Measure what you see.

BYK a200
Thermo-Anemometer

Manual

A member of ◐ ALTANA

◯ BYK

BYK a200   **Manual**

Thermo-Anemometer   November 2019

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⚠ **CAUTION!**
Read Instruction Manual before using this instrument.

⚠ **WARNING!**
This manual cannot address all of the safety considerations associated with its use. It is the responsibility of the user to consult this manual and establish appropriate safety practices for use with this equipment and the individual material being tested.

⚠ **WARNING!**
The BYK a200 Thermo-anemometer is designed and intended for the use described in this manual. Using the Thermo-anemometer for other purposes for which it was not designed may reduce or eliminate the protection offered by the features of the instrument. Serious injury may result.

⚠ **WARNING!**
Ultimate disposal of this product should be handled according to all national laws and regulations.

Please note the following points:

• Familiarize yourself with the layout and operation of the controls.

**The BYK a200 Thermo-anemometer** measures air velocity, air temperature and relative humidity.

Careful use of this instrument will provide years of reliable service.

The instrument will automatically turn off in order to lengthen the battery working life. When the **low battery** symbol ⊟ appears on the display, please replace the old battery with a new one.

1. Open the battery compartment cover with a suitable screwdriver.
2. Replace 9V battery.
3. Attach the battery compartment cover.

2 System Description

METER DESCRIPTION

Fan

Body of meter

LCD display

MAX/MIN button

HOLD☀ button

☾ Power on/off button

UNITS button
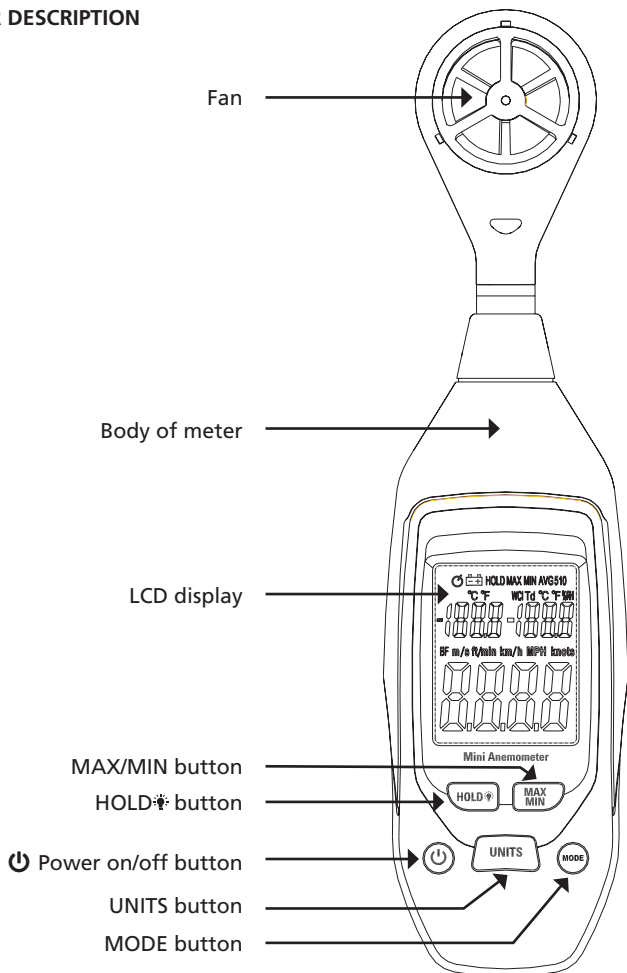
MODE button

BUTTON DESCRIPTION

⏻: Short press the button to turn on or off the meter.

UNITS: Short press to switch air velocity units,
Long press to switch temperature units.

MODE: Short press to change display to – Td (dew point
temperature), WCI (wind chill index temperature),
% RH (relative humidity).

HOLD☀: Short press to hold the current data,
Long press to activate or deactivate backlight.

MAX/MIN: Short press to record Maximum, Minimum and
Average readings of the measurement values.

NOTE: MAX/MIN button is deactivated when Hold function is activated.

DATA HOLD

Short press the Hold button to freeze the temperature and velocity
readings. The Hold symbol is shown on the display. Press the Hold
button again to turn off the hold function.

