

Price Computing Scale

ER Series

OWNER'S MANUAL



9002-ER0-0033-4


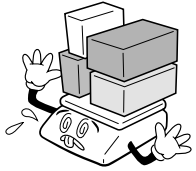

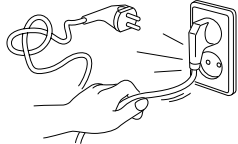
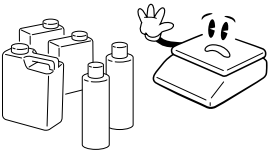
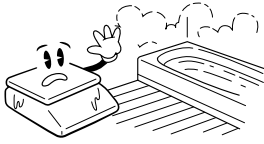
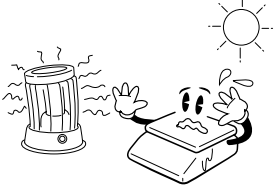
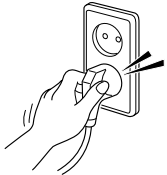
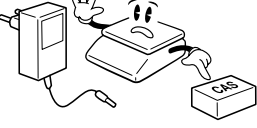
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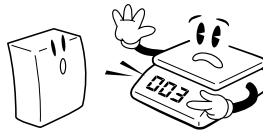


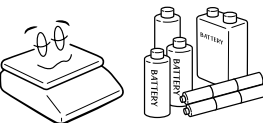


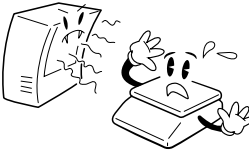

PRECAUTIONS

Precautions when installing the scale. To ensure that you get the most from your scale, please follow these instruction.

Warning		
<p>Do not disassemble the scale. When any damage or defect occurs, contact your CAS authorized dealer immediately for proper repair.</p> 	<p>Do not overload beyond the maximum weight limit.</p> 	<p>Scale must be grounded to minimize electricity static. This will minimize defect or electric shock.</p> 
<p>Do not pull the plug by its cord when unplugging. Damaged cord could cause electric shock or fire.</p> 	<p>To prevent from fire occurring, Do not place or use the scale near flammable or corrosive gas.</p> 	<p>To reduce electric shock or incorrect reading, Do not spill water on the scale or place it in humid condition.</p> 
<p>Avoid placing the scale near heater or in direct sunlight.</p> 	<p>Insert plug firmly to wall outlet to prevent electric shock.</p> 	<p>Use proper Adapter. Incorred adapter could damage the scale.</p> 

WARNING

Make sure to plug your scal into the proper power outlet. For maximum performance, plug into a power outlet 30 minutes before the usage for warm up.

Attention		
<p>For consistent and accurate reading, maintain periodical check by your CAS authorized dealer.</p> 	<p>Avoid sudden shock to the scale. Internal mechanism could be damaged.</p> 	<p>Grab on the bottom of the scale when moving. Do not hold by the platter.</p> 
<p>Take the battery out when scale is not in use for long time. Leakage from the batteries is hazardous.</p> 	<p>Place the scale on firm and temperature consistent environment.</p> 	<p>By adjusting 4 corners of the scale, set the scale even using the built in scale leveling indicator.</p> 
<p>Keep the scale away from other electromagnetic generating devices. This may interfere with accurate reading.</p> 		<p>Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instruction.</p>  <p>Correct type of battery</p>

PREFACE

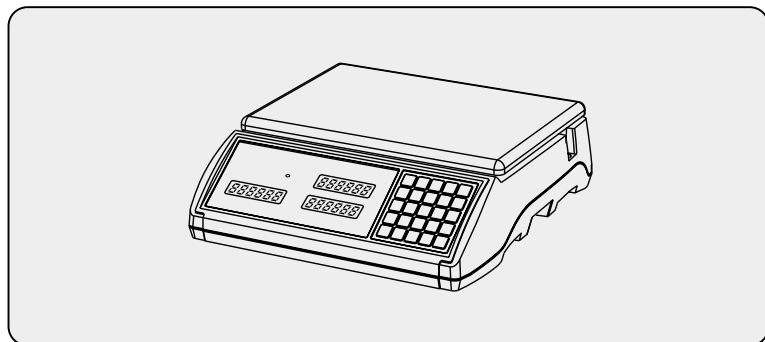
Thank you for the purchasing of CAS ER series.

This series have been designed with CAS reliability, under rigid quality control and with outstanding performance. Your specialty departments can enjoy with CAS product. We hope that CAS product meets your needs.

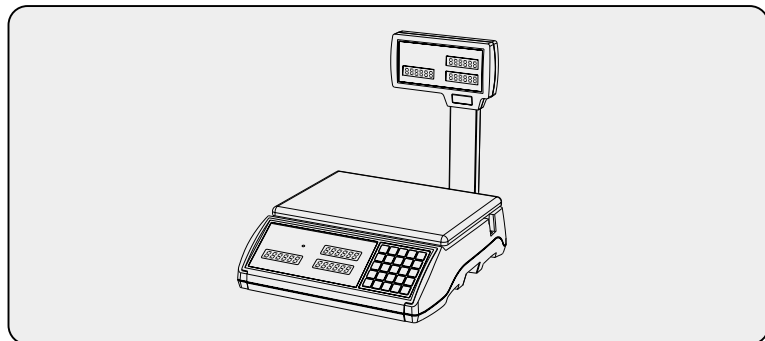
The user manual is designed to guide you to understand product operation and proper care of product.

