

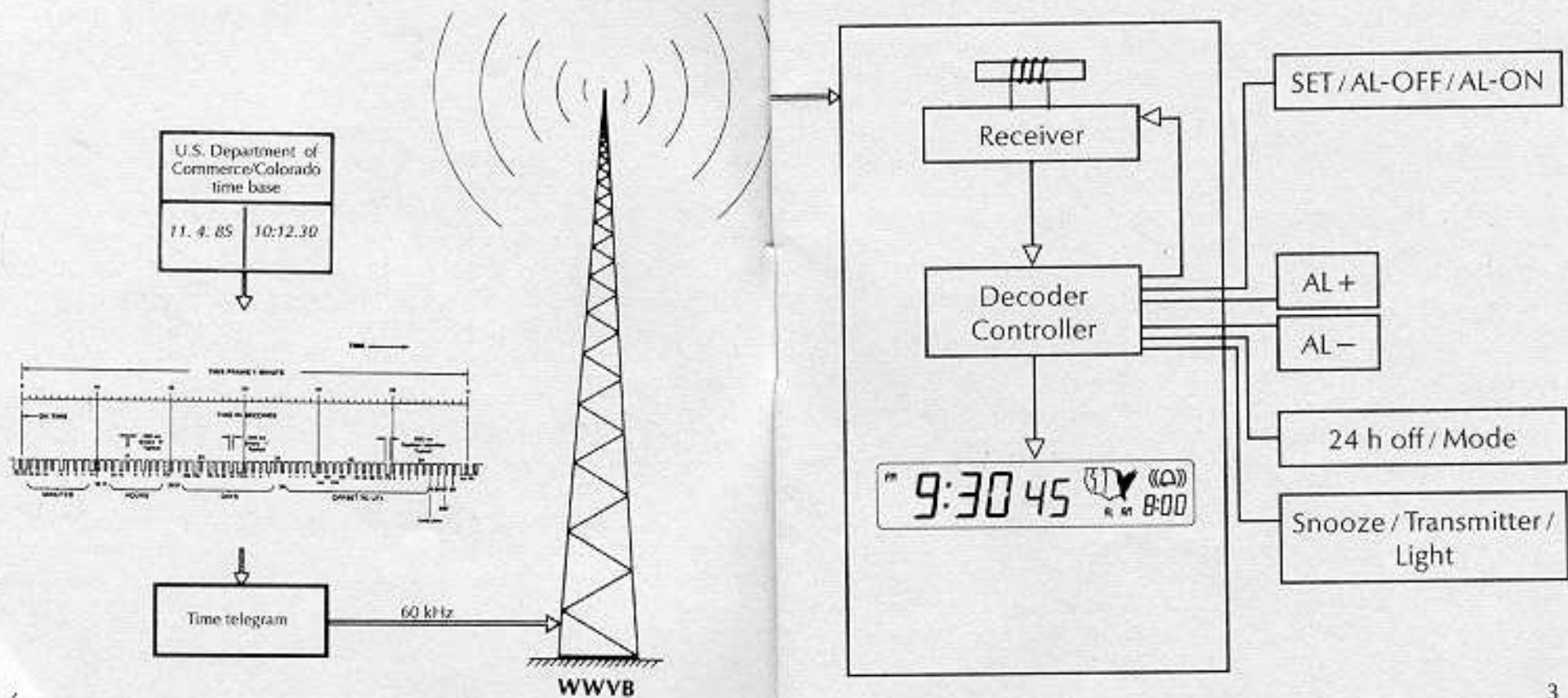


Junghans Mega

Radio-controlled alarm clock

Instructions for use

How the Junghans Mega functions



How radio-controlled clocks function

Your Junghans Mega alarm 1 is an absolutely precise alarm and reminder clock which adjusts itself automatically to the time norm transmitted by radio signal.

The time base is located at the U.S. Department of Commerce in Colorado.

Therefore the Junghans Mega alarm 1, with radio-control from this time base, always displays the absolutely precise time and awakens or reminds you at the set alarm time, accurate to the second.

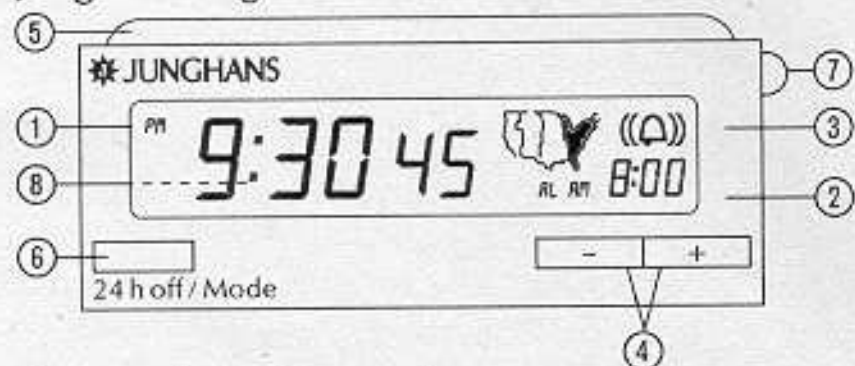
The Junghans Mega alarm 1 receives the WWVB transmitter signal free of charge via its built-in antenna system anywhere longwave reception is possible with a portable radio.

