The warranty period extension method 1 year \rightarrow 2 years

The warranty period will be extended from 1 year to 2 years when you register customer information. ATAGO Logger NFC can also be downloaded at the same time.



Trouble scanning the code? Access this link https://www.atago.net/ur/index.php?l=en

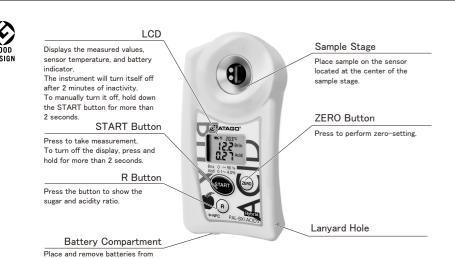
Pocket Brix-Acidity Meter (Apple) PAL-BXIACID5 Cat. No. 7105 Master Kit

Image is for explanation purposes only.

It may be different than the actual product purchased.



Parts



Contents

Main unit…1 Instruction Manual (this book)…1 AAA batteries…2 Measuring Spoon 1mL…1

Beaker 100mL···1 Digital scale···1 (About the Digital Scale)

Note Please remove the tape in the battery compartment before first use.

Memo The measuring spoon is available from ATAGO. Part No. RE-39005 Measuring Spoon 1mL

ATAGO instruments are rigorously inspected to ensure each unit meets the highest standards of quality assurance.

Quick Tips

- •The instrument measures the Brix in the sample solution, and the acidity in the 1: 50 dilution of the sample that is diluted with purified water.
- Press the START button once to measure the Brix
- The Brix and the acidity of the sample (stock-solution) will be displayed at the end of the measurement.



- Press the ZERO button to perform zero-setting for either Brix or Acidity Zero-setting can be performed with water (for Brix) or air (for acidity)
- ·I CD Auto Shut-off

The instrument will turn itself off after 2 minutes of inactivity. To manually turn it off, hold down the START button for more than 2 seconds.

Measurement Value

Brix represents the weight of sucrose in 100 grams of sucrose solution as percentage by weight. When other dissolved solids are present in the solution. Brix conversion may be applied.

Brix is a measure of the total dissolved solids in a solution and indicates the combined concentration of all soluble substances, such as sugar, salt, protein, and acids.

This unit measures and determines the acidity through electrical conductivity.

Malic acid is the primary acid found in Apple.

The instrument measures the total acidity in a sample and converts it into malic acid concentrations

Automatic Temperature Compensation

The Automatic Temperature Compensation (ATC) feature is based on temperature detected by the thermo sensor located

ATC may not work correctly when the temperature of the sensor area is not the same as the actual temperature of the sample. When measuring a hot or cold sample, let it sit on the sensor for approximately 20 seconds and measure, or take multiple readings until measurements become stable

Zero-setting and Measurement

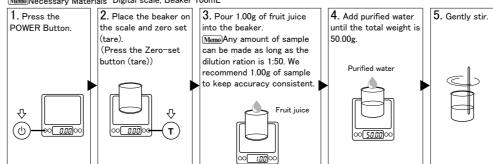
Note Recommended on a daily basis Preparation Acid: Zero-setting 1. Clean the 2. Press the 3. Press the "000" will appear. sensor with START button START button water (with nothing of -Zero-setting is required.-Dry the area the sensor) COO Acid Press the ZERO button with tissues (with nothing on the Flash Light up thoroughly START START Measurement: 0.00 Acid Proceed to Brix: Zero-setting is zero-set correctly 0.00 Brix: Zero-setting "000" will appear 1. Apply tap/purified 2. Press the START 000 Brix% ► 000 Brix% -Zero-setting is required.-Press the ZERO button. At least 0.3mL

Measurement

[1]Acid: Dilution About the Digital Scale

Memo Necessary Materials Digital scale, Beaker 100ml

START

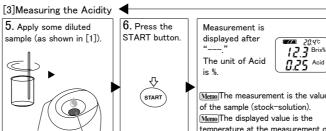


zero-set correctly

Press the START

[2]Measuring the Brix

1. Clean the sensor 3. Press the Measurement is 4. Cleaning 2. Apply some sample displayed after with water. (undiluted). START button Clean the sensor with Dry the area with water 12.3 Brix% tissues thoroughly Dry the area with tissues thoroughly MemoIn case "LLL" is START At least 0.3ml displayed add sample



temperature at the measurement of acidity.

Brix or Acidity is displayed to show the sugar and acidity ratio. Sugar/Acid ratio = Brix% Aciditv% 49.20 Rati (R)

Sugar/Acid Ratio Display

Press the R button when the

Proceed to measurement.

