		3	1
201	Decimal Point: Weight	0~3	In default state, decimal digits of weight.		3	1
202	Decimal Point: U.Price	0~5	In default state, decimal digits of U.Price.		2	1
203	Decimal Point: T.Price	0~5	In default state, decimal digits of T.Price.		2	1
204	Decimal Point Fix: Tare	0~1	Fix display decimal point according to Spec200		0	1
205	Decimal Point Fix: Weight	0~1	Fix display decimal point according to Spec201		0	1
206	Decimal Point Fix: U.Price	0~3	Fix display decimal point according to Spec202 0: No Fix; 1: Fix for Discount; 2: Fix for PLU Call Out; 3: Always Fix.		3	1
207	Decimal Point Fix: T.Price	0	Fix display decimal point according to Spec203.		1	1
208	Decimal Point of Weight In Barcode Print	0~3	For number 1.533, if number here is 2, print 153 when print barcode. If number here is 3, print 1533. The rest may be deduced by analogy. Generally suggest Spec208=Spec201, Spec209=Spec203		3	1
209	Decimal Point of Money In Barcode Print	0~5			2	1
210	T-Sale Unit	0~8	0, 1, 2: System Default; 3: kg Unit; 4: g Unit; 5: ton Unit; 6: lb Unit; 7: 500g Unit; 8: 100g Unit; There are some relations among 3 units. Relations are a little different in different editions because the measuring systems are different in different countries.		0	1
211	System U.Price Unit	0~8			0	1
212	System Weight Unit	0~8			3	1
213	Weight Precision	0~3	TM-30A 30kg	0: 10g, 3000	1	1
				1: 5g/10g, 6000/3000		
				2: 2g/5g, 15000/6000		
				3: 1g/2g, 30000/15000		
			TM-15A 15kg	0: 5g, 3000		
				1: 2g/5g, 7500/3000		
				2: 1g/2g, 15000/7500		
				3: 0.5g/1g, 30000/15000		
			TM-6A 6kg	0: 2g, 3000		
				1: 1g/2g, 6000/3000		
				2: 0.5g/1g, 12000/6000		
				3: 0.2g/0.5g, 30000/12000		

No.	Content	Range	Remarks	Default	Permission
			Only precisions of unit kg are listed here. Other units may be a little different. When users use precisions of 2 or 3, weight print would display "*" which means it's only for industrial use.		
214	Default measure sort	0~1	0: Non-input PLU is by-weight as default 1: Non-input PLU is by-count as default	0	1
215	Maxium Overflow Degree	0~99	Degree number, there is no limit if number is 0.	9	1
216	Maxium Underflow Degree	0~99		9	1
217	Minium Sale Degree	0~99		4	1
218	Zero Tracking Degree	0~99999	Unit is: e/10	0	2
219	Tare Range	0~99	Percentage number. No limit if number is 0.	0	2
220	Range of the Initial Zero	0~99		9	2
221	Range of the Single Manual Zero	0~99		2	2
222	Range of the Accumulative Manual Zero	0~99		2	2
223	Zero Flag Range	0~99	Inter-code	4	2
224	Zero Tracking Range	0~99		5	2
225	Stable Flag Range	0~99		6	2
226	Tare over capacity 1	0~1	0: forbidden; 1: allow	0	1
227	Tare refresh	0~1	0: forbidden; 1: allow	1	1
228	Weight unit auto transfer	0~2	0: allow; 1: only allow default weighing; 2: Forbidden	0	1
229	Fast transfer working unit	0~2	0: forbidden; 1: allow, but need to long pressfunction key; 2: allow	1	1
230	AD Anti-shake while printing	0~7	Hardware parameter	2	1
231	Zero forbidden in PLU Mode	0~1	0: Zero is allowed; 1: Zero is forbidden	0	1
232	Floating-point of weight	0~2	0: Always based on low capability 1: Based on current capability, low is priority 2: Based on current capability, high is priority	0	1
233	Zero back is necessary for fast weight unit switch	0~1	0: No need 1: Need	0	1
235	Power detect module	0~1	0: Enable; 1: Disable	0	1
236	Print in battery mode	0~1	0: Print; 1: Not print	0	1
237	Interval of key scanner	0~4	Hardware parameter	1	1
238	Anti-shake of key scanner	0~4	Hardware parameter	1	1
239	Time for open drawer	0~9999	0~9999ms. Default 100ms	100	1
244	Ignore PBS state	0~1	Use to oblige elimate error E7.12	0	1
245	Ignore PDS state	0~1	Use to oblige elimate error E7.11	0	1
246	Ignore PPS state	0~1	Use to oblige elimate error E7.14	0	1