However, local reception conditions play a significant role.

The built-in microprocessor in the Junghans Mega alarm 1 processes the received time telegrams and controls the hands accordingly. Completely automatically. Once it has been set correctly by the radio signals, the Junghans Mega alarm 1 continues running on its own internal, highly accurate, 32 kHz quartz time base, comparing the indicated time with the time information from the WWVB transmitter once every day. Due to this daily time comparison, it is not important for the precision of the Junghans Mega alarm 1 if the time cannot be compared with the transmitter now and then, due to occasional disturbances (e. g. thunderstorms, temporary transmitter shut downs, unsuppressed household appliances, etc.).

Beside the advantages of timekeeping precision and an alarm signal which is accurate to the second, your radio-controlled Junghans Mega also changes over automatically from standard time to daylight saving time and back again.

The functions on your radio-controlled Junghans Mega alarm 1



- ① Time display (hour, minute, seconds)
- ② Display of the set alarm time ("battery low indication", if set alarmtime flashes)
- ③ Alarm readiness display
- ④ Buttons for setting and changing the alarm/reminder time
- ⑤ Snooze button for alarm repetition every 5 minutes, light and transmitter call within the USA (hold down longer than 6 sec.)

- ⑥ Shuts off the alarm for 24 hours. Time zone change possible in the "SET" position (see below) and with "+" / "-". Change of display between alarm time and date in the "ON" position.
- ⑦ Program switch (on back)
ON = alarm on
OFF = alarm off
SET = set alarm



- ⑧ Display of perpetual calendar: month, day ("battery low indication", if calendar flashes)
- ⑨ Visual reception display and indicator
- ⑩ Time zone display within the USA (PST, MST, CST, EST)

Starting up your radio-controlled Junghans Mega alarm 1:

- Slide the battery cover on the back toward the bottom.
- Insert a 1.5 V AA alkaline battery with the positive and negative poles correctly aligned. Make certain to use only leakproof, brand name batteries.
- Close the battery cover on the back of your radio-controlled Junghans Mega alarm 1.

Automatic setting sequence after inserting the battery:

1. All settings indicate START POSITION

Test display indicating whether all display positions are functioning

0:00 00 0  0. 0.

2. The visual reception indicator blinks in one second rhythm

The receiver is switched on, the clock is receiving

0:00 00 0  0. 0.

3. The seconds display changes in one second steps, the reception indicator blinks

The receiver obtains time telegrams from the transmitter and now determines the exact time

0:00 32 0  0. 0.

4. The precise time appears, displayed in hours, minutes, seconds and the date

Now the comparison with the transmitter is complete. You have the absolutely exact time

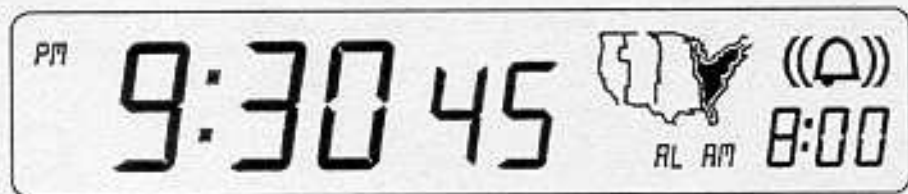
AM 10:12 32  6. 30.

How to set the precise alarm time:

Slide the program switch on the back of the case into the "SET" position. The alarm display "AL" blinks.

With the "+" / "-" buttons (4), set the hour and minute. Pressed briefly = single step adjustment, held down = hour and minute move ahead rapidly.

Now program the radio-controlled Junghans Mega alarm 1 to the alarm time between 00:00 AM and 11:59 PM which you have just set.



Push the program switch (7) on the back of the case into the "ON" position. You now see the bell symbol in the display and the alarm time you have set as a confirmation of alarm readiness.

The clock's alarm function is now ready.

The radio-controlled Junghans Mega alarm 1 will activate its alarm at the set time, accurate to the second.

