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**Digital wristwatch
«TECHNOCHAS»
(electronic module 01)**

ГОСТ 23350-98
ТУ ВУ 190245707.002-2006

User manual

*The external look of the watch may differ
from the image above.*

Watch functions

- Time in 12- or 24-hour mode (hours, minutes, seconds).
- Calendar (date, day of the week, month). The watch calculates day of the week automatically. The user can select the language for displaying the day of the week (Russian or English).
- Automatic transition to summertime and wintertime (the user can enable or disable it).
- Hourly signal.
- Time of another time zone (setting the offset for an integer number of hours relative to the "home" time zone with automatic calendar recalculation).
- Alarm with a melodic signal.
- Timer (3 submode operation, see below).
- Stopwatch (2 submode operation, see below).
- Automatic digital precision adjustment.
- Display backlight.

Technical specifications

- Daily precision deviation at temperature (23±2)°C is not more than ±0.5 sec/day (the daily deviation from 0 to ±6.35 seconds can be corrected by the user with the help of digital adjustment function).
- Battery life is not less than 1.5 years.
- Operating temperatures from 1 to 45°C.
- Battery type: AG3.
- Lifetime is at least 5 years.

Package contents

Watch with battery, user manual, package – 1 piece each.

Common instructions

We recommend you to read this manual before using the watch.

To avoid premature failure, the watch should not be exposed to water, mechanical stress (shock, vibration, etc.), corrosive media (acids, alkalis, etc.), and should not operate at temperatures outside the operating range (1-45°C).

Display backlight

To turn on the backlight, press K4. The backlight will turn off automatically after 3 seconds. Keep in mind that frequent use of the backlight significantly reduces battery life in hours.

Operation modes

The watch has the following operation modes:
- Indication of the current time and calendar (main mode);
- Alarm mode;
- Timer mode;
- Stopwatch mode.

Sequential change of these modes is performed by pressing K1.

Main mode

In main mode, the watch displays the hours, minutes, seconds of the current time, the date, the month number, and the day of the week.

Setting up the current time and calendar

Enter the current time setup mode by pressing K3 for more than 3 seconds in the main mode. The seconds will begin pulsating.

The choice of the corrected parameter is made by pressing K3 in the following order: seconds → minutes → clock → year → month → date and then in a circle. The watch will calculate day of the week automatically based on the entered year, date and month.

The selected value is pulsating. When you press on K1 it will decrease them by 1, when you press K2 - they will increase. To accelerate the setting process, you can press and hold K1 or K2.

For setting up the seconds at the time of transmitting the time signals by radio or television, you need to press and release K1 or K2. In this case, in the range of values from 0 to 29, the seconds are zeroed, in the range from 30 to 59, their zeroing is accompanied by an increase in the minutes by 1.

The current time mode (12 or 24 hours) can be selected when the watch is set. If the watch is displaying "H" in the place of the seconds during hours setup (their value is pulsing), a 24-hour scale is used. If you set the value to more than 23 hours, "A" will be displayed in place of the seconds, which means that the 12-hour time scale is used, and the time is before noon. Similarly, if the value is set to less than 0 hours, the "P" symbol corresponding to the time after noon will appear. In addition, when the "p.m." time is displayed in the 12-hour format, the "▲" indicator appears under the "**12/24**" sign on the dial.

Automatic transition to summertime and wintertime is switched on and off by pushing K3 for more than 3 seconds in the minutes setting mode (minutes are pulsing). In this case, the symbols "ON" or "OF" corresponding to the automatic transition function on or off, will appear on the display. You can switch between these states by pushing K1 or K2. To return to the time setting, press K3.

Selecting the language for displaying the days of the week. You can select Russian or English by pushing simultaneously K1 and K2 in the time and calendar setup mode or in the basic mode.

To exit the setup mode back to the time display mode (main mode), press and hold K3 for more than 3 seconds during setting of any values except minutes. In addition, the clock provides an automatic exit from the setup mode in 1 minute 30 seconds after the last push of the buttons.
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Time of another time zone

To display the time in another time zone, press K2 in the main mode. Operating in the second time zone mode is shown by the pointer "▲" under the symbol "☉2" on the dial,

To set the time for another time zone, push and hold K3 for more than 3 seconds. The value of the hours will start to pulsate. By pushing K1 (decreasing the value) and K2 (increasing the value), set the required value. The calendar will be automatically recalculated if necessary. To exit the setting mode, push and hold K3 for more than 3 seconds.

Setting up the alarm and hourly alarm

Enter the alarm mode by pushing K1 in the main mode. This will display the "AL" symbols on the top line of the display, to the right of them – the alarm time, and in the bottom line the current time will be displayed as in main mode.

To set the alarm and hourly signal, push and hold K3 for more than 3 seconds. The "AL" symbols begin to pulse. Press K1 and K2 to activate or deactivate the alarm and the hourly signal. The pointer "▲" under the icon "☙" on the dial shows activated alarm, under the icon "🔔" – activated hourly signal (these pointers are also displayed when the alarm mode is exited). Further, by pushing on K3, you will proceed to setting the hours and after one more push – the minutes of the alarm time. The values are set using K1 and K2, similar to setting the current time. To exit the setup mode, press and hold K3 for more than 3 seconds.

The alarm clock has 5 melodies and a single-tone signal. When you push K2 and K3 at the same time in alarm mode, the selected melody will sound. If you push K3 during playback, the next melody will sound. The K2 button interrupts the melody playback. The melody on which playback will be stopped will sound when the alarm goes off.