OVERALL VIEW

STADARD TYPE

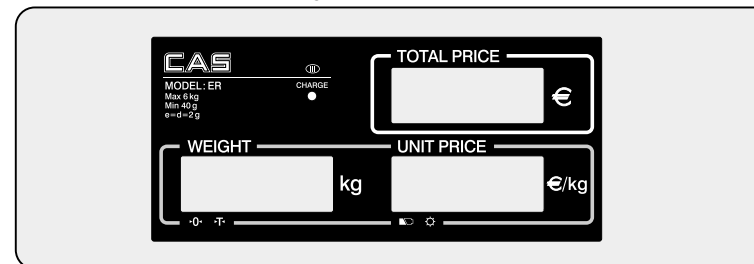


POLE TYPE

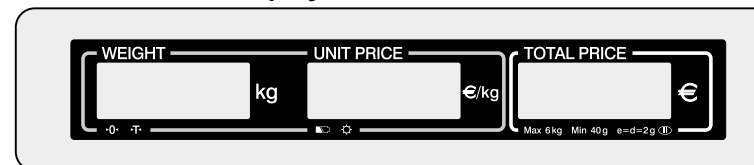


DISPLAY & KEYBOARD

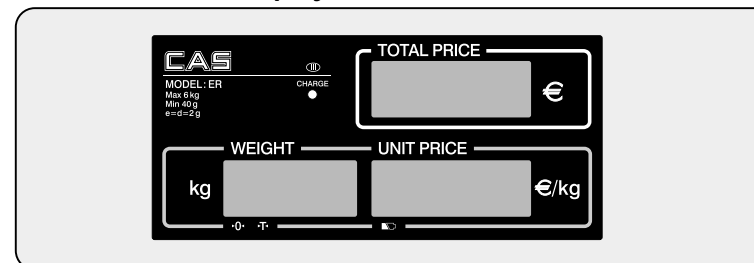
LCD TYPE : Front Display



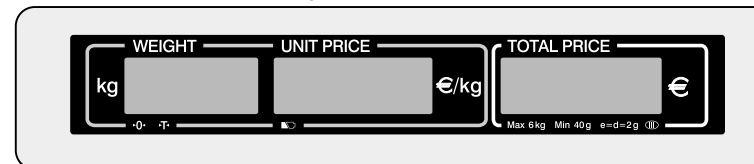
LCD TYPE : Rear Display



VFD TYPE : Front Display



VFD TYPE : Rear Display



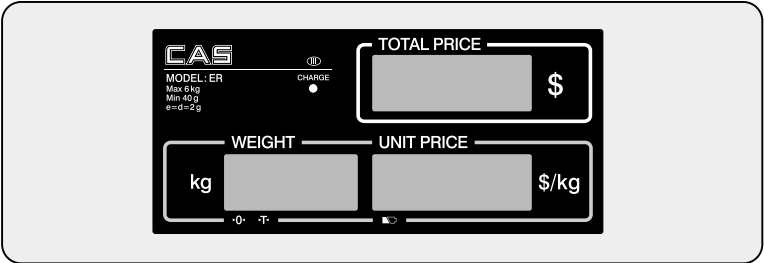
LCD TYPE : Front Display



LCD TYPE : Rear Display



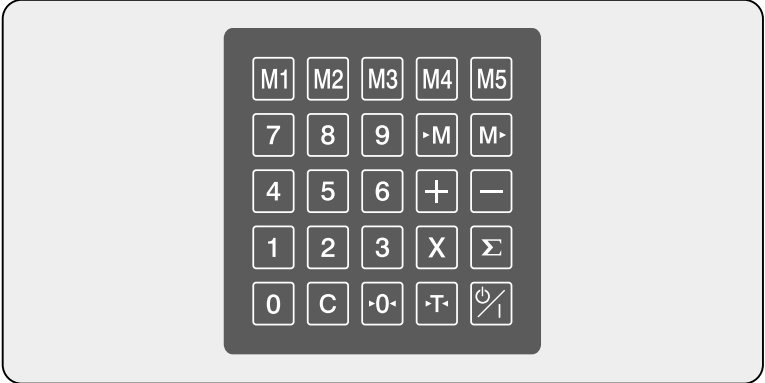
VFD TYPE : Front Display



VFD TYPE : Rear Display

















KEYBAORD



■ Table : Symbols on Display

SYMBOLS	DESCRIPTION
0 (▼)	To adjust zero
T (▼)	Tare on
⚙ (▼)	Backlight on
🔋 (▼)	Low battery warning

■ Table : Key Functions

KEYS	FUNCTIONS
 ~ 	To input all of numerical data
 ~ 	Direct PLU keys
	To save PLU
	To call up PLU
	To clear data
	To set zero
	To set or clear tare value
	To turn on & off the scale or backlight (LCD version only)
	To make several sales transaction by adding up
	To make discount transaction
	To multiply the same item when making sales transaction
	To check total sales amount or finalize sales transaction

OPERATIONS

1. Programming Mode

Chapter 1. Basic Operation

- Turning the scale on / off
- Turning backlight on / off (a option in LCD version only)
- Zero function

Chapter 2. PLU Saving & Calling-up

- Saving unit price on PLU
- Saving PLU name (option)
- Calling up PLU
 - Indirect PLU
 - Direct PLU (M1~M5)

Chapter 3. User's Set-up Mode

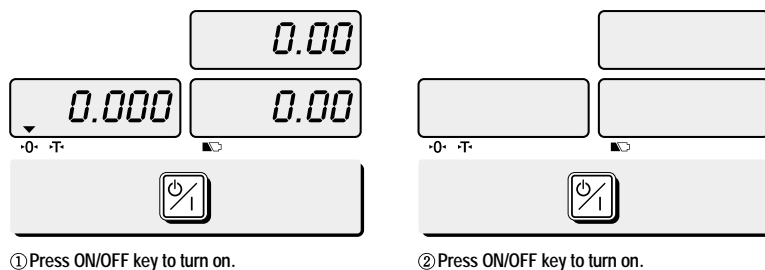
- Auto power-off
- EL backlight on / off (backlight option in LCD version only)
- Selecting printer
- Option setting for daily total sales amount

Chapter 4. Formatting Printing Receipt

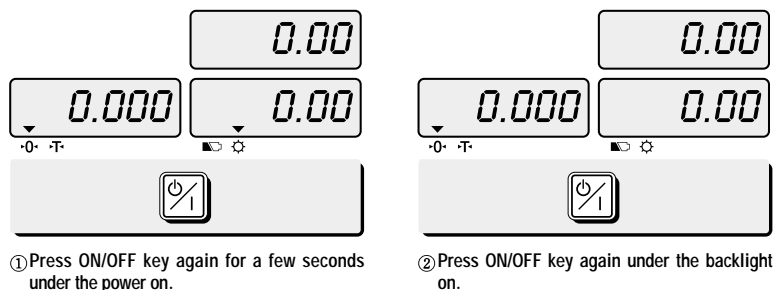
- Using Printer
- Receipt header setting
- Receipt currency (unit) setting
- Receipt date setting

Chapter 1. Basic Operation

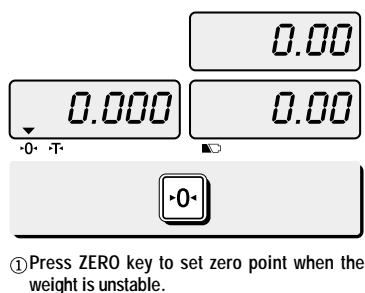
a. Turning the scale on / off



b. Turning the backlight on / off (Option in LCD version only)



c. Zero function



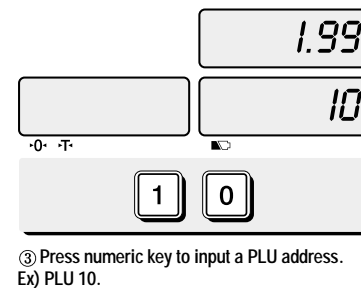
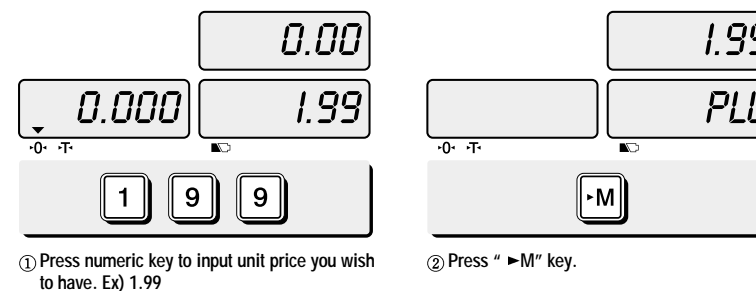
Chapter 2. PLU Saving & PLU Calling-up

a. Saving unit price on PLU

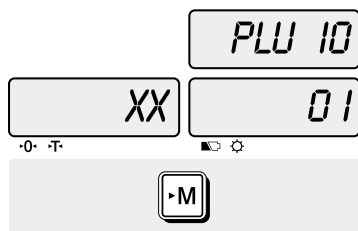
This section explains how to save unit price in PLU.

	Number of PLU	Range	Remarks
PLU	199	1~199	
PLU name (option)	28	1~28	

- Number of direct PLU may be different on product model.
- “C” key is to clear data input.



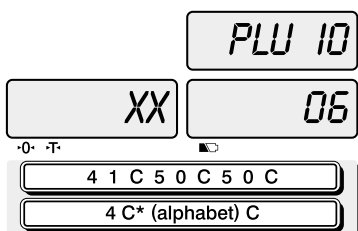
- “C” key is to input, save a character, and move to next character (or byte).
- “ZERO” key is to move previous character (or byte).
- “TARE” key is to move next programming menu.



