Yamato

# OPERATION MANUAL

## Digital Platform Scale: DP-5601
## Digital Indicator: EDI-561

Read this manual and keep it handy.

**Yamato Scale Co., Ltd.**

EXPORT-1302

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## Safety Precautions

Read carefully SAFETY PRECAUTIONS before use, and follow all the instructions.
SAFETY PRECAUTIONS are designed for protecting users, other peoples 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** | : | Denotes where mishandling without compliance with this sign has a potential risk of suffering death or serious injury. |
| **Warning** | : | Denotes where mishandling without compliance with this sign has a potential risk of suffering injury or damage on the property. |
| **Caution** | : | Denotes a potential risk that may result in injury or damage on the equipment if operated without compliance with this sign. |
| **Inhibition** | : | Denotes what is inhibited. |
| **Compulsion** | : | Denotes what must be followed. |

NOTE: 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. Ground the instrument.
2. Do not step on a power cable under the feet or a cart.
3. Do not disassemble the indicator.
4. Connect or disconnect a power plug by holding the plug securely.

: To avoid explosion and fire:

Avoid use in the flammable atmosphere, because this equipment is not explosion-proof type.

: To avoid fire and electrical shock:

If a smoke or smell is found, disconnect the power cable immediately.
Ask the service representative to check the instrument.

**Warning**

: To avoid injury and damage:
1. Place an item on a platform securely.
2. Unplug a power cable after use.
3. Do not adjust the inside of the instrument after removing the platform cover.
4. Do not carry a scale by the indicator. Hold the platform base.

**Caution**

: To avoid damage:
1. Do not scratch the display panel and keys.
2. Maintain the operating voltage and working condition.
3. Do not attempt to measure items heavier than the limit.
4. Do not give a shock to the platform.

: To maintain the scale performance:
1. Avoid vibration.
2. Avoid direct sunbeam and wind from the air conditioner.
3. Place the scale on the secured base.
4. Use the instrument at temperature between -10C and 40C.
5. Work on the level place. If not level, adjust the leveling legs.

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 electronic precision equipment. Do not store it in the place where vibration and/or shock can be expected.

**DISPOSAL**

This equipment should be dumped as an industrial waste. Follow the municipal regulations when dumping it.

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 Weights and Measures Law.

## Here are some of the functions

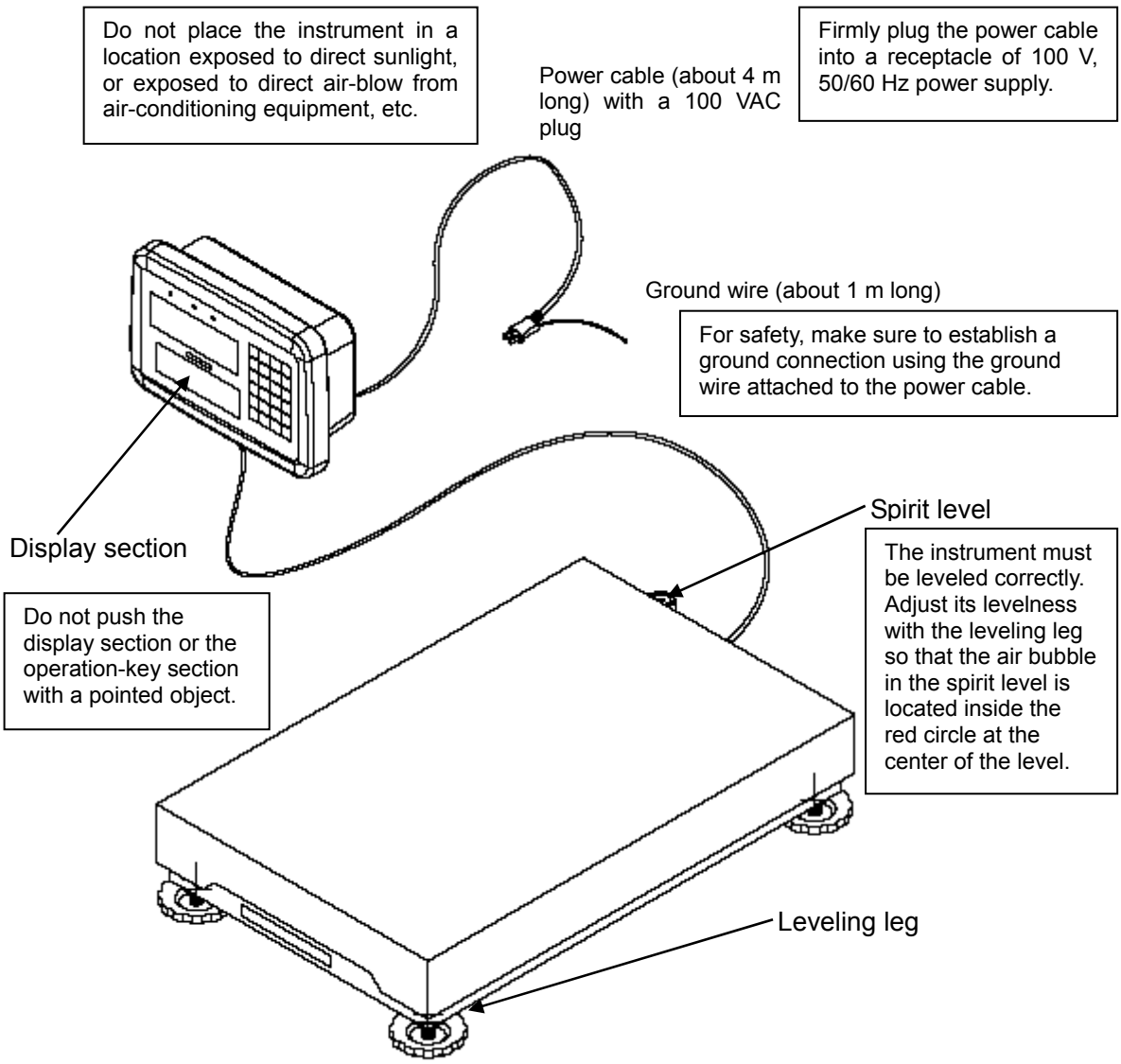
The DP-5601 allows the user to easily carry out effective weighing and counting operations. Make use of this instrument according to your needs.

This instrument has the following functions as standard.

| Function/Purpose | Method | Remarks | Page |
|---|---|---|---|
| **Tare subtraction**<br>Use this function when you wish to set the weight of any objects to be weighed or the weight of a container of such objects to “0” before weighing. | ① This function can be carried out by simply touching the T key. | | 9 |
| | ② The setting can be made using the numeric keys and the E key. | The weight of the container must be measured in advance. | 9 |
| | ③ A registered tare value can be set using the PLU key. | The weight of the container must be measured and registered in advance. | 15 |
| **Addition and total**<br>Use this function when you wish to know the number of times measurement values are added as well as the total weight | ① Addition and total display can be performed using the + and TOTAL keys. | | 11 to 12 |
| | ② Automatic addition can be performed using the ⬇ and 3 AUTO keys. The total can be displayed using the TOTAL key. | The individual weight must be set and registered in advance. | 12 |
| **Registration**<br>Use this function when you wish to register a tare value or a code number in the internal memory. | Registration can be done using the PLU key. | | 15 to 16 |

