

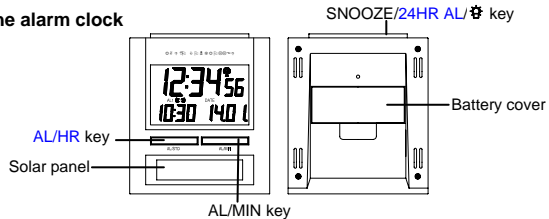
RADIO CONTROLLED ALARM CLOCK WITH SOLAR PANEL

OPERATING MANUAL

INTRODUCTION:

Congratulations on purchasing this Alarm Clock with solar panel with DCF-77 radio-controlled time. The operation of this product is simple and straightforward and by reading this operating manual, users will receive the optimum benefits of all its features.

The alarm clock

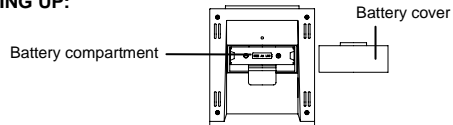


FEATURES:

- DCF-77 Radio controlled clock with manual setting option
- 24 hours time display

- **Calendar: date and month**
- Alarm snooze programmable duration (1-59 min)
- Time zone setting (± 9 hours)
- Two independent alarm time settings
- LCD back-light
- Rechargeable alkaline 1,5V battery

SETTING UP:



1. Firstly, flip open the battery cover at the back of the alarm clock and remove the insulation plastic piece from the battery compartment.
2. Checking the correct polarization, insert the provided 1.5V rechargeable alkaline battery into the battery compartment and replace the cover.

Note:

The included battery is a rechargeable alkaline battery. It needs to be inserted into the battery compartment as power source for normal operation. The solar panel itself does not provide enough power to operate the clock.

- When the battery is inserted, all the segments of the LCD will light up briefly and alarm beeps once.
- The time (hour, minutes and seconds) will be represented by "--:-- -- ". The DCF reception tower at the top of the seconds will start flashing and the alarm times will be shown at the preset time of 6:00.
- The clock **will now** start receiving the DCF time signal. After approximate 3 to 5 minutes, the DCF time will be displayed.
- If reception is not successful within approximately 7-10 minutes, it will attempt to receive the signal in the next following hour (**DCF time reception is every full hour**). The reception is temporarily terminated. Your alarm clock is now operational.

IMPORTANT!

- It is recommended to place the alarm clock under any source of light daily for 12 hour to allow sufficient charging time for the rechargeable alkaline battery. Under this recommended condition, the rechargeable alkaline battery life can be used up to 5 years. Otherwise the life expectancy of the battery is approximately 2 years, depending on alarm activation times and backlight usage.
- Do not use any normal Ni-Cd or NiMH or Lithium battery charger to recharge the rechargeable alkaline battery. Only use a charger unit designed for this specific type of battery and purpose.

- Do not insert any other kind of battery other than the 1,5V rechargeable alkaline battery in the battery compartment as they may cause damage to the clock and may result to cause an explosion!

Note:

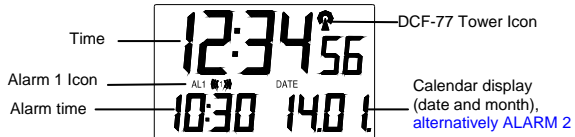
If the low battery indicator is displayed on the LCD, position the alarm clock under any source of light or place the rechargeable battery into an appropriate Alkaline charger to charge up its rechargeable alkaline battery. Unless the alarm clock is manually reset, the low battery indicator will remain displayed.

BATTERY CHANGE:



Please help in the preservation of the environment. Return used batteries to an authorised depot.

LCD SCREEN



RADIO CONTROLLED TIME:

The time base for the radio-controlled time is a Cesium Atomic Clock operated by the Physikalisch Technische Bundesanstalt Braunschweig which has a time deviation of less than one second in every one million years.

The time is coded and transmitted from Mainflingen near Frankfurt via frequency signal DCF-77 (77.5 khz) and has a transmitting range of approximately 1,500 km. The alarm clock receives this signal and converts it to show the precise time and so when within this range the received time is completely accurate.

CHECKING FOR DCF-77 RECEPTION:

The alarm clock will automatically start scanning for the DCF-77 frequency signal [after the battery is inserted](#). In normal surroundings (for example away from interfering sources such as TV sets), it takes between 3-5 minutes to receive the signal. [If after 10 minutes of inserting the battery into the alarm clock and the DCF-77 signal is not received, then check the following list before manually setting the time \(see Manual time setting\):](#)

1. The distance of the alarm clock should be at least 1.5-2.0 meters away from interfering sources such as computer monitors or TV sets.
2. Avoid placing the alarm clock onto or in the immediate proximity of metal, doors, windows frames or structures.
3. Within thick concrete rooms such as basements and tower blocks, the DCF-77 signal is naturally weaker. In extreme cases, place the alarm clock closer to a window and/or point its front or rear towards the general direction of the

Frankfurt/Main transmitter (avoid positioning within close proximity of metal frames or structures).