0.0 Br

and measure the Brix

again. Remove sample

Memo Press the R button to return to the measurement value display.

·Wipe off the sample. Clean the sensor with water.

Dry the area with tissues thoroughly. ·Clean oily residues with mild soap, and then, rinse with water.

Note Handle the sensor with care so as not to scratch it.

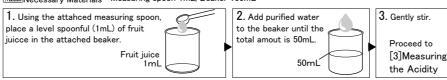
Addendum

Acid: Measuring Without using a Scale

For approximate measurement only

[1]Acid: Dilution

Memo Necessary Materials Measuring spoon 1mL, Beaker 100mL



Acid: Checking with Reference Solution

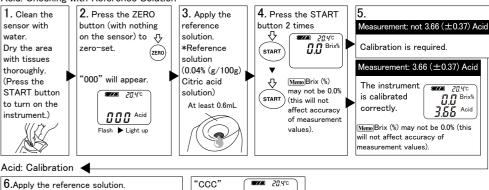
When there is any doubt regarding accuracy of measurement results, adjust the reference value according to the following procedure Memo The reference solution is available from ATAGO. Part No. RE-130004 Reference solution (0.04% Citric acid solution)

Acid: Checking with Reference Solution

Turn on the instrument

buttons simultaneously.

Press the START and ZERO



Error Messages

will appear

The following messages alert the user when an operation has failed.

START

Brix: The ZERO button was pressed with something other than water on the sensor section Acid: The sensor was not empty when zero-setting was attempted Calibration was attempted with something other than the calibration solution.

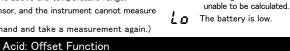
Brix: The START button was pressed with nothing or an insufficient amount of sample on the sensor section. Temperature: The sensor temperature is below the temperature range.

Flash Light up

Brix/Acid: The sample measured outside the measurement range

Temperature: The sensor temperature is above the temperature range **nn** Rix: Too much light is entering the sensor, and the instrument cannot measure

(Shade the sample stage with your hand and take a measurement again.)



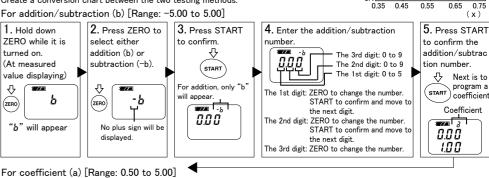
QQ Sugar/Acid Ratio: When

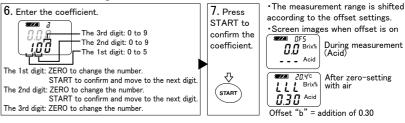
An example of conversion

the Sugar/Acid Ratio is

Discrepancies with titration y = a x + bDue to the difference in measurement principles, readings from the instrument may not match up exactly with the v:titration readings readings by titration for certain samples. However x: The instrument readings correlation between the two testing methods can be seen. a: coefficient (multiplication) Offset feature use b:addition/subtraction number Create a conversion chart between the two testing methods

For addition/subtraction (b) [Range: -5.00 to 5.00]



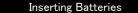


according to the offset settings. Press the R buttor ·Screen images when offset is on while setting up the During measurement (Acid) Off-Set feature. After zero-setting LLL Brix%

© 0.00 R 1.00 Offset "b" = addition of 0.30

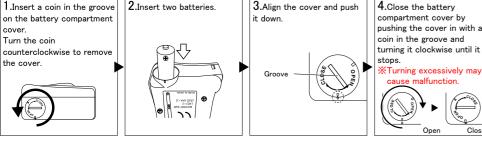
Specifications	
Measurement range	Brix 0.0 to 90.0% , 10.0 to 99.9°C
	Acid 0.10 to 4.00%
Resolution	Brix 0.1% Acid 0.01% 0.1°C Sugar/Acid Ratio 0.01 (0.00 to 99.99) 0.1 (100.0 or more)
Measurement accuracy	Brix $\pm 0.2\%$ Acid $\pm 0.10\%$ (0.10 to 1.00%) Relative precision $\pm 10\%$ (1.01% or more) $\pm 1^{\circ}$ C
Measurement time	Brix : Approx. 3 seconds
Backlight	The backlight stays on for 30 seconds after any button is pressed.
Output	NFC Forum Type 4 Tag ISO/IEC 14443 Type A
Output category	Date Time, Brix [%], Acidity [%], Sugar/Acid Ratio, Temp [degC]
Acidity scale	(e.g.) 2019/01/17 09:30:45, 3.71, 1.02, 3.64 21.3
Automatic temperature compe	nsation range Brix :10 to 100°C Acid :10 to 40°C
Ambient temperature range	10 to 40°C
International Protection class	IP65
Power supply and Battery life	Two (2) AAA alkaline batteries
Dimensions and Weight	55(W) × 31(D) × 109(H)mm , 100g (main unit only)

The product is in conformity with the requirements of the EMC Directive 2004/108/EC.



