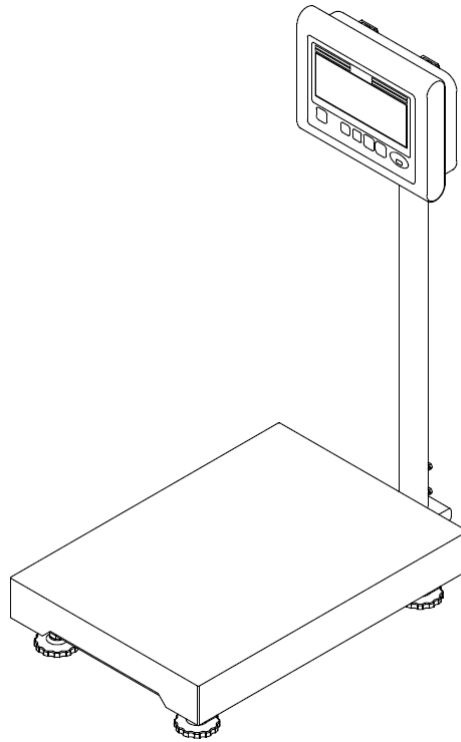


DIGITAL UNIVERSAL SCALE

DP-6700-II

OPERATION MANUAL



- Carefully read this operation manual and the product warranty to properly use this product.
- Keep this manual for future reference.

YAMATO SCALE CO., LTD.

PREFACE

Thank you for having purchased the DP-6700.

This innovative scale is useful in a wide range of commercial activities at factories and general stores as well as in the fishery, grocery and agricultural industries.

This scale features many functions.

Please read carefully this Operation Manual and take advantage of the descriptions in it to use Yamato's DP-6700 in the optimum condition for the longest life.

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Chapter 1 PLEASE READ BEFORE USE


1-1. SAFETY PRECAUTIONS


Read carefully SAFETY PRECAUTIONS before use, and follow all the instructions. SAFETY PRECAUTIONS are designed for protecting users, other people and assets from physical and financial damages by your safety practices. This OPERATION MANUAL should be kept for the entire service life of the product.

- The hazardous levels and descriptions are defined as follows


	Danger	Indicates mishandling without compliance with this sign has a potential risk of suffering death or serious injury.
	Warnig	Indicates where mishandling without compliance with this sign has a potential risk of suffering injury or damage on the property.
	Caution	Indicates a potential risk that may result in injury or damage on the equipment if operated without compliance with this sign.
		Indicates what is prohibited.
		Indicates what must be followed.

- Prior to use, read carefully the following descriptions of Danger, Warning and Caution to understand and comply with them.


 **Danger**

 : To Avoid Electrical Shock

- (1) Do not step on the power cable of an AC adaptor under the feet or other devices including a cart. (When using the optional AC adaptor)
- (2) Do not remove the screws on the body.
- (3) Connect or disconnect the AC adaptor securely by holding a plug section of the AC adaptor. (When using the optional AC adaptor)


 : To Avoid Explosion and Fire.

Intrinsically safe feature is not equipped with this equipment.
Avoid using in any area having steam, flammable gases and/or hazardous materials.

 : To Avoid Fire and Electrical Shock.


If it is used under abnormal conditions such as smoke or strange odor, it may cause a fire or electric shock. Immediately remove the batteries or unplug the AC adapter from the power outlet. Contact the dealer from which the equipment was purchased for repair after confirming the equipment ceases to smoke. Never repair it by yourself, which may result in hazardous consequences.

Warnig


 : To Avoid Injury and Damage

- (1) When placing an item on the pan, do not use it in an unstable place, and place it so that it will not collapse or fall.
- (2) After use, disconnect the AC adaptor from the power outlet. (When using the optional AC adaptor)
- (3) Make sure to hold the handgrips with the both hands when the equipment is carried or moved. (Never carry it in an abnormal posture or by holding the pan.)
- (4) Do Not Put Fingers into Openings or Holes of Scale
- (5) No disassemble or remodel is allowed.
- (6) Do Not let the Liquid from Damaged Display contact with the Mouth

Caution

 : In order not to damage the scale

- (1) Do not press the display and keys with the tip of the nail or anything sharp.
- (2) Observe the power supply voltage and operating environment.
- (3) Do Not Disassemble or Remodel the Equipment.
- (4) Do not put more than the weighing capacity.
- (5) Do not apply the pan with excessive shock or vibration by dropping items.

 : To maintain the performance of the scale

- (1) Do not install near any equipment that generates vibration.
- (2) Do not install in places subject to direct sunlight or the air from air conditioners.
- (3) Please install it on a sturdy floor or table.
- (4) Do not use it outside the operating temperature range(0 to +40°C) .
- (5) Use the scale horizontally.
(If the scale is not leveled, use the leveling feet to ensure the level.)
- (6) Do not drop the scale or store it sideways.
- (7) When checking the mounting condition of the pan, be sure to visually check to avoid applying an excessive load such as rotating the pan to the left or right.
- (8) Although this scale is waterproof, do not submerge the scale in water or splash water on the bottom side of the main body turned upside down to maintain performance.

1-2. Instructions and directions for use

Causes of Malfunction

- (1) Do not drop an item or jump on the scale, or drop the scale itself.
- (2) Do not apply thinner, benzene or alcohol.

Causes of failure in weighing

- (1) Avoid using the equipment in any place close to fire and steam, or under direct sunlight and the air from the air conditioner.
- (2) The equipment should not be located close to the equipment that generates strong electromagnetic waves. (microwave oven, etc) And do not use the scale close to an electrical device operating at high-accuracy control or emitting signals.
- (3) Use the equipment on a horizontal and stable table or floor that is robust enough to support the load.
- (4) Use the equipment at the specified operation environment (working temperature: 0 to +40°C, 30% RH to 85%RH). Even within the specified environmental range, under the conditions where dew condensation occurs as shown below, poor measuring may occur.
 - 1) When used or stored for a long time in a high humidity environment.
 - 2) When a sudden temperature change is applied even if the humidity is low.
(ex. Putting cold water on the scale.)
 - 3) When the scale is used in an environment where it is exposed to cold air, such as a refrigerator, or steam or water vapor.
- (5) To check the mounting condition of the pan, do not apply an excessive load such as rotating the pan left or right.

Dry batteries

- (1) Do not use batteries other than alkaline or manganese batteries.
- (2) Set batteries correctly as shown by the polarity marks (+ and -). Incorrect installation damages the equipment.
- (3) Do not mix alkaline batteries and manganese batteries when in use. It may cause battery leakage/ burst or damage of scale.
- (4) Replace batteries immediately when the battery level indicator [bAt] shows that they are running out. Replace all the 4 batteries at one time. Combination with an old battery results in leakage or extreme short life.
- (5) Remove batteries when the equipment is left unused for a long time (about 1 month or longer), otherwise, they may leak and cause the inside of the equipment to be corroded.
- (6) 5. Remove batteries from the equipment when it is used with the AC adaptor. Make sure not to operate the equipment both with batteries and the AC adaptor.

Daily Checkup at Start Time

Prior to operation, conduct a daily checkup and weight test to secure the correct measurement that is required by the local rules.

Storage and Disposition

Storing Place;


- (1) Do not store the equipment in the place with high temperature/humidity or receiving direct sunlight for a long period of time. It should also be noted that substantial changes in the ambient temperature may cause condensation inside the equipment, resulting in a failure of the operation.
- (2) This is an electronic precision equipment. Do not store it in the place where vibration and/or shock can be expected.
- (3) Do not store and use the equipment in the place with rapid change in temperature, high humidity or dust. It may cause malfunction, electrical shock or fire.

When the equipment is disposed of:

- (4) The equipment must be disposed of as an industrial waste (nonflammable waste). Make sure to observe the local regulations when disposing.


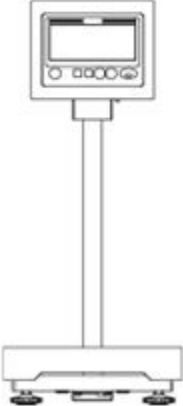


1-3. Functions

This Scale has the following functions. Use these functions in accordance with your purpose.

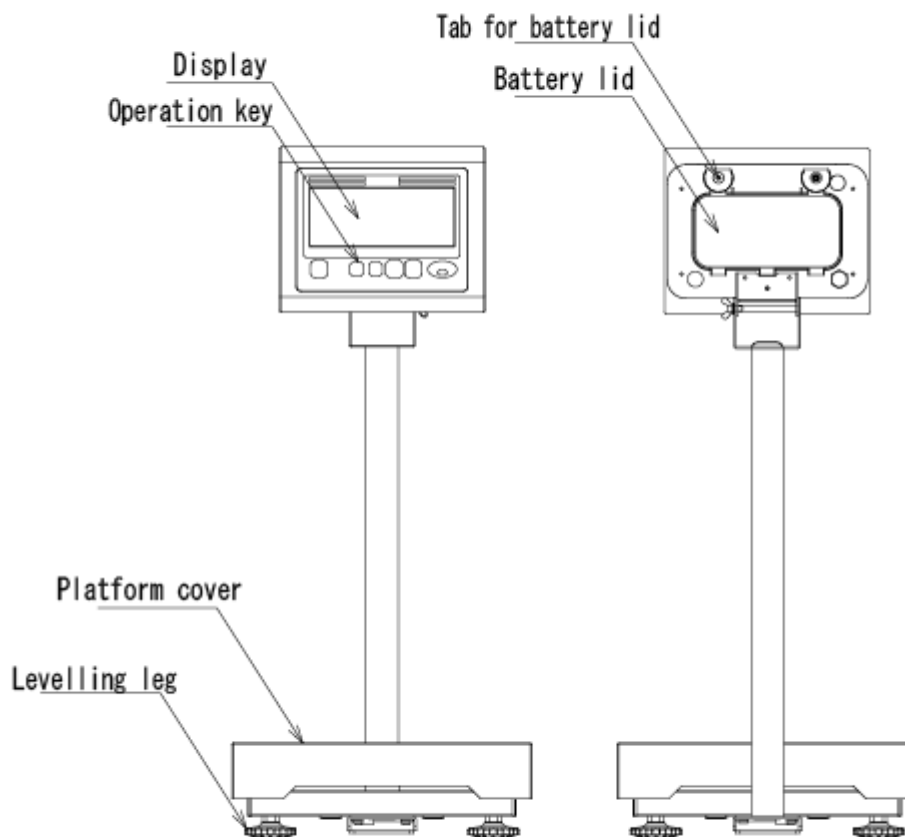
Purpose	How to use the function
You want to shut down the scale automatically when operating by batteries.	<p><u>Automatic power OFF function</u></p> <p>The scale is set to shut down in 15 minutes after no use before shipment. The setting can be changed following instructions on "Parameter Setting".</p>
You want to display the weight of items or an empty container as "0".	<p><u>Tare function</u></p> <p>One-touch tare is available with  key.</p>
You want to make sure you do the tare operation manually so you don't forget.	<p><u>Tare reminder function</u></p> <p>When you did not tare, the displayed value will blink to let you know.</p>
You want to know the total value of the measured weight	<p><u>Addition function</u></p> <p>The weight value can be added manually or automatically. You can check the number of additions and the total value.</p>
When packing items, you want to boost process yield.	<p><u>Fixed Weighing function (Not Legal for trade)</u></p> <p>Max. 99 items data can be registered. Call up the desired data and the range of process yield can be grasped visually with LED.</p>
You want to know in which ranges the weighing items lie such as underweight, acceptable weight and over weight for the target weight.	<p><u>Checkweighing function</u></p> <p>The upper and lower limit of max. 99 items can be registered. You can check at a glance whether the current net amount is acceptable for the target weight.</p>
You want to rank goods efficiently.	<p><u>Grading function (Not Legal for trade)</u></p> <p>The data of max. 20 items, 12 ranks per item can be registered. Call up the desired No. of ranks. The items are sorted in accordance with its weight and numbered.</p>
You want to know the number of items quickly	<p><u>Counting function (Not Legal for trade)</u></p> <p>Calculate the number of items from the weight value. Ideal for checking the number of pieces.</p>
When removing and weighing packing items, you want to boost process yield.	<p><u>Subtractive weighing function (Not Legal for trade)</u></p> <p>Max. 99 items data can be registered. You can check at a glance whether the current net amount is acceptable for the target weight.</p>

1-4. Product Package & Name of Parts

Product Package

Accessories	Main Body	Options
<ul style="list-style-type: none"> ● Operation Manual 		<ul style="list-style-type: none"> ● AC Adaptor  <ul style="list-style-type: none"> ● Battery lid for AC adaptor 

Name of Parts



1-5. To Keep the Scale Working Efficiently

1. This waterproof digital scale is graded as IP65. IP65 is the grade of protection against a water jet directed at the enclosure from any direction and DP-6700 may work even in humid and messy circumstances. **Never wash the whole scale submerging in water.**
2. When washing the whole scale, apply clean water and then wipe it with a dry clean cloth. Do not apply seawater, dirty water and water including impurity, all of which can be cause of trouble.
3. If the scale becomes dirty, wipe it with a soft cloth. Do not use a scourer, scrub brush and so on.
4. When washing the whole scale with a neutral detergent, apply a little neutral detergent to a sponge and wipe them. Make sure to rinse them in clean water and wipe it thoroughly with a dry cloth.
5. When disinfecting the complete scale with alcohol, apply solution whose alcohol concentration is 80% or below. Rinse the plastic part and front mask in clean water.
- 6. Do not loosen any screws.** Do not disassemble or modify the scale.
If you disassemble it by mistake, make sure to contact your dealer.
7. Do not drop the scale or hit against something hard such as a table.
8. Do not open the battery lid in an extremely dust, sandy, or messy environment. Any adhesive on the sealing packing may effect on the water-proof feature.
9. After replacing batteries, fasten the battery lid tightly. (Refer to page 8: How to set batteries)
10. Do not press the parts of the display, key switches and gasket with your fingernail or edged tools.
11. After operation, store the scale in a place where it is dry and it's temperature doesn't change.

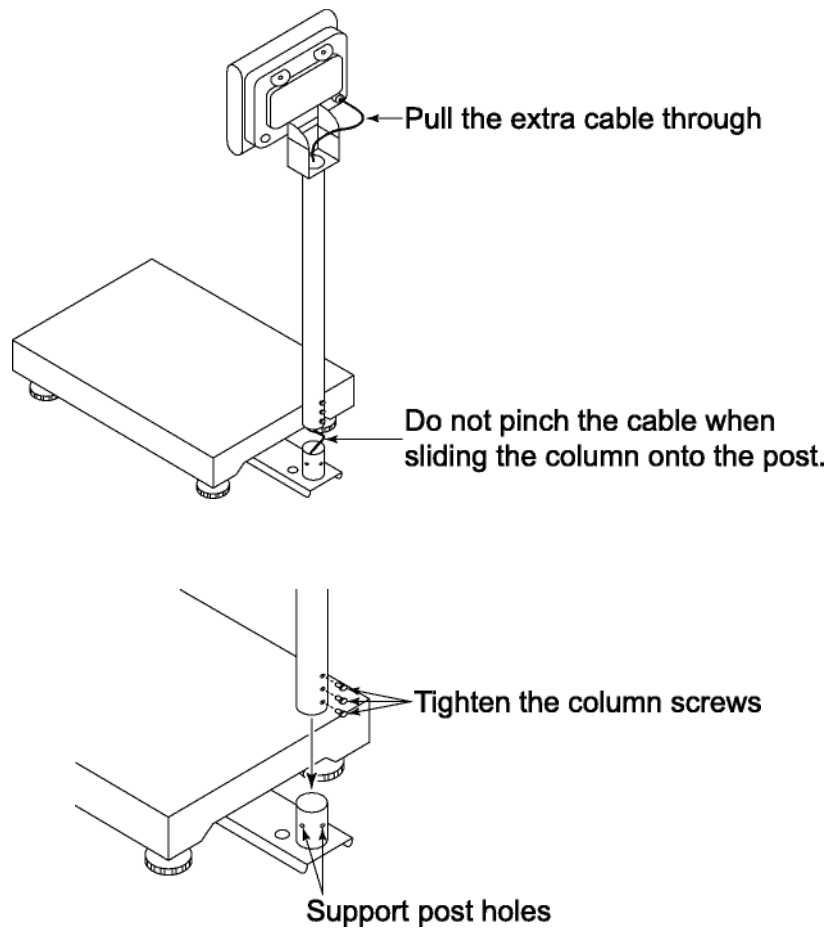
Chapter 2 PREPERATION BEFORE USE

2-1. Installation 1 (How to assemble the scale)

How to assemble the scale

⚠ Caution

Inserting the pole into the pole bracket, extending a slack in the cable and taking care not to damage the cable.



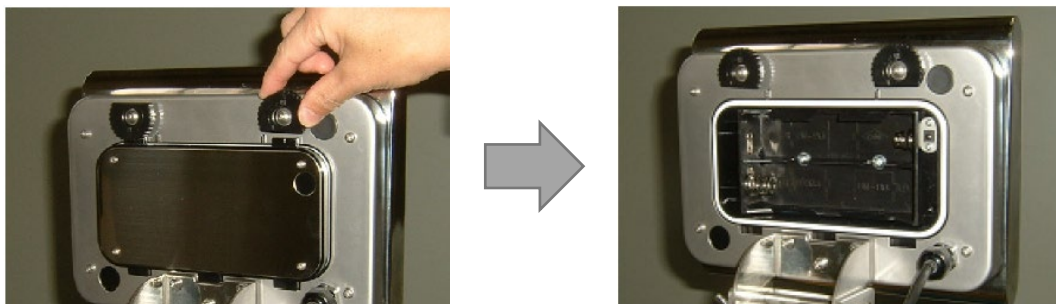
Procedures

1. Insert the pole into the pole bracket.
2. Set a screw at the center hole and fasten it.
3. Fasten other screws (at both ends).

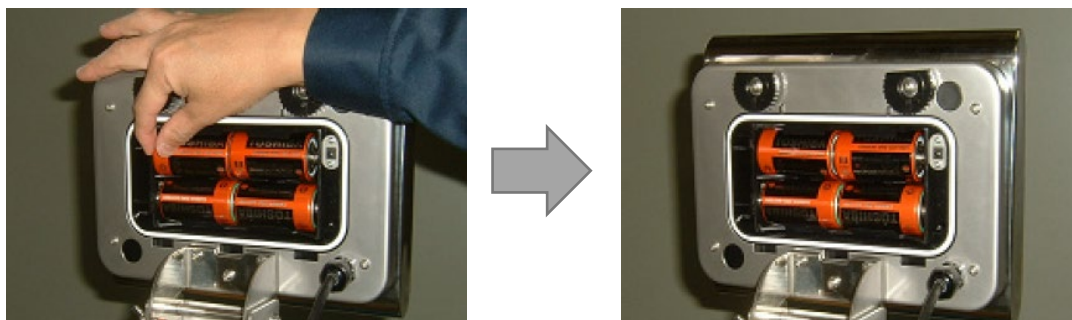
2-2. Installation 2 (How to set the batteries and optional AC Adaptor)

How to set the batteries

1. Turn both tabs on the back of the indicator counter-clockwise (180 degrees) and remove the battery lid. When there is water drops around the back of the indicator, wipe the indicator down thoroughly with a dry cloth.



2. Install 4 x UM-1 batteries in the battery box. Replace all 4 batteries with all new ones at once. Do not use alkaline batteries and manganese batteries in mixing.



3. Restore the battery lid and fix it by turning clockwise (180 degrees) firmly. To avoid leakage problems. remove batteries when the equipment is left unused for a long time (about 1 month or longer) or when it is operated with the AC adaptor.



Note: Make sure that both tabs are hanging firmly, or its waterproof cannot be kept and the scale is damaged.

Note: The waterproof is not effective when using the AC adaptor.

Use a dedicated AC adaptor:

It would be cause of trouble if you apply a different one.

Insert firmly into the AC jack through a hole on the battery lid.

To avoid leakage problem, remove batteries when the scale is being operated by the AC adaptor.



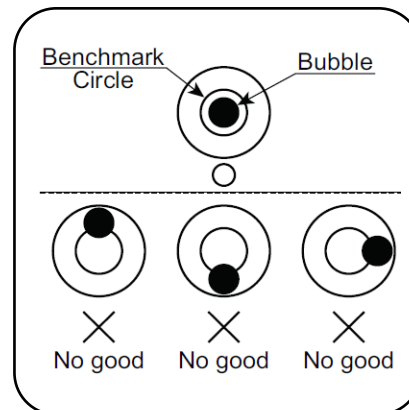
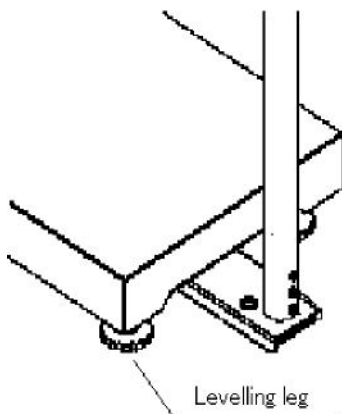
2-3. Place the scale

Make sure that the scale is placed on a leveled surface, or a correct measurement cannot be attained.

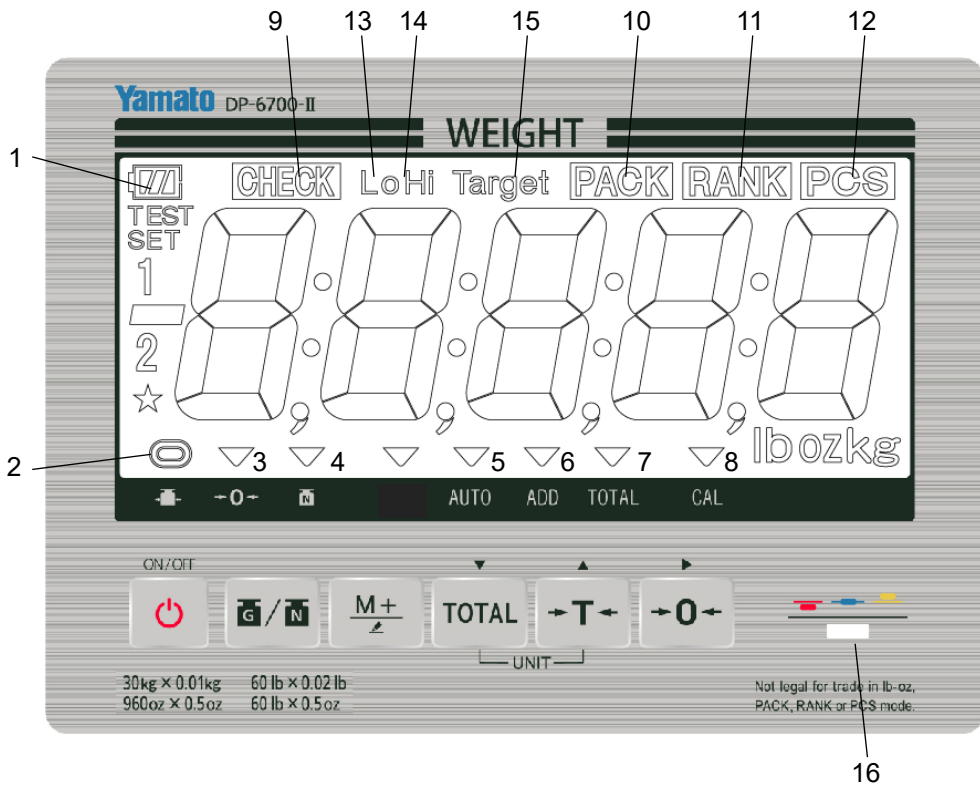
Make sure that the scale is not shaky, which also results in an incorrect measurement.

Do not place the scale on an inclined surface (if the inclination is beyond the adjustable range by the leveler.)

The bottom of the scale is equipped with 4 leveling legs with which the scale is adjusted to be on the level. Turn the leveling legs until the bubble locates at the center of the benchmark circle. It is recommended that the adjustment should be conducted on a flat surface. Make sure that all the 4 legs equally touch the floor.



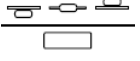
2-4. Display and Keyboard



Signs without numbers in the figure are not used on this scale.



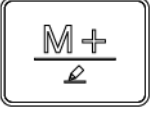

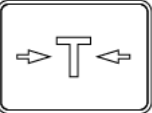
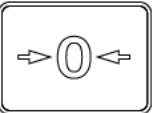
Sign Part

1.		Battery level indicator	The battery remaining capacity is shown by 3 levels when they are consumed.
2.		STABLE indicator	Illuminates when the scale display is stable.
3.		Zero Point sign	Displayed when near the zero point.
4.		NET sign	Lights when the net amount is displayed.
5.		Auto sign (Automatic addition / sending)	Lights when the addition function is set to add automatically.
6.		In Addition Sign	With the addition function, it lights up when the scale memorizes the total data.
7.		Total sign (Displaying total)	With the addition function, it lights when the total data is displayed and being checked.
8.		CAL Indicator	Shows scale is not sealed for legal for trade operation. <u>When the CAL sign is lit or blinking, it cannot be used for proof of transaction.</u>
9.		CHECK indicator	It is used with check weighing function and subtractive check weighing function, Rank selection combination function
10.		PACK indicator	It is used with fixed weighing function, subtractive check weighing function, Rank selection combination function. <u>When the PACK sign is lit or blinking, it cannot be used for proof of transaction.</u>
11.		RANK indicator	It is used with grading function. <u>When the RANK sign is lit or blinking, it cannot be used for proof of transaction.</u>



12.	PCS	PCS indicator	It is used in the counting function. <u>When the PCS sign is lit or blinking, it cannot be used for proof of transaction.</u>
13.	Lo	Low Sign	Lights when the lower limit is set with the check weighing function.
14.	Hi	High Sign	Lights when the acceptable value for the fixed weighing function and the upper limit value for the check weighing function are set.
15.	Target	Target Sign	Lights when the target value is set in the fixed weighing function.
16.		3 Color LED	It is mainly used in Multifunction, and the color changes according to the judgment of Under weight, Acceptable amount, Over weight, rank selection result, etc.

When any of the 11.12.13. Signs are lit or blinking the displayed value cannot be used for transaction proof.

Key Part



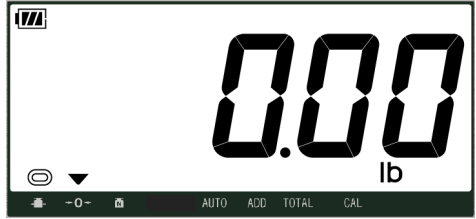
<p>ON/OFF</p> 	<p>Power ON/OFF key</p> <ul style="list-style-type: none"> ● When the power is turned off, press this key to turn on the power. ● To turn off the power, hold down this key until the display goes out.
	<p>Net/Gross key</p> <ul style="list-style-type: none"> ● Press to toggle between net and gross weight reading if a tare is entered.
	<p>Addition / setting key</p> <ul style="list-style-type: none"> ● Addition and sending of weighing data (one-touch tare) ● When setting, the value is incremented by 1.
<p>▽</p> 	<p>Total key</p> <ul style="list-style-type: none"> ● Press to display the total weight, or to decrement a digit. Press the Total and Tare keys simultaneously to toggle the units.
<p>△</p> 	<p>Tare key</p> <ul style="list-style-type: none"> ● Press this key to show the weight of a container as zero. Then the system subtracts the weight as tare. (P.18 : How to perform the one-touch TARE) ● When setting, it is used to increment the number.
<p>▷</p> 	<p>Zero reset key</p> <ul style="list-style-type: none"> ● If the indication is deviated from zero before weight measurement, press this key to reset it to zero. (P.17 : How reset the indication to ZERO) If it exceeds ± 1.9% of the capacity, the zero point cannot be reset. ● When setting, it is used to move numerical digits and setting items

Changing Units


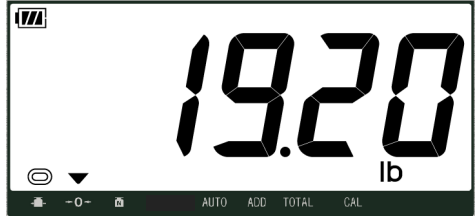
To switch between kilogram, pound, ounce and pound/ounce units; press the  and  keys at the same time. (lb/oz unit is not legal-for-trade unit.)

Chapter 3 BASIC OPERATIONS


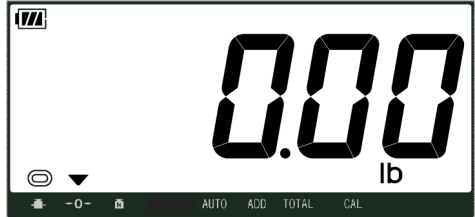
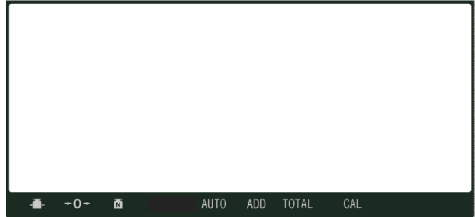
3-1. How to turn ON the power

	Operation	Display
1.	Press  to turn on the scale. All displays will start blinking.	
2.	The display shows zero after all the indicators blinks.	




3-2. How to weigh an item

	Operation	Display
1.	Place the item(s) on the pan. The display shows the weight of the item. (e.g. 19.2 lb) The stable indicator is lit when the weight becomes stable.	 ↓ 

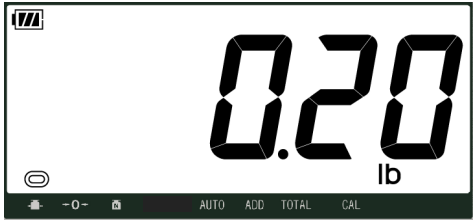

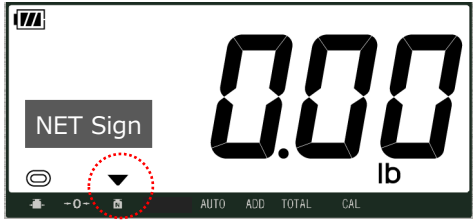

3-3. How to turn OFF the power

	Operation	Display
1.	To turn off the scale, keep pressing  .	 <p style="text-align: center;">↓</p> 

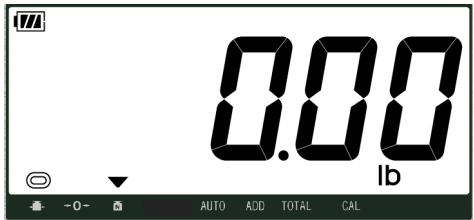


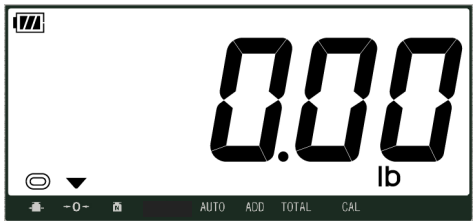
3-4. How reset the indication to ZERO

	Operation	Display
1.	When zero does not appear since the zero point is not correctly recognized: Press  after the scale indicator is lit. Zero appears on the display. At this time, the center zero indicator lights up.	 <p style="text-align: center;">↓</p> 
If it exceeds $\pm 1.9\%$ of the capacity, the zero point cannot be reset.		

3-5. How to perform the one-touch TARE

	Operation	Display
1.	Place an empty container on the pan. The weight of the container is shown on the display.	 <p>The display shows 0.20 lb. The unit 'lb' is at the bottom right. The bottom status bar contains icons for a scale, a zero, a container, and labels for AUTO, ADD, TOTAL, and CAL.</p>
2.	Press  after the stable indicator is lit. The net indicator is lit and the display shows zero. At this time, the net indicator lights up.	 <p>The display shows 0.00 lb. A 'NET Sign' box is on the left, and a downward arrow icon is lit below the display. The bottom status bar is the same as in the previous step.</p>
3.	Start of weighing. Place the item(s) in the container on the pan. The display shows the net weight of the item	 <p>The display shows 1.150 lb. The unit 'lb' is at the bottom right. The bottom status bar is the same as in the previous steps.</p>

3-6. How to perform the cancellation of TARE

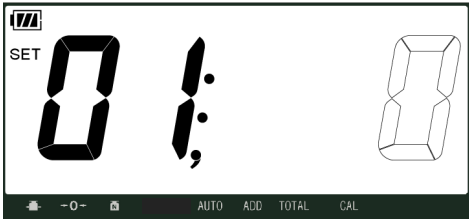
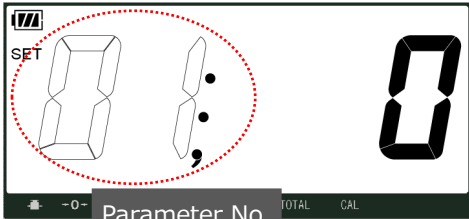
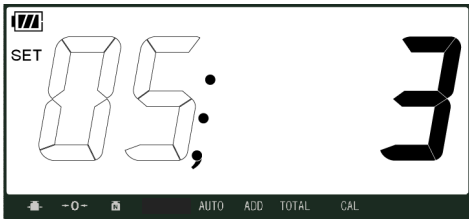
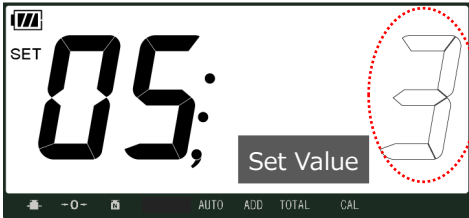
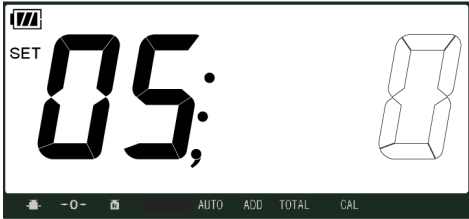
	Operation	Display
1.	Remove the container from the pan. The display shows the weight of the container as a negative number.	 <p>The display shows 0.00 lb. The unit 'lb' is at the bottom right. The bottom status bar contains icons for a scale, a zero, a container, and labels for AUTO, ADD, TOTAL, and CAL.</p> <p style="text-align: center;">↓</p>  <p>The display shows -0.20 lb. A minus sign is to the left of the digits. The unit 'lb' is at the bottom right. The bottom status bar is the same as in the previous step.</p>
2.	Press  after the stable indicator is lit. The net indicator goes out and the display shows zero.	 <p>The display shows 0.00 lb. The unit 'lb' is at the bottom right. The bottom status bar contains icons for a scale, a zero, a container, and labels for AUTO, ADD, TOTAL, and CAL.</p>




Chapter 4 PARAMETER

For DP-6700-II, the settings of this scale can be changed according to the usage environment of the customer.


4-1. How to change USER PARAMETER

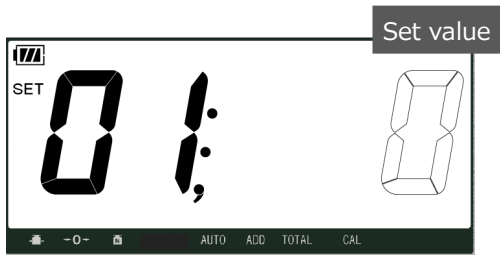
As an example, we will explain how to change the setting value of "User parameter # 05: Auto-off time" from "3:15 minutes" to "0: Do not auto-off".


	Opertation	Display
1.	Press and hold and push to enter the parameter setting mode.	
2.	Press . The parameter number blinks.	
3.	If is pressed the next parameter number, if is pressed then the previous parameter number. Move to your desired parameter number.	
4.	Press . Setting value blinks.	
5.	Press to increment the set value by +1. Or press to decrement the set value by -1. Change to your desired number.	
6.	After changing the setting value, if you press or the setting will be fixed. <u>If you do not do this, the changed settings will not be applied.</u>	

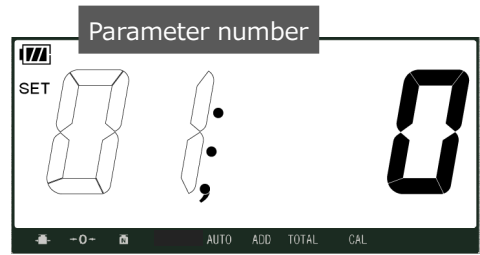
	Opertation	Display
7.	Press  , when all settings have been changed. Restart the scale and return to the weight display.	 




Key operation in user parameter mode




 : Restart the scale and return to normal weighing mode (unconfirmed setting value changes will not be applied)



←  →
 (Confirming Set Value)





- Change the setting value**
-  : -1: Decrement the set value by -1
 -  : +1: Increment the set value by +1
 -  : Confirm the set value and move to the next parameter number

- Parameter number selection**
-  : Move to the previous number
 -  : Move to the next number
 -  : Switch to change the set value

4-2. USER PARAMETER LIST

#	Description	Value	Details
#01	Multi-Function	0: 1: 2: 3: 4: 5:	Suspend Functions Fixed Weighing Check Weighing Grading Counting Subtractive Check Weighing Function
#03	Buzzer (option)	0: 1: 2: 3: 4:	No sound Beep at underweight Beep at acceptable weight Beep at overweight Beep at under & over weight
#04	Rank judgment	0: 1:	Update judgment display in real time Update judgment display only when stable

Chapter 4 PARAMETER


#	Description	Value	Details
#05	Automatic power OFF time (When in battery operation)	0: 1: 2: 3: 4: 5:	No Auto power off 5 minutes after no use 10 minutes after no use 15 minutes after no use 30 minutes after no use 60 minutes after no use
#07	Blinking of weight display	0: 1: 2: 3: 4: 5:	No blinking Blinks at underweight (Blinks when grading is stable) Blinks at acceptable weight (Blinks when grading is stable) Blinks at overweight (Blinks when grading is stable) Blinks at under & over weight (Blinks when grading is stable) Blinks with the parameter #03 settings. (Blinks when grading is stable)
#08	Switching weighing	0: 1:	Additive grading (Judgment by net amount) Subtractive grading (Judgment is made for the weight loaded and unloaded. Addition / communication is only when unloaded)
#10	Scale ID	0 ~ 99:	ID for scale identification during communication
#11	Addition and Send timing	0: 1: 2: 3: 4: 5: 6:	Not to use Addition and Send function Automatic sending (Send at stability) Automatic sending when item is removed (Send at stability) Manual sending (Send with  key) Automatic sending (Send when stable in Acceptable range) Manual sending (When it is stable in the Acceptable range, press ) Continuous sending
#12	Communication only	0: 1:	Perform both addition and communication Only communication is performed without addition
#13	Communication device	0: 1: 2: 3: 4: 5: 6: 7:	Bluetooth (Yamato standard protocol) Not Available RS232C (Yamato standard protocol) Not Available Bluetooth wireless printer (for designated model) Not to use the serial communication function Not Available Not Available
#14	Send contents	0: 1: 2:	Net weight Net weight, Tare weight, Gross weight Net weight, Tare weight
#15	Baud rate	0: 1: 2: 3: 4: 5: 6: 7:	9600bps 2400bps 4800bps 9600bps 19200bps 38400bps 57600bps 115200bps
#16	Character length	0: 1:	8 bit 7 bit
#17	Parity	0: 1: 2:	Non Odd Even
#18	Stop bit length	0: 1:	1 bit 2 bit

#	Description	Value	Details
#19	Print only total	0: 1:	Also outputs at every weighing Output only the total, not every weighing
#21	Bluetooth Printer Model	0: 1:	Not available Japan only Brother / RJ3050Ai
#22	Print font size	0: 1: 2:	Standard size About 1.5 times the standard size About twice the standard size
#23	During addition / communication [SEnd] display time	0: 1 ~ 15:	No [Send] display 0.1 ~ 1.5 sec.: Display [Send] for a specified second when sending data
#24	Unit at power on *Valid at #41 = 002	0: 1: 2: 3:	kg(g) lb oz lb oz
#25	LED brightness	0: 1: 2: 3:	brightness 25% brightness 50% brightness 75% brightness 100%
#26	Date and time data sending Bluetooth Printer	0: 1:	Not include date and time data Including date and time data (related #29)
#27	Set value data sending Bluetooth Printer	0: 1:	Not include function setting value data Include function setting value data
#28	Paper feed amount each time Bluetooth Printer	0: 1 ~ 15:	None Standard space + Skip a specified line
#29	Wireless printer print characters Bluetooth printer	0: 1: 2:	<u>Japanese</u> English (GBR) English (USA)
#30	Zero addition / sending	0: 1:	Addition / sending at zero is not possible Addition / transmission is possible even at zero point
#31	Not Available		Not Available
#36	Value indication time for subtractive Checkweighing	0: 1 ~ 30:	No delay Delay 0.1 to 3.0 seconds
#B2	Language of counting display unit	0: 1:	Japanese (0000 □) English (0000P)
#L3	Buzzer sounding length for limit judgment (Linked to #03)	0: 1:	Sounds a buzzer in a single shot when it changes from unstable to stable Sounds the buzzer continuously when it is within the range
#L4	LED lighting method (Additional checkweighing function)	0: 1:	Always lights above the minimum measurement amount Lights only when stable above the minimum measured amount
#L8	Tare reminder function	0: 1:	Tare reminder function OFF Tare reminder function ON (When the tare amount is 0, transmission and addition are not possible)

Chapter 5 VARIOUS FUNCTIONS

5-1. Automatic power OFF time

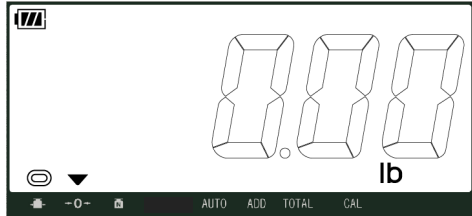
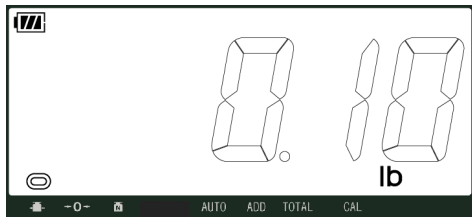


This function automatically turns off the power of the scale when the scale is not operated for a certain period.