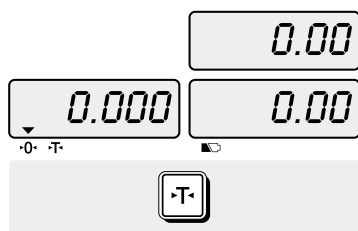
④ Press "►M" key to save it.

b. Saving PLU name (option)

- If you have "28 PLU name inputting option" you may save the name of PLU for 1~28.
- "C" key is to input, save a character, and move to next character (or byte).
- "ZERO" key is to move previous character (or byte).
- "TARE" key is to move next programming menu.



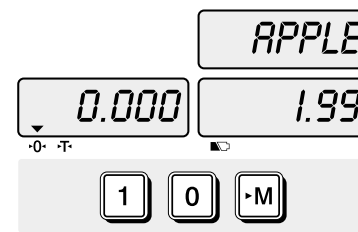
⑤ Input appropriate ASCII codes to save the PLU name. Ex) "APPLE" is "4, 1, C, 5, 0, C, 5, 0, C, 4, C, C, 4, 5, C"



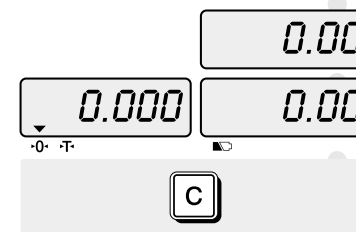
⑥ Press TARE key to exit to normal weighing mode or C key up to maximum 8th byte. Then automatically exit to normal weighing mode.

c. Calling up a PLU

• Indirect PLU

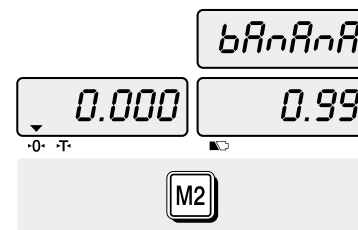


① To call up indirect PLU saved press appropriate numeric keys (address) and "M►" key. Ex) PLU 10

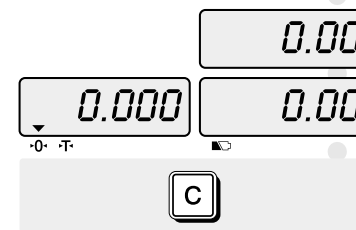


② To go back to normal weighing mode press "C" key.

• Direct PLU

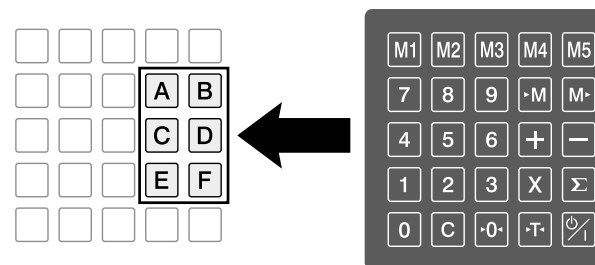


① To call up direct PLU saved just press appropriate direct PLU key. Ex) PLU 2



② To go back to normal weighing mode press "C" key.

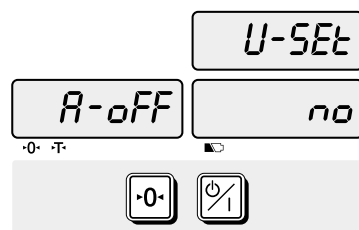
• Please refer to "Alphabetic key location".



Chapter 3. User's Set-up Mode

This section explains how to set up the following functions.

Functions	Options	Remarks
1. Auto power-off	NO / 10 / 30 / 60	
2. EL Backlight On/OFF	OFF / ON / 3 / 5 / 10	When backlight option selected in LCD version only
3. Printer selection	NON / Top / EPSON /Dep-50	



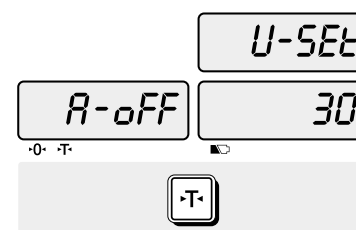
① To get into "User's Set-up Mode" press ON/OFF key pressing and holding ZERO key.

- Press "**ZERO**" key to save current option and move to next function setting mode.
- Press "**TARE**" key to move to other next option.

a. Auto power-off

This section explains how to set backlight on & off function and automatic off function.

Options	Description	Remarks
NO	No auto power-off.	
10 (minutes)	Auto power-off in 10 minutes when no use.	
30 (minutes)	Auto power-off in 30 minutes when no use.	
60 (minutes)	Auto power-off in 60 minutes when no use.	



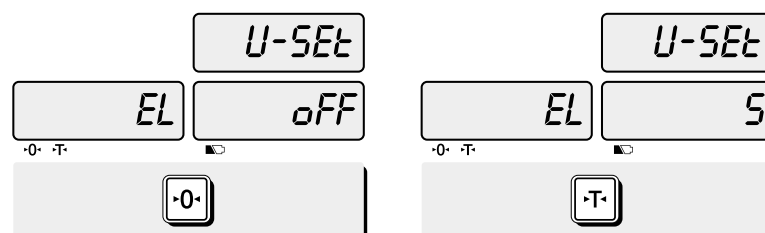
① Select a option you wish to have by using "TARE" key. Ex) 30 (minuets)

b. EL backlight ON/OFF function

(Only when backlight option selected in LCD version)

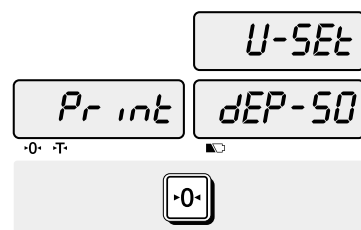
This section explains how to set backlight on & off function and automatic off function.

Options	Description	Remarks
OFF	Backlight OFF	
ON	Backlight ON	
3 (Seconds)	Automatic backlight-off when not in use for 3 seconds.	
5 (Seconds)	Automatic backlight-off when not in use for 5 seconds.	
10 (Seconds)	Automatic backlight-off when not in use for 10 seconds.	



① Press "ZERO" key to move next function setting, EL Backlight ON/OFF.

② Use "TARE" key to select one of backlight auto power-off option or EL Backlight ON/OFF.
Ex) Select 5 seconds auto power-off option.

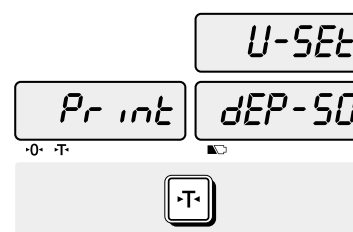


③ Press "ZERO" key to save current option and move to next function setting.

c. Selecting the printer

This section explains how to select the printer option when you'd like to use the printer connected to ER series.

Options	Description	Remarks
NON	No printer in use	
TOP	Top printer interface	
EPSON	Epson printer interface	
DEP-50	DEP-50 printer interface	



① Select the printer you're using with ER by pressing "TARE" key. EX) DEP-50

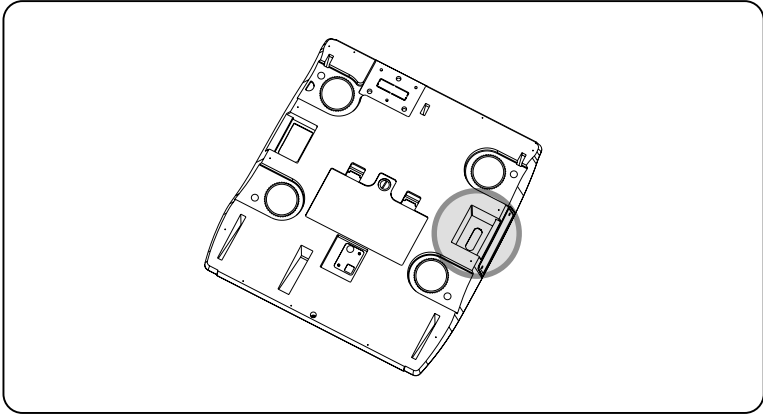
Chapter 4. Formatting printing receipt

This chapter explains how to set the receipt format in the following fields.