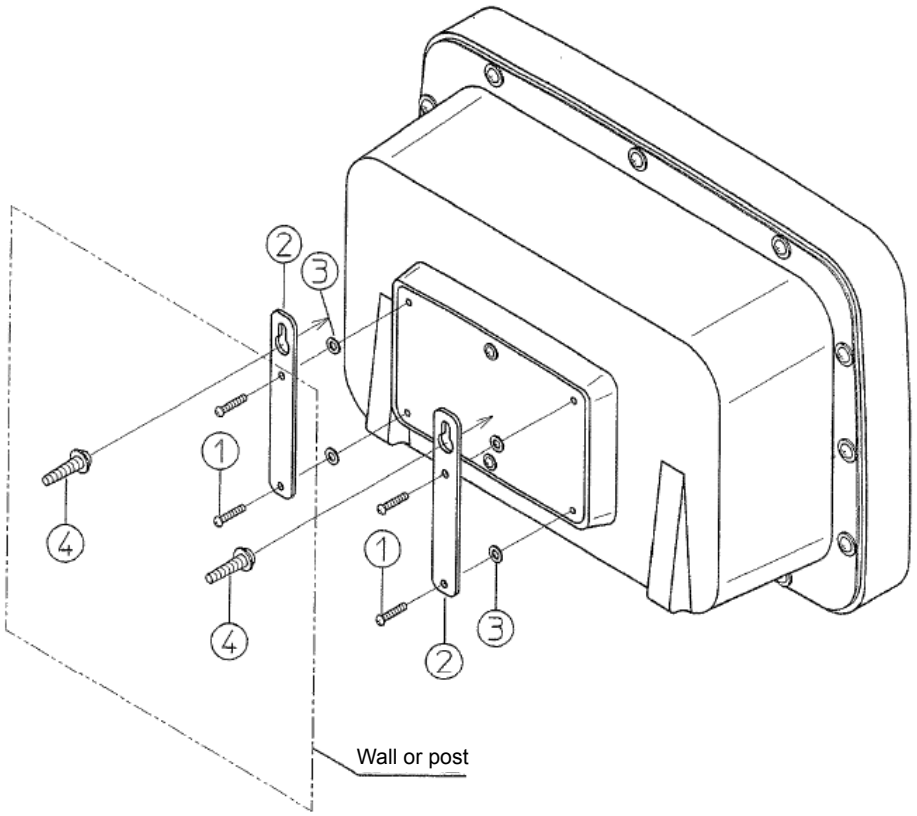
## Preparation before use

☆ Note the following points to properly use the instrument.



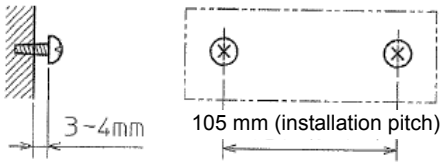

- Place the instrument on a solid floor.
- If the installed place is not flat, adjust the levelness with the leveling leg to make it stable.
- Keep the instrument away from any equipment that generates vibrations.
- The rated operating temperature of this instrument ranges from -10°C to +40°C. Do not use the instrument outside of this temperature range.
- Unplug the power cable when the instrument is not in use or during inspection.

## How to install the wall mount bracket




**Installation procedure**

1. First, remove the 4 set screws ① on the back of the indicator. Then install the supplied 2 wall mount brackets ② by firmly tightening the 4 screws ① (make sure to insert the 4 washers ③ between the indicator and the 2 wall mount brackets ②).
2. Install the 2 wooden tapping screws ④ to a wall or post, as shown in the following figure.

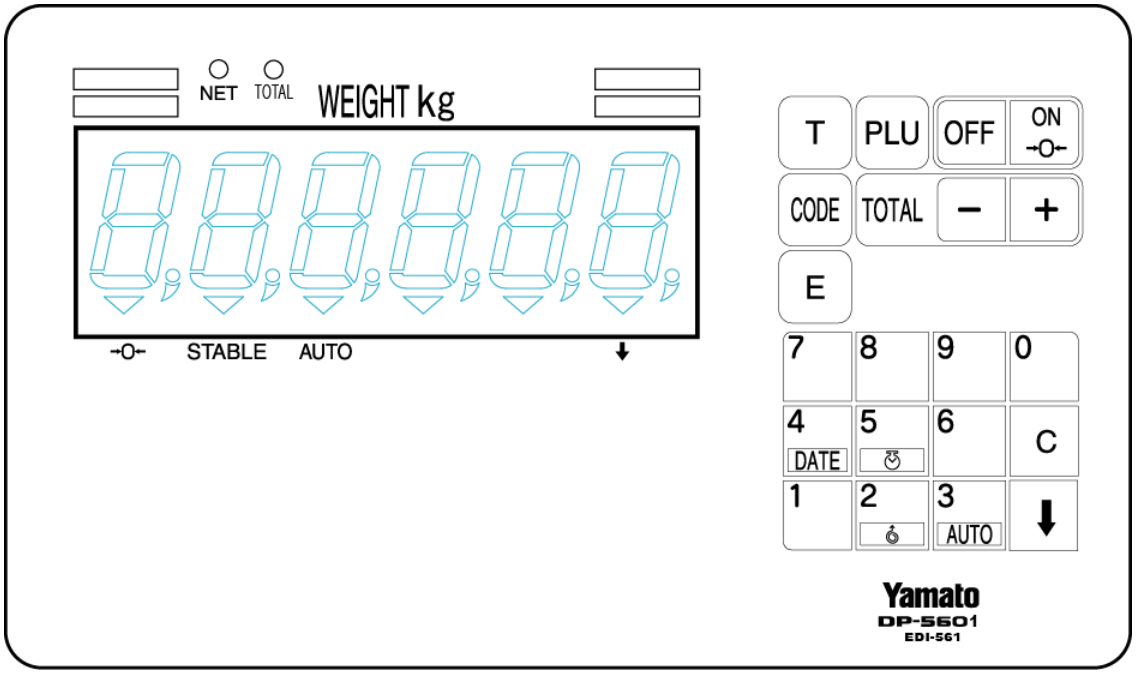



3. Using the upper holes of the 2 wall mount brackets ② set in the above step 1, hook the brackets onto the 2 wooden tapping screws ④ set in the above step 2. The installation is now complete.

**<Caution>**

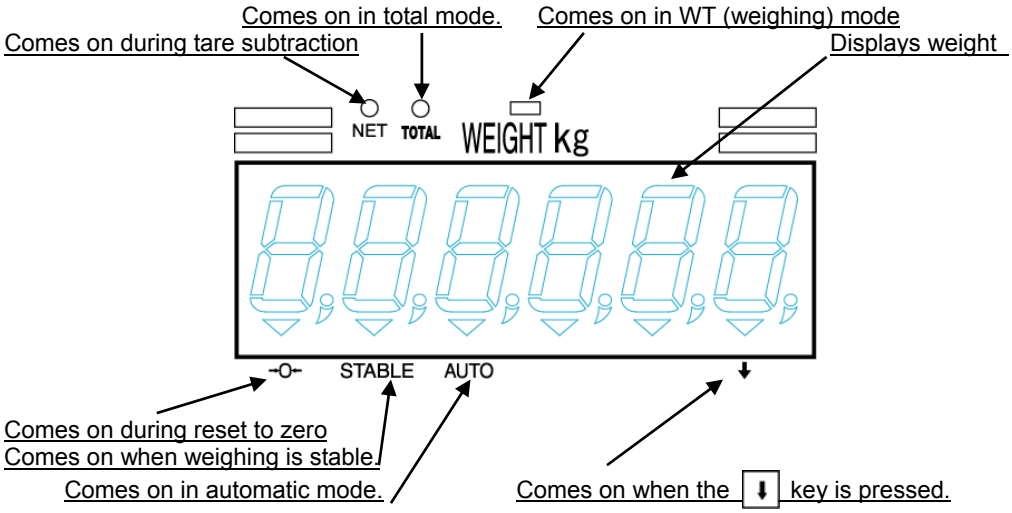
Since the 4 set screws ① have been tightened to a fixed torque at the factory, the enclosure is water-proof and dust-proof (i.e. IP66 protection rating), easy to wash, and hygienically sound (HACCP compliance). However, for the wall-mount type indicators, the user must remove the set screws ① and then install the wall mount brackets ②. Therefore, the “IP66” and “HACCP compliance” cannot be assured if the set screws ① are not firmly tightened or if the wall mount brackets ② are externally installed.

