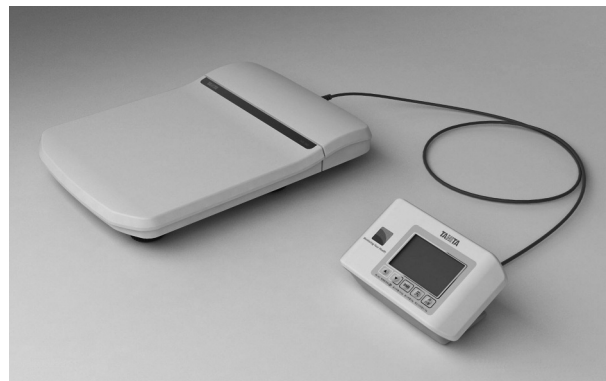


ELECTRONIC SCALE **WB-380**

Instruction manual



<Usage Conditions>

Temperature Range for Use	: 5°C – 35°C
Relative Humidity	: 30% – 80% (without condensation)

<Storage Conditions>

Temperature Range of Environment : -10°C – 50°C
Range of Relative Humidity : 10% – 90% (without condensation)
To avoid malfunctions, avoid storing the equipment where there is direct sunlight, significant temperature changes, the risk of dampness, a large amount of dust, in the vicinity of fires, or where there is the risk of receiving vibrations or shocks.



Please read this Instruction Manual carefully and keep it handy for future reference.

1. Table of Contents

2. Safety Notes	2	8. Operation	12
3. Part Names	6	9. Based on NIH/WHO BMI Guidelines	12
4. Assembly Instructions	8	10. Measuring height procedure	13
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6. Set up	10	12. Troubleshooting	15
7. Power supply	11	13. Specifications	16

2. Safety Notes

The following outlines precautionary measures to be taken to avoid injury to the users of this device and others, and to prevent damage to property. Please familiarise yourself with the contents to ensure the safe operation of this equipment.

 **Warning** Ignoring instructions highlighted with this mark could result in death or severe injury.

 **Caution** Ignoring instructions highlighted with this mark could result in injury or damage to property.



This mark indicates actions that are prohibited.



This mark indicates instructions that must always be adhered to.

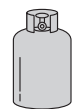
Warning

Do not handle the plug with a wet hand.

Such action may result in electric shock, fire, or leakage.

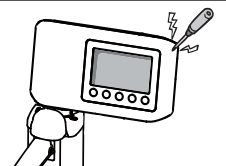


Keep this equipment away from flammable gas and oxygen rich environment.



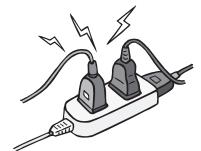
No modification of this equipment is allowed.

There is a risk of electrocution or injury. Nor can precise analysis be guaranteed.



Do not use double adapters.

May result in fire.



Prohibited



Always...

Use only a correctly wired outlet.

Only genuine cables and equipments are allowed.



Caution



Prohibited

Keep away from water.

Do not jump on the equipment.

Do not insert fingers into gaps and holes.

Do not apply force to the display.

The screen panel may break and cause injury.

Assist persons with disabilities.

Another person should assist persons with disabilities who may not be able to take a measurement alone.



Always...

Be sure clean the scale platform with appropriate disinfectant after each use.

Stand clear of the subject during measurement to ensure accuracy.

Continually monitor both the subject and the equipment for anomalies.

If an anomaly in the subject or equipment is discovered, take appropriate action, such as stopping the equipment, while ensuring the safety of the subject.

Be sure to use the included AC adapter.

Unplug the AC cable from the equipment when moving it.

When not in use for a long time, unplug the AC Adapter from the wall socket.

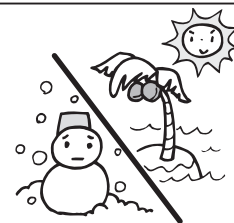
Interpretation of analysis results (e.g. evaluation of measurements and formulation of exercise programmes based on results) must be performed by a professional.

Weight loss measures and exercise based on self-analysis could be harmful to you health. Always follow the advice of a qualified professional.

For Accurate Measurements

Avoid measuring in multiple locations with greatly differing temperatures.

This may cause inaccurate measurements. Allow the equipment to stand for at least 2 hours before using if it is moved to a new location with a temperature difference of 20°C or more.



Ensure the weighing platform is placed on a level and stable surface.

Avoid subjecting the equipment to excessive shocks or vibrations.

Use in a stable location.

Errors in measurements may occur if the device is used in an unstable location.



Always...

Scheduled Maintenance

TANITA recommends that each facility conduct periodic checks of each unit.

1. Check the following at least daily:
 - The unit is on a stable and level surface ie on a firm flooring, not on a thick carpet
2. Visually inspect the following at least weekly:
 - The display for any damage or contamination
 - All cables, cords, and connector ends for damage or contamination
 - All safety-related labeling for legibility
 - All accessories (sensors, electrodes, etc.) for wear or damage
3. Visually inspect the following at least monthly:
 - Screws on equipment

Update settings, replace items, or call for service as necessary according to the results of the visual inspections. Do not use the unit if you see any signs of damage. Equipment that has been damaged must be checked for proper operation by qualified personnel before using again.