No.	Content	Range	Remarks	Default	Permission
247	Password hold function	0~3	Password is memoried and no need to input again once it is input. Memory is cleared on restart or parameter amend. 0: Not hold any password 1: Only hold drawer password 2: Hold all password except admin password 3: Hold all password	0	1
249	PLU Text Mode	0~2	0: System default mode 1: Short PLU mode (110 characters per PLU) 2: Long PLU mode (360 characters per PLU)	0	1
253	Call PLU by “Note” when Press 【PLU】	0~1	0: Based on PLU number 1: Based on PLU note	0	1
254	Auto【PLU】Function	0~3	0: Disable 1: Enable in idle mode 2: Enable in PLU mode 3: enable in all mode	0	1
255	Digit number for auto【PLU】	0~7	0: Disable 1~7:Auto【PLU】after digtals number inputted	0	1
256	Pre-Print Function	0~1	0: Disable; 1: Enable	1	1
300	Single service charge mode	0~2	0: Forbidden 1: Allowed, not repeat collect total percent service charge 1: Allow, repeat collect total percent service charge	0	1
301	Single service charge default input mode	0~2	0: Unit price mode; 1: Total price mode; 2: Percent mode	0	1
302	Sum service charge input mode	0~5	0: Manual transfer, manual input price 1: Manual transfer, manual input percent 2: Manual transfer, take auto price 3: Manual transfer, take auto percent 4: Auto transfer, take auto price 5: Auto transfer, take auto percent	0	1
303	Sum service charge auto amount	0~ 9999999	Under price mode, auto account according to price decimal point Under pecent mode: unit is ‰	0	1
304	Service charge % account base	0~1	0: Based on price before tax 1: Based on price after tax	0	1
305	Service charge’s tax rate calss	0~3	0: No global tax rate 1: Default is exclude Tax with Excluded Rate 2: Default is include Tax with Excluded Rate 3: Defaultx with included Rate	0	1
306	Service charge tax rate(‰）	0~9999	0.01% tax rate, for 17%, need input 1700	0	1
307	Service charge function	0~1	0: Forbidden, 1: Allowed	1	1

No.	Content	Range	Remarks	Default	Permission
308	Service charge re-input	0~1	0: Forbidden, 1: Allowed	1	1
340	Dot matrix LCD's contrast	0~7	Do not change these settings.	6	1
341	Dot matrix LCD's brightness	0~31		7	1
	（PTR, parameters setting for network printer）				
350	PTR: Item print format	0~99	0 means print according to bill 1 format (once using bill 1 format, the barcode format and signals are all according to bill 1)	0	0
351	PTR: Item barcode format	0~99		0	0
352	PTR: Item barcode flag	0~ 9999999		0	0
353	PTR: Item print Times	0~99		1	1
354	PTR: Item print Reverse	0~1	0: No Reverse, 1: Print 180° Reversed	0	1
355	PTR: Sum Print Format	0~99	0 means print according to bill 1 format (once using bill 1 format, the barcode format and signals are all according to bill 1)	0	0
356	PTR: Sum Barcode Format	0~99		0	0
357	PTR: Sum Barcode Flag	0~ 9999999		0	0
358	PTR: Sum Item Print Times	0~99		1	1
359	PTR: Sum Item Print Rol	0~1	0: No Reverse, 1: Print 180° Reversed	0	1
360	PTR: network print function	0~3	0: Disable 1: Enable, wait till printing finished 2: Enable, wait till printing started 3: Enable, wait till data sending finished	1	1
361	PTR: printer status clew	0~3	0: No operation 1: Online/offline clew 2: Online/offline clew, alarm when there is no rating printing 3: Online/offline clew, error when there is no rating printing	1	1
362	PTR: rating number for printer	0~20	Alarm or error if less than rating number	0	1
363	PTR: check interval	0~65535	Unit: second, default for 10s	0	1
364	PTR's IP: No.1	0~255		0	0
365		0~255		0	0
366		0~255		0	0
367		0~255		0	0
368	PTR's IP: No.2	0~255		0	0
369		0~255		0	0
370		0~255		0	0
371		0~255		0	0
372	PTR's IP: No.3	0~255		0	0
373		0~255		0	0
374		0~255		0	0
375		0~255		0	0