Options	Description	
HEADER	To input characters you wish to have on the receipt header.	Maximum 1,2 line / 24 characters, 3 line / 16 characters for each line
UNIT	To input currency symbol or characters you wish to have on the receipt.	Maximum 8 characters
DATE	To input date on the receipt.	

a. Setting the printer

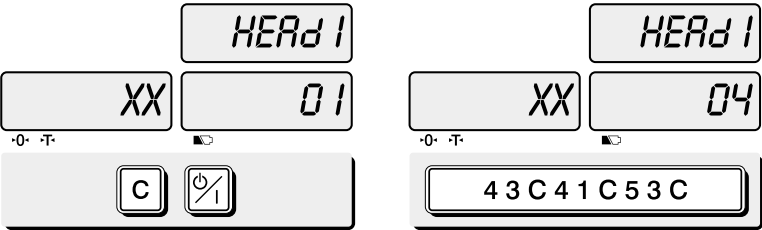
Please connect your printer to RS 232 port, which is located at the gray part on the picture, using RS 232 Cable.



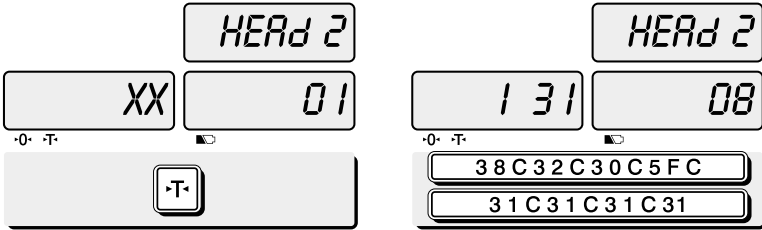
b. Receipt header setting

Options	Description	
HEADER	To input characters you wish to have on the receipt header.	Maximum 1,2 line / 24 characters, 3 line / 16 characters for each line

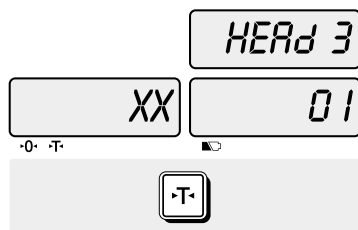
- User may input the name of store, telephone number, or other expressions he/she wishes to have on the receipt.



- Pressing and holding "C" key, press "ON/OFF" key under the scale power off. "01" on the "Unit Price" display represents that you are ready to input the first character.
- Input appropriate ASCII codes (page on 20) you wish to have.
Ex) CAS.

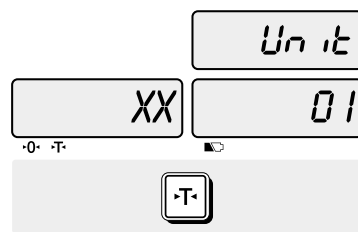


- To save it and go next header line press "TARE" key.
- Using ASCII code you can input appropriate data on Header 2.
Ex) 820-1111, telephone #.

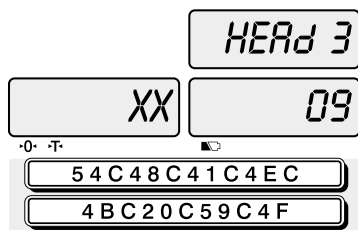


⑤ To save it and go next header line press "TARE" key.

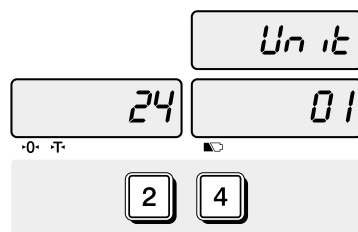
c. Receipt currency (unit) setting



① Initial CURRENCY (UNIT) display status.

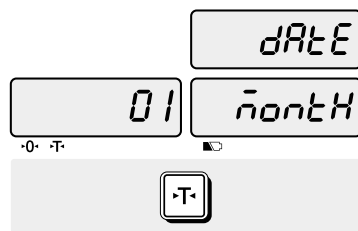


⑥ Using ASCII code you can input appropriate data on Header 2.
Ex) THANK YOU

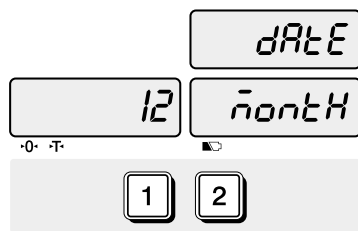


② Using ASCII code you can input appropriate character or currency symbols on UNIT.
Ex) \$

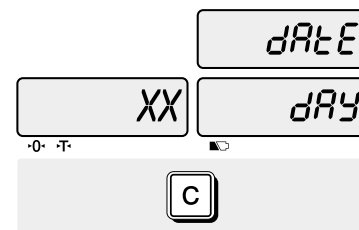
d. Receipt DATE setting



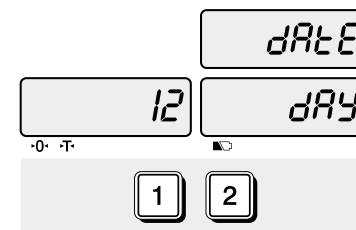
① To save it and go to "Initial DATE display" status press "TARE" key.



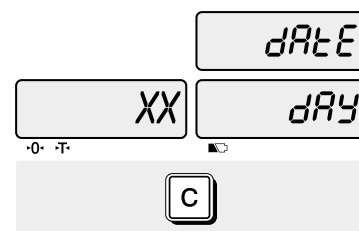
② Just input appropriate month you wish to have, not using ASCII code.
Ex) 12 (December)



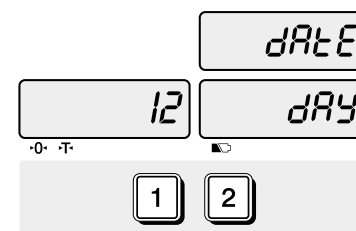
③ Press "C" key to go to next "DAY" setting.



④ Just input appropriate month you wish to have, not using ASCII code.
Ex) 12th day



⑤ Press "C" key to go to next "YEAR" setting.



⑥ Just input appropriate month you wish to have, not using ASCII code.
Ex) Year 2004

- If you press "C" or "T(TARE)" key you can automatically go to normal weighing mode.

2. Sales Mode

Chapter 5. Basic Operation

- a. Turning the scale on / off
- b. Turning backlight on / off (LCD version only)
- c. Zero function
- d. Tare function
 - One time tare
 - Successive tare
 - Preset tare

Chapter 6. Sales Transaction

- a. Sales with free price (hand pricing)
- b. Sales using PLU
 - direct PLU
 - indirect PLU
- c. Adding up several sales for weighed item
- d. Adding up several sales for non-weighed item (Fixed Price Added)
- e. Multiplying same item
- f. Calling up or deleting total amount
- g. Cancel

Chapter 7. Discount & Payment

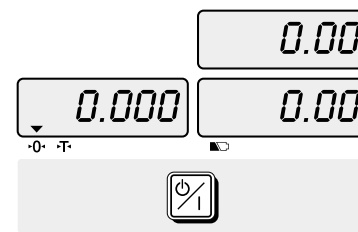
- a. Discount on subtotal
- b. Payment

Chapter 8. Daily Total Sales

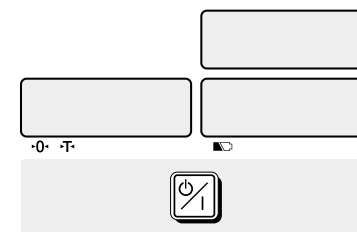
- a. Calling up daily total sales data
- b. Deleting daily total sales data

Chapter 5. Basic Operation

a. Turning the scale on / off

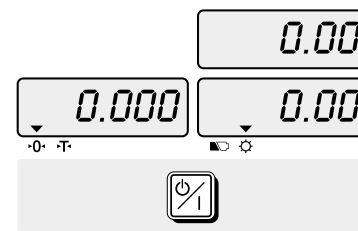


① Press ON/OFF key to turn on.