At the alarm time, a signal will sound. You can deactivate the signal by pushing K2. If you do not turn off the signal, it will sound 3 times every 10 seconds, after 5 minutes and after 5 minutes more – also in series of 3 times.

Timer

Enter the timer mode by pushing K1 in the main mode 2 times. The characters "T1" in the upper line on the display and the pointer "▲" under the "**T**" on the dial will appear. The watch has 3 submodes of timer (T1-T3). You can switch between submodes by pushing K2.

Timer-1 alarms at the given time after start-up. The timer operation time is set in the range from 1 minute to 1 hour 30 minutes, with a discreteness of 1 minute. When the timer is running, the remaining time before the alarm is displayed in hours, minutes, and seconds on the bottom line of the display.

Timer-2 alarms at the given time (similar to the alarm clock), but you can see time remaining to the alarm is triggered in hours, minutes and seconds. The alarm time is set in hours and minutes.

Timer-3 beeps when a given date comes. You can see the time remaining to the alarm in the days, hours, minutes and seconds. The alarm time is set by year, month and date. The maximum possible count value for the timer-3 is 1100 days.

To set the timer, select the required submode by pushing K2 and set the required values in the same way as setting the current time. Entering or leaving the setting mode – pushing and holding K3 for more than 3 seconds, then K3 – selecting the set value (it pulsates), K1 – decreasing the value, K2 – increasing. To switch the timer on or off, push K3. In this case, the pointer "▲" under the "**T**" sign on the dial will start to pulsate. The timer can work in the background after switching the watch to another mode. The pointer will continue pulsation in this case.

When alarm sounds, you can turn it off prematurely by pushing K2.

Stopwatch

Enter the stopwatch mode by pushing K1 in the main mode 3 times. This the "ST" characters on the top line of the display and the pointer "▲" under the " 🏃 " icon on the dial will appear. Discreteness of the account – 0.01 seconds from 0 to 30 minutes, 1 second – after 30 minutes. The maximum value is 24 hours.

You can start and stop the stopwatch by pushing K3. When the stopwatch is switched on, the pointer "▲" under the " 🏃 " sign on the dial will pulsate. The stopwatch can work in the background, when you switch the watch to a different mode of operation. The pointer will continue to pulsate on this case. You can reset the stopwatch to zero values (0'00"00) by pushing and holding K3 for more than 3 seconds.

In addition, the clock has the ability to fix the stopwatch's intermediate value without stopping the count by pushing K2 while the stopwatch is running (the intermediate value will appear in the upper line). The type of the fixed value depends on the selected submode. You can switch between two submodes by pushing K2 while the stopwatch is reset (zeroed). You can see the name of the submode on the top line of the display.

Submode LAP – fixes the "intermediate result", i.e. time elapsed between turning on the stopwatch and pressing K2.

Submode SPL – fixes the "circle time", i.e. time between successive pushes of K2.

Automatic digital precision adjustment

The watch has the function of automatic digital precision adjustment. When you zero the seconds value when setting up the time (see the corresponding section), the watch remembers this moment. If you make the next zeroing after 4 to 720 hours, the watch will automatically calculate and enter the correction value.

In addition, you can view and manually enter the correction value. To do this, enter another time zone mode (by pressing K2 in the main mode), and then push and hold K2 for more than 3 seconds to enter the digital precision adjustment mode. The display shows the current correction value. For example, " -1"15 " on the display shows that without correction the clock would hurry to 1.15 seconds per day.

For manually entering the correction value, push K1 to decrease its value, K2 - to increase. The setup resolution is 0.05 seconds, the range of values is from -6.35 to 6.35 seconds per day.

To exit from the digital precision adjustment mode to the main mode, press K3. There is also an automatic exit from this mode in 1 minute 30 seconds after the last push of the buttons.

You can calculate the required correction value manually as follows. For example, you setup the time on the watch at 21:00:00 (reset seconds to zero). 10 days later, at 21:00:00 on the watch, the real time is 21:00:07, in other words, the clock went forward for 7 seconds. Dividing the difference in values by the number of days of observation, we get the correction value: 7/10 = 0.7. As the clock went ahead, from the already existing correction value in the clock (for example, 0.4), we subtract the value we calculated. In our example: 0.4-0.7 = -0.3. In case the watch is behind - the calculated value have to be added to the correction value from the watch: 0.4 + 0.7 = 1.1.

Battery replacement

The symptoms of the battery failure are the weak contrast of the display or the absence of information on it, the disappearance of information when the signal or backlight is switched on, the systematic lag of the clock.

To replace the battery, it is necessary to open the watch caseback, remove the plate holding the battery, remove the old battery, install a new one in its place, observe the polarity ("+" of the battery outward), install the fixing plate, lock the caseback. After replacing the battery, it is necessary to make a general reset of the clock by simultaneously pressing K1 and K3.

Battery type: AG3 or equivalent.

It is recommended to replace the battery in a specialized service center to prevent the loss of fine details or damage of moisture protection.

Warranty

Warranty period is 1 year from the sale date. The warranty period is extended for the period when watch is repaired. Warranty repair does not accept the watch:
• Without a factory passport
• Without a stamp of the shop and the date of sale in the passport, or a cash voucher about the fact of their acquisition.
• With aftermath of mechanical damages (potholes and deep scratches on the case, cracks on the glass and the indicator), traces of water and other traces of operating conditions violation.

Repairing of the watch during the warranty period is provided in the manufacturer's warranty workshop.

Manufacturer quality control information

Date of issue:
QC stamp:

Sale information

Date of sale:
Seller's signature:
Shop stamp: