



FOODCARE
line



HI 84432 is a low cost, easy to use automatic titrator and pH meter that provides professional results quickly and accurately.

The HI 84432 digital automatic minititrator and pH meter is designed for quick and accurate analysis of Total Titratable Acidity in fruit juices. By eliminating subjective factors including color indicators, errors in mathematical calculations or erratic titrant additions from the measurement, the HI 84432 provides accurate, repeatable results with no guesswork.

A clear and intuitive user interface allows users to navigate the HI 84432's menus and functions quickly. A HELP key located on the keypad aids in set-up, calibration status and troubleshooting.

By simply pressing the START key, the HI 84432 automatically starts pump operation and titrates the sample to the end point.

This instrument employs a powerful and effective algorithm to analyze the pH response to determine the exact pH endpoint, then uses this to make the necessary calculations.

The Titratable Acidity determination is instantaneously displayed in selected measurement units on the large dot matrix display. The instrument is immediately ready for the next analysis.

The HI 84432 has a simple and accurate peristaltic pump to ensure the best accuracy and repeatability. To ensure instrument accuracy, perform a pump calibration with the provided HANNA standard.

HI 84432
A Better Product for
Quality Fruit Juice Production



LCD Features



Set Up Configuration Menu

Accessed from pH or Titration screens, this menu allow parameters such as measurement units, date formats and language selection to be configured quickly and easily.



Calibration Reminder

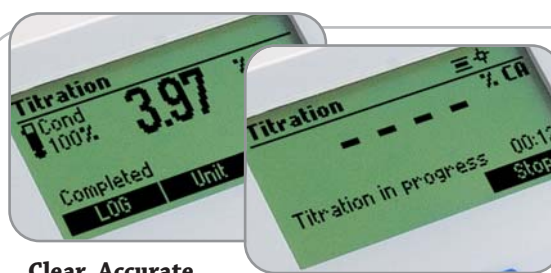
When calibration is required or due, users are reminded on screen.

The HI 84432 can also display when pump and electrode calibration was last performed.



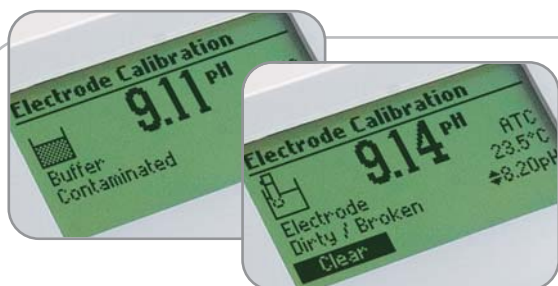
Log and Recall Data

Measurements along with time and date can be stored and recalled at a later date.



Clear, Accurate Measurements

Measurements along with time and date can be stored and recalled at a later date.



Calibration Warnings

For the most accurate performance, The HI 84432 warns users if there are errors in the calibration process.

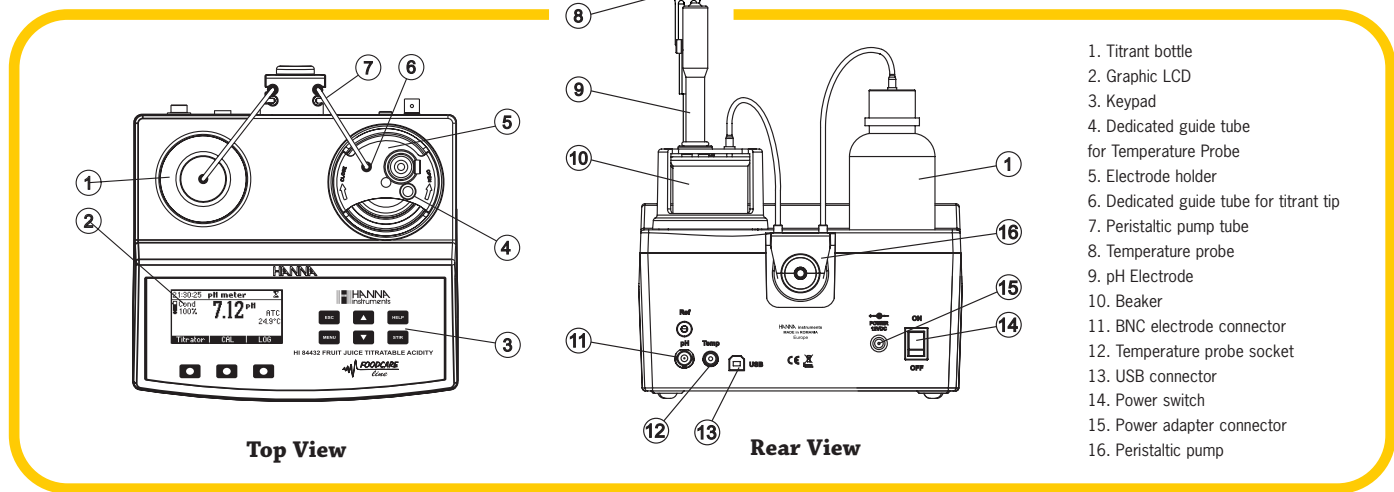
HI 84432 pinpoints the problem and displays the appropriate error message taking the guesswork out diagnosing errors such as dirty or broken electrodes or contaminated buffers.

