Operating Instruction for Radio-controlled Clock

Congratulations on your choice of this radio controlled clock - the supreme technological achievement of our time.

General Information on DCF-77

Radio-controlled Clocks and Reception:
The Technical Institute of Physics in Braunschweig operates a Caesium Atomic Clock with a calculated accuracy deviation of 1 second in 1 million years.

The time of this clock is coded (DCF-77) and transmitted via long wave transmitter located at Frankfurt. Your Radio-Controlled clock receives this signal, converts it and displays the correct time of day all year round regardless of summertime or wintertime.

As with any radio receiver reception is highly depended on site and location, ordinarily however there should be no problem within a range of 1500 KM around the transmitting station in Frankfurt. In case of reception problems please take note of the following:

* Recommended distance to any interfering sources like computer monitors or TV sets min. l-l .5M.

Within ferro-concrete rooms (basements, superstructures) the received signal is naturally weakened. In extreme cases, please place the clock close to a window and/or point its front or rear towards the Frankfurt transmitter.

During nighttime the atmospheric disturbances usually are less severe, i.e. reception is possible in most cases. This is adequate to keep the accuracy deviation below 0.5 seconds.

If reception is possible the clock should display the correct time within a few minutes.

Setting the clock into operation:

* Insert the battery.
* Press and hold the “SEC” push button (on the back of the clock) until the second hand is aligned at 12:00.
* Manually adjust the hour and minute hand by turning the red knob.
* Adjust the hand so that they show the beginning of the current hour example: current time is 8:15 - set the hands to 8:00 current time is 10:50 - set the hands to 10:00
* 20 seconds after releasing the button, the second hand begins to move with a double step every 2 seconds.
* Upon detecting the radio signal the second hand will move one step per seconds.
* With good transmitted signal the hands will automatically be incremented to the correct position within 3 minutes.

* If the transmitted signal is too weak, the clock will not enter a the single step mode and the time signal will not be acquired. In this case the clock will automatically retry to receive the signal every one hour time.

Switching from normal time to daylight saving time and vice versa:

To change from normal time to daylight saving time, the minute hand moves forward one hour.
To change from daylight saving time to normal time, the clock stops its operation for one hour.

Note that these changes occur automatically when the clock is in the radio controlled signal range.

Leaving the transmitted signals range:
If the clock is moved to an area outside the transmitted signals range, the clock will continue functioning as a quartz controlled clock. If the battery is then, removed, the time information inside the clock will be lost.

Battery
One piece battery of Alkaline should last for 1.5 year. The battery type is AA, R6, UM3.

Important Information:

* Avoid moisture, extreme temperatures and vibrations. Do not shake!
* Do not immerse the clock in water.
* Clean the casing and glass with a soft, slightly damp cloth. Do not use cleaning materials or solvents!
* Remove exhausted battery immediately, or else they may leak and damage the clock.

Do your part of the environment! Old batteries don't belong in the bin, take them to a collection point for old batteries or hazardous waste.