Display and operation-key sections

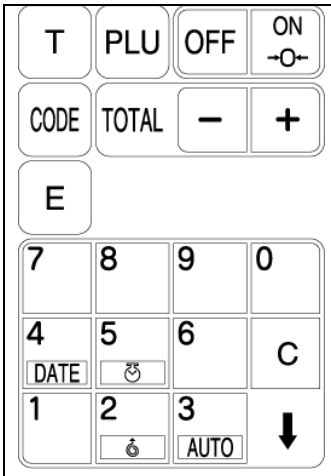


## Display section

1. Main display: Fluorescent display tube

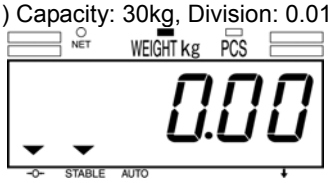
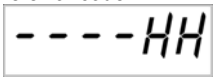
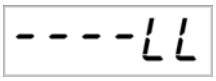
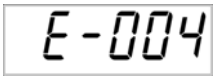
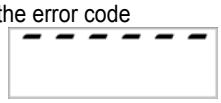



## Keyboard section

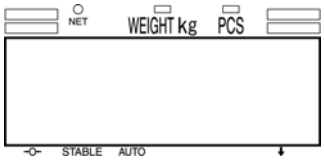



| | |
|---|---|
| ON →0← | Turns on display or resets to zero. |
| OFF | Turns the power OFF. |
| PLU | Calls registered data, or registers data. |
| T | Performs the quick tare subtraction. |
| + | Manual addition or printout at addition. |
| − | Subtraction or printout at subtraction. |
| TOTAL | Totalizing or total printout. |
| CODE | To set code number. |
| E | Determines the setting value entered. |
| 0 to 9 | Enters a numerical value. |
| C | Clear data entry or tare. |
| ⬇ | Change of function on keys [2] to [8]. |
| 2 | Feed the print paper (with ⬇ key) for Printer JPS-508. |
| 3 AUTO | Changeover between automatic and manual (with ⬇ key). |
| 4 DATE | To set date (with ⬇ key). |
| 5 | To set time (with ⬇ key). |

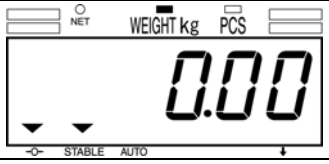
## How to carry out measurement

| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | [Turning ON the display]<br>Press the ON key. | All lamps come on and “0.00” appears. The ▼ signs above “→0←,” and “STABLE” come on.<br><br>e.g.) Capacity: 30kg, Division: 0.01kg<br>  <br><br>All lamps continuously come on until the instrument becomes stable. | If the error code<br>  <br><br>or<br>  <br><br>appears after all lamps come on, refer to page 34.<br><br>If the optional printer JPS-508 is connected and the error code<br>  <br><br>appears during use, press the OFF key and then ON key. If the same code appears, consult with Yamato Scale’s dealer. |
| ② | [Start measurement]<br>Place an object to be weighed on the platform of the instrument. | The weight of the object appears. (The following indication shows that the object weighs 10.00 kg.)<br> <br> | If the error code<br>  <br><br>appears after an object is placed on the instrument, the weight of the object exceeds the measurable range of the instrument. Remove the object from the instrument, and use the instrument within its rated operating range. |

## How to power OFF

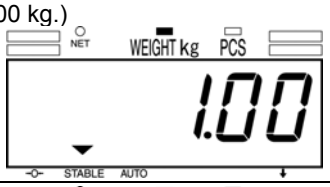
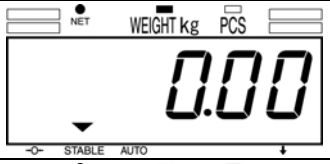
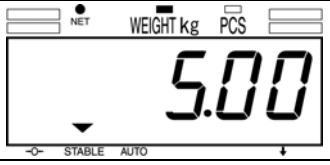
| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | [Turning OFF the display]<br>Press the OFF key. |  <br> | This instrument consumes standby power even with the display turned OFF. If the instrument is to be unused for a long time, unplug the power cable. |

## How to rezero

| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | Press the ON key.<br>*This resets to zero and displays “0.00.” |  <br> | The effective range of zero reset is within ±1.9% of the weighing capacity. |

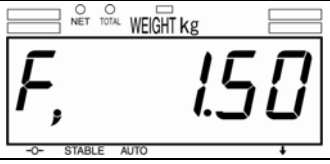
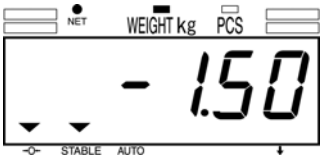
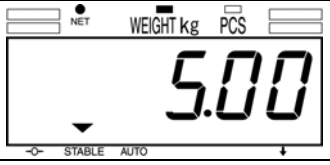
## How to carry out tare subtraction

1. One-touch tare ····· Simplified tare subtraction method using the T key only

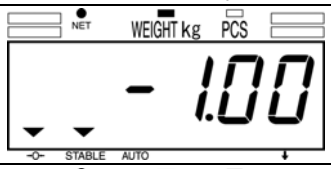
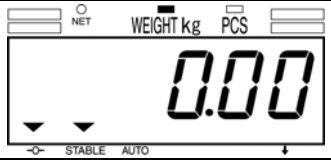
| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | Place a container on the platform of the instrument. | The weight of the container appears. (The following indication shows that the container weighs 1.00 kg.)   | |
| ② | When the displayed value is stable, press the T key. |   | "0.00" appears and the NET lamp comes on. |
| ③ | [Weighing start]<br>Place an object to be weighed in the container. |   | The net weight of the object appears. |

2. Preset tare (when tare weight is already known) ····· Use the numeric keys and E key.

<Example> To set the tare weight to 1.50 kg:

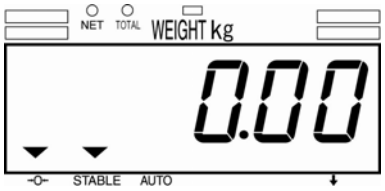
| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | [Entering the tare weight]<br>Enter 1, 5 and 0 in that order. |   | |
| ② | Press the E key. |   | The auxiliary display returns to normal indication. On the main display, the entered value is shown as minus for tare subtraction and the NET lamp comes on. |
| ③ | [Weighing start]<br>Place an object to be weighed on the instrument. |   | The net weight of the object appears. |

## How to clear tare subtraction

| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | Remove the container from the platform. |  | The panel shows the tare weight with a minus sign. |
| ② | Press the T key. |  | "0.00" appears and the NET lamp goes out. |

## How to enter a code number

<<Example>> To enter "123456" as the code number:

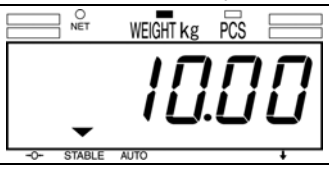
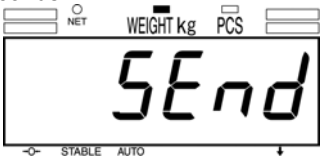
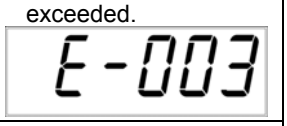
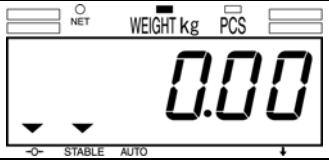
| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | Press the CODE key.<br>(The blinking field is used for setting a value.) | | . |
| ② | [Entering the code number]<br>Enter 1, 2, 3 AUTO, 4 DATE, 5, and 6 in that order. | | Up to 6 digits can be entered.<br>If you enter the wrong number, press the C key and then enter the correct number. |
| ③ | Press the E key. |  | |

## How to add and total

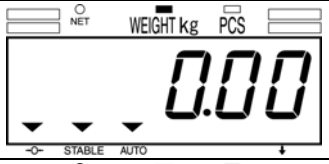
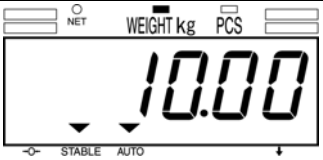
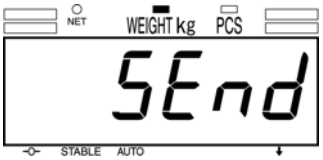
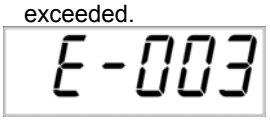
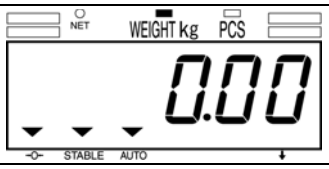
Use this function when you wish to add each measured value to the internal memory of the instrument and confirm the total cycle or the total weight.