If you wish to use the alarm repetition (snooze control):

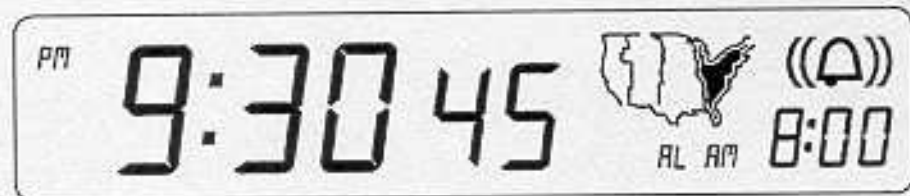
When the alarm sounds, press the snooze button (5) briefly, which activates the automatic alarm repetition.

After pressing the snooze button, the alarm repeats after 5 minutes. The alarm readiness symbol (bell) blinks during this time.

If you wish to be awakened at the same time the next day:

Press the "24 h OFF/Mode" button.

With the "24 h OFF/Mode" button, you can shut off the alarm for 24 hours. After exactly 24 hours, the signal sounds again. Pressing this button is acoustically verified by a long beep.



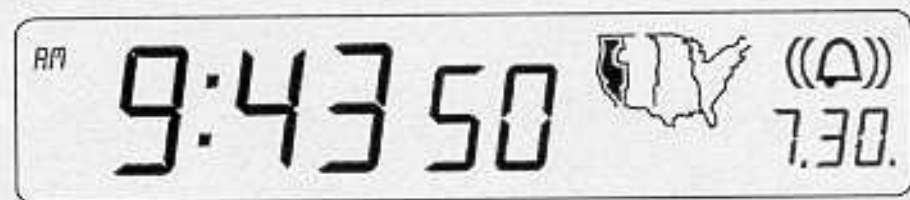
To check the date and alarm time:

Program switch position "ON".

Press the button "24 h OFF/Mode".

You can also call up the current date or the programmed alarm time with this button.

When alarm repetition is active, do not use the "24 h OFF/Mode" button, as otherwise the alarm repetition will be shut off.



If you do not wish to be awakened at the same time the next day (e. g. weekends):

Push the program switch (7) to the "OFF" position. Now the alarm is switched off. The alarm readiness symbol (bell) and the alarm time disappear.

The date display now appears.



Display light

So that you may still be able to read your radio-controlled Junghans Mega alarm 1 in the dark, it has been provided with an illuminated display panel. To operate, push button (5).

Manual time synchronization using the transmitter call button (5)/reception indicator.

With your Junghans Mega alarm 1 you can also establish a link with the WWVB transmitter manually by pressing transmitter call button 5 for longer than 6 seconds. The reception indicator appears in the display.



- Your Junghans Mega alarm 1 now checks its internally stored time by reading in the new time telegram. Best reception is achieved after 10 PM.

- The reception indicator flashes to indicate that the alarm clock's receiver has been switched on.
- During the transmitter call, the hour and minutes remain on zero and the seconds are shown beginning with "00".
- When time synchronization has finished, your Junghans Mega alarm 1 shows the absolutely accurate time.
- If reception of the first time telegram is disturbed, your Junghans Mega alarm 1 will automatically make 5 further attempts. If time comparison is still not possible, or if you interrupt the transmitter call prematurely by pressing 5 again, the internally stored time from the last successful radio contact will be displayed.

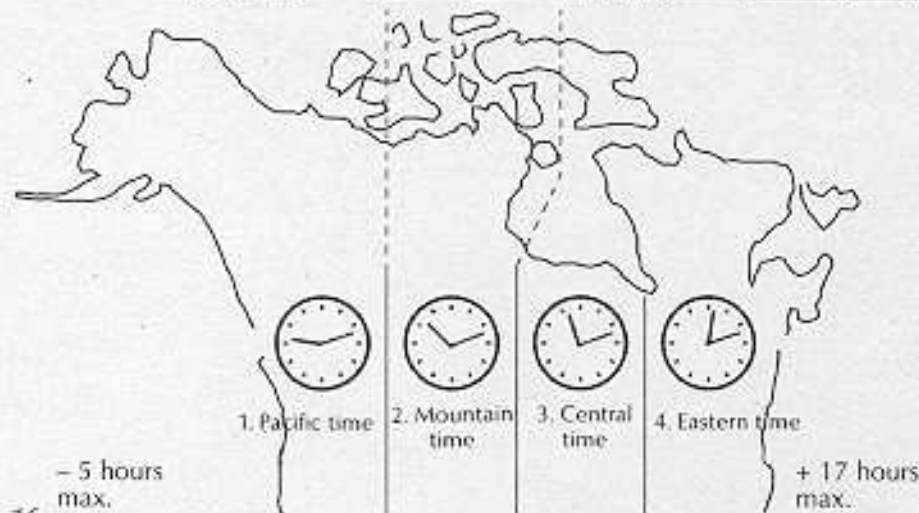
Setting the time zones on your JUNGHANS MEGA alarm 1

- Adjustment by one hour at a time
- Automatic date adjustment
- Time synchronization only possible within the transmitter range (within the USA)

Push the program switch (7) to the "SET" position. Press button (6) and hold down while setting the time display to the desired time with the "+" / "-" buttons (4). (Outside the USA, no time zone is displayed on the LCD).

