Zeitgeist 2

The all-rounder among pocket watches

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1   Introduction

A speaking watch featuring all kinds of additional cutting-edge functions, the Zeitgeist 2 is a true delight.

Housed in a practical casing with three buttons on the side, a clear-sound speaker, a long-lasting rechargeable battery, and a display, this device weighs only 29 g and fits easily into the palm of your hand.

The Zeitgeist 2 also comes with a strap and can either be worn around your neck or carried without the strap as a pocket watch that won't take up much space.

During development, great importance was given to ensuring ergonomic design, both inside and out.

Acoustic communication takes the form of natural-sounding voice output and short musical jingles.

Although it was designed for visually impaired users, the Zeitgeist 2 can also be of help to sighted persons of every age.

The functional scope of the device goes far beyond that of a speaking clock and includes numerous extra features, including:

❖ stopwatch
❖ timer
❖ calendar and alarms
❖ voice recordings
❖ compass
❖ pedometer (step counter)
❖ Lumitest
❖ automatic time setting
❖ tactile time output in vibration code

and a whole lot more.

This user guide describes all functions of the Zeitgeist 2 and is designed to be consulted at any time.

We hope you enjoy using the Zeitgeist 2 by Caretec!

2   Description and scope of supply

2.1   Scope of supply

- Zeitgeist 2 basic device
- Neck strap
- USB power adapter
- USB charging cable
- User guide as hard copy and on a USB stick

2.2 Haptic design

The Zeitgeist 2 is rectangular, slightly oval in shape, with a smooth casing of black plastic. It measures around 4 x 7 centimeters in size and is one centimeter thick.
On the top right of the device there is a slightly raised loop for the neck strap, and three metal buttons can be found on the right-hand side.
The underside of the device has a USB-C port for inserting the charging cable.
On the rear you will feel four screw holes and a slight depression for the rating plate, while on the left-hand side the casing is closed.
On the front is the display, with the speaker underneath, as well as the microphone under a grille-like structure.
Within this you can just feel the optical sensor for the Lumitest on the left-hand side, and on the right an LED (light-emitting diode), which lights up in different colors to indicate specific operating states: (red and green for charging, and blue for the microphone). For further details see the relevant sections.
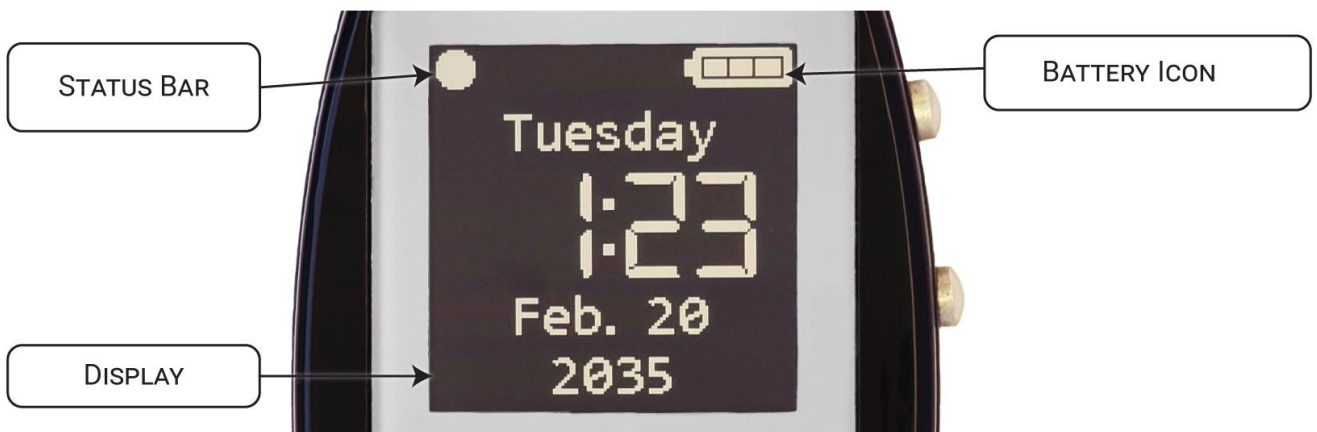
2.3   Display

Although the Zeitgeist 2 is designed to be primarily operated via audio, the device also includes a graphics-enabled display for the sighted.
This takes the form of a reflective LCD, which is not backlit but uses ambient light with good contrast for the display.