Note When the O-ring on the battery compartment cover is dirty or damaged, the water resistance may be compromised.



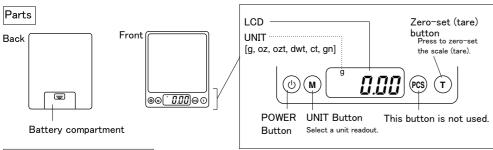


About the Digital Scale

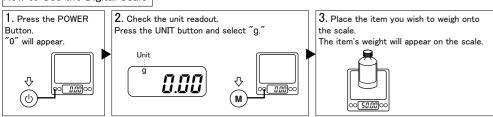
Note Remove the tape from the battery compartment

Contents

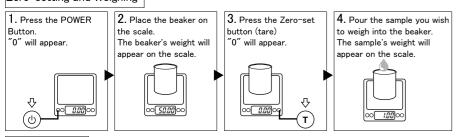
Cover···2 (large and small) AAA batteries···2 Main unit…1



How to Use the Digital Scale



Zero-setting and Weighing



Error Messages

:The battery power is low. Replace with new alkaline AAA batteries.

O-LD : The item you are trying to weigh exceeds the permissable weight limit of the scale. Quickly remove it from the scale.

Environmental conditions

- •Do not expose the scale to extreme heat or cold.
- •Do not expose the scale to any type of moisture. ·Use in a dry, clean environment
- ·Use between 10 to 30°C only. · Any contact with or exposure to dust, debris, humidity, strong vibrations, extreme atmospheric conditions or other
- electronics may affect the accuracy of the scale and result in unreliable readings.

- For precise measurements, place the item you wish to weigh onto the scale gently,
- •Place the scale atop a flat, stable surface.
- •The digital scale is remarkably durable. However, it is a precision instrument and should be used and treated with the utmost
- ·Use of the scale for purposes other than its intended use will result in damage to its internal components. *Do not shake or drop the scale.

Specifications

Temperature Conditions	Ambient temperature: 10 to 30°C
Power supply	Two (2) AAA alkaline batteries (Do not use rechargable batteries.)
Auto-Off Feature	The scale will automatically turn off after 90 seconds of inactivity.
LCD	LCD display with backlight
Unit	g, OZ, ozt, dwt, t, gn
Resolution	0.01g
Measurement range	0.01 to 500.00g
Specifications	

About Data Transmission Function

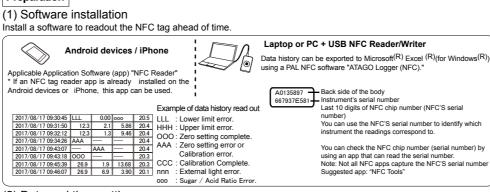
This instrument is equipped with NFC (Near Field Communication) technology Data history can be accessed by bringing PAL-NFC to any Android devices, iPhone or PC-linked USB NFC Reader/Writer* (in conformance to PC/SC specification). * Operation tested with SONY USB NFC Reader

Android devices / iPhone 2017/08/17 09:30:45.12.3.20.4 2017/08/17 09:30:50,12.3,20.4 2017/08/17 09:30:55.12.4.20.4 Measurement results are recorded with time stamps. Example of Laptop or PC + data history USB NFC Reader/Writer

Caution Data history exceeding 100 will overwrite old activity with new data, replacing the oldest recorded information first.

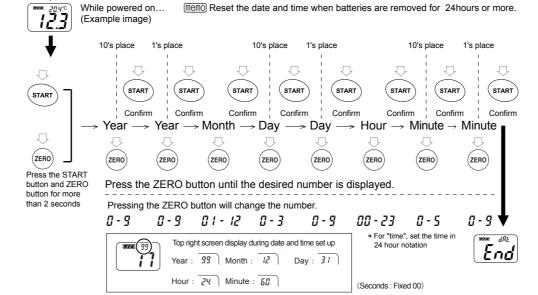
Preparation

PaSoRi RC-S380.