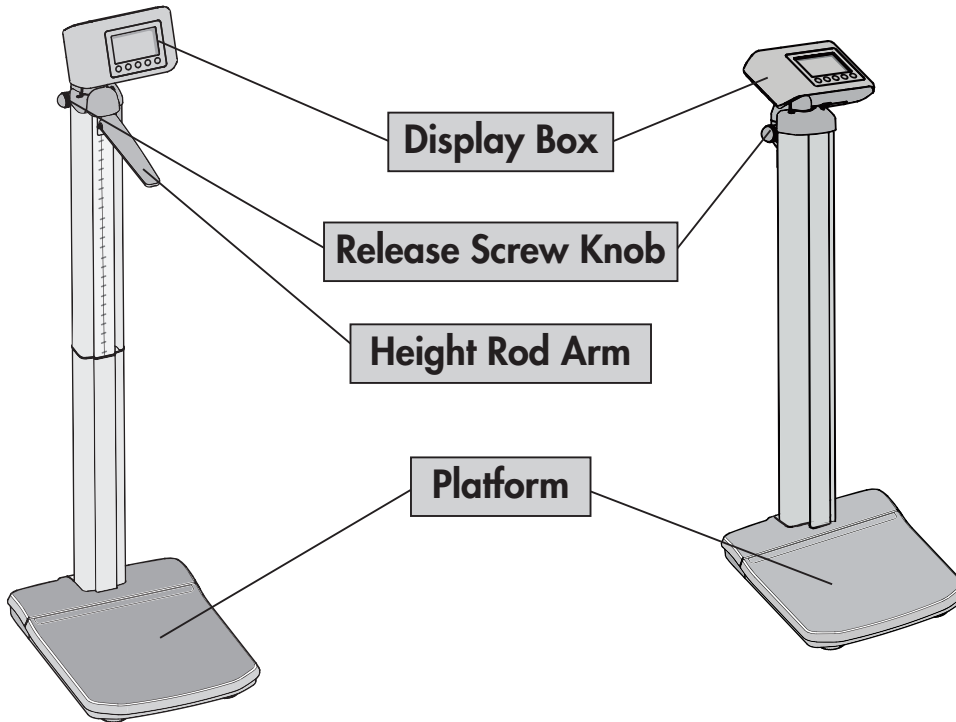


Always...

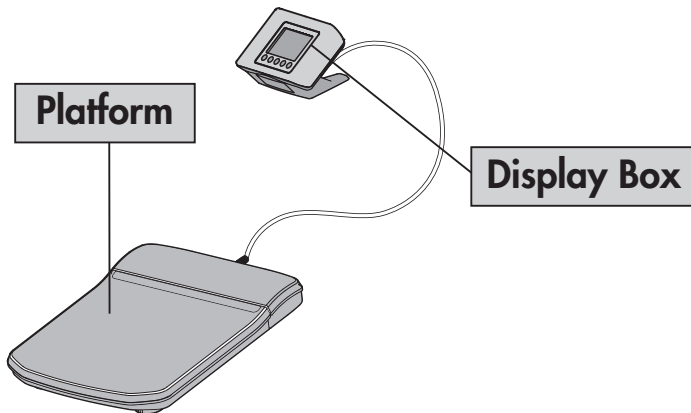
3. Part Name

WB-380H

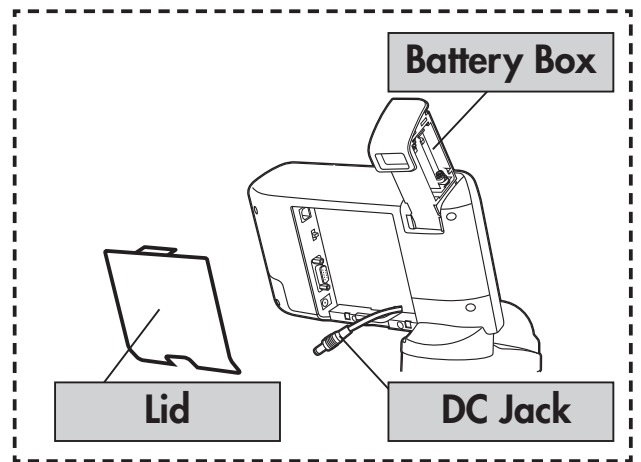
WB-380P



WB-380S



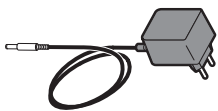
Display Box



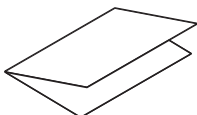
Accessories

<WB-380S>

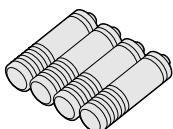
AC Adapter



Instruction Manual

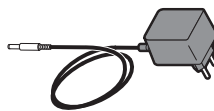


LR6 (AA Alkaline battery) x 4

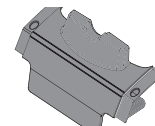


<WB-380H, WB-380P>

AC Adapter



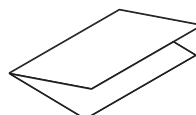
Back Cover



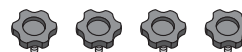
Front Cover



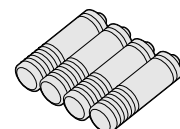
Instruction Manual



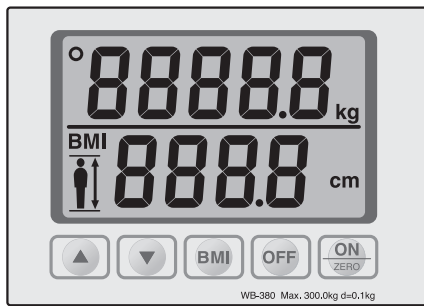
Screw x 4



LR6 (AA Alkaline battery) x 4



■ Control Panel

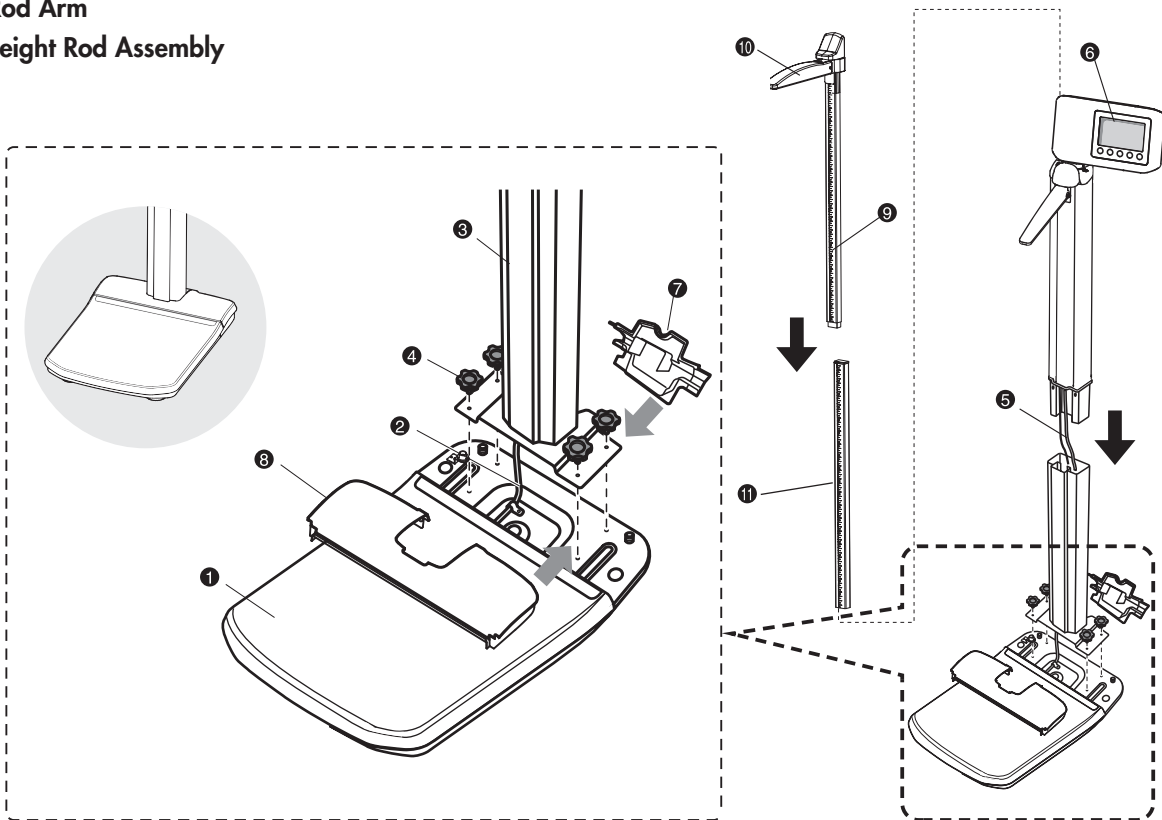


■ Symbols and their Meanings

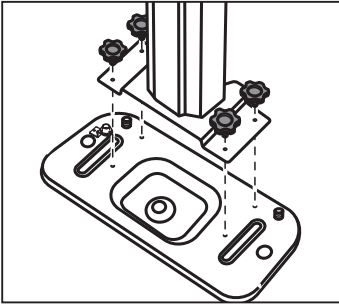
ON	Display Unit On		Output
OFF	Display Unit Off	ZERO	Zero reset
	Direct current		Caution Refer to the attached notes.
BMI	Select BMI mode		Adjust height for BMI

4. Assembly Instruction

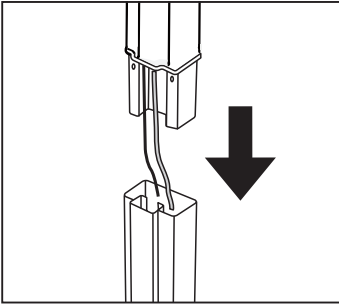
- ① Base (fully assembled and pre-wired to display assembly)
- ② Cable (Base side)
- ③ Lower Pillar Assembly
- ④ Screw
- ⑤ Cable (Cables) (Top Head Display Assembly Side)
- ⑥ Top Head Display Assembly (fully assembled and pre-wired to base)
- ⑦ Back Cover
- ⑧ Front Cover
- ⑨ Top Height Rod Assembly (fully assembled with pivoting height measuring lever)
- ⑩ Height Rod Arm
- ⑪ Lower Height Rod Assembly



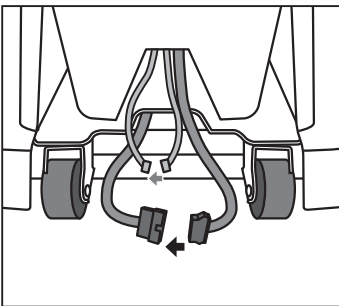
For WB-380H



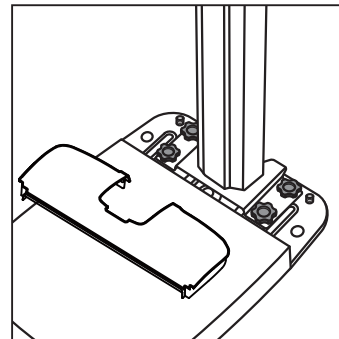
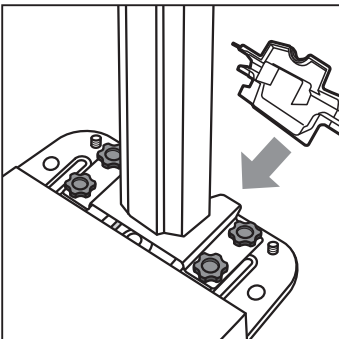
Install the lower pillar into the base using the four (4) screws.