### 1. How to carry out manual addition

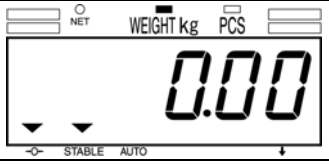
When a printer or other devices are connected to the system, refer to the respective instruction manuals.

| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | Place an object to be weighed on the platform of the instrument. |  | The weight of the object appears. |
| ② | [Addition]<br>Press the + key with the object placed.<br>*To cancel the addition, press the − key. | There is no change in the indication.<br> <br>If the parameter number 035 is set to any numbers other than “0,” “SEnd” appears for the preset seconds.<br>  | If the total value has exceeded the storage capacity of the internal memory after addition, the following error codes appear.<br>- The number of Measurement times has exceeded.<br> <br>- The total weight has exceeded.<br>  |
| ③ | Remove the object from the instrument. |  | The display returns to “0.00.” |
| ④ | - One cycle of addition is now complete.<br>- By repeating Steps ① to ③, each measurement value is added to the internal memory. | | |

## 2-1 How to carry out automatic addition

| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | Press the ⬇ key and then the 3 AUTO key. |  | The ▼ sign appears above ⬇ and then above the “AUTO.” |
| ② | [Addition]<br>Place an object to be weighed on the platform of the instrument. When the reading becomes stable, automatic addition is carried out and a short beep sounds.<br>*To cancel addition, press the − key. |  <br>If the parameter number 035 is set to any numbers other than “0,” “SEnd” appears for the preset seconds.<br>  | If the total value has exceeded the storage capacity of the internal memory after addition, the following error codes appear.<br>- The number of measurement times has exceeded.<br> <br>- The total weight has exceeded.<br>  |
| ③ | Remove the object from the platform. |  | The display returns to “0.00.” |
| ④ | - One cycle of automatic addition is now complete.<br>- By repeating Steps ② to ③, each measurement value is added to the internal memory.<br><br>The timing of automatic addition can be set at parameter #69. | | |

## 2-2 How to return to manual addition

| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | Press the ⬇ key and then the 3 AUTO key. |  | The ▼ sign appears above ⬇ and then the sign above the “AUTO” goes out. |

## How to cancel addition

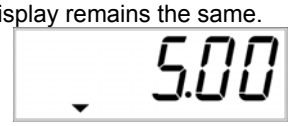
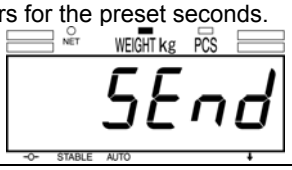
The DP-5601 has a function to cancel the added data in the scale memory.
There are two ways to cancel added data and the way can be chosen by parameter setting #086. The default setting is “”086 = 0”.

| Setting value | Name | Function | Remarks |
|---|---|---|---|
| 0 | Cancel last addition | Cancel last minute addition data | Only once available. |
| 1 | Subtraction of weight | Subtract the weight on platform from the scale memory. | Multiple subtractions available. |

### 1. How to cancel last addition

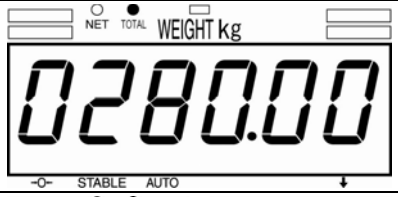
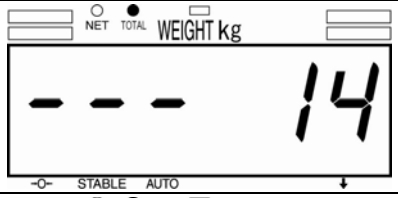
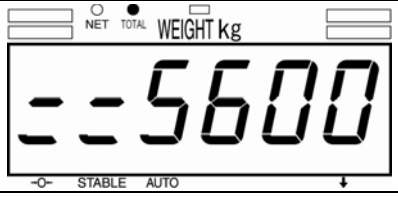
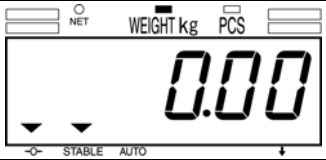
| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | Press the − key after addition. | If the parameter number 035 is set to any numbers other than “0,” “SEnd” appears for the preset seconds. | The last addition weight is canceled, regardless of the displayed weight. |

### 2. How to subtract weight

| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | Place weighing items you desire to subtract on platform after addition. | | The display shows the weight of items. |
| ② | Press the − key. | The display remains the same.  If the parameter number 035 is set to any numbers other than “0,” “SEnd” appears for the preset seconds.  | |
| ③ | Remove the items from the platform. | | The display returns to “0.00.” |
| ④ | - One cycle of subtraction of weight is now complete.<br>- By repeating Steps ② to ③, the continuous subtractions of weight from the internal memory are available. | | |

## How to use the TOTAL key

Added measurement results (the total weight and the total number of measurement times) can be confirmed.
<<Example>>
The total weight is 140280.00kg.
The total number of measurement times: 5600 times

| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | Press the TOTAL key.<br><br>The last 6 digits of total weight are displayed.<br>The total weight can be displayed up to 9 digits. |  | The total value is shown and total lamp lights. |
| ② | Press the TOTAL key again. |  | The upper 3 digits of the total weight are displayed. |
| ③ | Press the TOTAL key again to show the total number of measurement times. |  | Maximum total number of measurement times is 4 digits. |
| ④ | Press the TOTAL key. |  | The display returns to normal indication. |
| ⑤ | Continue to carry out the cycle of addition. | | |

To end the addition and clear the total values

To continue the addition

- To clear the memory of the total values, press the C key while the total weight or the total number of measurement times is shown.
- The command clears all of the total weight and the total number of measurement times, and the addition can start from the beginning at the next operation.

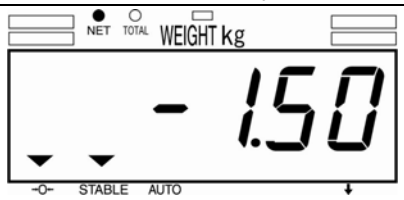
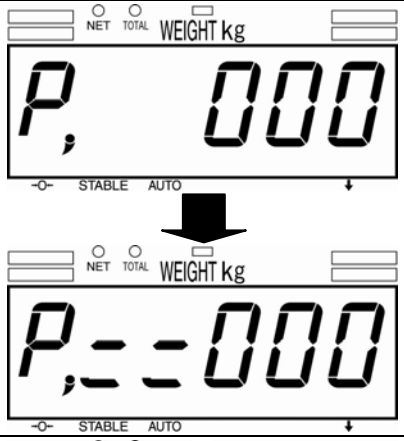
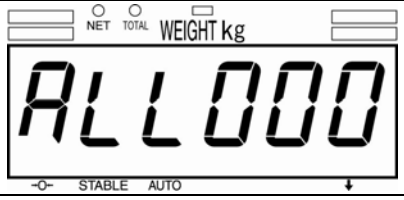
## How to register the entries

The DP-5601 can individually or collectively save the tare weight, code number in each call number.
The call numbers No.1 to 100 are available, and 100 sets of data can be stored in total.
Since these data are saved in the internal memory, they cannot be lost even if the instrument is powered OFF.
The registration of frequently used data simplifies the settings before work, and further improves working efficiency.

### 1. How to register the entries collectively

(Method of registering the setting data all at once)

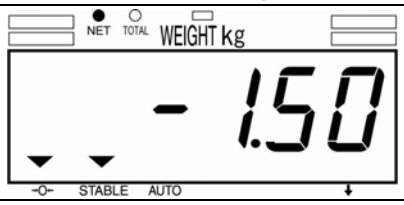
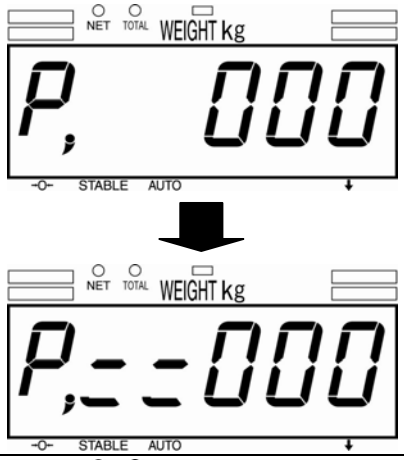
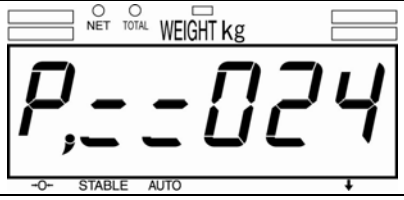
<<Example>> To register the following settings in the call number 70:
Tare weight: 1.50 kg, Code number: 123456

| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | Enter and set all the data in advance.<br>Only the preset data can be registered. |  | If there are any measured objects on the platform of the instrument after data setting, remove them from the platform. |
| ② | Press and hold the PLU key.<br>(The blinking field is used for setting a value.) |  | This key works only when GROSS is zero (i.e. there is nothing on the weighing unit). |
| ③ | Press the TOTAL key.<br>(The blinking field is used for setting a value.) |  | Pressing the TOTAL key once again returns to individual registration (tare weight). |
| ④ | [Entering a call number]<br>Enter 7 and 0 in that order.<br>(The blinking field is used for setting a value.) | | To cancel the registration, press the C key. After confirming that the call number is shown as “000,” proceed to Step ⑤.<br>The system sounds an alarm buzzer and cancels the registration. |
| ⑤ | Press the E key. | The display returns to indication in Step ① (weighing display). | |

## 2. How to register the entries individually

(Method of registering either tare weight or code number)

<<Example>> To register a tare weight of 1.50 kg in the call number 24

| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | Enter and set the tare weight by one-touch tare or preset tare. |  | If there are any measured objects on the platform of the instrument, remove them from the platform. |
| ② | [Registration]<br>Press and hold the PLU key. (The blinking field is used for setting a value.) |  | This key works only when GROSS is zero (i.e. there is nothing on the weighing unit). |
| ③ | [Entering a call number]<br>Enter 2 and 4 [DATE] in that order. |  | |
| ④ | Press the E key. | | The display returns to normal indication. |

<<Example>> To register a code number of 123456 in the call number 24:

| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | For entry of the code number, press the CODE key and then enter 1, 2, 3 AUTO, 4 [DATE], 5 and 6 in that order. | | The setting value blinks. |
| ② | Follow Steps ② to ④ of the previous example. | | |

## The difference between collective registration and individual registration

Registered data are saved in the memory for each call number. At the time of purchase, no data has been registered in the memory.

<<Example>> To register data in the call number 70:

- Collective registration: saves all preset data.

<Before registration>

Call number: 70
Tare weight: 0.00 kg
Code number: 000000

Collective registration →

<After registration>

Call number: 70
Tare weight: 3.00 kg
Code number: 123456

- Individual registration: saves only a specified item of data.

<Before registration>

Call Number: 70
Tare weight: 0.00 kg
Code number: 000000

Individual registration
(Tare weight: 3.00 kg) →

<After registration>

Call number: 70
Tare weight: **3.00 kg**
Code number: 000000

Data modification <after registration>

Call number: 70
Tare weight: 3.00 kg
Code number: 123456

Registration of the tare weight only

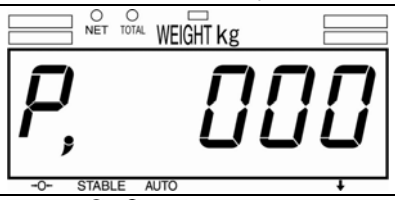
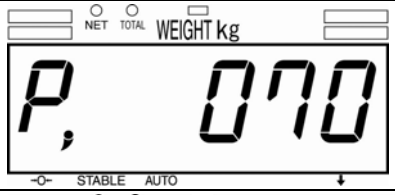
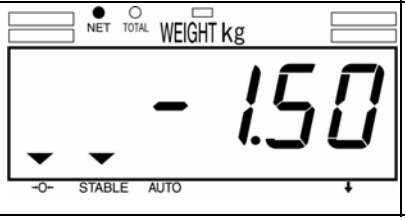
Individual registration
(Tare weight: 5.00 kg) →

Only the tare weight is changed.

Call number: 70
Tare weight: **5.00 kg**
Code number: 123456

## How to call registered data

<<Example>> To call the registered data from the call number 70, which was registered in the previous section:

| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | Press the PLU key. |  | This key works only when GROSS is zero (i.e. there is nothing on the weighing unit).<br>The setting value blinks. |
| ② | Enter 7 and 0 in that order. |  | Enter a call number whose data you wish to display. |
| ③ | Press the E key. |  | |

## How to clear registered data

Setting to “0” and registering it clears the corresponding registered data.
The data can be registered individually or collectively in the procedure described on pages 15 to16.

## Optional functions

The DP-5601 has a variety of optional functions in order to increase the efficiency of daily weighing operation. Please utilize these functions according to the environment of use.

### If journal printer is connected:

The journal printer is directly connected to the back of the indicator unit. Therefore, it requires less space, increases its usability, and makes a wealth of print contents available. A separate model of this printer, which can be installed away from the indicator, is also available. For details, refer to the dedicated instruction manual.

### If RS232C I/O is used:

The RS232C I/O can be used for various data inputs and outputs, operation commands, and other purposes. This is useful for the system management of weighing operations. For details, refer to the dedicated instruction manual.

### If wireless communication is used:

The wireless communication allows output of various data. This is useful for the system management of weighing operations. For details, refer to the dedicated instruction manual.

### If USB memory is used:

The various data can be stored in a USB flash memory and it is convenient for the data management. For details, refer to the dedicated instruction manual.

## How to set date and time

Note: The instrument has a built-in clock. Once the clock is set, it automatically starts ticking.

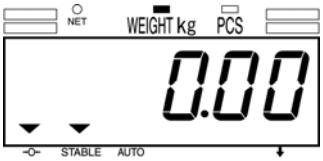
| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | [Date setting]<br>After press the ⬇ key, press the 4 [DATE] key.<br>The example shows March 1, 2010. | <br>(The ten's place of the year blinks.) | The date is expressed in dd/mm/yy format of the Western calendar (2 digits each).<br>Specify the year of the Western calendar. |
| ② | Using the numeric keys, enter the day, month and year in that order.<br><br>After entry, press the E key.<br>The screen returns to the weighing display. | | Enter the day, month and year in 2 digits each.<br><br>Example: "10"."03"."01" |
| ③ | [Time setting]<br>After press the ⬇ key, press the 5 key.<br><br>The example shows 8:20. | <br>(The ten's place of the hour blinks.) | The time is shown in 24-hour format (hour-minute).<br>Specify the hour in 24-hour format. |
| ④ | Using the numeric keys, enter the hours and minutes in that order.<br><br>After entry, press the E key.<br>The screen returns to the normal display. | | Enter the hours and minutes in two digits each.<br><br>Example:<br>"08"-"20" |

Caution: If the instrument is left unused for a long time (about 1 year with the power cable unplugged), the self-charging backup battery runs out, resulting in deletion of date/time data.

## How to set user parameters

The DP-5601 has 41 user parameters. You can change their settings according to the environment of use so as to achieve optimum operation of the instrument. When changing any of them, refer to the user parameter table on the next page.

