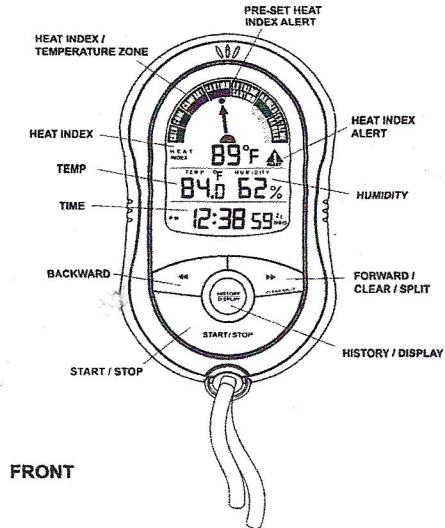
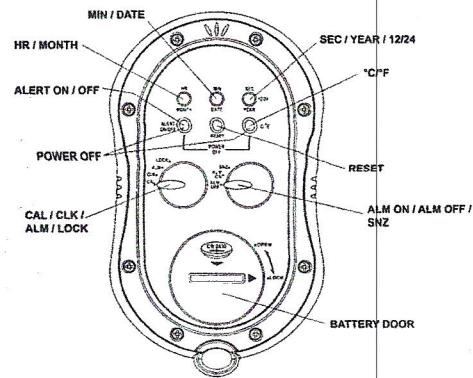


INSTRUCTION MANUAL

Location of Controls :



FRONT



BACK

FEATURES

1. Heat Index Indication
2. 7 thermal levels (3 for normal and 4 for warning)
3. Heat Index History (Maximum of each hour for the past 24 hours)
4. Thermometer (Operating range :14°F to 140°F)
5. Temperature °C/°F selectable
6. Hygrometer (Operating range :1 to 99% within 32°F to +140°F)
7. Stopwatch
8. Countdown Timer
9. Clock with 12/24Hr
10. Daily Alarm with snooze function
11. Calendar with Year, Month and Date
12. Low Battery Indicator
13. Auto Power-off

BATTERY INSTALLATION

1. The battery door is located on the back of the unit. To open, push down on the clip in the direction of the arrow and pull the battery door out.
2. Insert one "CR-2430" battery according to the polarity marking located on the inside of the battery compartment.
3. Insert the battery door back into place.

Keys on the Unit

- 1 HR /MONTH - Changes hours or months when setting the clock or calendar.
- 2 MIN /DATE - Changes minutes or day when setting the clock or calendar.
- 3 SEC /12/24 /Year - Changes from 12 hours clock or 24 hours clock when setting clock or the year when setting the calendar or second.
- 4 ALERT ON/OFF - Press key to completely turn on/off the Heat Index function
- 5 RESET -Clears and resets the entire display.

Notice: to conserve power the Heat Index value is not displayed when the heat index is below 80 F, or when the relative humidity is below 40 %.

6. °C/°F - Changes and temperature display to either Celsius to Fahrenheit
7. << (BACKWARD) - For Alert Selection / Viewing Heat Index History
8. >> (FORWARD) - For Alert Selection / Viewing Heat Index History
9. START /STOP - There are three types of alarms in the unit: Heat Index, Timer and Daily Alarm.
10. DISPLAY /HISTORY - There are three display modes (Clock, Timer and Heat Index History).
11. LOCK /ALM /CLK /CAL - Allows you to switch from locked to Alarm Set, to Time Set & to Calendar Set.
12. ALM OFF /ALM ON /SNZ - Allows you to set Alarm Off /Alarm On /Snooze

SETTING THE CLOCK

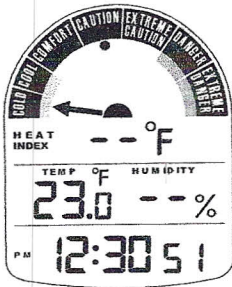
1. Slide the LOCK / ALM / CLK / CAL switch to the CLK (CLOCK Set) position.
2. To set the time, press the HR / MONTH and MIN / DATE button until the desired time appears on the display.
3. Press the SEC / 12 / 24 HR / YEAR button to change from 12 hour clock to 24 hour clock.
4. Slide the LOCK / ALM / CLK / CAL switch to LOCK position.

SETTING THE ALARM

Slide the ALM OFF / ALM ON / SNZ switch on the back of the unit to the ALM ON position. The Upper LCD window will now display the alarm time. Press the HR button and MIN button to set the alarm time. Alarm is enabled by sliding the button to either SNZ (Snooze On) or ALM ON (Alarm On) position. When alarm is enabled, the icon "⌚" will be on. If snooze function is enabled, both alarm "⌚" and snooze icon "Zz" will be on.

