OPERATING INSTRUCTION FOR WEATHER FORECAST STATION AND ATOMIC RADIO CONTROLLED CLOCK

1. Features

- Atomic radio controlled.
- Clock with perpetual calendar display.
- Weather Forecast display.
- Atmospheric pressure display.
- Pressure trend display.
- Indoor temperature and Humidity display.
- Outdoor temperature and Humidity display.

2.About Your Weather Forecast Station Alarm Clock

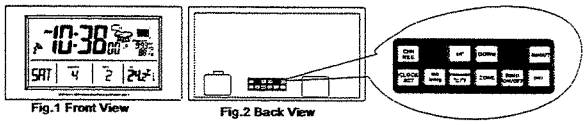
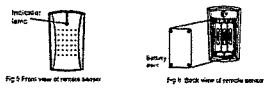


Fig.1 Front View

Fig.2 Back View



3.Battery type

- **The clock uses 4 C size batteries.**
- **The CID remote sensor uses 2AA size baterieS.**
- The **Temperature and Humidity remote senor** uses 3 AAA size batteries.

Note: Alkaline batteries are recommended

4.Setting the Atomic Time and date

When the receiver circuit is in operation the Antenna icon on the LCD blinks.(see Fig. 7a) The Bars facing the Antenna indicate the strength of the radio, no bar meansthere is no or very weak signal being received, one bar indicates a weak signal and 5 bars the strongest (see Fig.7b). Use the radio signal strength indicators to find a location that the reception is strong. Do not put clock on a metal desk top. If the clock is too close to electrical appliances such as TV, mobile phone and computer they may cause undesirable signal interference. Strong signal is normally found close to the window. In some areas where the signal is poor, you may need to position and rotate the clock until the best signal strength is obtained. When the signal strength falls to 2 bars or below, signal strength may be improved by not twisting the base stand.

Fig. 7a Blinking Antenna Icon (clock attempting to sychronize)

Fig.7b synchronization & radio signal strength indication

Fig.8 How to position the clock for the best signal reception

Once you have found the optimal position leave the clock still so that it can pick up good signals. It normally takes 3 to 9 minutes to synchronize. Once it is successful, the clock will show extremely accurate time and the correct date. A successfully synchronized clock is symbolized by a still antenna and a radiating beacon.(Fig.9) synchronized clock attempts to refresh itself with the radio time signal at least once a day. If it fails for more than 48 hours, the Antenna icon disappears. The clock will still function as a quartz clock until it gets refreshed again.

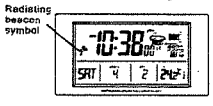


Fig. 9 Example of a synchronized clock

The clock is a radio device and like the mobile phone or the radio, in certain locations and at certain time of the day, especially during day -time, the strong radio noise interference often makes synchronization impossible. You may, for the time being, set the clock manually as described in section 5 below. Amanually set or properly synchronized clock automatically attempts to refresh or synchronize with the radio signal in the evening or early morning hours when the signal is clean and strong. In most cases you will find the clock properly synchronized when you wake up the next day morning.

Note: The clock can be forced to attempt synchronization at any time. Press the **CLOCK-SET/SYNC** button and the clock begins synchronization. Synchronization may not be immediate, so allow some time for the clock to synchronize.

5.Clock and calendar Setting

1.To select 12 or 24-hour time, press and hold the CLOCK-SET button.
2.The 12-hour format flashes. To select 12-hour or 24-hour format, press the UP or DOWN button on the back of the clock. To confirm, press CLOCK-SET.
3.The year flashes. To select the year, press the Up or DOWN button. To confirm, press CLOCK-SET.
4.The month flashes. To select the month, press the UP or DOWN button. To confirm, press CLOCK-SET.
5.The day flashes. To select the day, press the UP or DOWN button. To confirm, press CLOCK-SET.
6.The hour flashes. To select the hour, press the UP or DOWN button. To confirm, press CLOCK-SET.
7.The minutes flash. To set the minutes, press the UP or DOWN button. To confirm, press CLOCK-SET.
8.The seconds flash. To reset the seconds to "00" press the UP or DOWN button. To confirm, press CLOCK-SET.
9.The Offset time (00) flashes. To set the desired Offset time (time difference between home time and time in another zone), press the UP or DOWN button.

NOTE: To bypass the subsequent setting modes and shortcut to normal display mode, continuously press the CLOCK-SET button.