<<Example>> To change the parameter No. 007 (non-addition) from 0 to 1:

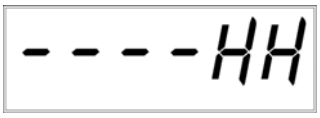
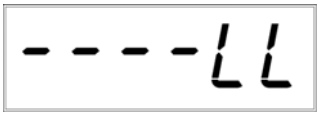
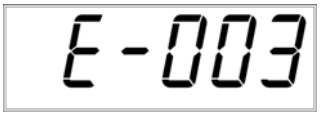
| | Operating procedure | Panel display | Remarks |
|---|---|---|---|
| ① | Press the PLU key while pressing the T key. | (The setting value blinks.) | The display switches to user parameter setting mode. |
| ② | Press the + key until the parameter number whose setting you wish to change appears. Pressing the − key decreases the parameter number. | (The setting value blinks.) | Keep pressing the + key automatically cycles through the parameters in the forward direction. (The − key has the same function – only goes backward.) |
| ③ | Using the numeric keys, change the setting. Press the 1 key. | (The setting value blinks.) | If you enter the wrong number, press the C key to clear the entry and enter the correct number. |
| ④ | To set other parameters, repeat the above Steps ② to ③. | (The setting value blinks.) | |
| ⑤ | Press the E key. The display returns to the weight display.<br><br>This example shows no load on the platform of the instrument. |  | |

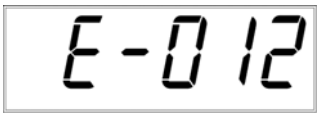
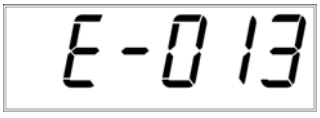
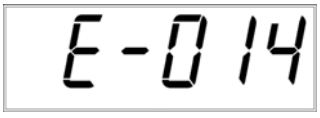
# User Parameter List

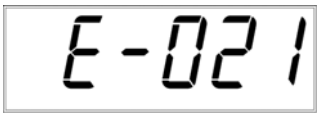
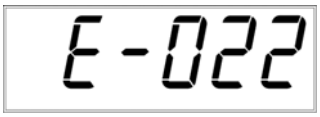
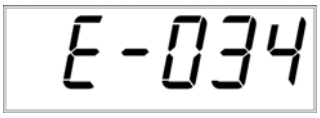
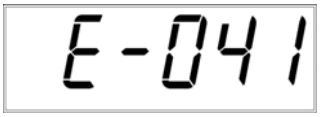
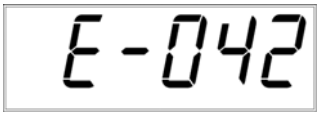
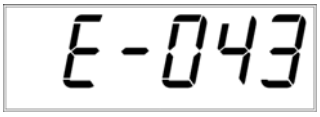
| NO. | ITEM | VALUE | DEFAULT | FUNCTION | REMARKS |
|---|---|---|---|---|---|
| 001 | DISPLAY BRILLIANCE | 000:<br>001:<br>002:<br>003:<br>004: | 002 | VERY DIM<br>DIM<br>STANDARD<br>BRIGHT<br>VERY BRIGHT | Adjust the brilliance of the display. |
| 002 | DIMMER TIMER | 000:<br>001-006: | 010 | DIMMER OFF<br>PERIOD BEFORE RETURN TO BRILLIANCE 00 | |
| 003 | NOT USED | | 000 | DO NOT CHANGE | |
| 004 | NOT USED | | 000 | DO NOT CHANGE | |
| 005 | NOT USED | | 000 | DO NOT CHANGE | |
| 006 | MANUAL TOTALIZATION | 000:<br>001: | 000 | [+], [-] KEYS INVALID IN AUTOMATIC MODE<br>[+], [-] KEYS VALID IN AUTOMATIC MODE | |
| 007 | NON-ADDITION | 000:<br>001: | 000 | TOTALIZE<br>NO TOTALIZATION, DATA OUTPUT ONLY<br>([TOTAL] KEY DOES NOT WORK.) | |
| 008 | PRINTER, JPS-508 | 000:<br>001:<br>002:<br>003:<br>004: | 001 | PRINTER JPS-508 NOT USED<br>NET WEIGHT PRINTED<br>GROSS, TARE AND NET WEIGHT PRINTED<br>DO NOT SET<br>OVER AND SHORT PRINTED (TO BE SET #68=1) | |
| 009 | PRINT ITEM | 000:<br>001:<br>002:<br>003:<br>004-007: | 003 | CODE NO. AND MEASUREMENT TIMES NOT PRINTED<br>CODE NO. PRINTED<br>MEASUREMENT TIMES PRINTED EVERY WEIGHING<br>CODE NO. & MEASUREMENT TIMES PRINTED<br>DO NOT SET | |
| 010 | PRINT TIME AND DATE | 000:<br>001:<br>002:<br>003:<br><br>004:<br>005: | 002 | TIME AND DATE NOT PRINTED<br>TIME PRINTED EVERY WEIGHING<br>DATE PRINTED AT TOTALIZATION<br>DATE PRINTED AT TOTALIZATION AND TIME PRINTED EVERY WEIGHING<br>DATE PRINTED EVERY WEIGHING<br>TIME AND DATE PRINTED EVERY WEIGHING | |
| 011 | FEED AFTER PRINT | 000:<br>001-020: | 000 | NO PAPER FEED<br>FEED SPECIFIED LINES AFTER WEIGHING | |
| 012 | FEED AFTER TOTAL PRINT | 000:<br>001-20: | 006 | NO PAPER FEED AFTER TOTAL PRINT<br>FEED SPECIFIED LINES AFTER TOTAL PRINT | |
| 031 | NOT USED | | 000 | DO NOT CHANGE | |
| 033 | NOT USED | | 000 | DO NOT CHANGE | |
| 035 | "SEnd" DISPLAY TIME PRINTER TPS-503W | 000:<br>001-008: | 001 | NO "SEnd" DISPLAYED AT ADDITION<br>"SEnd" DISPLAYED FOR SPECIFIED SECONDS AT ADDITION | |
| 053 | LCD CONTRAST | | 125 | DO NOT CHANGE | |
| 054 | NOT USED | | 000 | DO NOT CHANGE | |
| 055 | NOT USED | | 005 | DO NOT CHANGE | |
| 056 | NOT USED | | 000 | DO NOT CHANGE | |
| 058 | AUTO POWER ON | 000:<br>001: | 000 | NOT POWER ON AT PLUG IN<br>POWER ON AT PLUG IN | |
| 059 | AUTO CALL AT POWER ON | 000:<br>001: | 000 | NO FUNCTION<br>CALL #1 DISPLAYED AUTOMATICALLY AT POWER ON | |
| 060 | AUTO ADDITION MODE AT POWER ON | 000:<br>001: | 000 | MANUAL ADDITION MODE AT POWER ON<br>AUTO ADDITION MODE AT POWER ON | |
| 061 | AUTO CANCEL OF TARE | 000:<br>001:<br>002-003: | 000 | NO FUNCTION<br>TARE CANCELED WHEN G/W IS LESS THAN 4 DIVISIONS<br>NOT USED | |
| 062 | ITEMIZED TOTAL & GRAND TOTAL | 000:<br>001:<br>002:<br>003: | 000 | ITEMIZED TOTAL NOT AVAILABLE<br>ITEMIZED TOTAL AVAILABLE (AT #59=001)<br>GRAND TOTAL AVAILABLE<br>GRAND TOTAL, MAX, MIN, AVERAGE AND PRINT RANGE ARE EFFECTIVE | Valid only connection to Printer JPS-508. |
| 063 | GROSS CALCULATION | 000:<br>001: | 000 | INITIAL COUNTS CONVERTED INTO WEIGHT<br>CALCULATED BY NET+TARE (VALID AT #194=0) | |
| 064 | NOT USED | | 000 | DO NOT CHANGE | |
| 065 | NOT USED | | 000 | DO NOT CHANGE | |
| 066 | ONE-TIME ADDITION | 000:<br><br>001:<br><br>002: | 001 | MANUAL ADDITION EVEN FOR THE SAME ITEM IS POSSIBLE AT ANY TIME THE WEIGHT IS STABLE<br>ONE-TIME MANUAL ADDITION IS POSSIBLE WHEN IT IS STABLE AFTER PASSING THE VICINITY OF THE ZERO POINT<br>REAL TIME ADDITION IRRESPECTIVE OF STABILITY | |
| 067 | DELAY TIME FOR AUTOMATIC ADDITION | 000:<br>001-050: | 000 | ADDITION WITH NO DELAY TIME<br>ADDITION AFTER THE SPECIFIED TIME<br>- THE SETTING VALUE x 100ms | |
| 068 | ZERO ADDITION | 000: | 000 | NO ADDITION WITH THE INDICATION BEING 0 | |