After setting, slide the program switch into the desired "OFF" or "ON" position.

	-2	-1	MST 0	+1
Time	21 ¹²	22 ¹²	z. B. 23 ¹²	0 ¹²



If you want to know whether your radio-controlled Junghans Mega alarm 1 is receiving correctly:

The reception indicator (9) allows you to visually check the last successful time correction (radio contact). Days without radio contact are added together and displayed:

Example:

"0" or nothing visible = the ideal display

Your radio-controlled Junghans Mega alarm 1 has had regular radio contact every day with the transmitter.

6 = this display means that your radio-controlled Junghans Mega alarm 1 has had no clear radio contact with the transmitter for 6 days.

In the event of reception interference, hold down button (5) longer than 6 seconds and select a different location. Time synchronization occurs automatically every day within the USA, provided there is no reception interference. Outside the USA this reception is shut off since the transmitter signal cannot be received. During transmitter contact - after pressing button (5) longer than 6 seconds and every night from 11 PM hourly until 5:12 AM - the reception indicator blinks.

Special tips

Resetting outside the range of the WWVB transmitter

Of course, your Junghans Mega alarm 1 can also be operated without radio control by the transmitter, just like a normal quartz alarm clock. Assuming that you wish start working your Junghans Mega alarm 1 in Europe, for example after a battery change, you must begin with a "reset".

- When you carry out a "reset" all the time information stored in your Junghans Mega alarm 1 is deleted and the alarm clock start to read in new time telegrams. However, since the time telegrams from the WWVB transmitter cannot be received in Europe, you must now set your Junghans Mega alarm 1 manually.

To trigger a reset, simultaneously press the button (5) und button (6) > 3 sec. This causes the display to be deleted and when you release the buttons, the alarm clock begins a reset.

You can then change to the "emergency start" function.

Set program switch (7) to the "OFF" position. Push button (5) and hold down while setting the time with button (4) "+" / "-". (The time zone display is now on "PST". The "home" time zone can be set via time zone adjustment.)

In this mode your alarm clock attempts automatic synchronization once every hour and, if reception is successful (back in the states), it sets itself to the correct radio-controlled time.

If the time does not set itself:

If your radio-controlled Junghans Mega alarm 1 has not set itself to the exact time after 3 minutes at the latest, there is reception interference.

Repeat the starting procedure after changing location – if possible, close to a window.

The radio-controlled Junghans Mega alarm 1 adjusts itself automatically again. Only in the event of extreme reception situations or atmospheric disturbances, the setting procedure may be delayed.

The best reception conditions can be expected during the night from 11 PM to 5 AM.

Possible interference sources preventing reception of the WWVB transmitter:

As in the case of all radio receivers, the radio-controlled Junghans Mega alarm 1 may also be subject to certain reception restrictions and interference. Due to the special transmission and reception characteristics of longwave signals, local restrictions can be expected only outside the range of the ground wave (beyond a radius of 500 km around the WWVB transmitter in Colorado). Considerable interference may be caused by strong building noise, such as caused by metallic components. In addition to unsuppressed household appliances, TV sets and PCs are primary interference sources in a normal household. In the interference range of approx. 2 m around switched-on TV sets, the radiocontrolled Junghans Mega alarm 1 is unable to receive the time telegrams. To ensure clear reception, the radio-controlled Junghans Mega alarm 1 should therefore not be placed directly next to possible interference sources, e. g. beside a TV set.

Technical Data:

Integrated radio receiver for reception of the WWVB time signal transmitter at 60 kHz

Ferrite antenna

Automatic changeover, standard/
daylight saving time and back 1 second

Automatic time setting

Voltage range 1.3 - 1.7 V

Battery low indication < 1,3 V

(please change battery)

Typical operating time one
1.5 V battery 3 years

Setting time with interference-
free reception 2-3 minutes

Time comparison with transmitter
Every day
between 11 PM and
5:12 PM (only
within the USA)

Quartz time base 32 kHz

We reserve the right to make technical alterations.

This product conforms to the directive regarding interference suppression.

IMPORTANT

Please use environmentally safe batteries and make certain to dispose of them properly.

Warranty

Model No.:

Purchaser:

Dealer:

Signature:

Date:

Limited warranty

This clock was manufactured by Junghans using the latest technology. The functional capability of this clock has been tested several times and it is subject to the stringent standards of our Quality Control Department.

Scope of warranty

This warranty covers all defects in workmanship or materials in this clock.