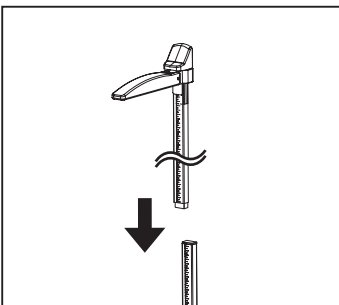
Assemble the top head display into the lower pillar inserting the cable into lower pillar.



Connect the cables inside the bottom of the lower pillar.

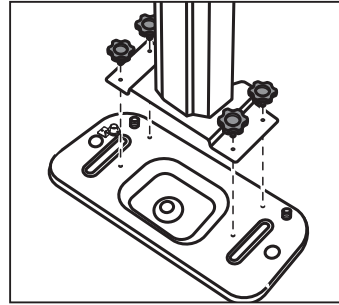


Attach the back cover and the front cover as shown.



Push all the way down assembled the top height rod to the lower height rod opening on the pillar.

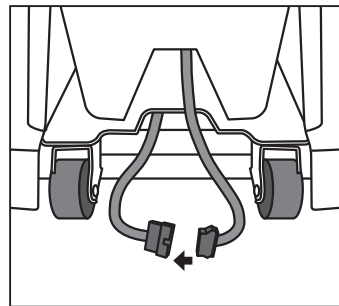
For WB-380P



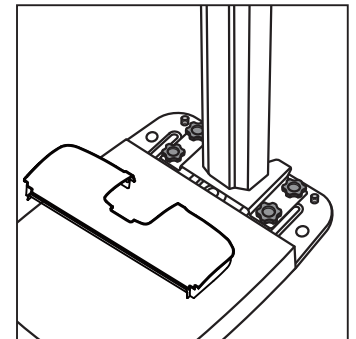
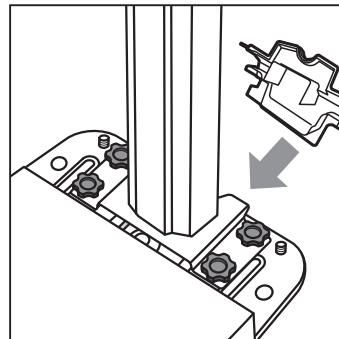
Install the lower pillar into the base using the four (4) screws.



Assemble the top head display into the lower pillar inserting the cable into lower pillar.



Connect the cable inside the bottom of the lower pillar.



Attach the back cover and the front cover as shown.



Push all the way down assembled the top height rod to the lower height rod opening on the pillar.

5. Functions

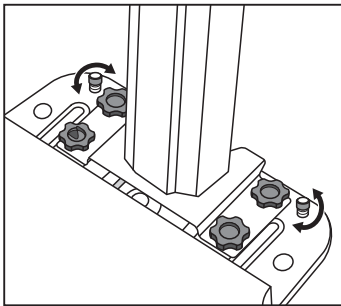
■ Automatic Power Off

This equipment has an automatic power off function that automatically turns off the power in order to reduce battery consumption.

If the display does not change for 30 seconds, the power will be automatically turned off.

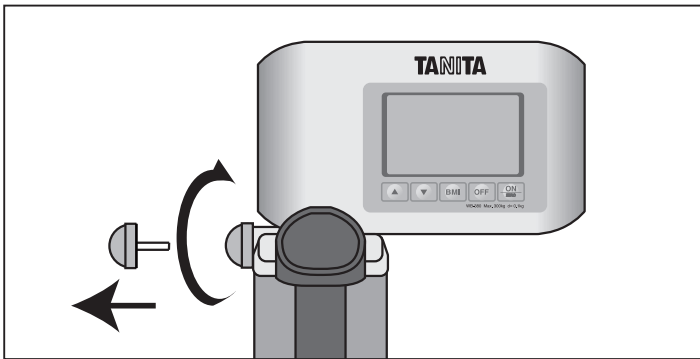
6. Set up

■ Flat and stable location

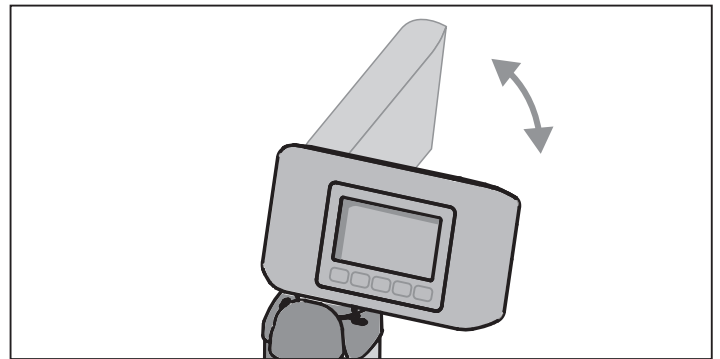


Position the two (2) adjustable supporting feet on the base until they just make contact with the floor.

