

The warranty period extension method 1 year → 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>



QR code

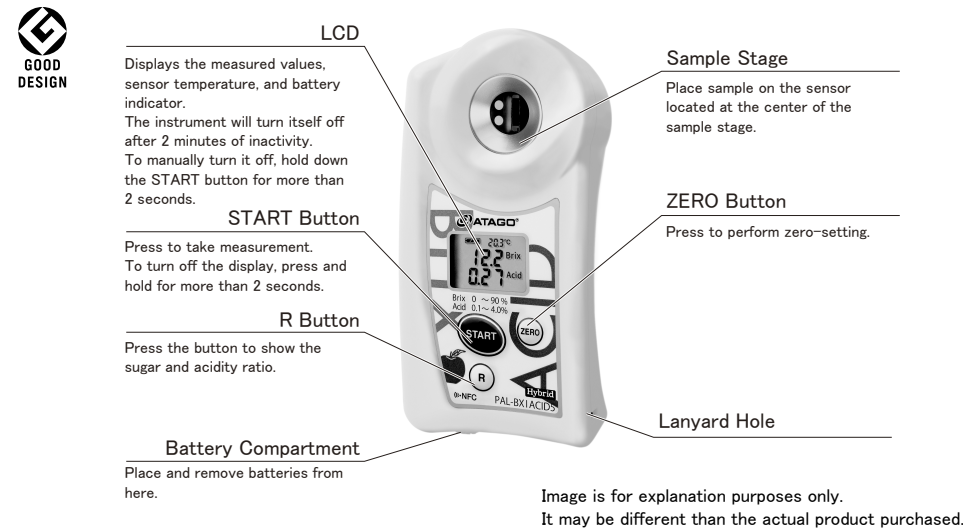
Pocket Brix-Acidity Meter (Apple) PAL-BXIACID5

Cat. No. 7105

Master Kit

ATAGO®
Instruction Manual

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.

Measurement of Brix



Measurement of Acid



- 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)

- LCD 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

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.

Acid

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.

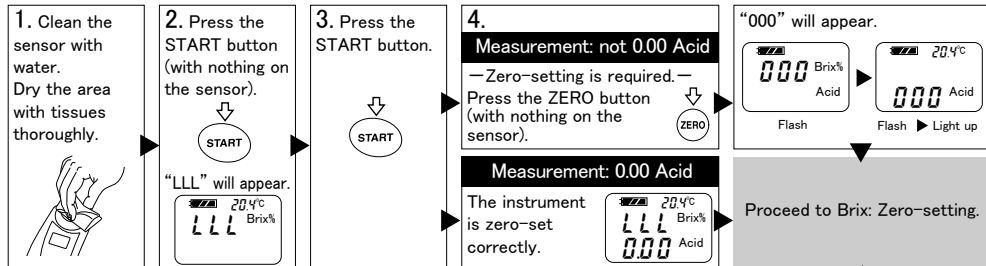
Automatic Temperature Compensation

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

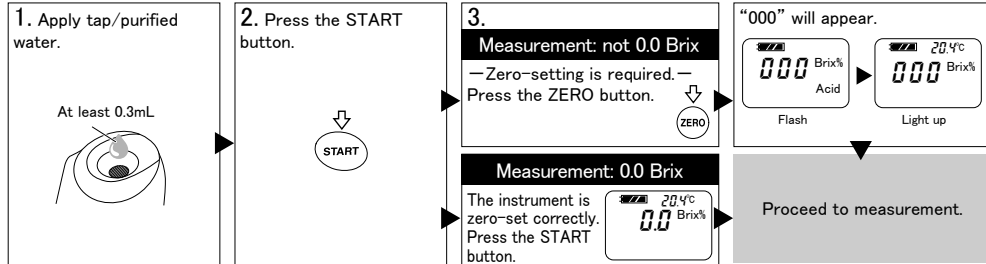
Preparation

Acid: Zero-setting



Note Recommended on a daily basis.