Other calibration warnings include: wrong buffer temperature, wrong slope (high and low) and wrong buffer.

Titrateable Acidity of Fruit Juice

Fruit Juices	Titrateable Acidity (g/100mL)	Predominant Acid	Fruit Juices	Titrateable Acidity (g/100mL)	Predominant Acid	Fruit Juices	Titrateable Acidity (g/100mL)	Predominant Acid
Apple	0.36–0.80	Malic	Guava	1.16	Citric	Peach	0.24–0.94	Citric
Cherry, Sour	0.94–1.64	Malic	Lemon	4.0–6.2	Citric	Pineapple	0.7–1.6	Citric
Cherry, Sweet	0.24–0.94	Citric	Lime	7.4–7.8	Citric	Pear	0.36–0.80	Malic
Cranberry	1.6–3.6	Citric	Mango	0.34–0.84	Citric	Plum	0.94–1.64	Malic
Grape, Table	0.4–0.9	Tartaric	Nectarine	0.24–0.94	Citric	Strawberry	0.6–1.1	Citric
Grapefruit	1.2–2.0	Citric	Orange	0.8–1.4	Citric	Tomato	0.34–1.00	Citric

Additional sample preparation may be required. Actual values subject to site, climate, season and variety variations.



1. Titrant bottle
2. Graphic LCD
3. Keypad
4. Dedicated guide tube for Temperature Probe
5. Electrode holder
6. Dedicated guide tube for titrant tip
7. Peristaltic pump tube
8. Temperature probe
9. pH Electrode
10. Beaker
11. BNC electrode connector
12. Temperature probe socket
13. USB connector
14. Power switch
15. Power adapter connector
16. Peristaltic pump

SPECIFICATIONS

HI 84432

Titrator	Titrateable Acidity Range	g/100 mL as citric acid : 0.20 – 8.00% CA g/100 mL as tartaric acid : 0.23 – 9.30% TA g/100 mL as malic acid : 0.21 – 8.30% MA
	Titrateable Acidity Resolution	0.01%
	Accuracy	5% of reading ±0.05
	Titration Method	Acid-base titration
	Principle	End point titration: 8.20 pH
	Pump Debit	0.5 mL/min
	Stirring Speed	600 rpm
pH Meter	Log Data	Up to 50 samples
	Range	-2.0 to 16.0 pH / -2.00 to 16.00 pH
	Resolution	0.1 pH / 0.01 pH
	Accuracy	±0.01 pH
	Calibration	1, 2 or 3 calibration points; 3 available buffers (4.01; 7.01; 8.20)
Temperature	Temperature Compensation	manual or automatic from -20 to 120°C (-4 to 248°F)
	Log Data	Up to 50 samples
	Range	-20.0 to 120.0°C (-4.0 to 248.0°F)
Electrode	Resolution	0.1°C
	Accuracy	±0.4°C without probe error
Temperature Probe		HI 1131B (included)
Environment		HI 7662-M (included)
Power Supply		0 to 50°C (32 to 122°F); max 95% RH non-condensing
Dimensions		12 Vdc adapter (included)
Weight		208 x 214 x 163 mm (8.2 x 8.4 x 6.4") (with beaker)
		2200 g (77 oz.)

Ordering Information

HI 84432-01 (115V) and HI 84432-02 (230V) are supplied with HI 1131B pH electrode, HI 7662-M temperature probe, HI 84432-50 titrant (100 mL), HI 84432-55 pump calibration solution (100 mL), HI 7061M cleaning solution (230 mL), HI 70300M storage solution (230 mL), HI 7071 filling solution (30 mL), HI 7004M pH 4.01 buffer solution (230 mL), HI 7007M pH 7.01 buffer solution (230 mL), HI 70082M pH 8.20 buffer solution, (2) 100 mL beakers, tube set with dispensing tip, (2) Medium magnetic stir bars, 12 Vdc power adapter and instruction manual.

Required Reagents

HI 84432-50 Titrant (1 mL/analysis)
HI 84432-55 Pump Calibration Solution (2.00 mL/calibration)

Reagents

HI 84432-50 Titrant Solution (100 mL)
HI 84432-55 Pump Calibration Solution (100 mL)
HI 84432-70 Reagents Kit (about 150 titration)

pH Calibration Solutions

HI 7004M Buffer Solution pH 4.01 (230 mL)
HI 7007M Buffer Solution pH 7.01 (230 mL)
HI 70082M Buffer Solution pH 8.20 (230 mL)

Electrode Storage Solution

HI 70300M Storage Solution, 230 mL bottle