The home screen, when no buttons have been pressed for a while, will show the basic display with the most important device information such as the clock time, the date, and on the top right, the charging status of the battery.
Various icons are displayed in the top left corner depending on the operating state; see the list in the picture. You will find detailed descriptions under the individual menu items.

If you are in a sub-menu on the device, the audio output will be supplemented by the individual input/output status shown on the display.

STATUS BAR ICONS:

LUNAR PHASE ICON:	OTHER ICONS:	BATTERY ICON:
◯ NEW MOON	GPS TIME SYNCHRONIZATION	BATTERY FULL
☽ WAXING CRESCENT	DEVICE LOCK	BATTERY 40% TO 70%
◗ FIRST QUARTER		BATTERY 13% TO 40%
● WAXING GIBBOUS	ALARM	BATTERY IS EMPTY
● FULL MOON	LIGHT NOTIFIER	BATTERY CHARGING
● WANING GIBBOUS	BED SHAKER	BATTERY CHARGING 13 % DONE
◖ LAST QUARTER	SILENT MODE	BATTERY CHARGING 40 % DONE
◖ WANING CRESCENT		BATTERY CHARGING 70 % DONE

__Note:__ When many "additional icons" appear in the status bar, space becomes tight and the "Bed shaker" and "Silent mode" icons may sometimes disappear behind the battery display, although the relevant functions of course remain activated.

2.4   Power supply

The Zeitgeist 2 contains a small lithium-polymer 400 mAh capacity battery, which is charged via the USB-C cable.

The new USB-C connector standard offers full freedom in terms of insertion, with there no longer being a top or bottom.

Please, however, take care when using the cable and port on the device. Make sure that you always insert and remove the cable at the correct angle, i.e. holding it straight.

Note: *The USB plug connection on the Zeitgeist 2 is only used for charging, not for exchanging data.*

The built-in battery will last without recharging for several weeks to months depending on the level of usage for the device.

You can quickly check the battery status in the home screen at any time by pressing the button combination **Top+Bottom SHORT**.

If the battery is completely flat, it will take around 75 minutes to fully recharge again.

When the battery charge level gets very low, you will hear a jingle warning you of this at intervals of 15 minutes.

As soon as a USB cable is plugged in with a power supply unit, the Zeitgeist 2 will indicate that the battery is being charged by emitting an audible signal, while the LED on the front will light up and change colors: RED means charging in progress, GREEN means charging has ended.

Note: *As soon as charging ends, no further power will be consumed even if the charger is still plugged in, i.e. the battery cannot be overcharged.*

The LED will go out once the charger is unplugged, regardless of the charging status.

3   Care of the device

No electronic device will like rough handling or exposure to moisture or water.
The Zeitgeist 2 has been designed with durability in mind, but it calls for cooperation from the user if this is to be attained.
It can normally withstand being dropped from table height or sat on with a soft surface underneath, but not being stood on.
As the device is not waterproof, make sure you keep it well away from any liquids or fluids.
Normal levels of perspiration from the palms of the hands present no problem, although a certain degree of cleanliness is required when handling all electronic devices.
Wipe the device down once in a while with a slightly damp (almost dry) cloth, e.g. clean soft microfiber, if necessary with a very small amount of soap or alcohol-based cleaner.

The Zeitgeist 2 is otherwise a maintenance-free product, but you should generally make sure no foreign substances get into the device openings.The speaker on the front is concealed under a grille and if a foreign substance gets into this, the speaker may start

making an unpleasant humming or rasping sound or become quieter in volume while in use.

On the underside of the device you will find the USB-C port used to charge the device. The port and connector must fit together snugly or charging will not take place. Both the port and connector may become damaged by foreign substances. It is sometimes possible to remove dust, etc. using fine work tools (please only try this if you know what you are doing or you may damage the device even further).

Apart from cleaning and care, there are no parts requiring maintenance from the customer. Damage to the device hardware can only be repaired by the dealer or manufacturer. Please remember that the warranty for the device will be invalidated with improper handling!

4   Operating principles

Perhaps you are familiar with the predecessor of the Zeitgeist 2, also from Caretec, i.e. the Zeitgeist version manufactured just after the turn of the millennium? Also equipped with three buttons, it set standards in terms of operation and sold well over the years.

The Zeitgeist 2 is now carrying on its tried and tested operating concept. It has, of course, been extended to include all the new functions and features offered by state-of-the-art technology.

The device has basically now been designed to be completely acoustic in use, with the visual features merely providing extra information for sighted people. Whenever a button is pressed, this is indicated by haptic feedback in the form of a brief vibration.

The Zeitgeist 2 uses almost exclusively what are known as endless scrolling menus and numeric settings. In other words, when scrolling up and down, you are moving in a loop, e.g. when selecting a month, January comes after December.

In the case of the three buttons, the device distinguishes between how long they are pressed: **SHORT** and **LONG** (LONG is around one second). The functions of the buttons are similar for many menu items:

- Use a SHORT press of the **top** or **bottom** button (**Top SHORT or Bottom SHORT**) to scroll up or down or to switch between states, e.g. between active or inactive.
- Use a **LONG** press of the **middle** button (**Middle LONG**) to start a menu item.
- Use a **SHORT** press of the **middle** button (**Middle SHORT**) for information about the relevant menu item. In each item you will move forward one step in the sequence of available options.

<u>For example, when setting a time in the calendar:</u>
As you move forward by one step between year/month/day, etc. by pressing **Middle SHORT**, you are simultaneously confirming the previous item.
The individual numerical value, e.g. number for the day, is selected by repeatedly pressing **Top** or **Bottom SHORT**.

As regards **button combinations** when two buttons are pressed simultaneously, the device distinguishes between **SHORT** and **LONG** as well.
The most important combination that is valid wherever you happen to be is: **Top and Bottom SHORT** = **Escape** from the functions; this will take you back to the home screen.

The buttons have specific functions depending on the one selected. See the following sections for further explanations.

<u>Note for the sighted:</u>
At certain points in the following sections you will also see diagrams accompanying the written explanations with a brief description of the button presses.
*A distinction is again made here between individual buttons, button combinations, **LONG** and **SHORT**.*

4.1   Button lock (key lock)

The device also features a button lock (key lock) for carrying the Zeitgeist 2 about and to prevent unintentional operations.
If you press a button when the device is locked, a jingle, a vibration signal and a large icon on the display indicate the locked status.
The sequence of buttons used for locking and unlocking is the same:
Simultaneously press **all three** buttons **SHORT** immediately followed by **Top SHORT**; the Zeitgeist 2 will confirm the operation with a voice message and indicate the status with an icon in the top left corner of the display.

4.2   Silent mode

The silent mode can be used to turn off all sound notifications at once, leaving only the vibration signals. The silent mode is meant for any occasion where it could be disturbing if a jingle sounds (e.g. when visiting a cinema, theater, concert etc.).
The sequence of buttons used for activating and deactivating the silent mode is the same:
Simultaneously press all three buttons **SHORT** immediately followed by **Bottom SHORT**; the Zeitgeist 2 will confirm the operation with a voice message and indicate the status with an icon in the top left corner of the display.
When the silent mode is activated, the following happens in detail:
- The alarm, timer, and calendar events will be muted and the device will only signal a new event or alarm by vibration.

- If an hourly reminder is enabled, the reminder will be muted, but the device will vibrate every full hour.
- The light notification jingles will be muted.
- The button lock (key lock) Jingle will be muted and the device will only signal that the device is locked by vibration.