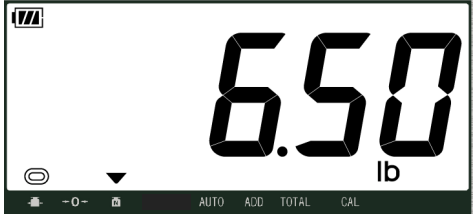



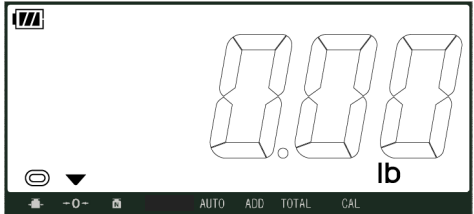
	Operation	Display
1.	<p>The factory default auto-off time is set to "15 minutes". It can be changed by the setting value of user parameter: #05.</p> <p>When the AC adaptor is connected, auto off is disabled regardless of the set value.</p>	<p>After a certain period has passed since the stable sign is lit.</p> 

5-2. Tare reminder function

This function prevents you from forgetting to operate the tare. When not tared, the weight value blinks to warn, and when the communication option is enabled, the manual sending operation is not accepted. Please use it when you want to surely perform the tare operation manually.

As the default, the tare reminder function is disabled. It can be enabled by changing the setting value of user parameter # L8 to "1". (P.19: How to change USER PARAMETER)

	Operation	Display
1.	When the Tare reminder function is enabled, the display blinks when you did not tare.	
2.	Place the container (tare) on the scale	
3.	<p>check that the stability sign is lit, then press  to tare.</p> <p>When the display changes to the net amount display, the display stops blinking.</p>	

	Operation	Display
4.	When the item is placed on the scale, the net amount (weight of the item minus the weight of the container) is displayed.	 <p>The display shows a large digital readout of '6.50' with 'lb' below it. At the bottom, there are icons for a scale pan, a zero button, and a unit selector arrow, followed by the text 'AUTO ADD TOTAL CAL'.</p>
5.	<p>When the tare is cleared, the display will start blinking again.</p> <div data-bbox="220 506 935 678" style="border: 1px solid black; padding: 5px;"> <p>If you perform a manual addition operation without tare, [INF07] will be displayed.</p> <p>Press  or  to cancel.</p> </div>  <p>The display shows the error code 'INF07' in a large, bold font.</p>	 <p>The display shows three zeros '0.00' with 'lb' below it. At the bottom, there are icons for a scale pan, a zero button, and a unit selector arrow, followed by the text 'AUTO ADD TOTAL CAL'.</p>

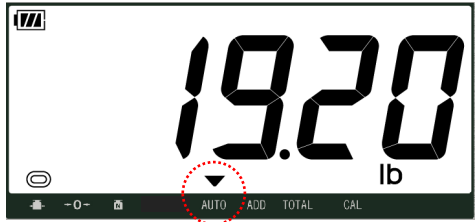

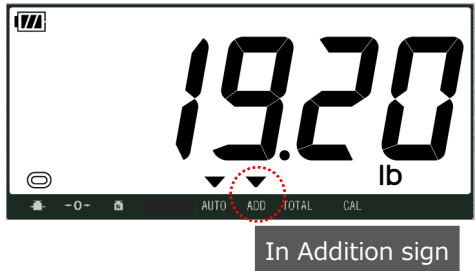
Chapter 6 ADDITION FUNCTION

The DP-6700-II series can memorize the total weight of the weighed items. This chapter describes operations such as adding the weighing result to the total value and displaying and checking the total value.

- You can also use the addition function in the multi-function (see Chapter 7) mode. However, the operation of the addition function may differ from the normal weighing mode, so check the operating instructions for the multifunction to be used.




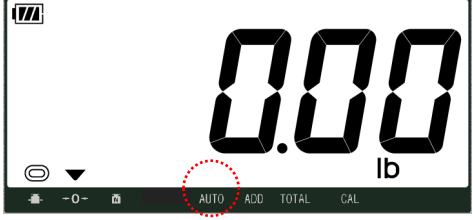
6-1. How to add

The operation of the addition function differs depending on the setting value of user parameter # 11. Please refer to "Chapter 4 User Parameters" and change the setting value to suit your work. In normal weighing mode, do the following:

	Operation	Display										
1.	<p>Place the item on the scale.</p> <p>The addition operation differs depending on the setting value of user parameter # 11. If the net amount is less than 20 divisions (less than 4 divisions for non-legal use products), it will not be added.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th style="width: 10%;">#11 Set Val.</th> <th style="width: 90%;">Addition function operation (normal weighing mode)</th> </tr> <tr> <td style="text-align: center;">0, 6</td> <td>The addition function is disabled.</td> </tr> <tr> <td style="text-align: center;">1, 4</td> <td>When the item is placed and the scale is stable, it will be added automatically.</td> </tr> <tr> <td style="text-align: center;">2</td> <td>When the item is placed and the scale is stable, it will be added when all the items are unloaded. You can leave the container (tare) on.</td> </tr> <tr> <td style="text-align: center;">3, 5</td> <td>When the item is placed and the scale is stable, press and it will add.</td> </tr> </table>	#11 Set Val.	Addition function operation (normal weighing mode)	0, 6	The addition function is disabled.	1, 4	When the item is placed and the scale is stable, it will be added automatically.	2	When the item is placed and the scale is stable, it will be added when all the items are unloaded. You can leave the container (tare) on.	3, 5	When the item is placed and the scale is stable, press and it will add.	<div style="text-align: center;">  </div> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; margin-top: 10px; width: fit-content; margin-left: auto; margin-right: auto;"> <p>When the it is set to add automatically, the automatic sign lights up.</p> </div>
#11 Set Val.	Addition function operation (normal weighing mode)											
0, 6	The addition function is disabled.											
1, 4	When the item is placed and the scale is stable, it will be added automatically.											
2	When the item is placed and the scale is stable, it will be added when all the items are unloaded. You can leave the container (tare) on.											
3, 5	When the item is placed and the scale is stable, press and it will add.											
2.	<p>When the addition operation is performed, "SEnd" is displayed.</p> <p>The display time can be changed by user parameter # 23.</p>	<div style="text-align: center;">  </div>										
3.	<p>While the scale memorizes the total value added, the adding sign lights up.</p>	<div style="text-align: center;">  </div>										



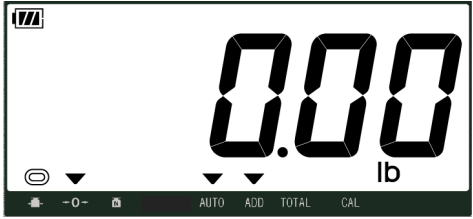

6-2. Switching between manual addition and automatic addition

Manual addition and automatic addition can be switched by key operation.

	Operation	Display
1.	<p>While pressing , press .</p> <p>Manual addition and automatic addition are switched.</p> <p>At the time of automatic addition, the automatic sign lights up.</p> <p>During manual addition, the automatic sign turns off.</p>	<p>Display</p>  <p>Auto Addition</p> <p>↑↓</p>  <p>Manual Addition</p>

6-3. Canceling Addition

You can cancel the addition operation performed just before by key the operation.

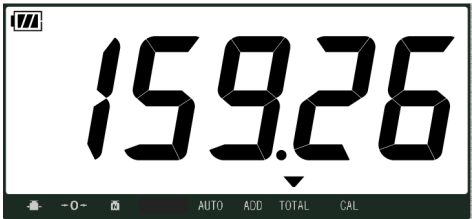
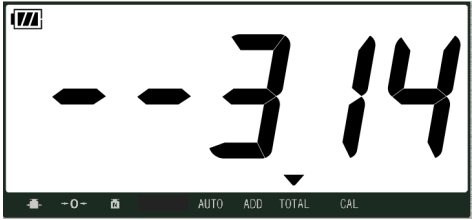
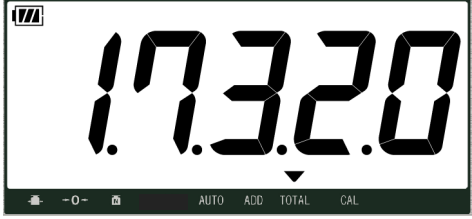
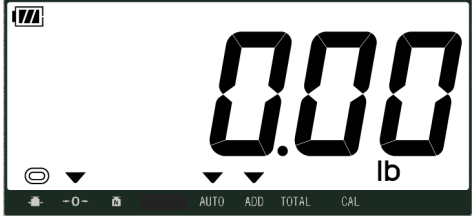
	Operation	Display
1.	<p>When displaying the weight, while pressing , press .</p>	
2.	<p>"SEnd" is displayed and the previous addition is cancelled. After that, it automatically returns to the weight display.</p> <div style="border: 1px solid gray; padding: 5px; background-color: #f0f0f0;"> <p>Only the last one can be canceled. Records before the last that cannot be.</p> </div>	

6-4. Confirmation of total weight and number of additions

You can display and check the total mass of the added items.

The maximum total mass that can be added is 8 digits (99,999,999), and the maximum total number of times is 5 digits (99,999 times).

Example) Total mass is 314159.26 lb, total number of times is 17,320 times

Operation		Display
1.	With the weight displayed, press and hold TOTAL for at least 1 second. Displays the last 5 digits of the total weight.	 <p>Total Display : Last 5 digits</p>
2.	Press TOTAL , it will display the first 3 digits of the total weight.	 <p>Total Display : First 3 digits</p>
3.	Press TOTAL , the total number of times (the number of times of addition) is displayed.	
4.	Press TOTAL , it will return to the weight mode.	

6-5. Sending measurement data (when communication is connected)

If you are using the communication option, the weighing data will be sent at the same time as the addition.

If you want to send only the measurement data without adding, change the setting value of user parameter # 12.

- User parameter #12 : Only for communication
 - 0 : At the timing of addition, data is sent together with the addition.
 - 1 : At the timing of addition, only data transmission is done without addition.

6-6. Sending total data (when communication option is connected)

If you are doing both add and send data, you can send total data.

	Operation	Display
1.	With the weight displayed, press and hold  for at least 1 second.	
2.	When the total data is sent, "SEnd" is displayed.	
3.	The total data will be reset and the adding sign will turn off.	

6-7. Resetting total data

The total data will be reset when you do the following:


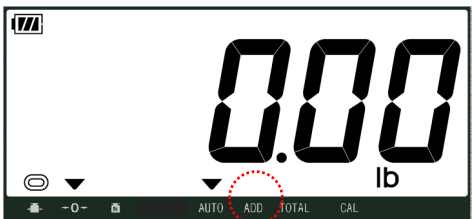
When the power of the scale is turned off

When weighing after switching between normal weighing mode and multifunction

When weighing by changing the item number of the multifunction

When total data is sent (when communication option is connected)

When reset by key operation (see the figure below)

	Operation	Display
1.	With the weight displayed, press and hold  for at least 1 second. The total data will be reset and the adding sign will turn off.	

Chapter 7 MULTI-FUNCTION

Yamato's unique features that support efficient and accurate weighing operations.

Please understand the features of each function and utilize them effectively according to the work method.

7-1. Fixed weighing function

Application	Fixed amount packing work
How to weigh	Store the target weight of the items on the scale and display the target weight with a negative number. e.g.) "-40 lb" is displayed when the target weight is 100 lb and the net weight is 60 lb.
Advantages	<ul style="list-style-type: none"> ● Insufficient weight of the item becomes clear at a glance, preventing work mistakes. ● You can manage the measurement by using the yield display on the sub display.
Stored value	<ul style="list-style-type: none"> ● Target weight ● Allowable weight
Display content: Main display	(Net weight) – (Target weight)
Registered item No.	Max. 99 items The set value is shared with the Check weighing function and subtractive check weighing function.

Setting Example;

Underweight	Acceptable weight	Overweight
≤ 4 division	3.00 lb Target weight ← 0.05 lb Allowable weight → 3.05 lb	Capacity [lb]

7-1.1 PRE-SETTING: Fixed weighing function

This is a list of user parameters related to this function.


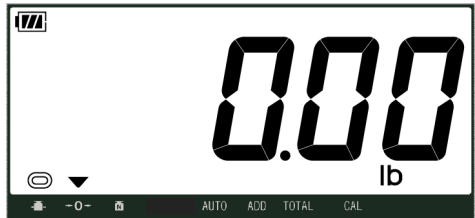








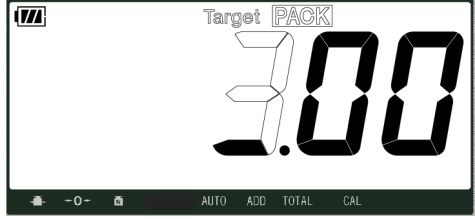







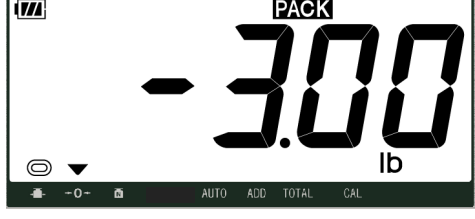
Refer to Chapter 4 User parameter and set in advance.

- #01: Multi-Function
Set 1: Fixed weighing
- 03: Buzzer
The buzzer can be sounded when judging whether it is Underweight, Acceptable weight, or Overweight.
- #07: Blinking of weight display
The display can blink when judging whether it is Underweight, Acceptable weight, or Overweight.
- #11: Addition and Send timing
You can select the timing for adding and sending weighing data.
- #L3 : Buzzer sounding length for limit judgment
You can select whether to keep the buzzer sounding at the timing set in #03.
- #L4 : LED lighting method
You can change the lighting method of the Underweight, Acceptable weight, and Overweight judgment LED.


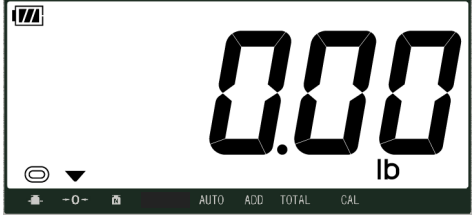






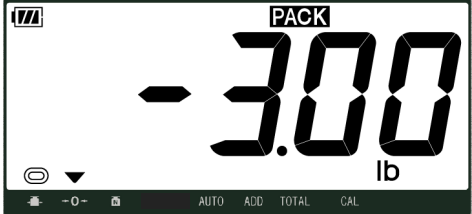
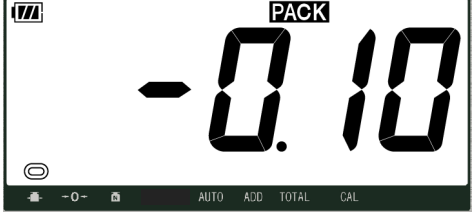
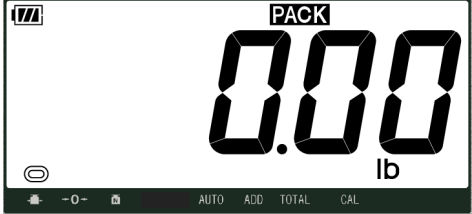
7-1.2 SETUP: Fixed weighing function

The registered data of each item are stored even if the scale is turned off.

e.g.) Item No. 03 at (Target weight) 3 lb and allowable weight 0.05 lb (Acceptable range 3 to 3.05 lb)

	Operation	Display
1.	Confirm the pan is empty, and then press  . The display changes to select the item number.	
2.	Select the item number. If the selected product type has already been set, the LED will light blue, and if not set, the LED will light red.  : Increment item number  : Decrement item number Press  to proceed to target weight setting.	
3.	Set the target weight.  : Changes the digit  : Select digit +1  : Select digit -1 Press  to proceed to allowable weight setting.	
4.	Set the allowable weight value.  : Changes the digit  : Select digit +1  : Select digit -1 Press  to save the target weight and the allowable weight.	
5.	The Fixed weighing is ready. Confirm the pan is empty, you can do the following.  : Return to the select the item number  : Return to normal weighing mode	

7-1.3 OPERATION: Fixed weighing function

	Operation	Display
1.	When the weight is displayed, press  without placing anything on the scale to change to the screen for selecting the item number.	
2.	Choose the item number. If the selected product type has already been set, the LED will light blue, and if not set, the LED will light red.  : Increment item number  : Decrement item number Press  to start the Fixed weighing	
3.	The display shows the weight up to the target value as a minus. Place the items on the pan until the display shows "0". <u>The lighting color of the LED changes according to the weight.</u> [Red: Blinking] Far less than the lower limit [Red: Lighting] Less than the lower limit [Blue: Lighting] Acceptable weight [Yellow: Lighting] More than the upper limit [Yellow: Blinking] Much above the upper limit It will not light if the amount is less than 4 divisions. Confirm the pan is empty, you can do the following.  : Return to the select the item number  : Return to normal weighing mode	 <p style="text-align: center;">↓</p>  <p style="text-align: center;">0.1 lb more</p> <p style="text-align: center;">↓</p> 

7-2. Check weighing function

Application	Checking work / quantity filling work
How to weigh	Set the upper and lower limit weights, and judge the item weight to Underweight, Acceptable weight, and Overweight.
Advantages	<ul style="list-style-type: none"> You can easily determine if an item is Acceptable.
Stored value	<ul style="list-style-type: none"> Lower limit weight Upper limit weight
Display content: Main display	Net weight
Registered item No.	Max. 99 items The set value is shared with the Fixed weighing function and subtractive check weighing function.

Setting Example;

	Underweight	Acceptable weight	Overweight
\leq 20division	1.20 lb Lower limit	1.30 lb Upper limit	Capacity [lb]

7-1.4 PRE-SETTING: Check weighing function

This is a list of user parameters related to this function.

Refer to Chapter 4 User parameter and set in advance.

- #01: Multi-Function
 - Set 2: Check weighing**
- #03: Buzzer

The buzzer can be sounded when judging whether it is Underweight, Acceptable weight, or Overweight.
- #07: Blinking of weight display

The display can blink when judging whether it is Underweight, Acceptable weight, or Overweight.
- #11: Addition and Send timing

You can select the timing for adding and sending weighing data.
- #L3 Buzzer sounding length for limit judgment


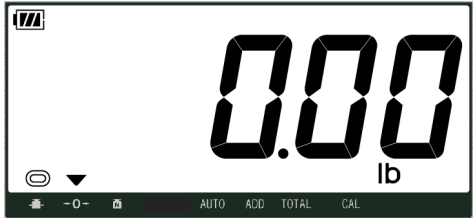








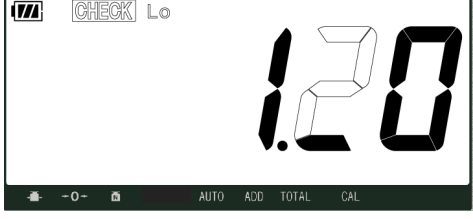




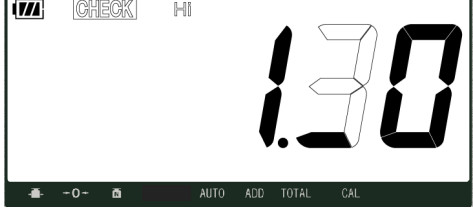



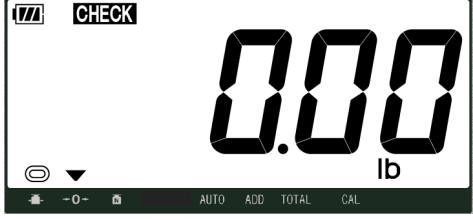
You can select whether to keep the buzzer sounding at the timing set in #03.
- #L4: LED lighting method

You can change the lighting method of the Underweight, Acceptable weight, and Overweight judgment LED.


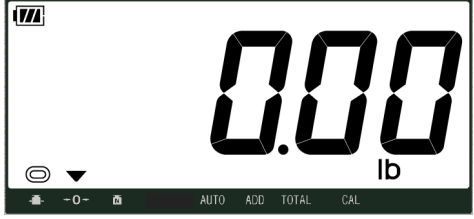






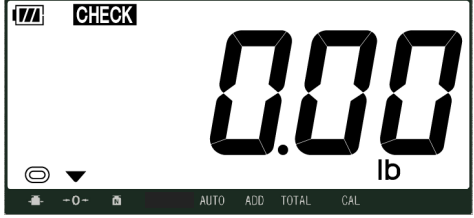
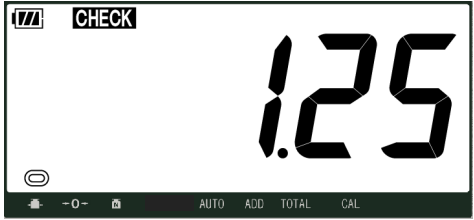
7-1.5 SETUP: Check weighing function

The registered data of each item are stored even if the scale is turned off.

e.g.) Item No. 06, lower limit weight 1.2 lb and upper limit weight 1.3 lb.

	Operation	Display
1.	Confirm the pan is empty, and then press  The display changes to select the item number.	
2.	Choose the item number. If the selected product type has already been set, the LED will light blue, and if not set, the LED will light red.  : Increment item number  : Decrement item number Press  to proceed to lower limit weight setting.	
3.	Set the lower limit weight.  : changes the digit  : Select digit +1  : Select digit -1 Press  to proceed to upper limit weight setting.	
4.	Set the upper limit weight.  : changes the digit  : Select digit +1  : Select digit -1 Press  to save the lower and upper limit weight. <div style="border: 1px solid black; padding: 5px; width: fit-content;"> If you try to set the upper limit to a value smaller than the lower limit, [FAULT] is displayed and you cannot proceed to the next setting. Please enter the upper limit again. </div>	 
5.	The Check weighing is ready. Confirm the pan is empty, you can do the following.  : Return to the select the item number  : Return to normal weighing mode	

7-1.6 OPERATION: Check weighing function

	Operation	Display
1.	When the weight is displayed, press  without placing anything on the scale to change to the screen for selecting the item number.	
2.	Select the set item number. If the selected product type has already been set, the LED will light blue, and if not set, the LED will light red.  : Increment item number  : Decrement item number Press  to start the Check weighing.	
3.	When the item is placed on the pan, the weight is displayed. <u>The lighting color of the LED changes according to the weight.</u> [Red: Blinking] Far less than the lower limit [Red: Lighting] Less than the lower limit [Blue: Lighting] Acceptable weight [Yellow: Lighting] More than the upper limit [Yellow: Blinking] Much above the upper limit The LED does not light when the scale is less than 20 divisions. (less than 4 divisions for non-legal use model) Confirm the pan is empty, you can do the following.  : Return to the select the item number  : Return to normal weighing mode	 ↓ 

7-3. Grading function

How to weigh	Item sorting work (Not legal for trade use)
Advantages	The weight range corresponding to each rank is stored and graded on the set value.
Stored value	<ul style="list-style-type: none"> The rank of the item can be determined at a glance and work mistakes can be prevented. You don't have to remember the weight range for each rank.
Display content: Main display	<ul style="list-style-type: none"> Lower limit weight of each rank Lower limit weight outside the rank
How to weigh	Item number, Rank judgment result
Registered item No.	Max. 20 items (12 ranks per item)

Setting Example;

Under Outside	Rank 1	Rank 2	Rank 3	Over Outside	
≦ 3divisons	0.4 lb Lower limit of Rank1	0.5 lb Lower limit of Rank 2	0.6 lb Lower limit of Rank 3	0.7 lb Lower limit of Outside the Rank	[lb]

It is convenient to prepare a "setting sheet" before setting. The table below is an example of how to set 3 ranks. The values in are the setting values to be entered in the setting operations after P. 53

Setting sheet entry example;


	Rank No.	Weight rage		Check
Light ↑	1	<input type="text" value="0.4"/> lb above	0.5 lb less than	
	2	<input type="text" value="0.5"/> lb above	0.6 lb less than	
	3	<input type="text" value="0.6"/> lb above	0.7 lb less than	
	4	<input type="text" value="0.7"/> lb above	lb less than	

7-3-1 PRE-SETTING: Grading function

This is a list of user parameters related to this function.

Refer to Chapter 4 User parameter and set in advance.

- #01: Multi-Function
Set 3: Grading weighing
- #04: Rank judgment
You can change how the rank judgment result is displayed.
- #08: Switching weighing
You can select the Additive or Subtractive grading.
- #11: Addition and Send timing
You can select the timing for adding and sending weighing data.

- # 08 = 1 (subtractive rank selection)
 - 0 : Not to add / send (same for "3, 5, 6")
 - 1 : When an item is taken out, it is automatically added and sent when stable (the same applies to "2, 4").
- # 08 = 0 (additive rank selection)
 - 0 : Not to add / send (same for "6")
 - 1 : When stable, add / send automatically (same for "4")
 - 2 : When an item is taken out, it is automatically added and sent when stable (the same applies to "5").
 - 3 : When stable, press  and add / send.

7-1.7 SETUP: Grading function

The registered data of each item are stored even if the scale is turned off.

e.g.) Item No. 04, 3 ranks as shown below.


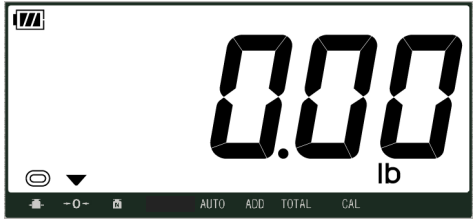









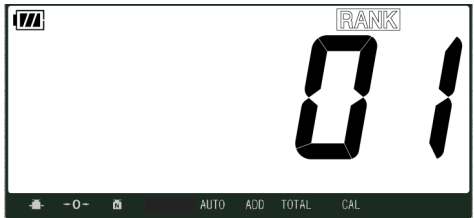

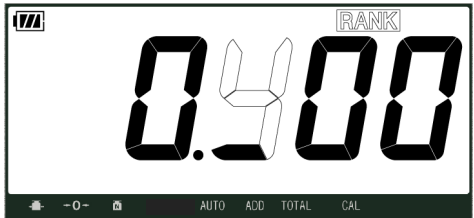
To rank in three, you need to enter a setting of four points.