SETTING THE CALENDAR

1. Slide the LOCK / ALM / CLK / CAL switch to CAL (Calendar Set).
2. To set the calendar, press the HR / MONTH and MIN / DATE button until the desired date appears on the display.
3. Press the SEC / 12/24 /YEAR button until the desired year appears on the display.
4. Slide the LOCK /ALM /CLK /CAL switch to LOCK position.



HYGROMETER:

It can measure from 1% to 99% resolution within the valid temperature range (32°F to +140°F). When the current temperature is out of that range, there will be no humidity value and the LCD will show "--%" (figure 1).

(Figure 1) is below 32°F

HEAT INDEX :

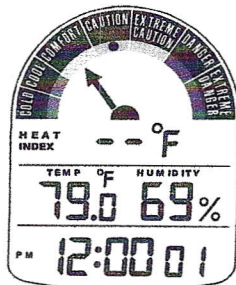
1. Heat Index is determined by the temperature and relative humidity. In this unit, Heat Index is defined by the table as shown below

Heat Index	Heat Index Value	Temperature Level	Alert Setting	Remark
Warning Level				
Extreme Danger	130°F or higher		Yes	Heat stroke or sunstroke highly likely
Danger	105° - 129°F		Yes	Sunstroke, muscle cramps, and / or heat exhaustion likely
Extreme Caution	90° - 104°F		Yes	Sunstroke, muscle cramps, and / or Heat exhaustion possible
Caution	80° - 89°F		Yes	Fatigue possible
Comfort	-- --	70° - 79°F	Nil	
Cool	-- --	50° - 69°F	Nil	
Cold	-- --	Below 49°F	Nil	

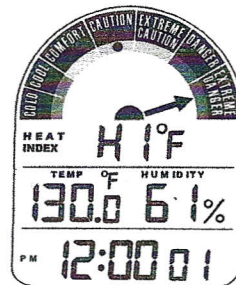
2. According to the Heat Index found, the Heat Index Warning level will be displayed as below:

Heat Index	80 - 89 °F	90 -104 °F	105 -129 °F	130 °F or above
Warning Level	Caution	Extreme Caution	Danger	Extreme Danger

When it is one of the 4 warning levels, the corresponding level icon and the pointing arrow will flash. At the same time, the Heat index field will show the current Heat Index found. For that below 80°F, it will show "--" (figure 2) and no thermal level will be shown. For that above 130°F, it will show "HI" (figure 3) and the level will be Extreme Danger.

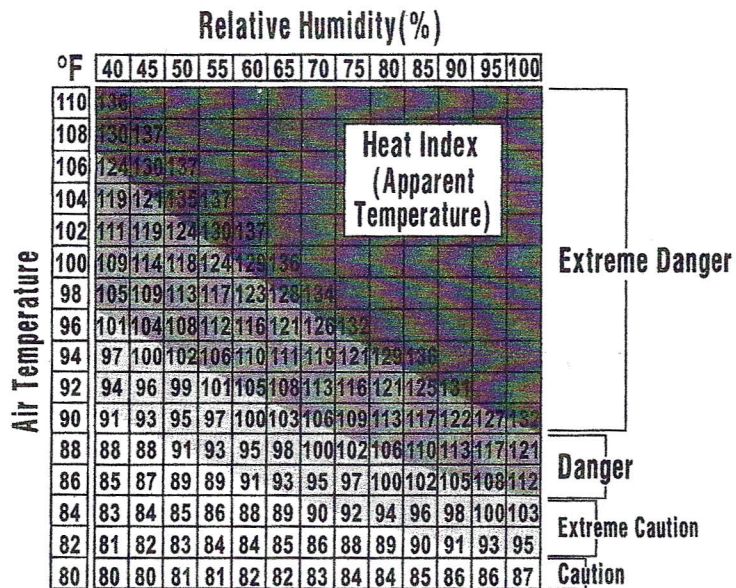


Below 80 °F (Figure 2)



Above 130 °F (Figure 3)

For the temperature levels - Comfort /Cool /Cold , corresponding pointing arrow will on. The Heat Index field will show "--".



HEAT INDEX ALERT

This unit has a Heat Index Alert function to alert people that the weather is hazardous to health.

1. SETTING HEAT INDEX ALERT :

4-level Alert can be set (Caution / Extreme Caution / Danger / Extreme Danger). The unit is pre-set at Caution Level.

To change the Heat Index Alert level, press and hold Alert On/Off button for 2 sec until a beep sounds.

Then the selected level will flash for selection.

Press **Clear/Split/ >>** to scroll from:

Caution → Extreme Caution → Danger → Extreme Danger → Caution

OR

Press **<<** to scroll from:

Caution → Extreme Danger → Danger → Extreme Caution → Caution

To finish the selection, press Alert On/Off button once.