⚠ *WARNING*	*Do not forget to deactivate the silent mode when it is no longer needed, otherwise you may miss calendar events or alarms.*

Note: *Simultaneously press the bottom and middle button short (**Bottom+Middle SHORT**) to cancel the vibration playback of an alarm, timer, or calendar event silently, while the information about it remains available.*

5   Operating states and RESET / troubleshooting

A distinction is basically made between three operating states:
- Home screen ....section 5.1
- Functions menu (main menu) ....section 6
- System settings (Settings sub-menu) ....section 7

The device will respond to buttons being pressed whatever its operating state.
Should it no longer do so, either the battery is flat or the built-in computer has frozen.
To perform **troubleshooting** and restore operation, proceed as follows:
- If the battery is flat, this will be indicated by the fact that the display remains dark. In this case, plug in the USB charger (power adapter plus cable). Most settings will be retained, although the clock time and alarms will be lost. After charging the device, you should preferably use the automatic time setting feature via GPS; see section 7.8.
- If you happen to lose your way in the sub-menus, it is a good idea to simply return to the home screen. You can do this by simply putting the device down and waiting for max. 30 seconds or by pressing the button combination **Top+Bottom SHORT**.
- If the computer really has frozen, the software has to be reset **(RESET)**. In this case your settings will be retained (except for the alarms):
  Place the device flat on a table and hold down the buttons **Top+Bottom VERY LONG**, i.e. 12 seconds.
  The Zeitgeist 2 will then vibrate strongly, play a start-up jingle and restore functioning on the display.
  Now leave the device for between 15 and 30 seconds **without** moving it until another jingle sounds (ping noise). During this period, various sensors have to be calibrated by the software. If the device is moved, this will adversely affect the accuracy of some functions, e.g. the compass.
- If the device is basically still functional but all settings are incorrect, you can also **restore the factory settings**. Careful as this will cause all settings to be lost!
  For details see the relevant function in the Settings menu, section 7.6.

Note: *If the display is functioning, but you can't hear anything or very little from the speaker, first check the* *volume setting* *in the Settings menu. Next check whether the grille covering the speaker is dirty. In extreme cases these little openings become so clogged with dirt that the device needs to be cleaned by the dealer or manufacturer or the speaker even replaced.*
This also applies to the little opening of the microphone if the volume of your voice recordings comes out very low.

5.1   Home screen

The Zeitgeist 2 is normally in home screen mode, i.e. on standby and awaiting a command, i.e. for a button to be pressed.
The device will also automatically return to the home screen from numerous sub-menus if you take no action for a while, around 30 seconds.
If the device goes back to home, you will hear a signal to indicate this.

You can access numerous functions directly from the home screen using **quick access**:
*(**Note:** Some functions can also be accessed as usual via the main menu; for details see the Main menu.)*
With quick access, the device once again distinguishes between individual buttons, combinations of them, and how long they are pressed, SHORT or LONG.

- **Top SHORT** ....To announce the clock time in 24 hour-format with seconds
- **Bottom SHORT** .To announce the date in long-form, also including the calendar week and phase of the moon
- **Middle SHORT** ...To call up information about the last menu item executed *(Careful: This may produce confusing results, depending on the preceding action.)*

- **Top+Middle SHORT** ....To announce information about active alarms
- **Bottom+Middle SHORT** .To announce information about active calendar entries
- **Top+Bottom SHORT** ......To announce information about battery status

- **Top LONG** ....To make the clock time vibrate according to the widespread industrial standard, i.e. vibration code with long and short vibration pulses. Here a long vibration pulse means 4 and a short one 1, i.e. the number 9 is made up of long-long-short; for further details see below in section 5.1.1.
The intensity and duration can be changed in the Settings menu, section 7.9.
- **Bottom LONG** ....Starts the Lumitest function
- **Middle LONG** .....To call up the main menu (see section 6)

- Combination **Top+Middle LONG** ...... To start or stop automatic time setting via GPS signal
- Combination **Bottom+Middle LONG** To record a new voice memo
- Combination **Top+Bottom LONG** ..... To reset the device (RESET)

Instructions for reading the button press diagrams:

In the vertical direction a distinction is made between SHORT or LONG for the duration of the button press.

The three buttons are represented in the horizontal direction, with small dots indicating the buttons to be pressed. The number of dots in the grey boxes corresponds to the number of buttons to be pressed (together).