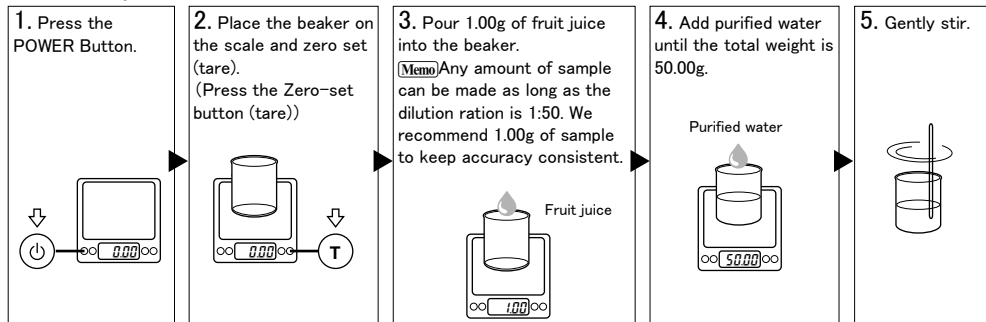
Brix: Zero-setting



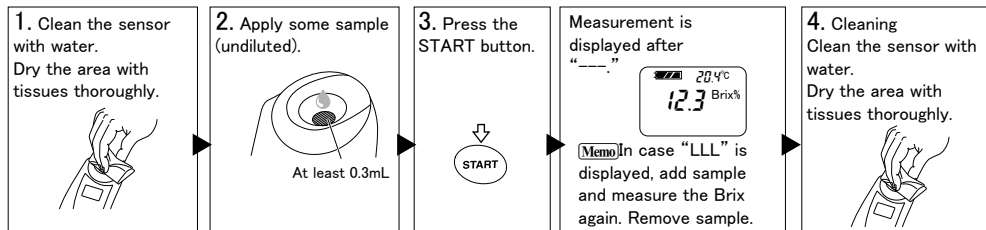
Measurement

[1] Acid: Dilution About the Digital Scale

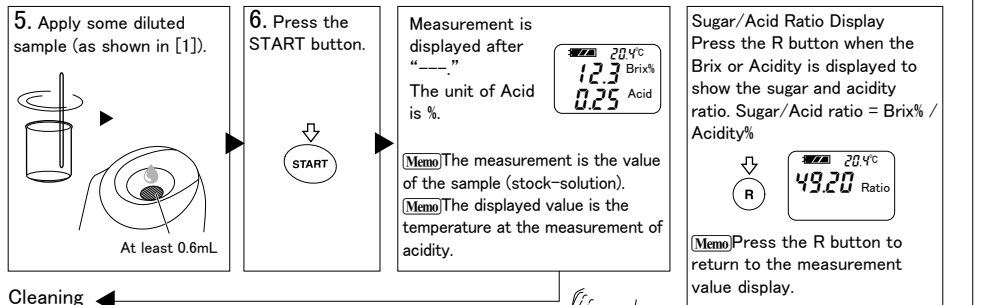
Memo Necessary Materials Digital scale, Beaker 100mL



[2] Measuring the Brix



[3] Measuring the Acidity



Cleaning

- 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.