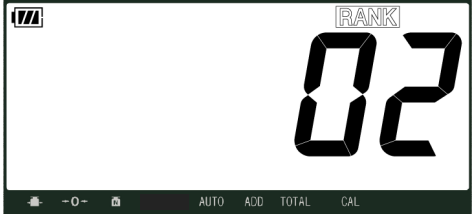

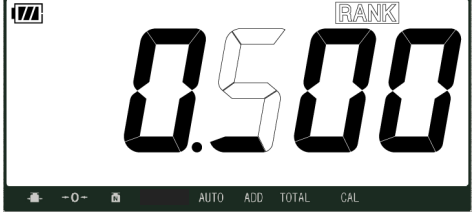


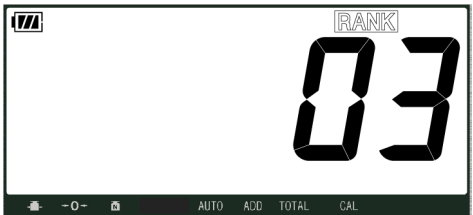

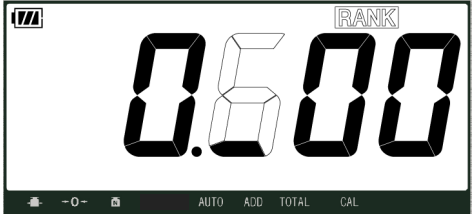


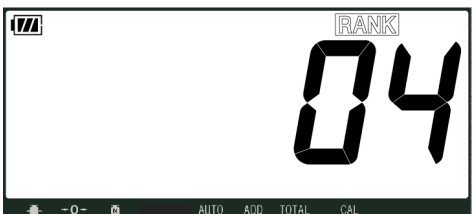

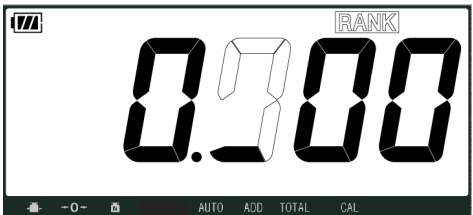
Rank1 above 0.4 lb less than 0.5 lb



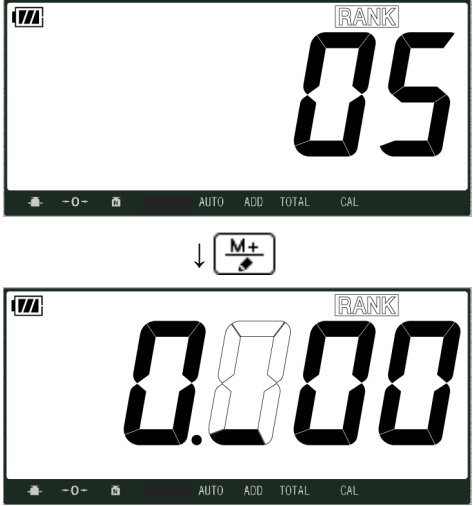


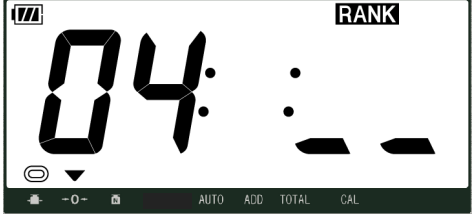
Rank2 above 0.5 lb less than 0.6 lb

Rank3 above 0.6 lb less than 0.7 lb


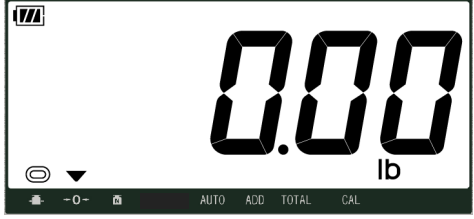



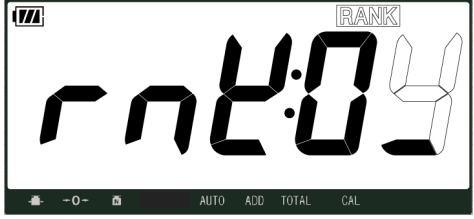
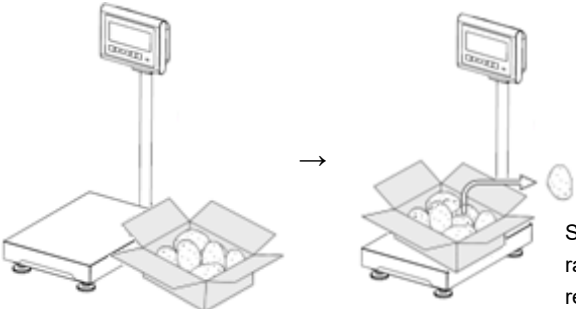
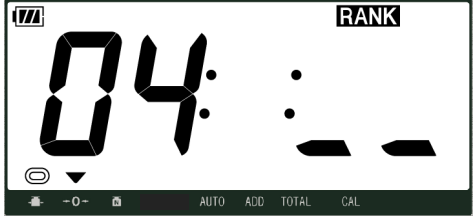
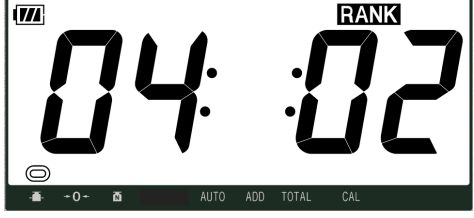

Outside the Rank = Rank4 above 0.7 lb (Set as the lower limit weight of Rank 4)



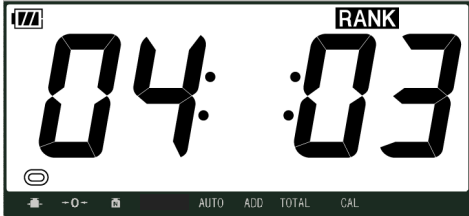
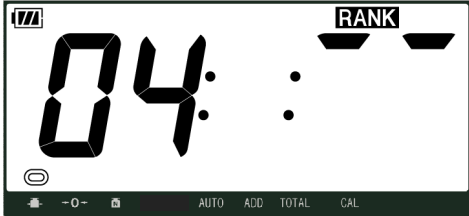
	Operation	Display
1.	Confirm the pan is empty, and then press  . The display changes to select the item number.	
2.	Choose the item number. If the selected product type has already been set, the LED will light blue, and if not set, the LED will light red.  : Increment item number  : Decrement item number Press  to proceed set the lower rank weight.	
3.	Press  when it displays "1". Enter the lower limit for rank 1.  : Changes the digit  : Select digit +1  : Select digit -1 <p><u>The setting division is smaller than the display division. Please be careful not to make a mistake in the digit.</u></p> Press  to proceed the next rank.	  

	Operation	Display
4.	<p>Press  when it displays “2”.</p> <p>As the rank 1, enter the lower limit for rank 2.</p> <p>Then press .</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>If you try to set a lower limit weight smaller than the previous rank, [FAULT] will be displayed and you will not be able to proceed. Please re-enter the lower rank weight.</p>  </div>	 <p style="text-align: center;">↓ </p> 
5.	<p>Press  when it displays “3”.</p> <p>As above, enter the lower limit for rank 3.</p> <p>Then press .</p>	 <p style="text-align: center;">↓ </p> 
6.	<p>Press  when it displays “4”.</p> <p>Set the lower limit of Outside the Rank as the lower limit weight of Rank 4.</p> <p>Then press  again.</p>	 <p style="text-align: center;">↓ </p> 

	Operation	Display
7.	<p>Press  when it displays “5”.</p> <p>Enter “0” for the lower limit of rank 5.</p> <p>After entering 0, press  to save the setting and start grading.</p>	
8.	<p>The Grading is ready.</p> <p>Confirm the pan is empty, you can do the following.</p> <p> : Return to the select the item number</p> <p> : Return to normal weighing mode</p>	

7-1.8 OPERATION: Grading function

	Operation	Display
1.	When the weight is displayed, press  without placing anything on the scale to change to the screen for selecting the item number.	
2.	Select the item number that has already been set. If the selected product type has already been set, the LED will light blue, and if not set, the LED will light red.  : Increment item number  : Decrement item number Press  to start the Grading	
3.	<p>Subtractive grading (User Parameter #08 = 1)</p> <p>Place the item together with the container on the scale, make sure that the scale is stable, and remove only one item. The rank is judged and displayed based on the weight of the removed item.</p>  <p>Show the rank of the removed item</p> <p>If only one item is reloaded on the scale, the rank of the reloaded item will be judged and displayed. You can reconfirm the rank of the removed item.</p>	 <p style="text-align: center;">↓</p> 
	<p>Additive grading (User parameter #08 = 0)</p> <p>When only one item is placed on the scale, the rank is judged and displayed based on the net amount of the item. (Tare if necessary)</p> 	

	Operation	Display																					
4.	<p>The LED color changes according to the judgment rank. If the amount is less than the minimum measurement amount (20 scales), the rank will not be judged.</p> <p>LED lighting</p> <table border="1" data-bbox="240 367 775 712"> <tbody> <tr> <td>Green</td> <td>Rank 1</td> <td>Rank 8</td> </tr> <tr> <td>Red</td> <td>Rank 2</td> <td>Rank 9</td> </tr> <tr> <td>Yellow</td> <td>Rank 3</td> <td>Rank 10</td> </tr> <tr> <td>Blue</td> <td>Rank 4</td> <td>Rank 11</td> </tr> <tr> <td>Magenta</td> <td>Rank 5</td> <td>Rank 12</td> </tr> <tr> <td>Cyan</td> <td>Rank 6</td> <td></td> </tr> <tr> <td>White</td> <td>Rank7</td> <td></td> </tr> </tbody> </table> <p>Out of Underweight Rank and Outside the Rank Does not light.</p> <p>Does not light if less than 3 divisions.</p> <p>Confirm the pan is empty, you can do the following.</p> <p> : Return to the select the item number</p> <p> : Return to normal weighing mode</p>	Green	Rank 1	Rank 8	Red	Rank 2	Rank 9	Yellow	Rank 3	Rank 10	Blue	Rank 4	Rank 11	Magenta	Rank 5	Rank 12	Cyan	Rank 6		White	Rank7		<p>【Judgment 1】</p>  <p>Item 04, Rank 3</p> <p>【Judgment 2】</p>  <p>Item 04, Outside the Rank</p>
Green	Rank 1	Rank 8																					
Red	Rank 2	Rank 9																					
Yellow	Rank 3	Rank 10																					
Blue	Rank 4	Rank 11																					
Magenta	Rank 5	Rank 12																					
Cyan	Rank 6																						
White	Rank7																						

7-4. Counting function

Application	Counting work (Not legal for trade use)
How to weigh	The weight per item (unit weight) is measured from a specified quantity of items to calculate the number of items from the weight data of the whole items.
Advantage	<ul style="list-style-type: none"> ● This function is suitable for quantity counting work.
Stored value	<ul style="list-style-type: none"> ● Lower limit quantity ● Upper limit quantity ● Number of weighing samples ● Weight measurement (once)
Display content: Main display	Number of items
Display content: Sub display	Left : Lower limit of the number Right : Weight per item
Registered item No.	Max. 99 items

7-1.9 PRE-SETTING: Counting function

This is a list of user parameters related to this function.

Refer to Chapter 4 User parameter and set in advance.

- #01: Multi-Function
Set 4:Counting
- #03: Buzzer
The buzzer can be sounded when judging whether it is Underweight, Acceptable weight, or Overweight.
- #07: Blinking of weight display
The display can blink when judging whether it is Underweight, Acceptable weight, or Overweight.
- #11: Addition and Send timing
You can select the timing for adding and sending weighing data.
- #B2 : Counting language
You can change the suffix notation in the count display.
- #L3 : Buzzer sounding length for limit judgment
You can select whether to keep the buzzer sounding at the timing set in #03.
- #L4 : LED lighting method
You can change the lighting method of the Underweight, Acceptable weight, and Overweight judgment LED.

7-1.10 SETUP: Counting function


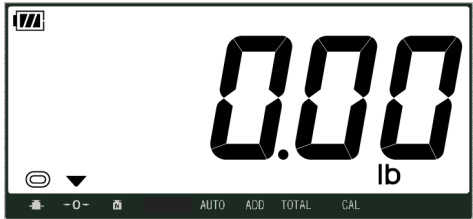








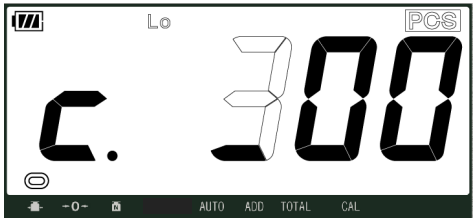

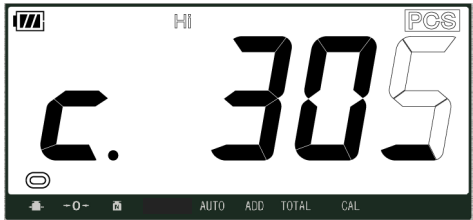

The registered data of each item are stored even if the scale is turned off.





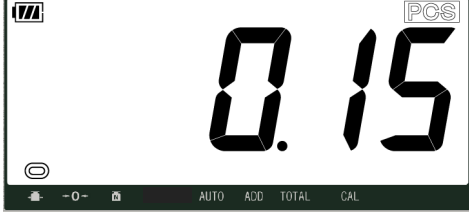



As a setting example, we will explain the operation when making the following settings.