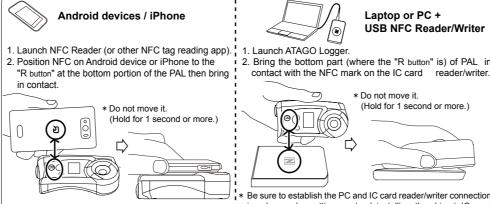


(2) Date and time setting

Set the date and time (year [the last two digits of the western calendar], month, date, time and minute) prior to data history readout.



Data history readout



* NFC position on Android device or iPhone differs

Be sure to establish the PC and IC card reader/writer connection in advance by setting up (and installing the driver) IC card reader/writer

Data history can be read out by holding up the USB NFC Reader/writer to the PAL unit

All recorded data stored in this instrument are read out.

* If data history is not read out, bring both in contact and move the one that is over the other device in a forward and back or left and right in a small motion.

Caution Bring PAL and Android devices, PAL and iPhone or PAL and USB NFC Reader/writer as close to each other as possible. (Position it so that the distance between both devices are 5mm or less.)

memo Data history can be read out while PAL is powered off.

memo Data history readout will not delete the stored data history.

Delete data history

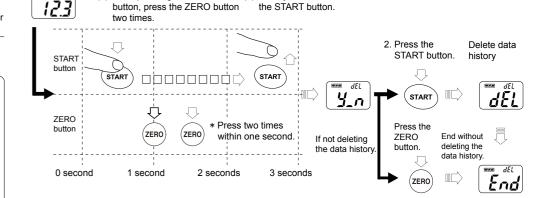
All data history will be deleted from this instrument.

Caution Deleted data history can not be restored. memo A data history can not be selected.

While powered

(Example image) 1. Quickly (3 seconds or less) do the following button operation.

(a) While pressing the START (b) Quickly release



Safety Precautions

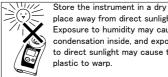
Read and follow all safety instructions before operating the instrument.

- •When measuring hazardous materials, use proper safety procedures, materials, and clothing to avoid personal injury. Anyone handling hazardous materials should understand its properties and its safety requirements.
- •If the instrument is dropped or subjected to a strong impact, contact your supplier for inspection.
- •Do not attempt to repair, modify, or disassemble the instrument.

♠ CAUTION

- ·Before use, carefully read the instruction manual and fully understand the function and operation for each part of the instrument.
- ATAGO is not liable for any loss and damage caused by the measurement and use of this instrument
- ·If this instrument is used to measure highly acidic samples, the sensor section and sample stage may be damaged, resulting
- •Do not use any metal tools when applying sample to the sensor section. The metal can damage the sensor section. If the sensor section is scratched or damaged, inaccurate measurements will occur
- •When the unit needs to be washed, use water at a temperature not exceeding 50°C.
- •Only use the specified battery type. Observe proper polarities, properly aligning the anodes and cathodes. •Do not leave the instrument in a location exposed to direct sunlight or near a heat source for any extended period of time
- •Do not change the ambient temperature of the instrument suddenly.
- •Do not place the instrument where it will be subject to strong vibrations
- *Do not use the instrument where there are excessive amounts of dust.
- •Do not store the instrument in an extremely cool area.
- •Do not set or drop heavy objects on top of the instrument
- ·Loosen the battery compartment cover for air transportation. •The instrument is water-resistant, not waterproof, and should not be submerged.

Storage and Maintenance



place away from direct sunlight. Exposure to humidity may cause condensation inside and exposure to direct sunlight may cause the plastic to warp



Cleaning Clean and dry the sensor area thoroughly after use, leaving no sample residues or water. ⟨For oily samples:⟩

Remove oily residues with mild soap, and then, rinse with water Storage Store the instrument away from direct sunlight at

a stable temperature with as little fluctuation as possible.

Repair and Warranty

The instrument is warranted for one year from the date of purchase. This warranty is void if the instrument shows evidence of the following. Send the included batteries as well if they are still in use.

· Having been disassembled by unauthorized personnel •Damages to the sensor section and/or sample stage

•Water damage or having been dropped ·Leakage from batteries other than those included with the unit

*Having been misused and/or operated outside the environmental specifications

Repair services are available for a fee after the warranty expires.

Contact an ATAGO authorized service center for service and support

Please have the serial number information ready when contacting a service center.

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Headquarters: The Front Tower Shiba Koen

TEL: 91-22-28544915 / 40713232
customerservice@atago-india.com

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ATAGO U.S.A., Inc. TEL: 1-425-637-2107

ATAGO THAILAND co.,Ltc TEL: 66-21948727-9 ,66-21171549 ATAGO BRASIL Ltda.

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