2. TURN ON /OFF HEAT INDEX ALERT

Press ALERT ON/OFF button to turn On/Off Heat Index Alert and

ALERT icon will show on the display when this function is

enabled while the icon will turn off when it is disabled.

Press **START/STOP** button will stop the alert beep sound temporarily. The Alert Beep will beep again if the alert data stay at or over the pre-set warning level for the next minute.

(If the alert data measured is below the pre-set warning alert, the beep will stop)


To completely turn off the alert beep,

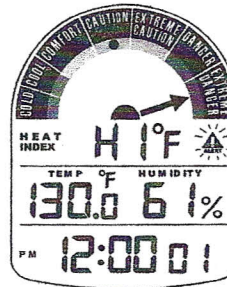
press **ALERT ON/OFF** button to off to completely turn off the alert function.

3. VIEWING HEAT INDEX ALERT LEVEL :



When the Heat Index data continuously stay at the pre-set

Alert level for 1 minute, the Heat Index Alert will beep

and  icon will also flash. (figure 4)




(Figure 4)

If the Heat Index data continuously stay at or over the pre-set Alert level for 5-minutes, the  icon will be static and  icon will also flash and permanently shown on the display. Users are highly recommended to leave the current place for shelter to avoid continuous exposure on sunlight. (figure 5)

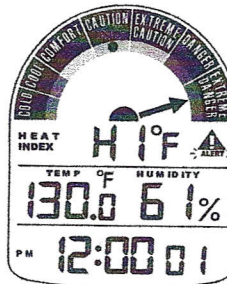
Press the **START/STOP** button to stop the alert beep temporarily.

The alert will beep again if the Heat Index data measured is still staying at or over the pre-set warning level for next minute.

If the Heat Index data measured is below the pre-set warning alert level, the beep will stop.

To completely turn off alert beep &  icon,

press **ALERT ON/OFF** button once.



(Figure 5)

WAKE UP FROM POWER OFF STATUS:

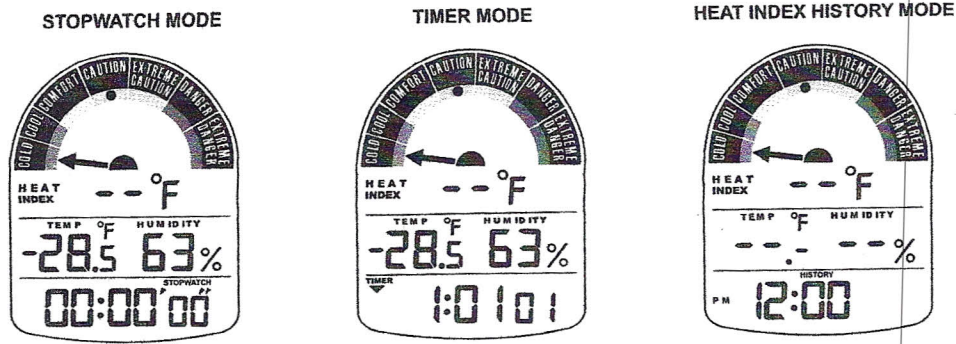
If it reaches the alerted Heat Index value it will wake up from power off status.

HEAT INDEX HISTORY

To recall the past 24-hour Heat Index maximum records, press the **HISTORY/DISPLAY** button to select History mode. The display shows HISTORY. It will show the record for the current hour first. Press **<< / >>** button to search the past records.

STOPWATCH & TIMER OPERATION

Press HISTORY /DISPLAY to select Clock, Stopwatch/Timer or Heat Index History function (figure 8):

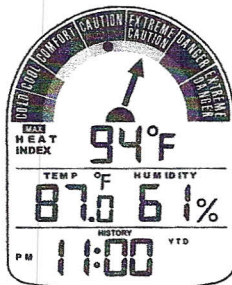


(Figure 8)

While in Stopwatch/Timer mode, start the unit from 00:00 for the stopwatch function. Start the unit from a non-zero value for the countdown timer function.

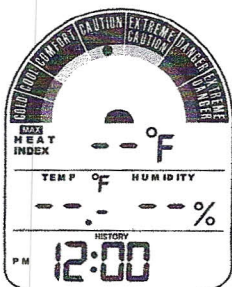
5. Press the START/STOP button to stop the stopwatch.
6. Press CLEAR / SPLIT />> to clear the record.
7. The stopwatch and timer icons (STOPWATCH, ▲) will be displayed as in the below table:

Condition	Display Mode			
	Clock	Timer	History	
Total time stopped (i.e. 0hr 01min 23.89sec)		0 1:23'89 ^{STOPWATCH} _(0:01)		
Total time running (i.e. 76hr 54 min 32.XXsec)	AM 12:08 59 ^{STOPWATCH} _(0:01)	76:54 32 ^{STOPWATCH} _(0:01)	AM 12:00 ^{HISTORY} _(0:01)	
Split time stopped (i.e. 0hr 02min 59.01sec)		02:59 0 ^{STOPWATCH} _(0:01)		
Split time running (i.e. 0hr 10min 02.99sec)	PM 23:59 59 ^{STOPWATCH} _(0:01)	10:02 99 ^{STOPWATCH} _(0:01)	PM 23:00 ^{HISTORY} _(0:01)	



(Figure 6)

The Clock field will show the hour of the record as XX:00. If it is yesterday's record, "YTD" icon will be shown also (figure 6):



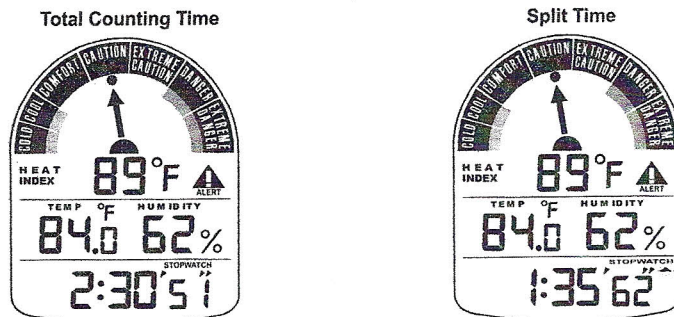
(Figure 7)

If no record on past 24 hours, Heat Index field will show "--", Temp field will show "--", Humidity field will show "--" and the pointing arrow will be off. (figure 7)

(Remarks: Setting the clock, by pressing HOUR or MIN key to adjust current time will clear all Heat Index History.)

USING THE STOPWATCH

1. To use the Stopwatch, press HISTORY/DISPLAY button to select the Stopwatch Mode.
2. Press the START/STOP button to start the stopwatch.
3. The Stopwatch can count up to a maximum value of 99Hr 59Min 59Sec.
(When counting over 59Min 59.99 Sec., the display will change to Hr/Min/Sec format. When it counts over 99Hr 59Min 59Sec, it will continue from 00Min 00.00Sec again.)
4. When the stopwatch is running, press CLEAR /SPLIT />> to toggle the display between Total Counting Time and Split Time.
(figure 9)



(Figure 9)

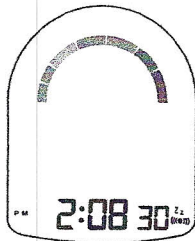
USING THE TIMER

1. To set the "TIMER" mode, press the "History/Display" button once. You will be in Stopwatch mode.
 2. Press the HOUR button once to advance hours by 1. Press and hold the HOUR button for 2 seconds for speed setting.
 3. Press the MIN button once to advance minutes by 1. Press and hold the MIN button for 2 seconds for speed setting.
 4. Press the SEC button once to advance seconds by 1. Press and hold the SEC button for 2 seconds for speed setting.
 5. The maximum countdown value is 99hr 59min 59sec.
 6. Press the START/STOP key to start/stop the timer.
- (Remarks: the timer cannot be set and operated if the user has not cleared the previous stopwatch record. Users need to clear the Stopwatch record to 00:00 before switching to Time mode.)

To change from TIMER mode to STOPWATCH

1. When you are in "TIMER" mode, press the "START/STOP" key to stop "TIMER" mode.
2. Press the "CLEAR/SPLIT/>>" key to change from STOPWATCH mode to TIMER mode.

AUTO POWER OFF FUNCTION



(Figure 10)

The unit will automatically power off when no buttons are pressed for 10 minutes. (figure 10)
Press any button or the unit senses the Heat Index value reaching "caution" or above zones will start the unit again.

While in auto-power off status, the clock & alarm will still operate.

MANUAL POWER OFF FUNCTION

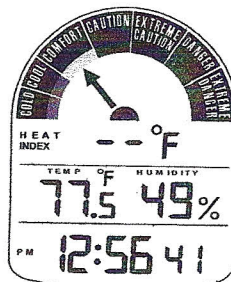
- Press & hold both Alert On/Off button & °C/°F button for 2 seconds to shut off the unit.
Press any button to re-start the unit. (figure 11)
(While in Power-off status, the clock and alarm will still operate)

Manual Power Off



(Figure 11)

Re-start



ALARM PRIORITY

1. There are three types of alarms in this unit: Daily Alarm, Timer and Heat Index.
2. If two or more types alarm at the same time, the alarm pattern will follow the type having the highest priority. The priority from high to low is: Heat Index, Timer, and Daily Alarm.
3. If two or more types of alarm start at the same time, pressing the START/STOP will stop the highest priority one. Then, the alarm pattern will follow the next highest priority one.