| NO. | ITEM | VALUE | DEFAULT | FUNCTION | REMARKS |
|---|---|---|---|---|---|
| 069 | MOTION DETECTION | 000:<br><br>001:<br><br>002: | 000 | MANUAL ADDITION BY MOTION DETECTION / AUTOMATIC ADDITION BY ZERO DETECTION<br>MANUAL ADDITION BY MOTION DETECTION / AUTOMATIC ADDITION BY MOTION DETECTION<br>MANUAL ADDITION BY ZERO DETECTION / AUTOMATIC ADDITION BY ZERO DETECTION | |
| 070 | NOT USED | | 000 | DO NOT CHANGE | |
| 071 | NOT USED | | 000 | DO NOT CHANGE | |
| 072 | NOT USED | | 000 | DO NOT CHANGE | |
| 073 | NOT USED | | 000 | DO NOT CHANGE | |
| 074 | NOT USED | | 001 | DO NOT CHANGE | |
| 086 | SUBTRACTION OF ADDED DATA FROM SCALE MEMORY | 000:<br>001: | 000 | CANCEL LAST MINUTE ADDITION DATA<br>SUBTRACT WEIGHT ON PLATFORM FROM SCALE MEMORY | |
| 092 | NEGATIVE COUNT | 000:<br><br>001:<br><br>002: | 000 | NO MANUAL ADDITION OR NO OVER/UNDER JUDGMENT WHEN THE NET WEIGHT IS NEGATIVE.<br>MANUAL ADDITION OR OVER/UNDER JUDGMENT ONLY WHEN THE NET WEIGHT IS NEGATIVE.<br>MANUAL ADDITION OR OVER/UNDER JUDGMENT DESPITE OF THE VALUE OF NET WEIGHT. | |
| 182 | NOT USED | | 000 | DO NOT CHANGE | |
| 183 | NOT USED | | 000 | DO NOT CHANGE | |
| 187 | NOT USED | | 000 | DO NOT CHANGE | |

## Error code

| Panel display | Conditions that trigger the error code | Corrective action |
|---|---|---|
|  | When there are any objects placed on the platform of the instrument, pressing the ON key to turn ON the display may generate this code. | Remove the object from the platform and press the ON key.<br>The panel shows “0.00”; and the instrument is operational. |
| | When there are any objects placed on the platform of the instrument, pressing the ON key to perform the zero reset may generate this code. | |
|  | When foreign material is caught between the platform of the instrument and the container or when the platform is removed, pressing the ON key to turn ON the display may generate this code. | Correctly install the platform and press the ON key.<br>The panel shows “0.00”; and the instrument is operational. |
| | When the platform of the instrument is removed, pressing the ON key to perform the zero reset may generate this code. | |
| | Placing any objects that are heavier than the weighing capacity of the instrument displays this sign during operation. | Removing the object returns to the weighing display. Use the instrument within its rated operating range. |
| | Removing the platform of the instrument displays this sign during operation. | Correctly install the platform.<br>The panel shows “0.00”; and the instrument is operational. |
| | When the number of measurement times added has reached the maximum number (9999), further addition of the number generates this code. | Press the C key. Then clear the number of measurement times added by referring to page 15. |
|  | This code appears when the added value exceeds the maximum value (999,999,999). | Press the C key to reset the error. Then clear the added value by referring to page 15. |
| | This code appears in the event of abnormal A/D conversion., or when the connected optional journal printer does not function properly due to a paper jam, etc. | Check the printing section for the paper jam, etc. Power OFF and then ON by pressing the OFF key and then the ON key. |
| | <When the optional RS232C is in use><br>This code appears when connected equipment is not ready for receiving a signal. | Check the connector connection. Press the C key to reset the error and then restart communication. |

| | | |
|---|---|---|
| | <When the optional RS232C is in use><br>This code appears when an unknown command is received. | Check the data transmitted by the connected equipment.<br>Press the C key to reset the error and then restart communication. |
| | <When the optional RS232C is in use><br>This code appears when an unknown header is received. | Check the data transmitted by the connected equipment.<br>Press the C key to reset the error and then restart communication. |
|  | <When the optional RS232C is in use><br>This code appears when received data such as tare weight exceed the rated operating range. | Check the data transmitted by the connected equipment.<br>Press the C key to reset the error and then restart communication. |
|  | <When the optional RS232C is in use><br>This code appears when a received header and the unit of numeric values are incorrect. | Check the data transmitted by the connected equipment.<br>Press the C key to reset the error and then restart communication. |
|  | <When the optional RS232C is in use><br>This code appears when the BCC values are not matched. | Check the results of BCC calculated by the connected equipment. Press the C key to reset the error and then restart communication. |
| | <When the optional RS232C is in use><br>This code appears when the connected equipment transmits too many data. | Divide the transmission data of the connected equipment into two parts and then transmit each part separately. Alternatively, reduce the volume of the transmission data.<br>Press the C key to reset the error and then restart communication. |
| | This code appears when the instrument has received an addition command during pre-stable condition. | Press the C key to reset the error. After the instrument has become stable, transmit the addition command again. |
| | <When the optional RS232C is in use><br>This code appears when a received zero adjustment command specifies an invalid zero adjustment range. | Transmit a command within the valid zero adjustment range (within the range of ±1.9% of the weighing capacity)<br>Press the C key to reset the error and then restart communication. |
| | <When the optional RS232C is in use><br>This code appears when the instrument has received a tare subtraction command, but is not ready for tare subtraction. | Check the specifications/status of the instrument. Make the instrument ready for tare subtraction and then transmit the command.<br>Press the C key to reset the error and then restart communication. |

| | | |
|---|---|---|
|  | <When the optional RS232C is in use><br>This code appears when an inexecutable command is received. For example, an addition command is received when there are no objects placed on platform of the instrument. | Check the specifications/status of the instrument. Make the instrument ready for the command and then transmit the command.<br>Press the C key to reset the error and then restart communication. |
|  | <When the optional RS232C is in use><br>This code appears when an undefined ZS99 command is received. | Check the data transmitted by the connected equipment.<br>Press the C key to reset the error and then restart communication. |
| | <When the optional RS232C is in use><br>This code appears when the transmitted data length is too long. | Check the data transmitted by the connected equipment.<br>Press the C key to reset the error and then restart communication. |
|  | <When the optional printer is in use><br>This code appears when the call number is “0” although the summary setting for individual call numbers is enabled. | Press the C key and set the call number. Then restart weighing. |
| | <When the optional USB flash drive feature is used><br>This code appears when a USB flash drive for writing is not connected. | Check that a USB flash drive has been inserted.<br>Press the C key to reset the error and then restart communication. |
|  | <When the optional USB flash drive feature is used><br>This code appears when there is no free space left in the USB flash drive for writing. | Check the free space of the USB flash drive.<br>Press the C key to reset the error and then restart communication. |
|  | <When the optional USB flash drive feature is used><br>This code appears when the USB flash drive for writing has been set to read only. | Check that the USB flash drive is set to read/write.<br>Press the C key to reset the error and then restart communication. |
|  | <When the optional USB flash drive feature is used><br>This code appears when the writing time into the USB flash drive is too long. | Check the data to be written in the USB flash drive.<br>Press the C key to reset the error and then restart communication. |

Note: Proper use of the instrument does not cause generation of errors.
If any of the above error codes is displayed, carry out the respective Corrective actions.
If the problem persists even after the above measures are taken, the instrument has internal failure. Contact your dealer from which you purchased the instrument.
If “E-101” or higher number of error codes shows up, contact the dealer.

## Specifications

1. Model : DP-5601
   Platform : BW-302
   Indicator : EDI-561
2. Weighing system : Strain gauze load cell
3. Weighing capacity : 3 kg to 2,000 kg
   Platform dimension : Refer to “Capacity & Platform size” list
4. Display tube
   Main display : 7-segmented 6 digit Fluorescent tube
   Character size : 32H x 14.6W (mm)
5. Display contents

| | |
|---|---|
| : Weight | Max. 5 digits |
| : Code | 6 digits |
| : Date | 6 digits |
| : Time | 4 digits |
| : Tare | Max. 5 digits |
| : Total weight | 9 digits |
| : Total cycle (weight) | 4 digits |

6. Indication sign
   Center zero : Indicator ▼ lights within 0±1/4 division
   Stable : Indicator ▼ lights at stable
   Automatic : Indicator ▼ lights in automatic mode
   Shift : Indicator ▼ lights when [⬇] key is pressed.