6. Setting the time zone and Daylight saving/ standard time

1. Press the **ZONE** button will select the time zone from Eastern, Central, Mountain or Pacific.
2. To change time manually, from standard to daylight saving time and vice versa, press and hold the **DST** button.

7. Setting the ring :

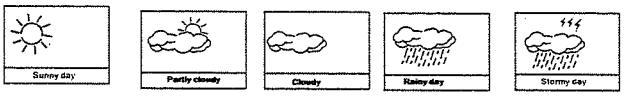
Press and hold the **RING ON/OFF** button, can turn on or turn off the ring when the incoming call. (Press and hold the **RING ON/OFF** button, the LCD display RING ON or RING OFF)

8.Getting started to use Weather Forecast Station

Your weather Forecast Station is capable of detecting atmospheric pressure change. Once the batteries are being installed, the display will show full segment display for few seconds and change to show the humidity, the temperature and will show ----0h at the pressure display and blank at the weather forecast. A window to the left upper corner will display and the arrows inside the window will blink to show that the pressure is being reading now. Once the pressure data readout is successful, the corresponding weather forecast symbol will display on the LCD accordingly.

In order to predict the correct weather, you have to set the approximate altitude of your location as the atmospheric pressure vary at different altitude. Press and hold the **mb/inHg** button, the barometer will change to the altitude of your location. To adjust your altitude of your location, press **UP** or **DOWN** buttons accordingly. After setting the altitude, press **mb/inHg** once will return to normal barometer display.
Note: Limits for the altitude settings is from -100m to 2000m.

Based on the collecting data, your weather forecast will predict the weather for the forthcoming 6 to 8 hours as indicated below:



Note:

1.Your weather forecast station needs at least to run and collect data for 12 hours in order to provide accuracy weather predication. The predication covers the next 6 to 8 hours. It may not necessarily reflect the current s ituation.
2.The accuracy of your pressure-based weather orecast station is about 70% to 75%
3.The "Sunny" shows on your weather forecast station implies clear weather.

9. Reading the Barometric pressure

press PRESSURE/ C/ F will start showing the pressure history of last 12 hours. If data is available the display will show the data and the last two digits will show the corresponding hour. For example, (see Fig10.a) 2 1003 on the LCD means the pressure measurement is 1003 mbar and the 2h is the data collected 2 hours ago. In comparing the pressure value (mbar), it give a hint to predict the weather condition. If the pressure value is ring, the weather condition may improve. If the pressure value is not changing, the weather condition may stay at the current condition. If the pressure value is declining, the weather condition may become poor. Fig 10b is a Pressure trendindicator to show the pressure trend.

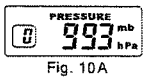


Fig. 10A

Fig.10 B

Note: The pressure limits on your weather forecast can display a pressure level between 00mbar and 1050mbar. For readings less than 00mbar your LCD will show LO. If the reading is higher than 1050 mbar, the LCD will show HI. At Sea level, (altitude = 0 M) the normal atmospheric pressure is 1013.24 mbar. This value is not an absolute value as it may vary according to the weather condition.

10. Indoor and outdoor Temperature and Humidity.

Your weather station can display Indoor, Outdoor and 10seconds of each of Indoor and Outdoor.

1. Press IN/OUT button will change indoor display to outdoor temperature and Humidity display.
2. When the clock is in the outdoor display, another press on IN/OUT button will change the outdoor display to 10 seconds of each indoor and outdoor display.
3. When the clock is in the outdoor display, another Press the **CHN/REG** button can select the channel 1.2or 3 (the clock default is 1)
4. Registering the outdoor temperature and Humidity.

- Press **RESET** button on the remote sensor.
- Press and hold the **CHN/REG** button on the back of the clock ,the **OUT/CHN** icon will flash.
- When the outdoor Temperature and Humidity displaynumerical value the registration is success.

5. To select °C(celsius) or °F.(Fahrenheit) temperature display. Press and hold the **°C / °F** button.

Your weather station can show temperature between 0°C and 50°C (32F and 122F) over this limit will show a HI. Use °C/ °F button at the back to select either °C for Celsius or °F for Fahrenheit.

Your weather station can show humidity between a range of 16% to 95%. Below 16% the display will show LO and over 95% it will show HI.

Note: The operation temperature of the clock is -0°C to 50°C. If the indoor temperature is below 0°C, the LCD may not be viewable.