MAX/MIN/AVG READING

1. Press MAX/MIN button for the first time, the instrument will enter
   Max-tracking mode, the tracked max reading will display on the
   LCD.
2. Press MAX/MIN button for the second time, the instrument will
   enter Min tracking mode, the tracked min reading will display on
   the LCD.
3. Press MAX/MIN button for the third time, the instrument will enter
   Avg. tracking mode, the tracked average reading will display on
   the LCD.
4. Press MAX/MIN button for the fourth time, the current reading will
   display on the LCD.

NOTE: Average mode will automatically stop in 2hours and the instrument will
auto power off

2 System Description

DISPLAY LAYOUT

- $\boxminus$: Low battery indicator
- $\circlearrowleft$: Auto power off symbol
- **WCI:** Wind chill index temperature
- **Td:** dew point temperature
- **%RH:** relative humidity
- **°C / °F:** Temperature measurement unit
- **AVG 5:** 5 reading averages
- **AVG 10**: 10 reading averages
- **HOLD:** Hold the displayed measured readings
- **MAX**: Maximum measured readings
- **MIN**: Minimum measured readings
- **Air velocity measurement units:** BF, m/s, ft/min, km/h, MPH, knots
- Large LCD digits at bottom of display is Air Velocity reading
- Smaller LCD digits at top, left of display is Temperature reading
- Smaller LCD digits at top, right of display is the Humidity reading
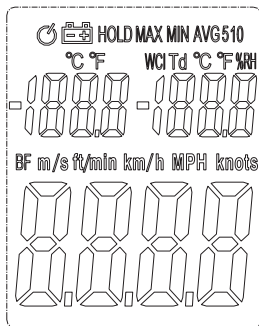
UNIT OF MEASURE CONVERSION TABLE

	m/s	ft/min	knots	km/h	MPH
1 m/s	1	196.87	1.944	3.6	2.24
1 ft/min	0.00508	1	0.00987	0.01829	0.01138
1 knot	0.5144	101.27	1	1.8519	1.1523
1 km/h	0.2778	54.69	0.54	1	0.6222
1 MPH	0.4464	87.89	0.8679	1.6071	1
$\underline{°F} = (°C \times 1.8) + 32$					

Air velocity	Range	Resolution	Accuracy
m/s	1.10 - 25.00 m/s	0.01 m/s	± (3% + 0.30 m/s)
km/h	4.0 - 90.0 km/h	0.1 km/h	± (3% + 1.0km/h)
ft/min	220 – 4920 ft/min	1 ft/min	± (3% + 40 ft/min)
mph	2.5 – 56.0 mph	0.1 mph	± (3% + 0.4 MPH)
knots	2.2 – 48.0 knots	0.1 knots	± (3% + 0.4 knots)
Beaufort force	1 – 17 BF	1 BF	±1
Air temperature	-10 – 60° C (14 – 140° F)	0.1° C / F	0.5° C (1.0° F)
Relative Humidity	20~80%	0.1%	3.5%
	0~20% 80~100%	0.1%	5%
Dew Point	0~50°C (32~122°F)	0.1	±2°C (3.6°F)

Display	Dual line, 4-digit LCD
Display Update	2 times/second
Sensors	Air velocity, NTC-type precision thermistor
Automatic Power off	Auto shut-off in 10 minutes
Operating Temperature	0 to 50° C (32 to 122° F)
Storage Temperature	-10 to 60° C (14 to 140° F)
Operating Humidity	<80% RH
Storage Humidity	<80% RH
Operating Altitude	2000 meters (7000 feet) maximum
Battery	One 9V alkaline
Low Battery Indication	The low battery symbol 🔋 flashes when the battery voltage drops below 7.2V; the backlight and low battery signal flashes twice when the battery voltage is below 6.5V.
Weight	172g (0.38 lbs.)
Dimensions	213 x 54 x 36 mm (8.4 x 2.1 x 1.4 in.)

EC – Declaration of Conformity

$C\epsilon$ ◐ **BYK**

We   BYK-Gardner USA
          9104 Guilford Road
          Columbia, MD 21046 USA

herewith declare the product:

Type: **BYK a200 Thermo-Anemometer**

comply with the requirements of the following EC directives:

      Electromagnetic Compatibility 2014/30/EU

The following harmonized standards were applied:

      EN 61326-1:2013
      EN 61326-2-1:2013

Columbia, MD, August 30, 2019

Technical documentation is available

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