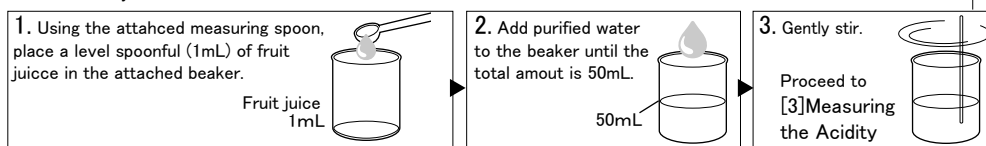
Addendum

Acid: Measuring Without using a Scale

For approximate measurement only

[1] Acid: Dilution

Memo Necessary Materials Measuring spoon 1mL, Beaker 100mL

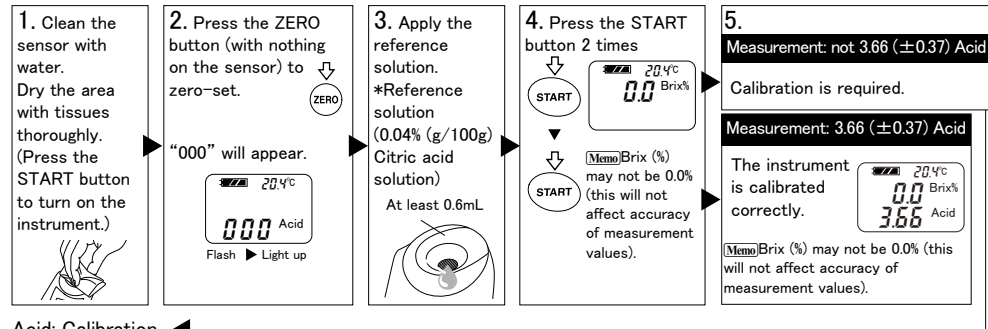


Acid: Checking with Reference Solution

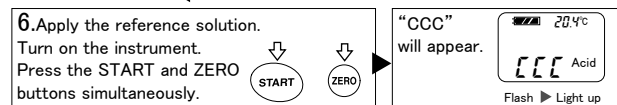
When there is any doubt regarding accuracy of measurement results, adjust the reference value according to the following procedure.

Memo The reference solution is available from ATAGO. Part No. RE-130004 Reference solution (0.04% Citric acid solution)

Acid: Checking with Reference Solution



Acid: Calibration



Error Messages

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

AAA Brix : The ZERO button was pressed with something other than water on the sensor section.

AAA Acid : The sensor was not empty when zero-setting was attempted.

AAA Calibration was attempted with something other than the calibration solution.

LLL Brix : The START button was pressed with nothing or an insufficient amount of sample on the sensor section.

LLL Temperature : The sensor temperature is below the temperature range.

HHH Brix/Acid : The sample measured outside the measurement range

HHH Temperature : The sensor temperature is above the temperature range.

nnn Brix : Too much light is entering the sensor, and the instrument cannot measure accurately.

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

Lo The battery is low.

Acid: Offset Function

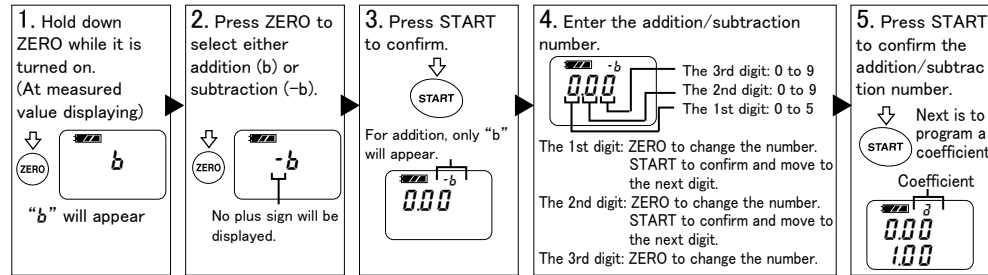
Discrepancies with titration

Due to the difference in measurement principles, readings from the instrument may not match up exactly with the readings by titration for certain samples. However, correlation between the two testing methods can be seen.

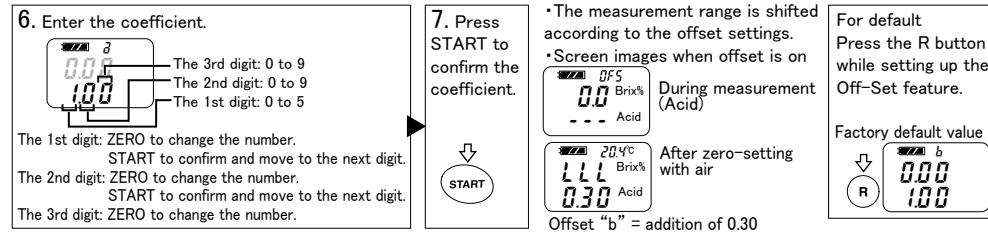
Offset feature use

Create a conversion chart between the two testing methods.

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



For coefficient (a) [Range: 0.50 to 5.00]



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/Acidity Ratio 0.01 (0.00 to 99.99) 0.1 (100.0 or more)
Measurement accuracy	Brix ±0.2% Acid ±0.10% (0.10 to 1.00%) Relative precision ±10% (1.01% or more) ±1°C
Measurement time	Brix : Approx. 3 seconds Acid : Approx. 2 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/Acidity Ratio, Temp [degC]
Acidity scale	(e.g.) 2019/01/17 09:30:45, 3.71, 1.02, 3.64 21.3
Automatic temperature compensation 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.