No.	Content	Range	Remarks	Default	Permission
376	PTR: Server Socket	0~65535	Do not change such setting unless there are expert! Irrelevant change will make the network printer do not work	33591	1
377	PTR: Client Socket	0~65535		33592	1
378	PTR: UDP Local Socket	0~65535		33593	1
379	PTR: UDP Remote Socket	0~65535		33594	1
400	PTR: Print speed decrease	0~99	Reduced % of paper feed speed	0	1
401	PTR: Paper Type	0~1	0: Plain Paper, 1: Gap Paper.	0	0
402	PTR: Gray Level of Gap Paper	0~9	0 is lightest, 9 is darkest. The print color lighter, the damage to print header smaller. Suggest users use lighter grey level.	7	0
403	PTR: Gray Level of Plain Paper	0~9		7	0
404	PTR: Plain Paper: Interval of Each Print	0~99	Set the unit of number is mm. 0 means use default set	0	0
405	PTR: Plain Paper: Cut-off Position	0~99		0	0
406	PTR: Plain Paper: Pre-feed Distance	0~1999	Unit of setting number is dot. Device is reverse feed if number > 1000	0	0
407	PTR: Paper width	0~99		0	0
408	PTR: Default font	0~2		1	1
409	PTR: Printer over-heat protect	0~30	Continuously print appointed time will enter over-heat protect, Please don't amend them without the guidance of professionals.	0	1
410	PTR: Feed Sensor Position	0~255	Hardware properties. Please don't amend them without the guidance of professionals.	180	1
411	PTR: Point numbers for narrow bar in barcode printing	0~9	0 for default set, Please don't amend them without the guidance of professionals.	0	1
412	PTR: Point numbers for wide bar in barcode printing	0~19		0	1
413	PTR: Readable character fonts in barcode printing	0~2		0	1
415	PTR: Auto new line mode	0~1	0: One line mode; 1: Auto new line mode	0	1
416	PTR: ITF25 barcode frame mode	0~2	0: no frame; 1: up and down frame; 2: around frame	1	1
417	PTR: ITF25 barcode frame width	0~31	Frame dots	8	1
418	PTR: ITF25 barcode left and right blank width	0~31	Left and right blank dots	20	1
419	PTR: Gap Paper: Pre-feed Distance	0~1999	Unit of setting number is dot. Device is reverse feed if number > 1000	0	0
420	PTR: not consider state of PBS	0~1	Use to force remove error E6.12	0	1
421	PTR: not consider state of PDS	0~1	Use to force remove error E6.11	0	1
422	PTR: not consider state of PPS	0~1	Use to force remove error E6.14	0	1

No.	Content	Range	Remarks	Default	Permission
450	PDF417: Checksum Level	0~9	0~8: Fix level 9: System default level	9	1
451	PDF417: Columns Number	0~30	0: Auto sizing, 1~30: Fix number	0	1
452	PDF417: Rows Number	0~90	0~2: Auto sizing, 3~90: Fix number	0	1
453	PDF417: Bar Width	0~6	0: Default 3	0	1
454	PDF417: Bar Height	0~18	0: Default 6	0	1

2.3 Definitions of String data paremeters

Number	Hint	Text content	Default print format
0	ShopN	Store Name	Print: header center
1	ScaleN	Device Name	Not use
2	MnyPre	Prefix of Money Unit	
3	MnySuf	Suffix of Money Unit	
4	Strg-1	Bill text 1	Print: header center
5	Strg-2	Bill text 2	Print: header left
6	Strg-3	Bill text 3	Print: header center
7	Strg-4	Bill text 4	Print: header left
8	Strg-5	Bill text 5	Print: end center
9	Strg-6	Bill text 6	Print: end left
10	Strg-7	Bill text 7	Print: end center
11	Strg-8	Bill text 8	Print: end left
12	I-SFee	Item Service Fee	Item service charge
13	T-SFee	Service Fee	Service charge
14	Ind-MK	Industry Mark	Industry Mark
15	W-SSID	Wireless SSID	Wireless SSID
16	W-PASS	Wireless Password	Wireless Password
17	Spst-6	Special text 6	Reserved
18	Spst-7	Special text 7	Reserved
19	Spst-8	Special text 8	Reserved