Note:


Users may be located in areas where atmospheric disturbances are the direct cause for not receiving the DCF-77 frequency signal. During nighttime, atmospheric disturbances are usually less severe and reception is possible in most cases. With a single daily reception, it is adequate for the alarm clock to keep time deviation to below 0.5 seconds in a period of 24 hours.

When reception is successful, the DCF-77 tower icon will start flashing on the LCD.

Once the signal is "locked", the DCF-77 tower icon will stay fixed on LCD and the received time will automatically correct the manually set time. As well as the time, the date will also be received by the alarm clock and will be displayed accordingly in the calendar section of the LCD.

FUNCTION KEYS:

The radio-controlled alarm clock uses the following keys:

- | | | |
|---|---|---|
| SNOOZE/ | : | Alarm snooze function |
| 24HR AL/ | : | Enter time setting mode, time zone and snooze duration, stop alarm and snooze |
|  | : | Back-light-On |
| AL/HR | : | Alarm 1 time setting, alarm 1 icon (((1))), alarm STOP for alarm 1 |
| | : | Set the hours and time zone |

- : Back-light-On
- AL/MIN** : Alarm 2 time setting, alarm 2 icon (((2))), alarm STOP for alarm 2
- : Set the minutes and snooze duration
- : Back-light-On

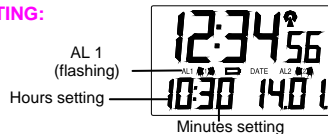
THE ALARM SOUND

When the alarm 1 is activated, it sounds as follows:

- From 0 to 26 seconds : 2 short and gentle continuous beeps
- From 27 to 54 seconds : 4 short continuous beeps
- From 55 seconds to 1 minute 35 seconds : very short continuous beeps

Notes: The alarm 1 & 2 will automatically cut off after a time of 1 minute and 35 seconds. The alarm is not switched off but will sound again at the same time on the following day.

ALARM SETTING:



TO SET ALARM 1 & 2:

1. Press the "AL/HR" key until (((1))) icon appears and the AL 1 icon on the LCD

starts flashing. If the waiting time is too long, flashing will stop and the time can not be set any longer. In such case simply press the "AL/HR" key once again and the display will resume flashing.

2. While the display is flashing: Set the hours and minutes of the desired alarm time by use of the "AL/HR" (hours) or the "AL/MIN" keys (minutes) respectively. (If the respective key is pressed permanently the hours setting will continuously advance by steps of 1 and the minutes setting by steps of 5).
3. Once the alarm time is set, press the "SNOOZE/24HR AL/☞" key to confirm or wait approximately 8 seconds (automatic exit of alarm time setting mode, AL 1 will stop flashing).
4. To set alarm 2, repeat above steps but use the "AL/MIN" key.

Note: If both alarms are set for the same time then only alarm 2's sound will be heard. The date cannot be displayed when Alarm 2 setting is activated.

TO CHANGE FROM ALARM 2 TO DATE DISPLAY:

1. Press and hold down the "AL/MIN" key, the AL2 icon will flash (if present) and the alarm on/off icon "(((2)))" (if present) will disappear.
2. Press the "SNOOZE/24HR AL/☞" key to confirm or wait approximately 8 seconds to exit. The date will appear in place of alarm 2 time setting.
3. To return to alarm display, simply press the "AL/MIN" key again.

Note: The date can only be displayed with reception of DCF time and the calendar will change accordingly to DCF time from Frankfurt.

TO TURN ALARM OFF **FOR 24 HRS** WHEN IT IS RINGING (BOTH ALARM 1 OR 2):

1. Press the "SNOOZE/24HR AL/🔔" key to start the desired snooze time or press and hold until the confirmation tone sounds the "SNOOZE/24HR AL/🔔" key to switch the alarm off for 24 hours.
2. Or, press the "AL/HR" key to stop alarm 1 or the "AL/MIN" key to stop alarm 2. This will turn the alarm off for 24 hours.

TO DEACTIVATE ALARM FROM GOING OFF AT ALL:

Alarm 1:

1. In normal mode display, press and hold the "AL/HR" key. The alarm icon "AL1" will flash first then after a few seconds the alarm on/off icon "(((1)))" will disappear indicating that it has now been turned off.
2. Press "SNOOZE/24HR AL/🔔" key to exit the mode

Alarm 2:

1. In normal mode display, press and hold the "AL/MIN" key. The alarm icon "AL2" will flash first then after a few seconds the alarm on/off icon "(((2)))" will disappear indicating that it has now been turned off.
2. Press "SNOOZE/24HR AL/🔔" key to exit the mode. Date will automatically be displayed (providing DCF time signal is revived).

TO REACTIVATE THE ALARM SETTING:

Alarm 1:

1. In normal mode display, press the "AL/HR" key. The alarm icon "AL 1" will flash first, then the alarm on/off icon "(((1)))" will appear indicating that it has now been turned on.
2. Press the "SNOOZE/24HR AL/🔔" key to exit this mode.