   Lamp indication
   Net : Red LED lights during tare subtraction
   Total : Red LED lights during total being displayed

7. Keys

| | |
|---|---|
| ON →O← | Turns on display or resets to zero. |
| OFF | Turns the power OFF. |
| PLU | Calls registered data, or registers data. |
| T | Performs the quick tare subtraction. |
| + | Addition or printout at addition. |
| − | Subtraction or printout at subtraction |
| TOTAL | Totalizing or total printout |
| CODE | To set code number. |
| E | Determines the setting value entered. |
| 0 to 9 | Enters a numerical value. |
| C | Clear data entry or tare |
| ⬇ | Change of function on keys 2-8 |
| 2 | Feed the print paper (with ⬇ key) for JPS-508. |
| 3 AUTO | Changeover between automatic and manual (with ⬇ key). |
| 4 DATE | To set date (with ⬇ key). |
| 5 | To set time (with ⬇ key). |

8. Tare setting : 3 types
   - One-tough by Tare key
   - Numerical entry
   - Recall by PLU number

   Max. Tare : up to capacity

9. Recalling registered data
   Range: Within weighing capacity.
   Registration method: Individual or Multiple registration
   Data to be registered: Tare, Code No., Upper limit, Lower limit, Unit weight, Item name, Rank setting value, Rank name

10. Option

a)Built-in journal printer

| | |
|---|---|
| Contents of print (each print) | Weight (5 digit), Code (6 digit), Total cycle (4 digit), Date (6 digit), Time (4 digit) |
| (Total print) | Total weight (9 digit), Total number of weighing times (4 digit) |

b)RS232C interface

| | |
|---|---|
| Connectable device | : USB Memory, PC etc. |
| Output data | : Date, Code, Gross weight, Net weight, Tare, Total weight, Times of addition |
| Input data | : Addition command, Total command, Tare command, Zero reset command, Code, Date, Tare |

c)Relay input/output

| | |
|---|---|
| Output | : 6 outputs available (Underweight, Pre-lower limit, Acceptable weight, Overweight, Rough feed, Fine feed) |
| Input | : Tare, Zero reset, Addition, Total |

d)USB Memory

e)Wireless communication

11. Power supply : AC110V, 120V, 200V, 220V, 230V +10%~-15%, 50/60Hz

12. Power consumption : Approx. 23W

13. Indicator
    Material: Stainless Steel
    IP rating: IP66

14. Operating condition
    Temperature: -10℃ to 40℃
    Humidity: 30% to 85% RH (no condensation)

15. Cable
    Power cable: Approx. 4m
    Load cell cable: Approx. 3 meter (small & middle size)
    Approx. 5 meter (large & extra-large size)

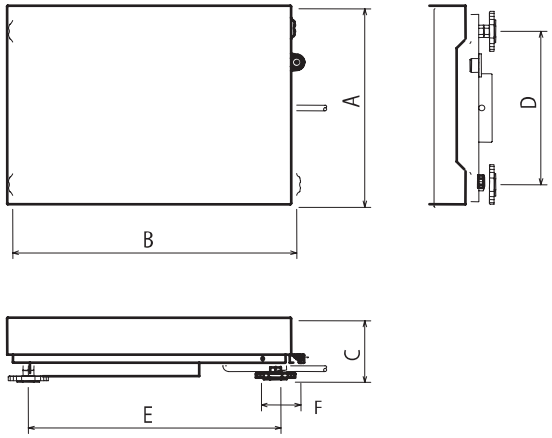
16. Accessory Hook for hanging on walls

## Outline view drawing

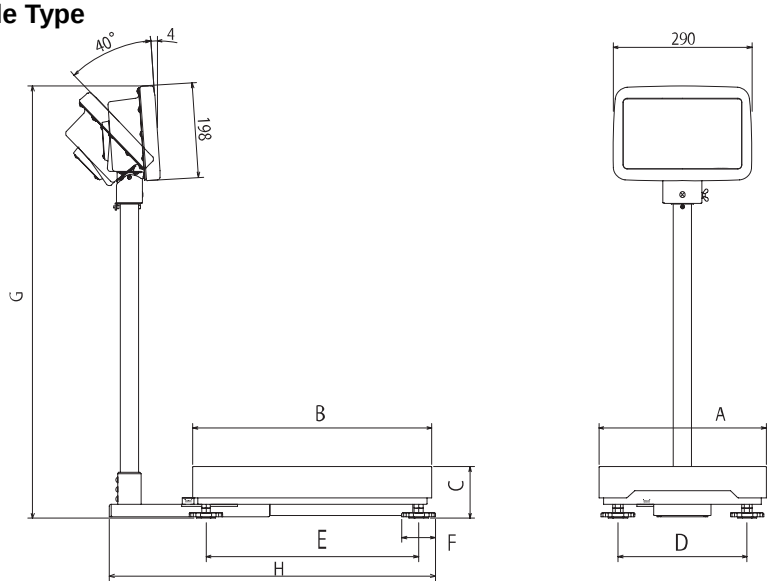
Capacity & Platform Size (Model: BW-302) (Unit: mm)

| Platform Size | Desk-top | Small | Medium | Ex-Medium | Large | Extra Large |
|---|---|---|---|---|---|---|
| Capacity (kg) | 3<br>6<br>15 | 30<br>60<br>150 | 60<br>150<br>300 | 600 | 300<br>600<br>1200 | 1200<br>1500<br>2000 |
| A | 350 | 350 | 500 | 500 | 850 | 1200 |
| B | 300 | 500 | 750 | 750 | 1000 | 1200 |
| C | 80,+0~10 | 112,+0~20 | 148,+0~20 | 236,+0~30 | 236,+0~50 | 246,+0~50 |
| D | 270 | 270 | 400 | 400 | 720 | 1070 |
| E | 305 | 495 | 660 | 660 | 855 | 1070 |
| F | $\phi$ 38 | $\phi$ 70 | $\phi$ 70 | $\phi$ 75 | $\phi$ 75 | $\phi$ 75 |
| G (Pole type) | 556,+0~10 | 903,+0~20 | 910,+0~20 | 935,+0~30 | 935,+0~50 | nil |
| H (Pole type) | 370 | 683 | 896 | 895 | 1145 | nil |

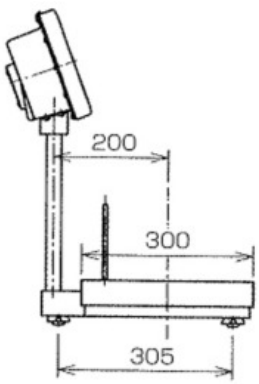
**Separate Type (Standard)**

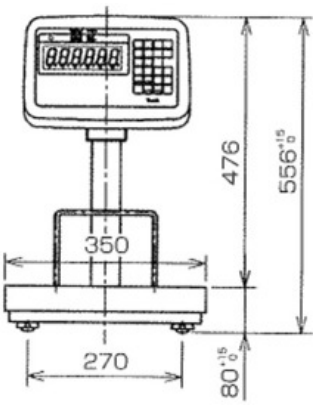



**Integrated Pole Type**

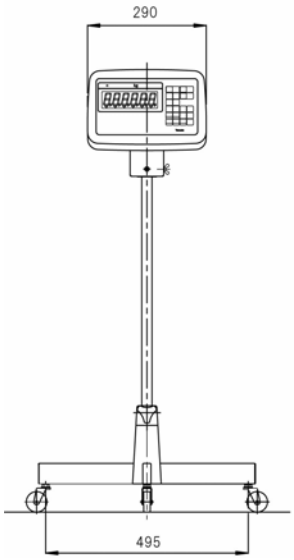


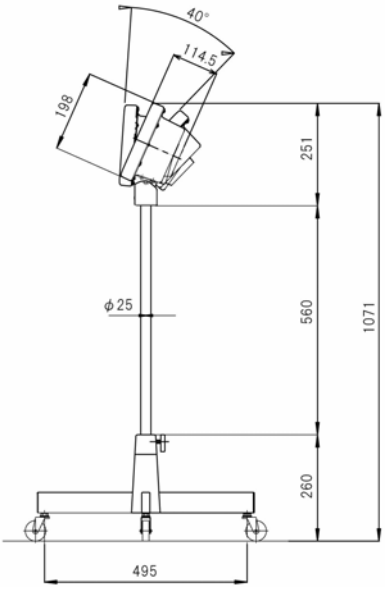
## Desk-top Type




## Separate Stand Type



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