[Setting Example]


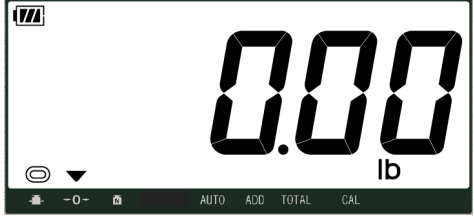






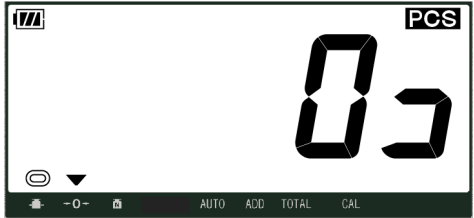
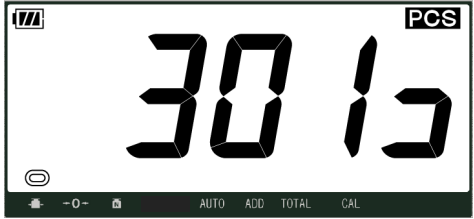
Item number 63, lower limit 300 pieces, upper limit 305 pieces

20 samples, sample weight 0.15 lb

	Operation	Display
1.	Confirm the pan is empty, and then press  The display changes to select the item number.	
2.	Select the item number. If the selected product type has already been set, the LED will light blue, and if not set, the LED will light red.  : Increment item number  : Decrement item number Press  to proceed the lower limit quantity setting.	
3.	Enter the lower limit quantity. If you do not want to check the number, enter "0".  : Changes the digit  : Select digit +1  : Select digit -1 Press  to proceed the upper limit quantity setting.	
4.	Enter the upper limit quantity. If you do not want to check the number, enter "0". Press  to proceed the unit weight setting. <div style="border: 1px solid black; padding: 5px; width: fit-content;"> If you try to set the upper limit to a value smaller than the lower limit, [FAULT] is displayed and you cannot proceed to the next setting. Please enter the upper limit again. </div>	 

	Operation	Display
<p>5.</p>	<p>Enter the number of items to be weighed as a sample to calculate the weight (unit weight) per item.</p> <p>Press  to proceed to sample weighing.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>"Number of samples" is the number of items to be weighed as a sample in order to calculate the weight (unit weight) per item.</p> </div>	<div style="border: 1px solid black; padding: 5px; text-align: center;">  <p>Enter the number of samples (20pcs)</p> </div>
<p>6.</p>	<p>Place the number of items you entered earlier on the scale.</p> <p>After the scale stabilizes, press  to memorize the settings and proceed to work mode.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>The LED lights according to the unit weight calculated from the number and net quantity.</p> <p>[No lighting] The weight of the sample is less than 4 divisions</p> <p>[Yellow: Blinking] The unit weight is smaller than a division.</p> <p>[Blue: Lights up] The unit weight is greater than or equal to a division.</p> <p>If you press  when the LED is not lit, the settings are discarded and the normal weight display is restored.</p> </div>	<div style="border: 1px solid black; padding: 5px; text-align: center;">  <p>Sample weight (0.15 lb)</p> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-top: 10px;"> <p>0.0075 lb per piece</p> </div> </div>
<p>7.</p>	<p>This completes the setting of the counting function.</p> <p>Remove all weighed items from the scale and perform the work.</p> <p>Confirm the pan is empty, you can do the following.</p> <p> : Return to the item number selection screen</p> <p> : Return to normal weighing mode</p>	<div style="border: 1px solid black; padding: 5px; text-align: center;">  </div>

7-1.11 OPERATION: Counting function

	Operation	Display
1.	When the weight is displayed, press  without placing anything on the scale to change to the screen for selecting the item number.	
2.	Select the set item number. If the selected product type has already been set, the LED will light blue, and if not set, the LED will light red.  : Increment item number  : Decrement item number Press  to start the Check weighing.	
3.	When an item is placed on the scale, the number calculated from the weight (unit weight) of each item is displayed. <u>The lighting color of the LED changes according to the weight.</u> [Red: Blinking] Far less than the lower limit [Red: Lighting] Less than the lower limit [Blue: Lighting] Acceptable weight [Yellow: Lighting] More than the upper limit [Yellow: Blinking] Much above the upper limit The LED does not light when the scale is less than 4 divisions. Confirm the pan is empty, you can do the following.  : Return to the select the item number  : Return to normal weighing mode	 ↓ 

7-5. Subtractive check weighing function

Application	Fixed weighing work performed by the removal method. (Not legal for trade use)
How to weigh	All the items in the container are placed on the pan, and the weight of the removed items is judged by Underweight, Acceptable weight, and Overweight.
Advantages	<ul style="list-style-type: none"> ● Can be removed and weighed. ● There is no need to replace the tare for each measurement.
Stored value	<ul style="list-style-type: none"> ● Lower limit weight ● Upper limit weight
Display content: Main display	The weight of the removed item is displayed as a negative value.
Display content: Sub display	Left side: Lower weight value Right: Upper limit weight value
Maximum number of registered varieties	Max. 99 items The set value is shared with the Fixed weighing function and subtractive check weighing function.

Setting Example;

Underweight	Acceptable weight	Overweight
≤ 4 division	1.7 lb Lower limit	1.75 lb Upper limit
		Capacity [lb]

7-1.12 PRE-SETTING Subtractive check weighing function

This is a list of user parameters related to this function.


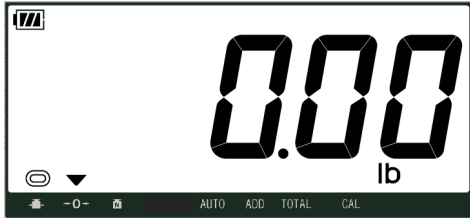








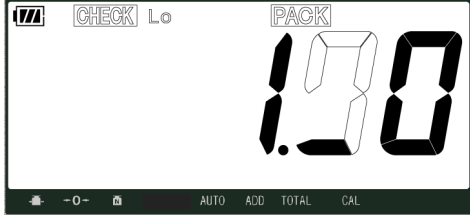





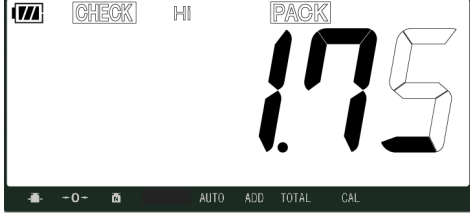


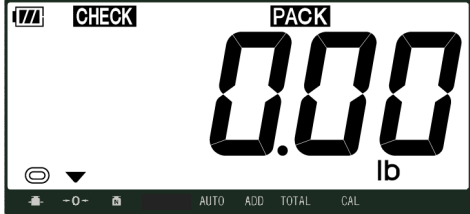
Refer to Chapter 4 User parameter and set in advance.

- #01: Multi-Function
Set 5: Subtractive check weighing
- #03: Buzzer
The buzzer can be sounded when judging whether it is Underweight, Acceptable weight, or Overweight.
- #07: Blinking of weight display
The display can blink when judging whether it is Underweight, Acceptable weight, or Overweight.
- #11: Subtractive weighing result confirmation timing
After taking out the item, you can set the timing to confirm the weighing result and move to the next weighing.
- #36: Indication value confirmation waiting time
When setting to automatically confirm in #11, you can set the delay time from stabilization to weight confirmation.
- #L3: Buzzer sounding length for limit judgment
You can select whether to keep the buzzer sounding at the timing set in #03.
- #L4: LED lighting method
You can change the lighting method of the Underweight, Acceptable weight, and Overweight judgment LED.


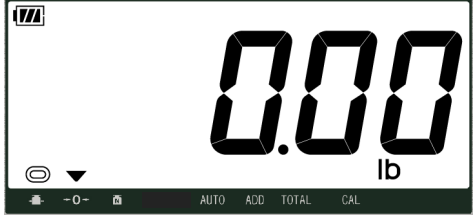




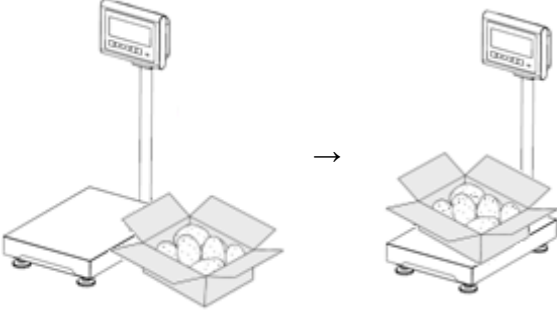
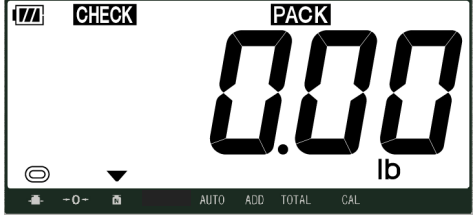
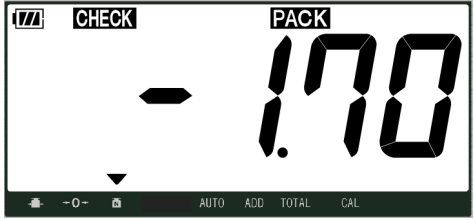
7-1.13 SETUP: Subtractive check weighing function












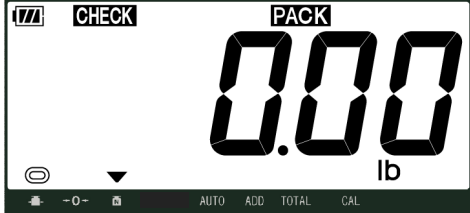
The registered data of each item are stored even if the scale is turned off.

e.g.) Item No. 33, lower limit weight 17 lb and upper limit weight 17.5 lb

	Operation	Display
1.	Confirm the pan is empty, and then press  . The display changes to select the item number.	
2.	Choose the item number. If the selected product type has already been set, the LED will light blue, and if not set, the LED will light red.  : Increment item number  : Decrement item number Press  to proceed to lower limit weight setting.	
3.	Set the lower limit weight.  : changes the digit  : Select digit +1  : Select digit -1 Press  to proceed to upper limit weight setting.	
4.	Set the upper limit weight.  : changes the digit  : Select digit +1  : Select digit -1 Press  to save the lower and upper limit weight. <div style="border: 1px solid black; padding: 5px; width: fit-content;"> If you try to set the upper limit to a value smaller than the lower limit, [FAULT] is displayed and you cannot proceed to the next setting. Please enter the upper limit again.  </div>	
5.	The Subtractive check weighing is ready. Confirm the pan is empty, you can do the following.  : Return to the select the item number  : Return to normal weighing mode	


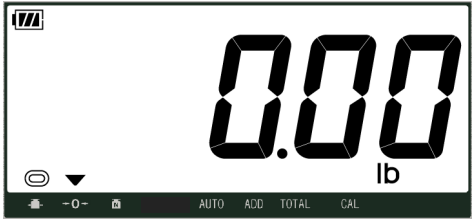


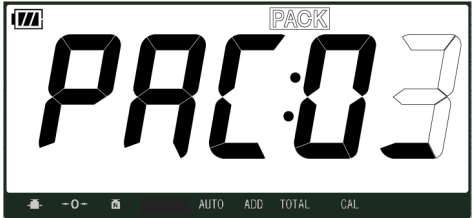




7-1.14 OPERATION: Subtractive check weighing function

	Operation	Display
1.	When the weight is displayed, press  without placing anything on the scale to change to the screen for selecting the item number.	
2.	Choose the item number. If the selected product type has already been set, the LED will light blue, and if not set, the LED will light red.  : Increment item number  : Decrement item number Press  to start the Subtractive check weighing	
3.	Place the item together with the container on the scale. Please be careful not to exceed the capacity.  When the scale stabilizes, the display automatically changes to "0".	
4.	Remove the item from the scale. Display the weight of the removed item. NOTE) Not legal for trade use <u>The lighting color of the LED changes according to the weight.</u> [Red: Blinking] Far less than the lower limit [Red: Lighting] Less than the lower limit [Blue: Lighting] Acceptable weight [Yellow: Lighting] More than the upper limit [Yellow: Blinking] Much above the upper limit The LED does not light when the taken out weight is less than 4 divisions.	

	Operation	Display												
<p>5.</p>	<p>After taking out the item, when the scale is stable, the weighing result is confirmed manually or automatically according to the settings of user parameters # 11 and # 36.</p> <p>When confirmed, the weighing result is added to the total data. If you use the communication option, data will be sent at the same time.</p> <table border="1" data-bbox="233 555 920 1240"> <thead> <tr> <th>#11 Setting</th> <th>How to determine the measurement result</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Press  and return to the display of net amount 0. It will not be added or sent.</td> </tr> <tr> <td>1, 2</td> <td>After the item is taken out and the scale is stable, when the time set in # 36 elapses, it will be automatically added and sent.</td> </tr> <tr> <td>3</td> <td>After taking out the item and stabilizing the scale, press  to add and send.</td> </tr> <tr> <td>4, 6</td> <td>After an appropriate amount of item is taken out and the scale is stable, when the time set in # 36 elapses, it will be automatically added and sent.</td> </tr> <tr> <td>5</td> <td>After taking out an appropriate amount of item and stabilizing the scale, press  to add and send.</td> </tr> </tbody> </table>	#11 Setting	How to determine the measurement result	0	Press  and return to the display of net amount 0. It will not be added or sent.	1, 2	After the item is taken out and the scale is stable, when the time set in # 36 elapses, it will be automatically added and sent.	3	After taking out the item and stabilizing the scale, press  to add and send.	4, 6	After an appropriate amount of item is taken out and the scale is stable, when the time set in # 36 elapses, it will be automatically added and sent.	5	After taking out an appropriate amount of item and stabilizing the scale, press  to add and send.	<p style="text-align: center;">Display</p>
#11 Setting	How to determine the measurement result													
0	Press  and return to the display of net amount 0. It will not be added or sent.													
1, 2	After the item is taken out and the scale is stable, when the time set in # 36 elapses, it will be automatically added and sent.													
3	After taking out the item and stabilizing the scale, press  to add and send.													
4, 6	After an appropriate amount of item is taken out and the scale is stable, when the time set in # 36 elapses, it will be automatically added and sent.													
5	After taking out an appropriate amount of item and stabilizing the scale, press  to add and send.													
<p>6.</p>	<p>Confirm the weighing value or switch to the display of net amount 0.</p> <p>After that, you can repeatedly take out the item and continue working.</p> <p>Confirm the pan is empty, you can do the following.</p> <p> : Return to the item number selection screen</p> <p> : Return to normal weighing mode</p>													

7-6. How to delete Multi-function settings

e.g.) Use the Fixed weighing function to erase the set value of item No. 3.











	Operation	Display
1.	When the weight is displayed, press  without placing anything on the scale to change to the screen for selecting the item number.	
2.	Select the item number for which you want to clear the settings. The LED lights up with the set item number.  : Increment item number  : Decrement item number	
3.	Press and hold  and press  ,  ,  . NOTE) Make sure all 4 keys are pressed. Deletes the selected item number setting and restores the factory settings. At this time, the LED turns off.	

Chapter 8 ERROR MESSAGES

The scale automatically checks up various functions. When one of the following error messages appears on the display, follow the troubleshooting instruction.

Contact the dealer from which the product was purchased, if other messages than the following appear, or an error is not recovered after following the troubleshooting.

Display	Cause / Troubleshooting
	Batteries are running out. Replace all of the batteries with new ones. <ul style="list-style-type: none"> Do not use alkaline batteries and manganese batteries in mixing. Do not mix new and old batteries.
	The voltage of the AC adapter has dropped significantly. Reconnect it to another power outlet and then turn it on again.
	This message appears when the weighed value is less than – 5 divisions. Press to reset the zero point.
	This message appears when the weighed value is over + 5 divisions. When the item is removed, the display returns to the weighing screen. Make sure to use the scale within the capacity.
	A failure is found at the weight detection part. Turn off the scale, and then reapply after a brief interval. When the scale does not return to normal, contact the dealer from which the scale was purchased for troubleshooting.
	Turned on the scale while a heavy item was placed. Turn off the scale. Make sure that nothing is left on the pan and turn on the scale again.
	Turn on the scale while a foreign material was stuck between the main body and the pan. Check if a foreign material is not stuck or contacting the pan. Then turn on the scale.
	Pressed while a heavy item was on the pan in the middle of the operation. The weight of the item is beyond the level where is operative. Remove the item from the pan, and then press .
	Turned on the scale while the item was left on a pan. And then, removed it and pressed . It is out of the range where the zero point can be reset. Make sure that nothing is left on the pan and turn on the scale again.
	The key is held down when the scale starts up, which may cause a malfunction. Turn off the power of the scale once and restart it without pressing any keys other than .
	These messages appear when a trouble was detected in the electronic circuit. Turn off the power of the scale once, wait a while, and then restart it. When the scale does not return to normal, contact the dealer from which the scale is purchased for troubleshooting.
	The Bluetooth™ printer lid is open or the paper is not loaded correctly. For details, refer to the instruction manual of the printer.

Display	Cause / Troubleshooting
	<p>When using the communication option, it is displayed that it is not connected to the communication device.</p> <p>When the connection with the device is established, it automatically returns to the weight display.</p> <p>If this display continues even after waiting for a while, please try the following.</p> <p>Make sure that the power of the communication device is turned on and that the communication device is not connected to anything other than the scale (PC, etc.).</p> <p>Make sure that the distance between the scale and the communication device is not too far, or that there is no device that blocks radio waves between the scale and the communication device.</p> <p>Make sure that the following user parameter settings are correct.</p> <ul style="list-style-type: none"> # 13: Communication type # 15: RS232C communication speed # 16: Character length # 17: Parity # 18: Stop bit length <p>For Bluetooth™ wireless communication, cancel pairing and then turn on the power of the scale and communication device again.</p> <p>If the above does not solve the problem, there is a possibility of mal function. Please contact the dealer where you purchased the product.</p>
	<p>The number counter has reached the upper limit with the Grading function. The Grading function measures the number of sorted items and holds them internally for data output when using communication options.</p> <p>Turn off the scale and then turn it on again. The counter will be reset.</p>
	<p>Due to Tare reminder function (P.23) the manual send operation using  was blocked. Press  or , then press  to tare.</p>
	<p>The Bluetooth™ wireless printer is low on battery.</p> <p>Charge the printer.</p>
	<p>The Bluetooth™ wireless printer is not responding.</p> <p>Make sure that the user parameter # 21 (wireless printer model) is set correctly.</p> <p>After canceling the pairing, turn on the power of the scale and the communication device again.</p> <p>If the above does not solve the problem, there is a possibility of mal function. Please contact the dealer where you purchased the product.</p>
	<p>Inappropriate setting value of multifunction e.g.) Set the check weigh function so that the lower limit value > the upper limit value.</p> <p>Please input the setting value again.</p>

Chapter 9 SPECIFICATIONS

The appearance and specifications are subject to change without notice for improvement.

9-1. Specifications

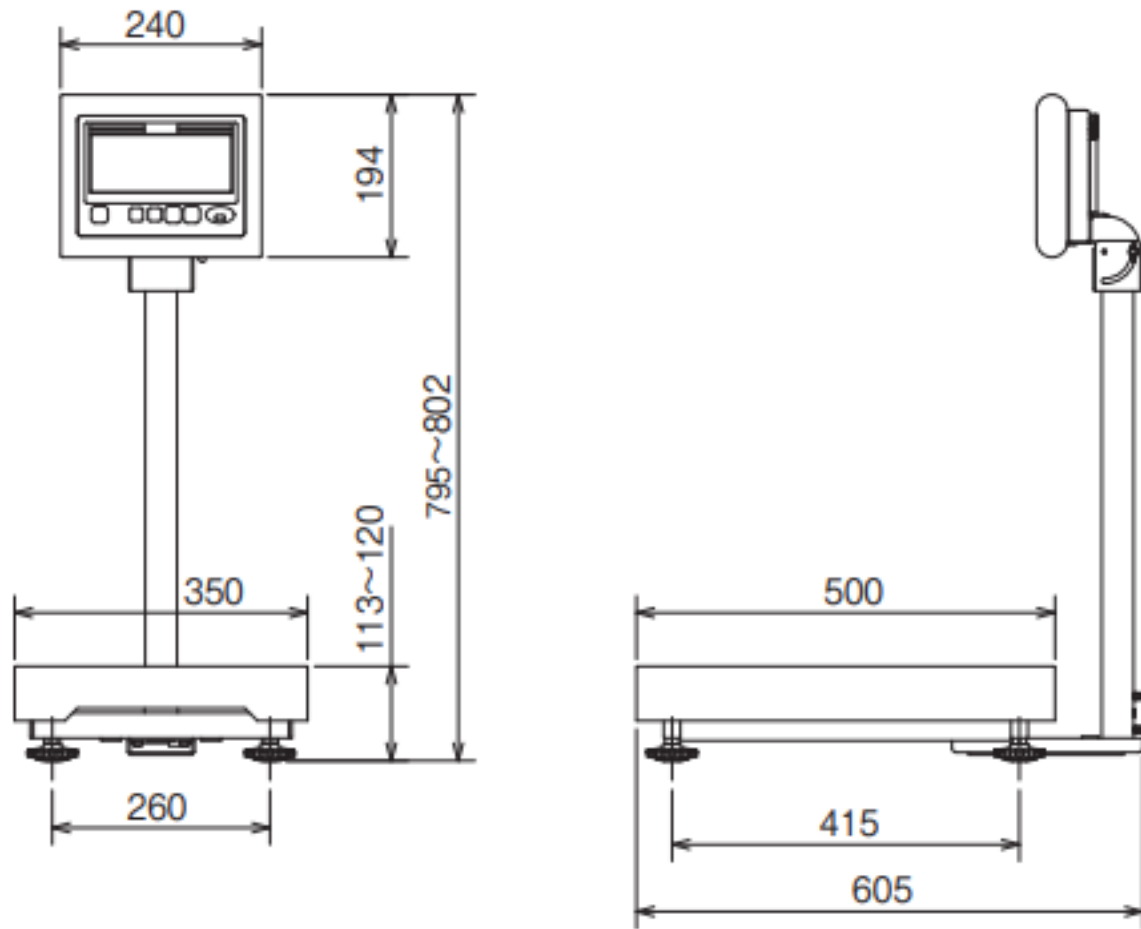
1. Product Name Waterproof Digital Universal Scale
2. Model DP-6700-II
 DP-6700S-II (Table-top)
3. Weighing system Strain-gauge load cell
4. DP-6700-II 500(W) x 350(D)mm
 DP-6700S-II 354(W) x 354(D)mm
5. Capacity lineup

Model	Capacities and divisions	Max. Tare
DP-6700-II-60	30 kg x 0.01 kg, 60 lb x 0.02 lb 960 oz x 0.5 oz, 60 lb x 0.5 oz	30 kg, 60 lb 960 oz, 60 lb
DP-6700-II-150	60 kg x 0.02 kg, 150 lb x 0.05 lb 2400 oz x 1 oz, 150 lb x 1 oz	60 kg, 150 lb 2400 oz, 150 lb
DP-6700-II-300	150 kg x 0.05 kg, 300.00 lb x 0.1 lb 4800 oz x 2 oz, 300 lb, x 2 oz	150 kg, 300 lb 4800 oz, 300 lb
DP-6700S-II-60	30 kg x 0.01 kg, 60 lb x 0.02 lb 960 oz x 0.5 oz, 60 lb x 0.5 oz	30 kg, 60 lb 960 oz, 60 lb

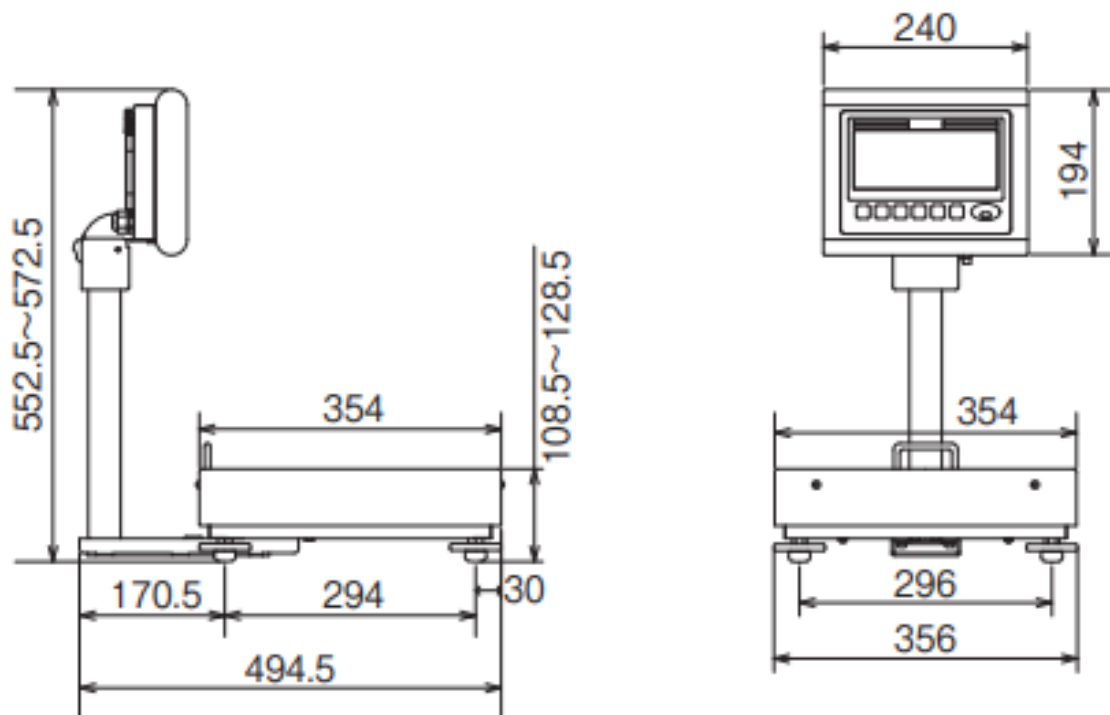
6. Display Display Liquid crystal display tube (7 segment type)
 Character size 23.5(W) x 45(H)mm
7. Appearance ● DP-6700-II
 Size 350(W) x 605(D) x 795-802(H)mm
 Weight Approx. 13kg
 Material SUS304(Main body), Polyamide Resin (Leveling legs)
 ● DP-6700S-II (Table-top)
 Size 356(W) x 494.5(D) x 552.5-572.5(H)mm
 Weight Approx. 13kg
 Material SUS304(Main body), Polyamide Resin (Leveling legs)
8. Dustproof and waterproof IP65 compliant
9. Power Supply 6VDC (4 "D" size batteries) or AC adaptor not to be used at the same time
 Power consumption: 0.03W
10. Operating conditions Temperature range -10°C to 40°C
 Humidity range 30% to 85% R.H. (no condensation)
11. Applicable laws and standards NTEP
12. Options ● Stainless steel leveling legs
 ● AC Adaptor
 ● Buzzer
 ● Communication(Select one, cannot be used together)
 Bluetooth™ Wireless printer (Brother / RJ3050Ai)
 RS232C
 Bluetooth™ Wireless communication unit

9-2. Appearance and Dimensions

DP-6700-II



DP-6700S-II (Table-top)



DP-6700-II

Grading Function / Setting sheet

* Please make copy and use



Item No.

Item Name

Memo

Enter the weight range in the table below for the required number of ranks. An example of entry is on P.35.

The value in is the value to be entered in the scale settings.

	Rank No.	Weight rage		Check	
Light   Heavy	1	above	<input type="text" value="1"/>	less than	
	2	above	<input type="text" value="2"/>	less than	
	3	above	<input type="text" value="3"/>	less than	
	4	above	<input type="text" value="4"/>	less than	
	5	above	<input type="text" value="5"/>	less than	
	6	above	<input type="text" value="6"/>	less than	
	7	above	<input type="text" value="7"/>	less than	
	8	above	<input type="text" value="8"/>	less than	
	9	above	<input type="text" value="9"/>	less than	
	10	above	<input type="text" value="10"/>	less than	
	11	above	<input type="text" value="11"/>	less than	
	12	above	<input type="text" value="12"/>	less than	
	Heavy	END	above	<input type="text" value="13"/>	less than

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PRINTED IN JAPAN