■ Angle Adjustment



1) Fully release screw knob on the column.



2) The indicator could select at 90-degree 2 positions be sure to screw it tightly after setting the position.

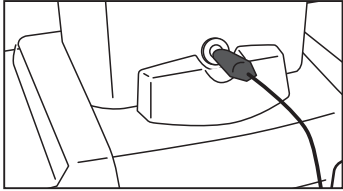
7. Power supply

■ AC adapter

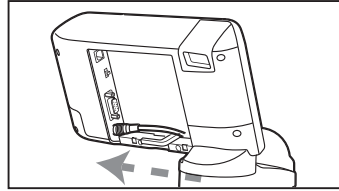
AC adapter is much preferable when the scale will be used continuously.

GB

For WB-380H, WB-380P

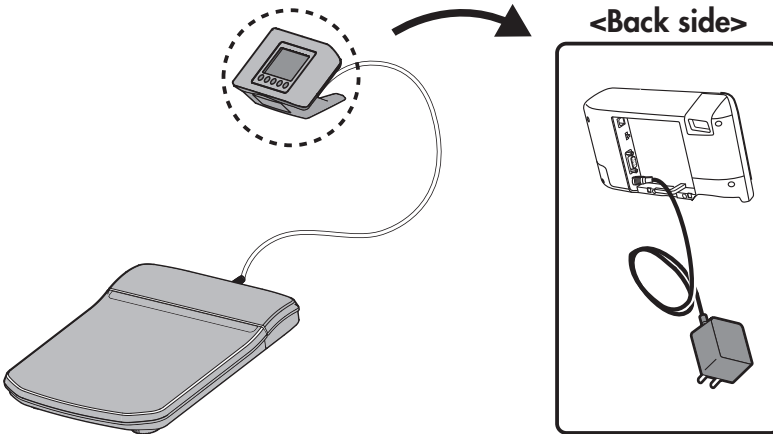


1) Plug on the AC adapter. Insert the AC adapter jack into the DC Jack on the back of the pole.



2) Insert the connector into the DC Jack on the back of the indicator.

For WB-380S

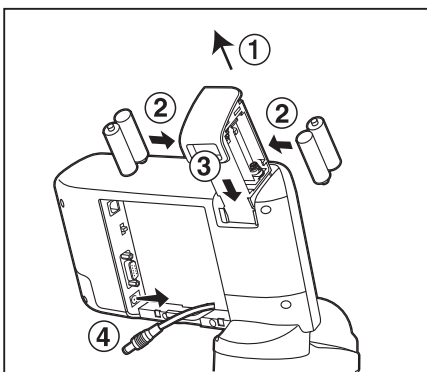


Plug on the AC adapter. Insert the AC adapter jack into the DC Jack on the back of the indicator.

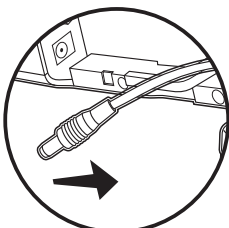
■ Batteries

For WB-380H, WB-380P

For WB-380S



- 1) Pull up the battery case which located on top of display.
- 2) Ensure that the batteries are inserted with the correct polarity.
- 3) push down the battery case completely.
- 4) Unplug the DC connector on the back of the indicator.

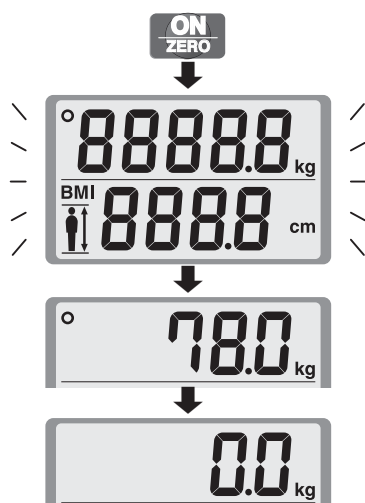


⚠ Caution

Unplug the DC connector. Or the scale wouldn't work.

8. Operation

GB

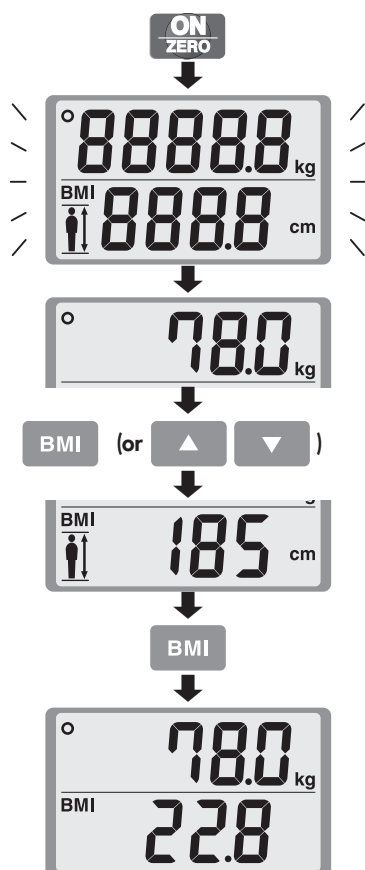


1. Standard Weighing Procedures

- 1) Turn on the power by pressing the **ON ZERO** key.
- 2) After all the segments flash, [0.0kg] is displayed.
- 3) The person to be weighed should still in the middle of the platform.
- 4) The weight will be locked-in and displayed on the display. "○ (Hold)" sign will appear in the upper left corner of the display.
When the scale is connected to an external device, weight data will be exported at this time.
- 5) The scale will automatically shut off in 30 seconds.

