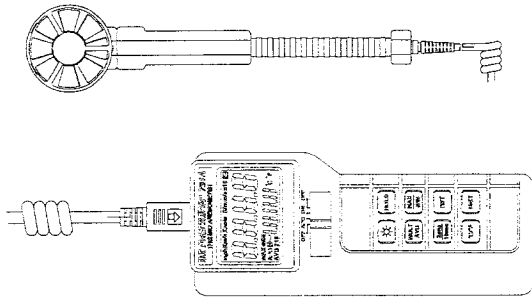


# OPERATING INSTRUCTIONS

## BK PRECISION 731A $\text{CE}$

### THERMO ANEMOMETER



## SPECIFICATIONS AND FEATURE

- Portable digital Thermo-Anemometer.
- Simultaneous display of both temperature and wind speed.
- Memory of maximum, minimum and average record for both temperature and wind speed.
- Air velocity average for multiple points
- Auto power off function.
- 2 meters coiled cable and mounting nut for long extension.

### GENERAL

**Low battery indication:** The "  $\text{CE}$  " is displayed when the battery voltage drops below the operating level  
**Accuracy:** Stated accuracy at 23°C  $\pm 5^\circ\text{C}$ , <80% relative humidity  
**Operating environment:** 0°C to 50°C at <75% relative humidity  
**Storage environment:** -20°C to 55°C at <80% relative humidity

### Battery:

Standard 9V battery (NEDA 1604, IEC 6F22 006P)

### Battery Life:

200 hours typical with carbon zinc battery

**Dimensions:** 770(H) x 65.5(W) x 35mm(D)

**Weight:** 390g including battery and probe

### MAX MIN Record Mode

Press MIN/MAX button to enter the MIN MAX Recording mode. In this mode the automatic power-off feature is disabled and  $^{\circ}\text{C}/^{\circ}\text{F}$  button, UNIT button are disabled too, and the measurement period will set to 2 seconds.

Push MIN MAX key to cycle through the MAX(maximum), MIN(minimum), MAX-MIN(maximum minus minimum) and AVG(average) readings.

In this mode, press HOLD key to stop the recording of readings, all values are frozen, press again to restart recording.

Pressing and hold down the MIN MAX button for 2 seconds or pressing RESET button to exit and erased recorded readings.

### 2 sec. / 16 sec. Average Mode

Pressing the 2sec/16sec button set the measurement period to 2 seconds. The "AVG 2" is displayed in the lower left hand side corner of the display. The first reading will hold two seconds and flashes "2" annunciator, and then update every two seconds with average for the last two seconds. The default setting for the measuring period is 2 second.

Pressing the 2sec/16sec button set the measurement period to 16 seconds. The "AVG 16" is displayed in the lower left hand side corner of the display. The first reading will hold sixteen seconds and flashes "16" annunciator, and then update every two seconds with average for the last sixteen seconds.

## TEMPERATURE

**Temperature Scale:** Celsius or Fahrenheit user-selectable

**Temperature Sensor:** NTC

**Measurement Range:** -20°C to 60°C / -4°F to 140°F

**Measurement rate:** 1 times per second.

**Resolution:** 0.1 $^{\circ}\text{C}/^{\circ}\text{F}$

**Accuracy:**  $\pm 1.0^{\circ}\text{C}$  on -20°C to 0°C, 45°C to 60°C

$\pm 0.5^{\circ}\text{C}$  on 0°C to 45°C

$\pm 2.0^{\circ}\text{F}$  on -4°F to 32°F, 113°F to 140°F

$\pm 1.0^{\circ}\text{F}$  on 32°F to 113°F

## Air Velocity

**Mounting Nut:** 1/4" x 20

**Operating Temperature:**

Meter: 0°C to 50°C (32F to 122°F)

Vane: 0°C to 60°C (32F to 140°F)

## WIND VELOCITY

Units	Resolution	Threshold	Range
m/s	0.01	0.4	0.0-30.0
ft/min	1	80	0.0-5900
knots	0.1	0.8	0.0-58.0
mph	0.1	0.9	0.0-67.0
Km/h	0.1	1.5	0.0-108.0

Accuracy:  $\pm 3\%$ FS

### Multi Point Average Mode

1. Place the probe head in the area where air velocity is to be measured. The measurement is completed, press the HOLD button enter the data hold mode, the anemometer held the present readings.

2. Press MAX MIN button, and the second display will show a count, this number represents the point that is being recorded.

3. Repeat this process until all desired points have been measure and recorded.

4. Press MULTI POINT button will display the average air velocity reading and number of points measured. the anemometer can recorded a total 8 points at one time, and average for the last 8 points.

5. Pressing and hold down the MULTI POINT button or pressing RESET button for 2 seconds to exit and erased recorded readings, or pressing "HOLD" button to exit but not erased recorded reading.

## OPERATING INSTRUCTIONS

### Power Switch

Set power switch to APO position and LCD annunciator "APO" will be turn on. The Auto-Power-Off mode turns the meter off automatically when the meter does not used for 10 minutes. When power-off happens, turn the switch through OFF range turn on the power again.

When enters the RECORD mode, the Auto-Power-Off will be disabled automatically, and LCD annunciator "APO" will be turn off.

When the meter is to be used for long periods of time, the auto-power-off feature can be disabled by set power switch to ON position and LCD annunciator "APO" will be turn off.

### Back-Light

Press "  $\text{CE}$  " button to turn the Back-Light on. To turn the Back-Light off press again.

### DATA HOLD

Pressing the HOLD key to enter the Data Hold mode, the "HOLD" annunciator is displayed. When DATA HOLD mode is selected, the anemometer held the present readings and stops all further measurements.

Pressing the HOLD key again cancels DATA HLOD mode, causing hygrometer to resume taking measurements.

## MAINTENANCE

### Battery Replacement

- Power is supplied by 9V (NEDA 1604, IEC 6F22) battery.
- The "  $\text{CE}$  " appears on the LCD display when replacement is needed. To replace the batteries, remove the two screws from the back of the meter and lift off the battery cover.
- Remove the batteries from battery contacts.
- When not use for long time remove battery.
- Don't keep in place with high Temp. or high humidity.

### Cleaning

Periodically wipe the case with a damp cloth and detergent, do not use abrasives or solvents.

## OPERATION

- Remove protective cap.
- Set the power switch to "APO" or "ON"
- Press the  $^{\circ}\text{C}/^{\circ}\text{F}$  button to change the temperature scale.
- Read the display.
- Cover sensor head to extend sensor life when not in use.