		TOP	MIDDLE	BOTTOM
HOME SCREEN	**SHORT PRESS**	• TIME	• INFO FROM RECENT MENU ITEM	• - DATE - CALENDAR WEEK - MOON PHASE - DAYS TILL NEW MOON
		•	• ALARM INFO	
			• CALENDAR EVENT INFO	•
		•	• BATTERY INFO	•
		•	• DEVICE LOCK/UNLOCK: (TOP + MIDDLE + BOTTOM) + TOP	•
	LONG PRESS	• VIBRATE TIME	• ENTER MENU	• START LUMITEST
		• TURN ON/OFF GPS	•	
			• NEW NOTETAKER NOTE	•
		• HOLD 12.5 SEC. TO RESET DEVICE		•

5.1.1 Structure of the vibration coding system for tactile time output

To make the tactile output as compact as possible, the 12-hour format was selected, without using a zero before minutes in single digits.

The basic structure consists of vibration blocks, separated by pauses that differ in length. The speed of the overall time output can be varied in three levels in the Settings menu; see section 7.9.

The individual numbers result from adding short and long vibration signals together, short stands for the value ONE, long for FOUR.

After **Top LONG** is pressed, there will be a short vibration pulse to tell the user to release the button again (Remove finger signal).

This is followed by a long pause, and then the number for the hours (from 1 to 12, with 12 being 3x long, i.e. 3x4=12), then a short pause, followed by the minutes divided into the tens digit from 1 to 5 and after a final short pause the ones digit from 0 to 9. The number zero, which also corresponds to the full hour, takes the form of a wavelike vibration.

Note: *With minutes in single digits, the zero of the tens digit is not output.*

- Example 1: 2 minutes after midnight (shown on the display in 24-hour format as **"00:02"**) or 2 minutes after noon (**"12:02"**) outputs the following code: "Remove finger signal, pause, 12 o'clock, short pause, 2 minutes".
  i.e.: short vibration, pause, 3x long vibration, short pause, 2x short vibration.

- Example 2: with 24-hour display **"09:53"** or **"21:53"** results in ...
  short vibration, pause, 2x long, 1x short, short pause, 1x long, 1x short, short pause, 3x short.

- Example 3: Ten o'clock full hour, **"10:00"** or **"22:00"** ...
  short vibration, pause, 2x long, 2x short, short pause, 1x wavelike vibration.

- Example 4: Eleven minutes past eleven, **"11:11"** or **"23:11"** ...
  short vibration, pause, 2x long, 3x short, short pause, 1x short, short pause, 1x short.

6   Main menu (functions menu)

The individual functions of the Zeitgeist 2 are called up here.
Some continue running in the background while the display shows the home screen again.
The list also includes the Settings sub-menu, which is dealt with in the next section.

Please note: For a graphical overview of all functions and settings available in the Zeitgeist 2, please see the diagram in section 8.

The main menu is started with **Middle LONG** in the home screen.
Top SHORT / **Bottom SHORT** are used to scroll through the individual entries.
If no buttons are pressed for around 10 seconds, the device will return to the home screen with a small audio signal.
If **Middle SHORT** is pressed, information retrieval for the individual menu item will start.
You will, for example, hear how many calendar entries or voice memos already exist.
Some of this information can also be retrieved directly from the home screen with certain button combinations (quick access).
Middle LONG starts the relevant function.

If you want to return to the main menu in the middle of a function, use the button combination **Top+Bottom SHORT**.

MAIN MENU			TOP	MIDDLE	BOTTOM
	SHORT PRESS		PREVIOUS ITEM	MENU ITEM INFO	NEXT ITEM
				RETURN TO HOME SCREEN	
	LONG PRESS		FIRST MENU ITEM	ENTER MENU ITEM	LAST MENU ITEM

Overview of functions in the main menu:

The following applies to all functions:
A corresponding voice output will be heard whenever a button is pressed.

With some functions, e.g. the chess clock (game clock), it is necessary to select options before starting the function, while others, such as the stopwatch, are ready for use immediately.

6.1   Stopwatch

The stopwatch on the Zeitgeist 2 registers several split times and announces the intervals between them (lap times).
A short signal (beep) sounds every 5 seconds while the stopwatch is running.
The stopwatch also continues running when the Zeitgeist 2 is in the home screen again, although without beeping.