Note: • Do not press the **ON ZERO** key while standing on the scale, as accurate measurement will not be possible.

2. BMI Weighing



- 1) Turn on the power by pressing the **ON ZERO** key.
- 2) After all the segments flash, [0.0kg] is displayed.
- 3) The person to be weighed should still in the middle of the platform.
- 4) The weight will be locked-in and displayed on the display. "○ (Hold)" sign will appear in the upper left corner of the display.
- 5) Press the **BMI** key (or **▲ ▼**). The default height [170cm] will be displayed.
- 6) Set the height with the **▲ ▼** key.
- 7) Once the height and weight have been established, press the **BMI** key.
The weight and BMI calculation will then be displayed.
When the scale is connecting to an external device, weight, height and BMI data will be exported at this time.
- 8) The scale will automatically shut off in 30 seconds.

9. Based on NIH/WHO BMI Guidelines

Under Weight		BMI < 18.5
Normal Range		18.5 ≤ BMI < 25
Pre obese		25 ≤ BMI < 30
Obese	CLASS I	30 ≤ BMI < 35
Obese	CLASS II	35 ≤ BMI < 40
Obese	CLASS III	BMI ≥ 40

10. Measuring height procedure

GB

For WB-380H

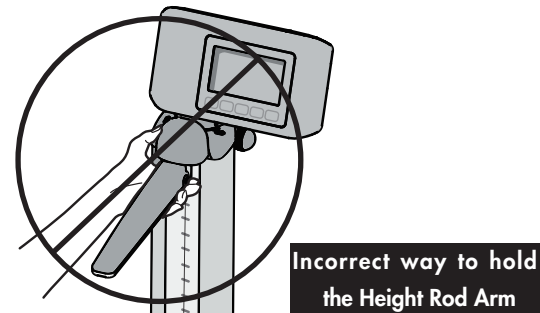
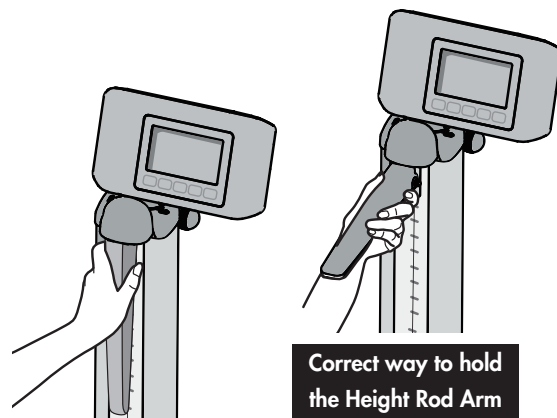
The user should step on the platform without wearing shoes for accurate measurement.

Always have someone assist the user for accurate measurement.

1) Adjust the Height Rod Arm position before the user steps on the platform. Place hand on the Height Rod Arm.

If the subject is taller than 120 cm, pull the Height Rod Sliding Block and Height Rod Arm at the same time upward so that the arm is positioned higher than the subject's head.

If the subject is shorter than 120 cm, move the Height Rod Arm down.



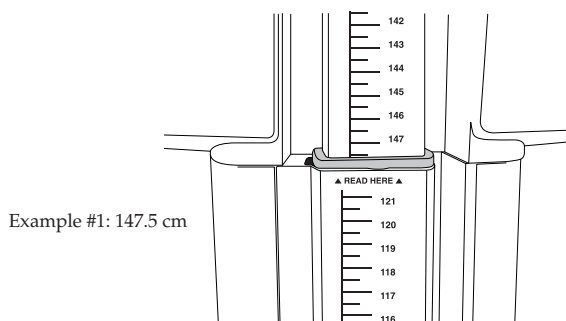
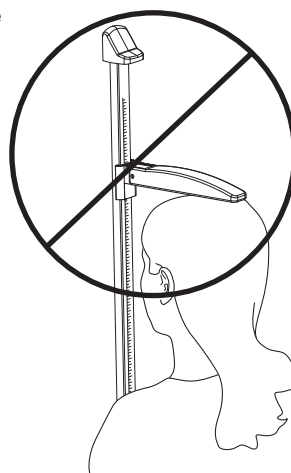
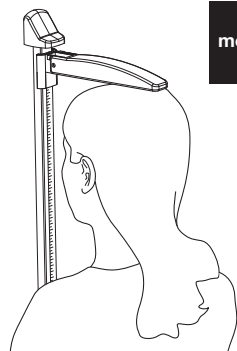
To avoid danger of breaking or coming loose, you must hold the height rod arm securely.

2) Gently lower the Height Rod Arm until the Height Rod Arm touches the very top of the user's head.

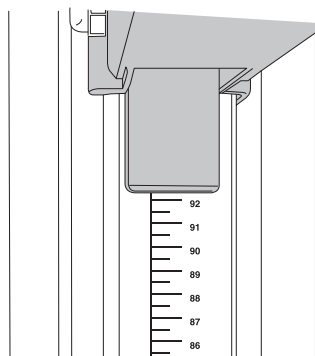
3) Read the measurement.

If the subject is taller than 120 cm, read the number just above the top of the Upper Pillar Column (see example #1).

