

#### HEAT INDEX:

The heat index was developed by the National Weather Service to help people avoid heat illness. Prolonged exposure and/or physical activity at a high heat index is likely to lead to sun stroke, heat cramps, heat exhaustion and even death in susceptible individuals. There are many factors that need to be considered when determining heat index. Besides temperature and humidity one must also take into consideration vapor pressure, effective wind speed, dimensions of a human body, internal body temperature, fluid intake and the sweating rate of a human. Please be aware that heat index is not an exact science. The values reached are only approximations. Ultimately, the final decision of whether or not to exercise belongs to the individual, athletic trainer or sports management.

#### ADDITIONAL INFORMATION

For additional information on heat index please consult the Center for Disease Control and Prevention, the American Red Cross or the National Weather Service

#### DISCLAIMER:

This unit is a precautionary device to warn of severely hot and humid conditions. GENERAL recommends that each athlete consult their physician prior to strenuous exercise in extremely hot and humid conditions. GENERAL accepts no responsibility for prior health conditions. Good judgement should be used in extreme weather conditions to remove athletes from the practice field to an indoor facility with air-conditioning.

#### USE GENERAL TOOLS & INSTRUMENTS FOR ALL YOUR MEASUREMENT REQUIREMENTS:

- Humidity instruments
- Thermometers
- Digital multimeters
- pH & conductivity meters
- Compasses
- Barometers
- Sound meters
- Data loggers
- Vacuum gauge
- Manometers
- EMF testers
- Amp clamps
- Weather instruments
- Insulation testers
- Panel meters
- Stopwatches
- Timers
- Altimeters
- Light meters
- Lightning detectors
- Clocks
- Refractometers
- Inspection mirrors
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## OPERATING INSTRUCTIONS

**GENERAL**

## DIGITAL POCKET HEAT INDEX MONITOR

Model SAM800HI



AN INDUSTRY BREAKTHROUGH FOR OUTDOOR SPORTS.  
DESIGNED TO MONITOR DANGEROUS, HEAT RELATED CONDITIONS.

Heat Index, Temperature,  
Humidity and Dew Point  
in One Handy, Pocket Sized Meter

INSIST ON GENERAL SPORTS MONITORING PRODUCTS

#### OPERATING INSTRUCTIONS:

- Turn the meter on by pressing the **ON/OFF** button. The LCD will show a full display of all measurement modes.
- After 1 or two seconds the SAM800HI will simultaneously display the last mode of operation. The standard display is heat index on the top of the LCD and temperature below.

#### °F/°C FUNCTION:

- To change the temperature scale from Fahrenheit to Centigrade press the **UNIT** button. Heat index, ambient temperature and dew point temperature can be displayed in either scale.

#### DATA HOLD FUNCTION:

- Press and hold the **HOLD** button to freeze the current reading on the display. "Hold" will appear on the LCD. The current reading is now being held and will not change until the hold function is cancelled.
- To cancel this function press and hold the **HOLD** button until "Hold" disappears from the LCD.

#### MIN/MAX FUNCTION:

- The min/max function will display the minimum and maximum values recorded by the meter for all measurement modes since it was powered on or since the **RESET** button has been pressed.
- Press and hold the **MIN/MAX** button until "MAX" appears on the bottom of the LCD. The display is now showing the maximum value recorded.
- Press the **MIN/MAX** button again until "MIN" appears on the LCD. The display is now showing the minimum value recorded.
- To return to current readings press and hold the **MIN/MAX** button again.
- To clear the minimum and maximum from the memory press the **RESET** button until the entire display flashes.

#### HUMIDITY & DEW POINT FUNCTIONS:

- Press and hold the **MODE** button once. "HEAT IDX" will disappear from the display and be replaced by "%RH". The unit will now show relative humidity on the top of the LCD and temperature below.
- Press and hold the **MODE** button again until "DP" appears on the display. The unit will now display dew point temperature on the top of the LCD and ambient temperature below.
- To exit the humidity & dew point function press and hold the **MODE** button until "HEAT IDX" appears on the display again.

#### DANGER ZONE:

- Based on a calculation of ambient temperature and relative humidity, the SAM800HI will indicate extreme levels of heat index. The LCD will show a blinking **DANGER!** and the unit will beep. This indicates that your current environment may not be safe for athletic activity. Please take the necessary precautions to safeguard personal health and well-being.

#### HEAT INDEX SET-UP:

- When you receive your new SAM800HI it will be pre-programmed to alarm at a heat index value of 82°. To change the point at which the unit will alarm follow these steps:
- While the unit is off press and hold the **ON/OFF** button until the top value, "HEAT IDX" and °F are flashing. Next press the **UNIT** button to decrease the value or **MODE** to increase it. To save the changes you have made press the **HOLD** button.
- Please note any heat index value over 80° is **dangerous!**

#### LOW BATTERY INDICATOR:

- Low battery indication is signaled by flashing of the entire display. This means you must replace the battery at once. Failure to do so will have an effect on the units accuracy. When replacing the battery be sure to touch all metal contacts with the fresh battery. Replacement batteries should be ordered through GENERAL model CR2032.

#### AUTO POWER OFF FUNCTION:

- The unit will automatically shut off after a period of 20 minutes of inactivity to conserve battery life. This is called sleep mode.
- To override the auto power off (non-sleep mode) press the **HOLD** button while the unit is off. Next press the **ON/OFF** button. When the LCD displays "n" release the **HOLD** button. The unit will now remain on until you manually turn it off.

#### CERTIFICATION:

- Should you require a certificate to verify that the SAM800HI meets its stated specifications you may send the unit back to us and we will issue a certificate for an additional fee.

#### NOTES:

- Remember, low batteries will give inaccurate readings so be sure to keep your battery fresh.
- Condensations will not affect the meters accuracy.

#### CAUTION:

- Do not immerse probe into liquids as this will cause permanent damage to the sensor and void the warranty.

#### SPECIFICATIONS:

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|-------------------------|---|
| • Functions:            | Heat index, temperature, humidity, dew point, danger icon with beep, data hold, min/max, auto power off |
| • Heat index range:     | 70° to 115°F (21° to 45°C)  |
| • Heat index accuracy:  | ±3%   |
| • Temperature range:    | 32° to 122°F (0° to 50°C)   |
| • Temperature accuracy: | ±2°F (±1°C)   |
| • Humidity range:       | 0 to 100% RH  |
| • Humidity accuracy:    | ±3% RH at 77° from 10 to 90% RH,<br>±4% RH at all other ranges  |
| • Dew point range:      | 32° to 140°F (0° to 60°C)   |
| • Dew point accuracy:   | ±3%   |
| • Resolution:           | 0.1°, 0.1% RH   |
| • Response time:        | 15 seconds (approx.)  |
| • Dimensions:           | 6.7" x 1.85" x 0.5" (168 x 47 x 15 mm)  |
| • Power source:         | 1 "CR2032" battery (included)   |
| • Battery life:         | 100 hours (average)   |

#### WARRANTY:

GENERAL warrants this unit to be free from manufacturing defects for a period of one year from date of purchase. Any tampering with the unit or it's circuitry will void the warranty.