Top SHORT ....To start or stop
Middle SHORT .....To announce information about the current status of the stopwatch
Bottom SHORT ...Split time, a new split time is created each time

When the stopwatch is stopped, the following also applies:
Bottom SHORT ...To read out all stored split times and lap times;
              press several times for multiple split times
Top LONG ....To reset the stopwatch back to zero

Independently of the operating state:
Combination **Top+Bottom SHORT** .... To return to the home screen
Middle LONG .... To return to the main menu

Stop Watch		TOP	MIDDLE	BOTTOM
	Short Press	START/STOP	GET INFO	IF RUNNING: ADD SPLIT TIME IF STOPPED: READ SPLIT TIME
		RETURN TO HOME SCREEN		
	Long Press	IF STOPPED: RESET	RETURN TO MENU	

6.2   Timer

The timer on the Zeitgeist 2 has two different modes: "Kitchen" and "Massage".
With the mode **"Kitchen"**, the time starts running as with a kitchen egg-timer, with the end of this period being indicated by a repeated jingle.
With the mode **"Massage"**, the time starts running in the same way, but you will also hear two acoustic signals indicating that the end of the period is approaching. One signal sounds halfway through the selected period, and a second signal one minute before the end, so the massage therapist can start finishing off the massage on time.

After starting the Timer function in the main menu, use **Top** or **Bottom SHORT** to select "Kitchen" or "Massage", or "Disabled" for switched off.
Selecting "Disabled" will also cancel a running timer.
After confirming with **Middle SHORT**, you select the number of minutes you want the timer to run for, using **Top** or **Bottom SHORT**. A time period between 1 and 60 minutes is possible here.
After you confirm again with **Middle SHORT**, the Zeitgeist 2 will immediately return to the home screen, give an acoustic summary of the settings, and at once start the timer.

When the time period comes to an end, the device plays a repeated jingle (ringing tone), the display flashes, and the buttons are assigned as follows:
- **Top SHORT** ....To switch the audio signal off
- **Middle SHORT** ...As above, to retrieve additional information about the previous time period
- **Bottom SHORT** .To repeat the timer with the current settings

Note: *If you do not respond by pressing any buttons, the ringing sound will continue for 5 minutes and then switch off automatically.*

The timer remains in "announcement mode" until you return to the home screen manually, as usual either by pressing **Middle LONG** or the button combination **Top+Bottom SHORT**.

If you want to know the status of the timer in between times, you can either use information retrieval in the main menu, i.e. press **Middle SHORT** with the item Timer, or, if you have not called up another function in the meantime, you can attain the same result with the Repeat function in the home screen also using **Middle SHORT**.

6.3   Alarm and Calendar

Designed as a multi-functional pocket watch, the Zeitgeist 2 of course also features two multi-functional reminder modes, which comprise the functions Alarm and Calendar.
Daily **alarms** typically take the form of jingles.
You can of course select the days of the week (weekdays/weekend) and the jingles to be used here.

The **calendar** comprises up to 20 reminders, which can be set at long intervals ahead and combined with a voice recording.

The "ringing" of the two modes can be deferred repeatedly (**Snooze function**).

Both reminder functions offer quick access to the home screen (section 5.1), which, for example, displays the number of active alarms and calendar entries, also indicating how long until the next alarm or calendar entry will "ring".
The same information is likewise provided with information retrieval using both functions in the main menu, via the **Middle** button **SHORT**.

Whatever the operating state, if you wish to <u>cancel settings about to be implemented</u>, use:
Combination **Top+Bottom SHORT** …….............. To return to the home screen
Middle LONG ………… To return to the list of alarms or calendar entries

Note: *If you perform a RESET on the Zeitgeist 2, all alarms will be deleted, although the Calendar and Period calendar entries will be retained.*

6.3.1   Alarm

After calling up the function in the main menu, first select the alarm you require, i.e. the days on which the relevant alarm is to be activated: **Daily**, **Working Day** (Monday to Friday) or just at the **Weekend** (Saturday, Sunday) should you want to sleep in on those days. ☺
After scrolling up or down with **Top** or **Bottom SHORT**, open the relevant alarm with **Middle LONG**. If it is switched off, it first has to be switched on with **Top** or **Bottom SHORT** and confirmed with **Middle SHORT**.