If the subject is shorter than 120cm, read the number below the Height Rod Arm (see example #2).

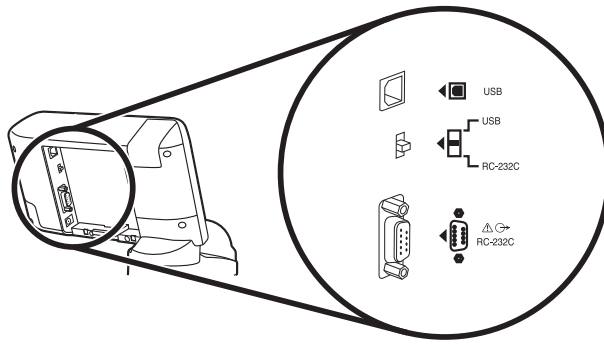


Reading the height measurement of 120cm or MORE



Reading the height measurement of 120cm or LESS

11. Output data format



This section covers the exporting of data from the scale to an external device (e.g. PC) using a RS-232C and USB compliant signal.



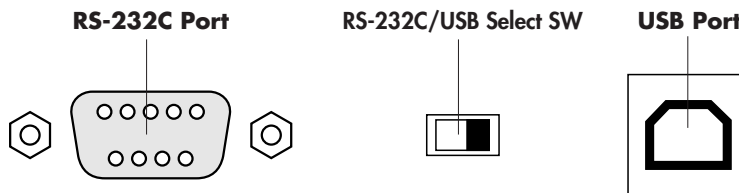
- RS-232C and USB interface are for data OUTPUT ONLY!
- This scale is not capable of receiving instructions from an external device.

Specifications

Communications standard	EIA RS-232C compatible	USB
Communications method	Asynchronous transaction	
Signal speed	9600 baud	
Data bit length	8 bits	
Parity	None	
Stop bit	1 bit	
Terminator	CR+LF	

Note:

- An RS-232C connector (D sub 9-pin female) and USB connector (B-type 4-pin female) are located on the back of the display unit.
- Please provide your own cables as necessary as none are included.
 RS-232C :Straight D sub 9-pin (male) – D sub 9-pin (female)
 USB :A-type 4-pin (male) – B-type 4-pin (male)
- Select Switch : Please select which interface you would like to use

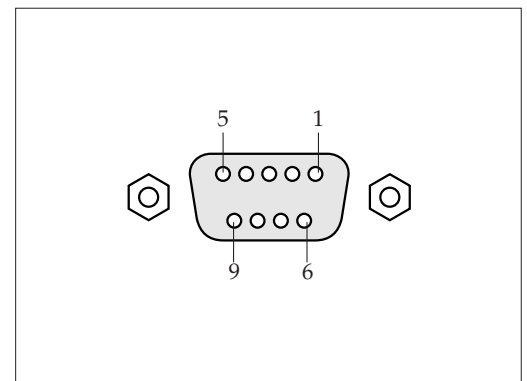


Caution

If you want to use the USB output, you must install the necessary driver on to your PC, available to download from <http://www.tanita.eu>.

Signal Line Name and Connection Method

Terminal no.	Signal name
1	
2	TXD
3	
4	
5	GND
6	
7	
8	
9	

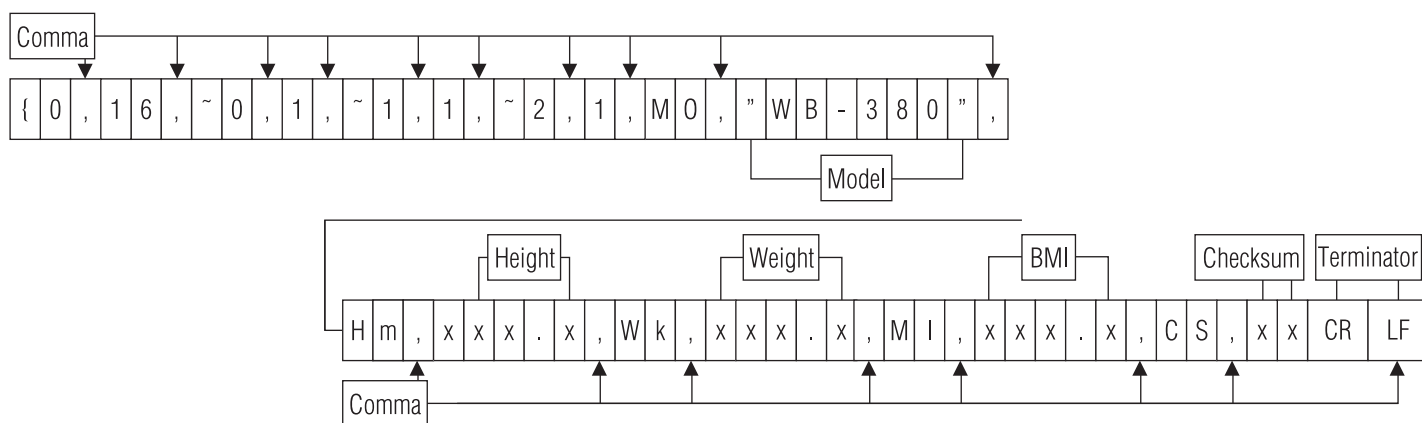


Output data

Name of item	Header	Output data (ASCII code)		Pattern	
				BMI mode	Weight mode
Control data	{0	Fix to 16	2 Bytes fixed	✓	✓
Control data	~0	Fix to 1	1 Byte fixed	✓	✓
Control data	~1	Fix to 1	1 Byte fixed	✓	—
Control data	~2	Fix to 1	1 Byte fixed	✓	—
Model	MO	"WB-380"	8 Byte fixed	✓	✓
Height	Hm	xxx.x	4 – 5 bytes	✓	—
Weight	Wk	xxx.x	3 – 5 bytes	✓	✓
BMI	MI	xxx.x	3 – 5 bytes	✓	—
Checksum	CS	xx	2 Bytes fixed	✓	✓