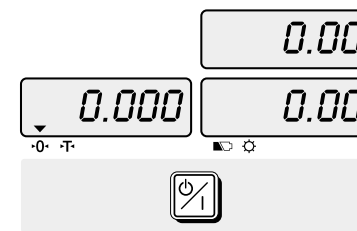


② Press ON/OFF key to turn on.

b. Turning the backlight on / off (Backlight option in LCD version only)

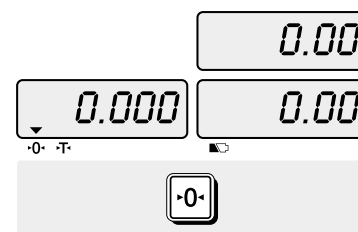


① Press ON/OFF key again for a few seconds under the power on.



② Press ON/OFF key again under the backlight on.

c. Zero function

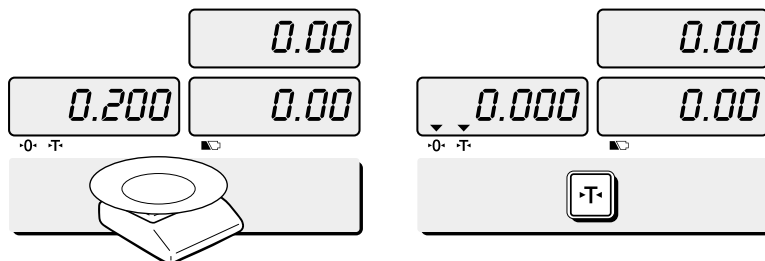


① Press ZERO key to set zero point when the weight is unstable.

d. Tare function

Tare means the weight of container. You may use tare function when you weigh an item with container and measure only the weight of item.

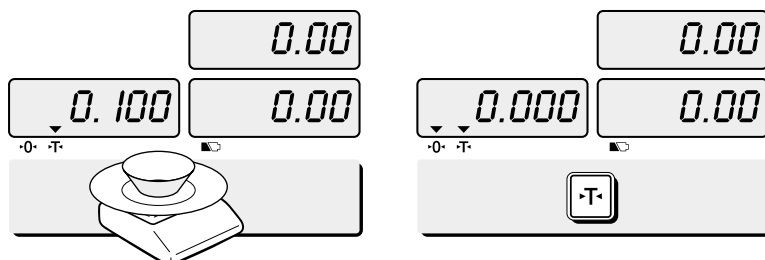
■ One time tare



① Place a container on the platter.
Ex) 200 g of tare.

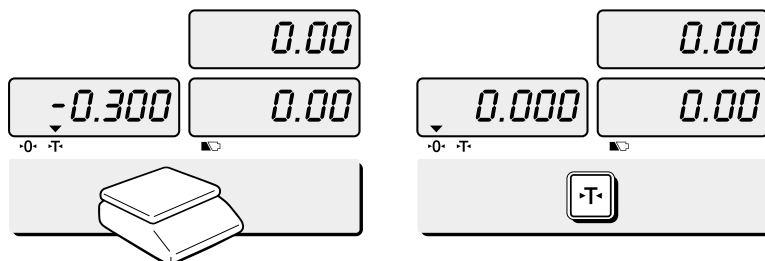
② Press "TARE" key to set zero point
Ex) 200 g of tare.

■ Successive tare



③ Place another container on the platter.
Ex) 100 g of tare

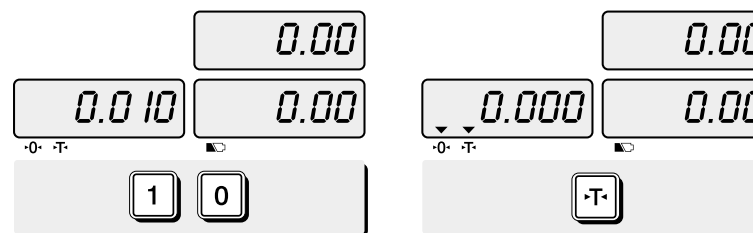
④ Press "TARE" key to set zero point



⑤ After weighing item remove all of the container from the platter.

⑥ Press "TARE" key again to set zero.

■ Preset tare



① Press appropriate numeric keys.
Ex) 10 g

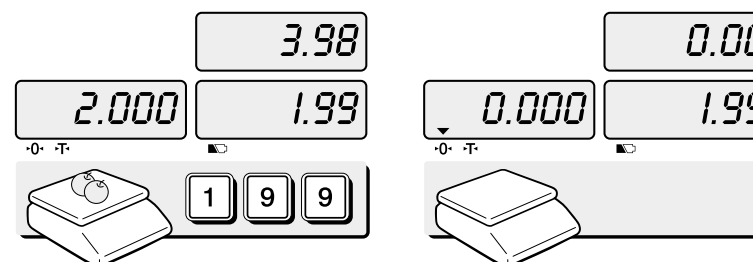
② Press "TARE" key to set zero.

Chapter 6. Sales Transaction

ER series may make sales transaction either with free price or with PLU.

a. Sales with free price (hand pricing)

This section explains how to make sales transaction with free price (hand pricing).

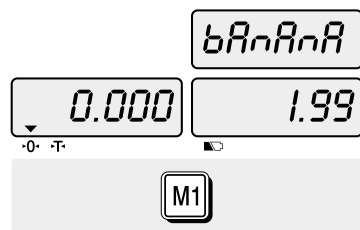


① Place an item on the platter and press appropriate numeric keys to input unit price.
Ex) 1.99 for unit price.

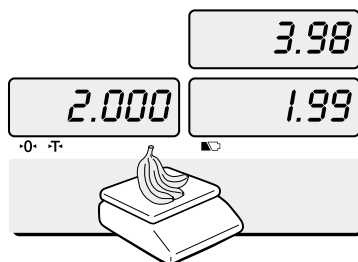
② Remove the item from the platter. It may automatically print out the receipt if the printer is set.

b. Sales using PLU (Price Look-Up)

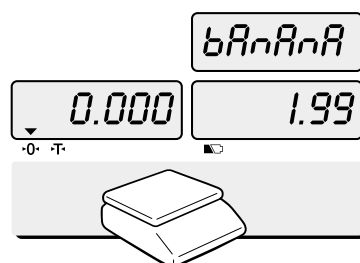
Direct PLU



- ① Call up a direct PLU.
Ex) "M1"

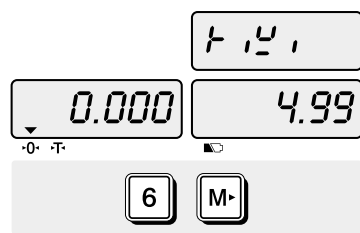


- ② Place an item on the platter.

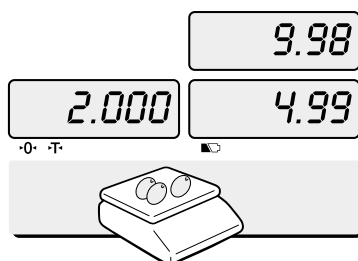


- ③ Remove the item from the platter. It will automatically print out the receipt if the printer is set as auto mode in user set mode.

Indirect PLU



- ① Call up an indirect PLU.
Ex) "PLU 6 for Kiwi".

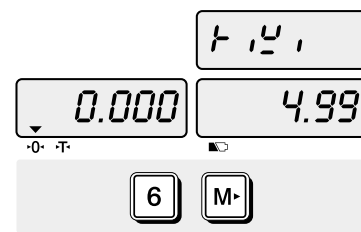


- ② Place an item on the platter.

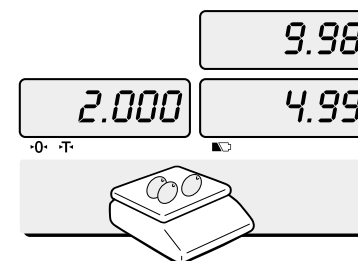
Then, remove the item from the platter to go back to normal weighing mode.

c. Adding up several sales transactions for weighed items

- Use "+" key to make the adding-up transactions.
- You may either call up PLU or just input the unit price.

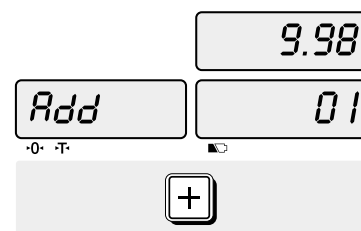


- ① Call up an indirect PLU.
Ex) "PLU 6 for Kiwi".

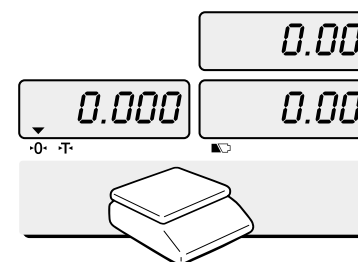


- ② Place an item on the platter.

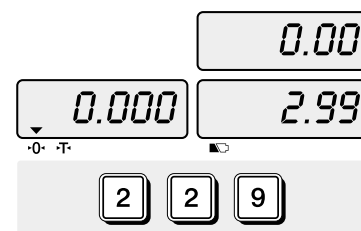
- If you press "Σ" key after 2nd step the scale is automatically going to normal weighing mode and add this transaction to daily total amount and number of sales data.



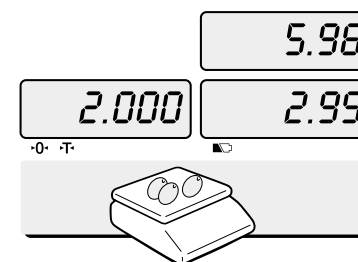
- ③ Press "+" key.



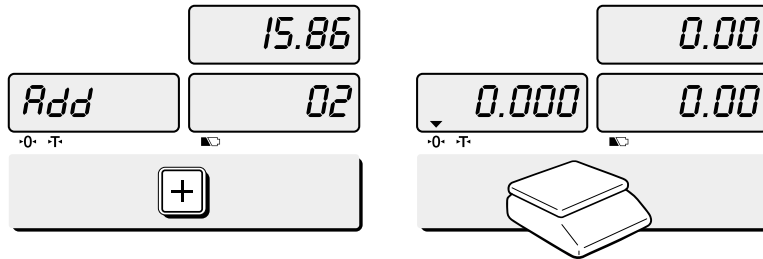
- ④ Remove the item from the platter.



- ⑤ Input a unit price
Ex) 2.99 for Honey melon.



- ⑥ Place an item on the platter.

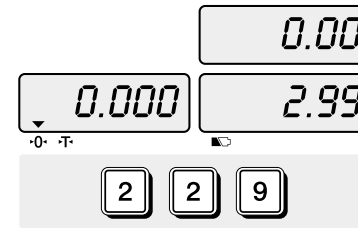


⑦ Press "+" key. "Total Price" display says total price added, and "Unit Price" display says the number of sales transactions added.

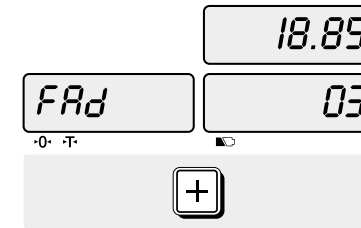
⑧ Remove the item from the platter.

- You may also place the item on the platter first and then input unit price in the scale later.
- You may add sales transactions up to 99 times and total amount of sales up to 999,999.

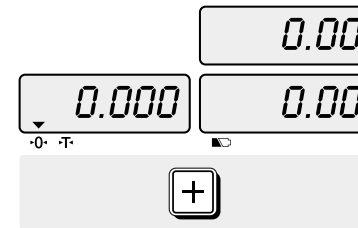
d. Adding up several sales transactions for non-weighted items (Fixed price added)



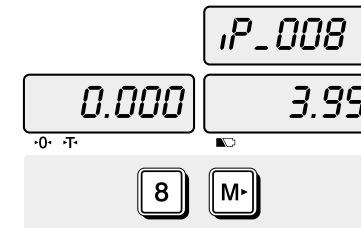
① Input a unit price
Ex) 2.99 for "Strawberry Cream Cheese".



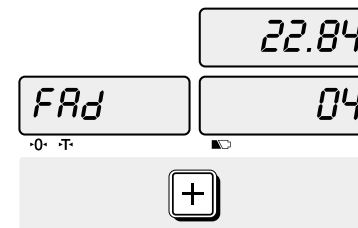
② Press '+' key.



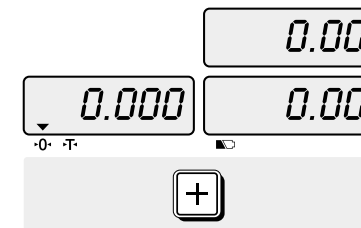
③ Press "+" key to go to normal "0" point mode.



④ Call up another PLU.
Ex) PLU# 8 which unit price is 3.99 for "Garlic bread".



⑤ Press "+" key.

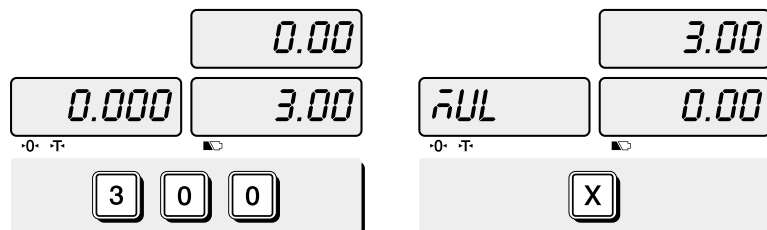


⑥ Press "+" key to go to normal "0" point mode.

- Please refer to "Chapter 7. Daily Total Sales Amount" for calling up or deleting the daily total.

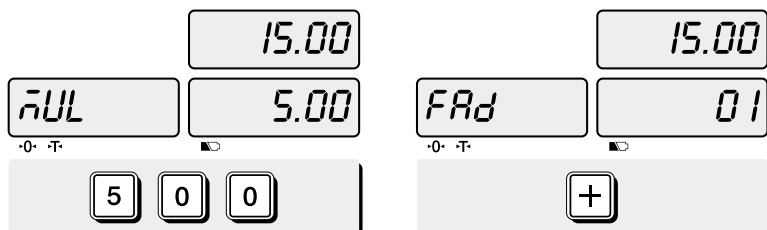
e. Multiplying the same item sales

- You may either call up PLU or input unit price into the scale.



① Input a unit price
Ex) 3.00 for "Canned Soup".

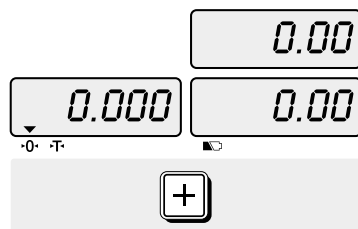
② Press "X" key.



③ Press appropriate numeric key to input the number of items.

④ Press "+" key.

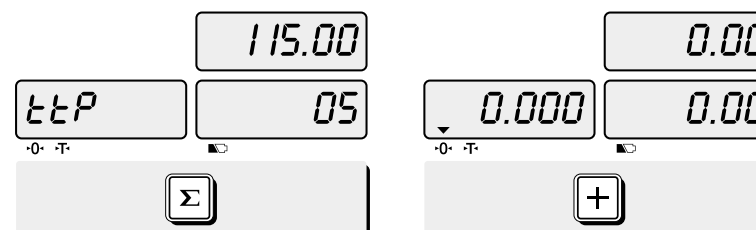
- You may cancel previous number of item input by pressing "C" key and retry it.
- You may go back to normal weighing mode by pressing "C" key when "Unit Price" display shows "0".



⑤ Press "+" key to go to normal "0" point mode.

f. Calling up or deleting total amount

- When you just check total amount.

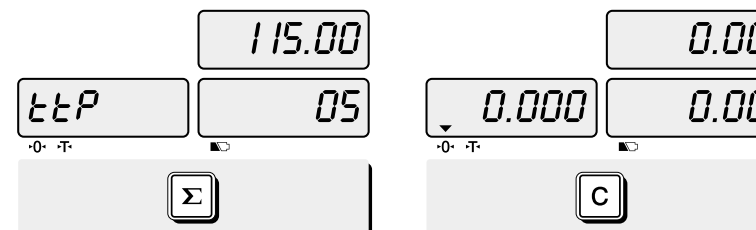


① Press "Σ" key just to check total amount.
Ex) Total amount=115.00, Total number of transaction= 5.

② Press "+" key to go to normal "0" point mode.

- The scale beeps when there is no adding-up transaction.

- When you delete total amount.

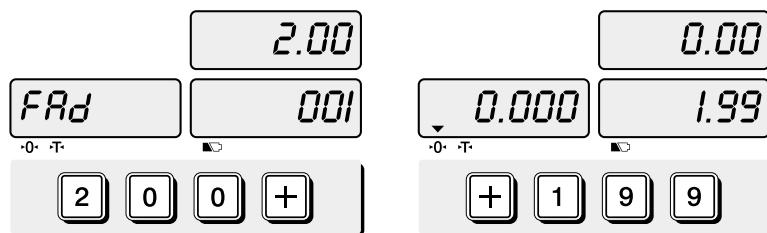


① Press "Σ" key just to check total amount.
Ex) Total amount=115.00, Total number of transaction= 5.

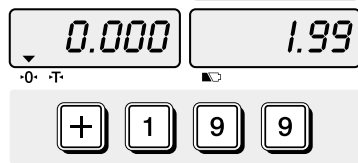
② Press "C" key to delete total amount.
However, this total amount is still saved on daily total sales amount.

g. Cancel

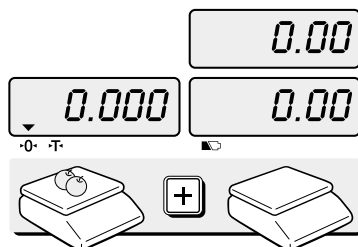
- When user makes more than two sales transactions he/she can cancel previous mistake transaction(s) of them by doing "Cancel" function.



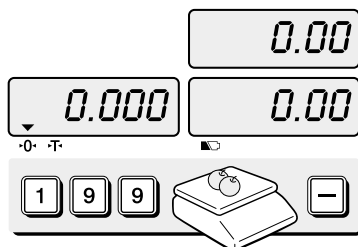
- ① Press numeric keys to input a unit price.
Ex) Item's unit price=2.00



- ② Press "+" key and appropriate numeric keys to make next another sales transaction.
Ex) unit price=1.99, 1 kg



- ③ Place item on the platter and do "ADD" function. Ex) unit price=1.99, 1 kg
Remove it from the platter.

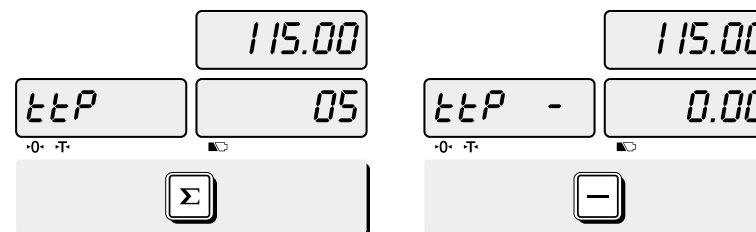


- ④ To cancel previous transaction input the same unit price and place the same item on the platter. Then, press "-" key.

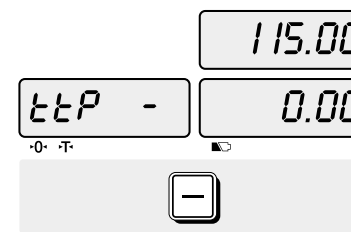
- Remove the item from the platter. For sure user may check total number of a series of transactions after canceling previous one by pressing "Σ" key to call up "ttP(Total Price)".

Chapter 7. Discount & Payment on total sales amount

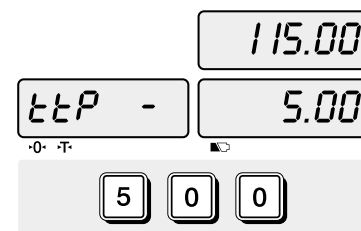
a. Discount on total sales amount



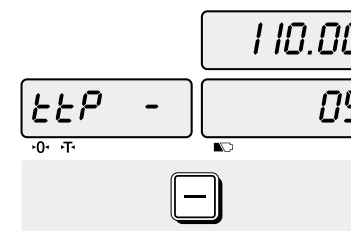
- ① Press "Σ" key just to check total amount.
Ex) Total amount=115.00, Total number of transaction= 5.



- ② Press "-" key.



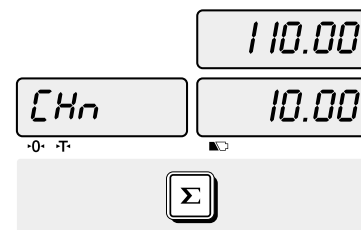
- ③ Press appropriate numeric keys to input the amount of discount.



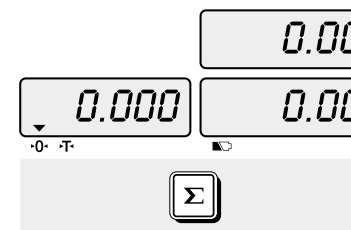
- ④ Press "-" key.

- Press "Σ" key to finalize these transactions. "Payment" function will be followed.

b. Payment function on total sales amount

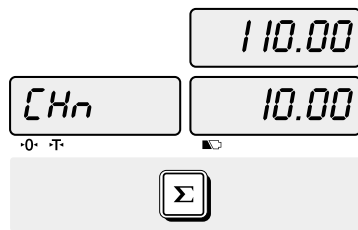


- ① Press "Σ" key to call up total price.

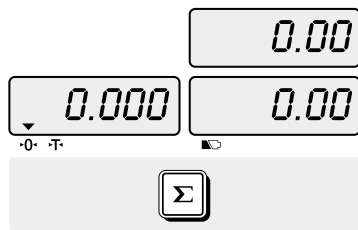


- ② Press appropriate numeric keys to make payment.
Ex) 120.00 payment

In the case of no change needed then, just press “Σ” key to finalize the sales transactions. However, in the case of change needed please continue the following steps.



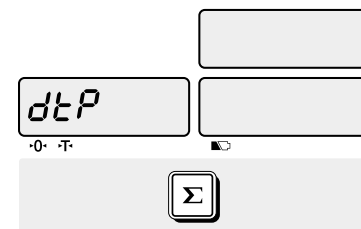
③ Press “Σ” key to call up the change amount.



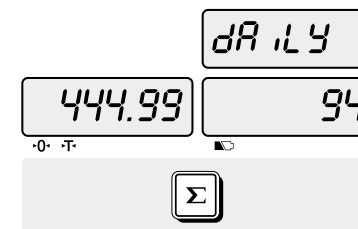
④ After checking the change amount press “Σ” key to go back to normal weighing mode.

Chapter 8. Daily Total Sales (option)

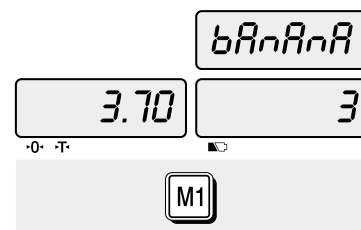
a. Calling up daily total sales data



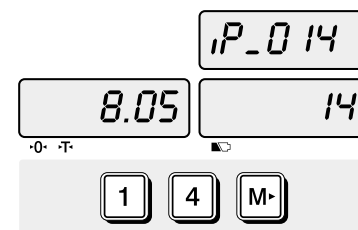
① Press “Σ” key for 3 seconds until “dtP” message shows up.



② Press “Σ” key again to call up daily total sales.
Ex) daily total amount of sales=444.99,

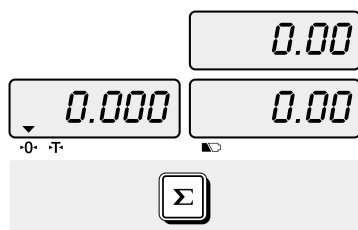


③ If you look at the amount of individual PLU sales call up appropriate PLU.
Ex) PLU#1(Banana: Direct PLU) & PLU # 14.



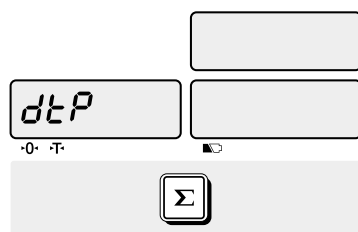
④ For PLU #14, press appropriate numeric keys and “M” to show daily total amount of sales and the daily total number of sale transactions.

- To go back to “Daily total sales” mode simply press “Σ” key. And then,
- To go back to normal weighing mode. press “Σ” key.
- If you want to print out current status press “T” key. Then, it prints out current daily total information.

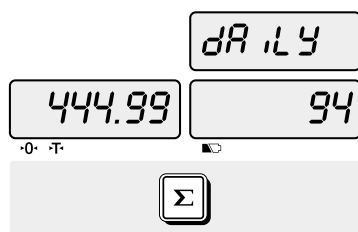


⑤ To go back to "Daily total sales" mode simply press "Σ" key.

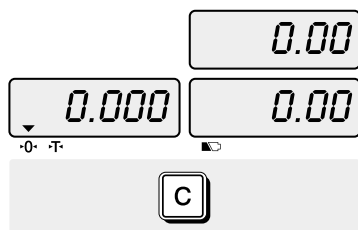
b. Deleting daily total sales data



① Press "Σ" key for 3 seconds until "dtP" message shows up.



② Press "Σ" key again to call up daily total sales.
Ex) daily total amount of sales=444.99,

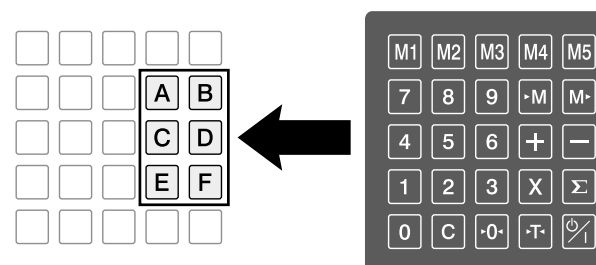


③ Press "C" key to delete "daily total sales" data. "Clear" message shows up shortly, and then it goes to normal weighing mode.

■ Table : ASCII Code

LOW ORDER \ HIGH ORDER	2	3	4	5	6	7	8	9
0	SP	0	@	P		p		
1	!	1	A	Q	a	q		
2	"	2	B	R	b	r		
3	#	3	C	S	c	s		
4	\$	4	D	T	d	t		
5	%	5	E	U	e	u		
6	&	6	F	V	f	v		
7	'	7	G	W	g	w		
8	(	8	H	X	h	x		
9	)	9	I	Y	i	y		
A	*	:	J	Z	j	z		
B	+	;	K	[	k			
C	,	<	L	\	l			
D	-	=	M	]	m			
E	.	>	N	^	n			
F	/	?	O	-	o			

■ Picture1 : Alphabet location on the keyboard



■ Table : Error Message

Error Message on Display	Description	Solution
"Err 1"	The "Err 1" occurs when a current zero point has shifted from the last span calibration.	Please call your CAS dealer.
"Err 2"	The "Err 2" is not a real error. Only it prompts return CAL switch to the normal position.	Please call your CAS dealer.
"Err 10"	The "Err 10" means a failure of the analog module. Replace the analog module by a new one.	Please call your CAS dealer.
"Err 11"	The "Err 11" means a writing error of the internal nonvolatile memory. To recognize this error, be sure to check the voltage on the circuit and do calibration procedures.	Please call your CAS dealer.
"Err 12"	The "Err 12" warns that the scale has lost the parameters for weighing regulations or has lost the factors for a digital span calculation.	Please call your CAS dealer.
"Err 13"	The "Err 13" means the soft key code is broken.	Please call your CAS dealer.
"Help 1"	"Help 1" is marked in case of zero extent exceeded.	Please remove the item from the platter.
"Help 3"	"Help 3" is marked in case sale number of times exceeds 99.	Spend again accumulated TTP value after delete
"Help 4"	"Help 4" is marked in case Euro factor value is "0" at Euro rate application. "Help 4" is marked when input smaller Pay cost than Total sale amount of money at Pay function use.	Input again Euro factor value. Pay value than Total sale amount of money bigger value or same value input
"Help 5"	"Help 5" is marked when DTP number of times is more than 50000 times.	Spend again accumulated DTP value after delete

■ Table : SPECIFICATION

MODEL	ER Series		
CAPACITY (Single Range)	6 x 0.002 kg	15 x 0.005 kg	30 x 0.001 kg
DISPLAY Weight Unit Price Total Price	5 digits 6 digits 6 digits		
SYMBOL ON DISPLAY	Power, Zero, Tare, Low battery, Backlight (Option for LCD version)		
MAXIMUM TARE	6.000 kg	- 9.995 kg	- 9.990 kg
OPERATING TEMPERATURE	-10 °C ~+40 °C		
POWER SOURCE	110VAC, 120VAC, 220VAC, 240VAC / 50 Hz, 60Hz		
POWER CONSUMPTION	Approximately 10W		
PLATTER SIZE (mm)	304 (W) X 220 (D)		
PRODUCT SIZE (mm)	360 (W) X 350 (D) X 106 (H)		

Notice: specifications are subject to change for improvement without notice.