Note: *An activated alarm is switched off again the same way.*

Next enter the hours (0 to 23) and minutes (0 to 59), using **Top** or **Bottom SHORT** to select and **Middle SHORT** to move forward.
Finish by selecting the jingle you require. 18 different short sound patterns are available here (e.g. melodies, animal sounds, ringtones).
After you confirm your selection with **Middle SHORT**, the Zeitgeist 2 will acoustically summarize the selected settings again and then return to the home screen.

Note: *Only one alarm can be created for each Day mode, with the Zeitgeist thus distinguishing between three alarms.*

<u>Sounding of the alarm incl. the Snooze function</u> takes place as follows:
The Zeitgeist 2 vibrates, the display flashes, and the jingle is simultaneously played in an endless loop. The buttons are now assigned as follows:
- **Top SHORT** ....Snooze function <u>Long</u>,
  after button is pressed, alarm will be repeated after **9 minutes**
- **Bottom SHORT** .Snooze function <u>Short</u>,
  after button is pressed, alarm will be repeated after **3 minutes**

- **Middle SHORT** .... For information about the alarm time selected; to stop the alarm
- **Bottom+Middle SHORT** .... To stop the alarm, while the Information about the alarm time selected remains available and can be accessed with **Middle Short**.

Note: *If you do not respond by pressing any buttons, the ringing sound will continue for 5 minutes and then switch off automatically.*

Repeating the alarm via the Snooze function will restart the entire sequence again, i.e. Snooze can be repeated as often as you wish.

The following applies to all options: Although the alarm no longer rings, the Snooze function options can still be selected and the display continues to flash.
Only **Middle LONG** or the button combination **Top+Bottom SHORT** will end the Ring function and take you back to the home screen.

Note: *There is an option of boosting the effect of the ringing alarm (though NOT of the calendar entry) with an additional product available from Caretec.*
The company offers a wireless vibration element whose vibration intensity far exceeds that of the Zeitgeist 2 alone.

6.3.2 Calendar

The settings and options of the calendar largely involve the same procedures as for Notetaker and Alarm.

If you open the Calendar function in the main menu, you not only see the entry "NEW" to make a new one, but also the list of existing calendar entries, with up to 20 possible here.
If you select one of them with **Top** or **Bottom SHORT**, followed by **Middle SHORT**, its settings will be output on the display and by voice.

Create new entry:

You can create a new calendar entry by selecting "NEW EVENT" with **Middle LONG**, but first you have to switch it on. To do so, go to "Enabled" with **Top** or **Bottom SHORT** and confirm with **Middle SHORT**.
You then enter the date and the clock time in the order Year, Month, Day, Hour, and Minute.
Select the numerical value with **Top** or **Bottom SHORT**, moving forward each time with **Middle SHORT**.

For a recurring time, set Repeat mode:
Either **"Never"** (i.e. only play entry once, do not repeat) or **"Daily"**, **"Weekly"**, **"On Working Days"** (Monday To Friday), **"Monthly"**, or **"Annually"** (e.g. as a reminder for birthdays).
If you select Daily, Weekly, Monthly, or Annually here, you need to enter another numerical value to specify after how many days/weeks/months/years the entry is to be repeated.

To clarify: If you enter "Weekly" with the number 3, information retrieval will announce "... every three weeks ..." for the relevant entry. This means that if the entry is set for today, you will hear it today, then again after three weeks, six weeks, nine weeks, etc. If you want to be reminded of something e.g. every Thursday, you select the next coming Thursday as the first time and enter with Repeat mode the number 7 "Daily" or the number 1 "Weekly". The entry will then be repeated in one week's time, i.e. the Thursday after next and all following Thursdays.

After you have specified the time, the next step is the audio assignment. Here the calendar entry can be announced either just with a repeated jingle as in the case of an alarm or linked to a voice recording, which you then create (For further details of voice recordings, see the following section "Notetaker", section 6.4). First you select the jingle; see above under Alarm. You can then create a recording, exactly as described under Notetaker.

If you do not want to add a voice memo, just confirm the recording option with **Middle SHORT**, without creating a memo.

The Zeitgeist 2 then immediately returns to the home screen with an acoustic message confirming the operation was successful.

Note 1: Calendar entries set in the past are invalid and will be discarded after an acoustic error message to this effect is output.