- Note:**
- The data are divided with commas (,) for each data.
 - The terminator (end of the data) is CR (ASCII code 0DH), LF (ASCII code 0AH).
 - The control data for the items 1 – 4 are for expansion. They are not used presently so the receiving side can ignore them.
 - Because of its specifications, the scale will output an irrelevant signal approximately 0.1 second after data output. Make sure you ignore this signal and do not import it.

[Output example]



12. Troubleshooting

If you are concerned that the scale may not be functioning correctly, please check the following point before requesting repairs.

Problem	Check Points
Nothing is displayed when ON ZERO key is pressed.	<ul style="list-style-type: none"> • Check the connection of the AC adapter jack to the DC jack, and the connection of the AC adapter plug to the power outlet. • The batteries may be weak. Try an AC adapter or new LR6 (AA) batteries. • Check the terminals of the batteries for contamination • Batteries — Unplug the DC connector on the back of the indicator.
"Lo" is displayed.	The batteries are running out. Please replace them immediately or use the AC adapter.
Measurement is not accurate.	<ul style="list-style-type: none"> • Check that all feet of scale are stable and on a hard flat surface, carpeting depth should be kept to a minimum. • After having stepped down from the scale and pressed the ON ZERO key, perform the measurement again. • Accurate measurement may be impossible if the product is used where there is excessive vibration.
The weight does not stabilize	<ul style="list-style-type: none"> • Are you moving during measurement? • Is the measured weight within the range of weight measurement? • Are you touching the height rod arm, switch, or another part during measurement?
"OL" is displayed	• The range of weight (300kg) is exceeded.
"-OL" is displayed	• Was anything placed on the scale before measurement?
"Error" is displayed	• Check whether the cable between the platform and display is disconnected, cut, or pinched.

13. Specifications

Model		WB-380	
Weight Measurement	Measurement System		Strain Gauge Load Cell
	Maximum Capacity / Minimum Graduation		300kg / 0.1kg
	Range of Weight		0 - 300kg
Height Measurement	Measurement System		Mechanical Height Rod
	Range of Height		64cm - 214cm
Height	Input Items		61cm- 250cm 1cm increments
Output Items	Display	Weight	300kg / 0.1kg
		Height	61cm- 250cm 1cm increments
		BMI	0.1 increments
Size / weight of equipment	Overall	WB-380H	395 x 552 x 1425 mm Total 11.2kg
		WB-380P	395 x 595 x 1196 mm Total 10.0kg
		WB-380S	395 x 529 x 123 mm Total 7.1kg
	Platform		395 x 390 x 59 mm
Display		Upper 5Digits and Lower 4Digits LCD Height of numerals / 24mm	
Output Data Interface		RS-232C (D sub 9-pin Female connector) USB (B-type)	
Power Source		AC adapter (included) Centre Minus DC 6V 200mA (LR6 - AA Alkaline Battery x 4)	
Power Consumption		0.3 W max.	
Temperature Range of usage		5°C - 35°C	
Battery Life		Approximately 100hours of continuous use when using LR6 (AA Alkaline battery)	



This device features radio interference suppression in compliance with EC Regulation 2004/108/EC

Disposal



This equipment is electronic device. Please dispose of this equipment appropriately as not the general household waste but electronic equipment. Please follow a regional regulation when you dispose of this.

<EU representative>

TANITA® Europe B.V.

Hoogoorddreef 56-E, 1101 BE Amsterdam, the Netherlands TEL: +31-20-560-2970 FAX: +31-20-560-2988 <http://www.tanita.eu>

<Manufacturer>

TANITA® Corporation

1-14-2, Maeno-cho, Itabashi-ku, Tokyo, Japan TEL: +81(0)-3-3968-7048 FAX: +81(0)-3-3967-3766 <http://www.tanita.co.jp> ISO 9001 Certified

TANITA Corporation of America, Inc.

2625 South Clearbrook Drive,
Arlington Heights, Illinois 60005, U.S.A.
TEL: +1-847-640-9241
FAX: +1-847-640-9261
<http://www.tanita.com>

TANITA Health Equipment H.K.LTD.

Unit 301-303, 3/F, Wing On Plaza, 62 Mody Road,
Tsimshatsui East, Kowloon, Hong Kong
TEL: +852-2834-3917
FAX: +852-2838-8667
www.tanita.asia

TANITA India Private Limited

A-502, Mittal Commercial, Off. M.V. Road (Andheri Kurla Road),
Marol, Andheri-East, Mumbai INDIA 400 059
TEL: +91-22-3192-6107
FAX: +91-22-2859-9143
www.tanita.co.in

TANITA (Shanghai) Trading Co., Ltd.

Room 8005, 877 Huai Hai Zhong Lu, Shanghai,
The People's Republic of China
TEL: +86-21-6474-6803
FAX: +86-21-6474-7901
www.tanita.com.cn