Alarm 2:

1. In normal mode display, press the "AL/MIN" key. The alarm icon "AL 2" will flash first, then the alarm on/off icon "(((2)))" will appear indicating that it has now been turned on.
2. Press the "SNOOZE/24HR AL/🔔" key to exit this mode. Date cannot be displayed

MANUAL TIME SETTING:



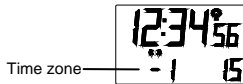
In some cases after inserting the battery, the alarm clock may not be able to receive the DCF-77 signal. In this situation, the time should be manually set (before manual setting see **Checking DCF-77 Reception** above).

1. Press and hold down the "SNOOZE/24HR AL/🔔" key until the time on the LCD starts flashing.
2. Now manually set the time in hours and minutes by pressing the "AL/HR" and "AL/MIN" keys respectively. (Pressing these keys continuously moves the hours consecutively by 1 and moves the minutes consecutively by 5)
3. When the time is set, press the "SNOOZE/24HR AL/🔔" key to confirm or wait for approximately 8 (leaving the automatic time set mode, digits stop blinking).

Note: The unit will still try and receive the signal despite the time being manually set. When it receives the signal, then the DCF tower icon will stay fixed on the LCD. If reception has been unsuccessful, then the DCF tower icon will disappear but reception will still be attempted the following hour.

TIME ZONE SETTING:

0 = Central Europe



To change to a different time zone (± 9 hours):

1. Press and hold down the "SNOOZE/24HR AL/🔔" key to enter the time setting mode
2. Press the "SNOOZE/24HR AL/🔔" key once more, the time zone and snooze time setting will be displayed at the lower part of the LCD (Left digit = Time zone, right digit = Snooze)

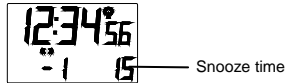
3. Using the "AL/HR" key to select the desired time zone. Each press changes the digits by 1 hour.
4. When the desired time zone is selected, press the "SNOOZE/24HR AL/🔔" key to confirm or wait approximately 8 seconds to automatically return to the normal mode display.

Note: If the time zone is changed, the calendar display will not change to the new time zone.

SNOOZE SETTING:

The snooze time is set as default for 5 minutes by the manufacturer. The actual snooze time required should be displayed as one minute less than in the snooze time setting. This is because it activates from the start of next minute after the "SNOOZE" key was pressed – it does not count the current minute that it was pressed in.

For example: if the alarm is set at 7:00 and 10 minutes snooze time is required so that when pressed it will go on again at 7:10, then 9 minutes has to be set as the snooze time.



To use the snooze feature, simply press the “SNOOZE/24HR AL/🔔” key when the alarm is sounding and the alarm will snooze for 5 minutes before automatically sounding again. When the alarm is snoozing, the alarm icon (((1))) and/or (((2))) will start flashing indicating that the alarm is active but is in Snooze mode.

TO CHANGE TO A SNOOZE TIME (1-59 MINUTES), THEN SIMPLY:

1. Press and hold down the “SNOOZE/24HR AL/🔔” key to enter the time setting mode
2. Press the “SNOOZE/24HR AL/🔔” key once more, the time zone and snooze time setting will be displayed at the lower part of the LCD (Left digit = Time zone, right digit = Snooze)
3. Using the “AL/MIN” key to select the desired snooze time. Each press changes the digit by 1.
4. When the desired snooze time is selected, press the “SNOOZE/24HR AL/🔔” key to confirm or wait approximately 8 seconds to automatically return to the normal mode display.

LCD BACK-LIGHT:

The LCD back-light is automatically switched ON when any one of the 3 function keys are pressed. The back-light will be switched on for approximately 2 seconds before automatically switching OFF. However, if any of the keys are pressed and held down, then back-light will remain ON constantly until the key is released.

MAINTENANCE:

- Avoid placing the alarm clock in areas prone to vibration and shock as this may damage and inaccurate readings.
- Avoid exposure to sudden changes in temperature such as direct sunlight, extreme cold and wet or moist conditions.
- When cleaning the display and casing, use a soft damp cloth only. Do not use solvents or souring agents as they may mark the LCD and casing.
- Do not submerge the alarm clock into water.
- Do not attempt to make any repairs to the alarm clock. Return it to its original point of purchase for repair by a qualified engineer. Opening and tampering with the unit may invalidate its guarantee.

SPECIFICATIONS:

Recommended operating temperatures	: 0°C to +50°C
Power source	: 1 x AA, 1.5V rechargeable Alkaline battery
Recharging source	: Solar panel (Any light sources: solar or artificial)
Battery life	: Approximately 2 years (depending on alarm activation and backlight usage)
Dimensions (L x W x H)	: 88 x 44 x 100 mm

LIABILITY DISCLAIMER

- The manufacturer and supplier cannot accept any responsibility for any incorrect readings and any consequences that occur should an inaccurate reading take place.
- This product is not to be used for medical purposes or for public information.
- The specifications of this product may change without prior notice.
- This product is not a toy. Keep out of the reach of children.
- No part of this manual may be reproduced without written consent of the manufacturer.