Note 2: New calendar entries are sorted in ascending order of the date, possibly diverging from existing entry numbers.

Note 3: Although it is possible to make different calendar entries at an identical time, this will cause overlapping and sometimes result in confusing situations. The Zeitgeist 2 will then sound as usual at the time set, but will only play one of the jingles selected (the one belonging to the entry created first for this date). The other jingles will not be played. The voice memos recorded will, however, be retained and played back one after the other, along with a message giving the number of memos existing here. Middle SHORT is used to move forward to the next memo. We however strongly recommend not assigning duplicate times when creating entries, but always leaving a few minutes in between them.

Editing existing entries:

To do so, open an entry in the list of events and go through all settings mentioned above, editing individual items as you wish. At the end of this process, the Zeitgeist 2 will announce successful updating of the entry.

Deleting existing entries:

Once again, open an existing entry in the list of events, but change the very first setting from "Entry enabled" to "Entry disabled". The voice output will also confirm this with "Event deleted".

As regards sounding of the calendar entry incl. Snooze function, etc., see the relevant item under Alarm.
If a voice memo has also been created for the individual calendar entry, it will be played back immediately if the jingle is interrupted with **Middle SHORT**. You can listen to it again by pressing **Middle SHORT**.

6.4   Notetaker

The Zeitgeist 2 also features a dictation function that allows you to store audio recordings.
It is normally used to record short voice messages reminding you of things you don't want to forget.
The device can accommodate 20 such memos, with each being stored in the memory plus the date and time.

__Note:__ For voice recordings made with the Notetaker and Calendar function, a total of approx. 30 minutes is available for both functions together.
This is regardless of the number of recordings made here and there is no further restriction on the length of each recording.
Should the memory run out while you are recording, the Zeitgeist 2 will stop the ongoing recording with a message to this effect.
If the memory already has available capacity of less than 30 seconds PRIOR to a recording, the device will not start recording, also outputting a message here. In both cases you should delete existing recordings, whether in Notetaker or Calendar mode, so as to free up memory again.

You can record a voice memo either from the main menu or via quick access in the home screen, using the button combination **Middle+Bottom LONG**.

If you call up the main menu here, you will first see the list of recordings already made, in addition to the entry "NEW" for a new recording.
If you press **Middle SHORT** to play back an existing memo selected with **Top** or **Bottom SHORT**, the associated date and clock time will be announced after playback of the recording. You will also see this information on the display when playback starts.

A new recording starts after you select the entry "NEW". This is followed by an acoustic message that the top button will start and stop recording and you can listen to the recording made with the bottom button. A jingle is played to introduce and conclude the ongoing recording (the jingles do not however form part of the recording). The blue LED on the front of the device additionally flashes while recording is underway.

You can add something to the recording, by pressing **Top SHORT** again to start and stop the additional recording. You can make as many additions to your recording as you wish. If you want to replace the recording with another recording press **Top LONG**.
By pressing middle SHORT, the Zeitgeist 2 returns immediately to the main screen.

__Note:__ The start of the re-recording is introduced by its own jingle and vibration.

To delete individual recordings, call up the list of memos with the main menu. The **Middle** button **SHORT** would now play back the individual memo, but the **Middle** button **LONG** can be used here to start the dialogue to delete recordings with an acoustic explanation.

- **Top SHORT** ....To delete a memo and then move to the list of recordings again
- **Middle SHORT** ...To cancel Delete and immediately return to the home screen
- **Bottom SHORT** .To play back the memo

*Note: If RESET of the Zeitgeist 2 is performed, the recordings will **not** be deleted. This only takes place with reset to the factory settings.*

6.5   Lumitest

The light meter in the Zeitgeist 2 determines the brightness level of any light source, e.g. the lighting in a room.
The sensor is located on the front of the device in the slight protrusion on the left below the display.
Point the front of the Zeitgeist 2 directly towards a light source, making sure you do not cover the sensor with your fingers.

The Lumitest features two modes: continuous measurement and a light notifier, which functions according to a threshold value for the brightness level. The light notifier is called up during continuous measurement.

You can start the Lumitest function either from the main menu or directly from the home screen with quick access using **Bottom LONG**.

The measurement function will commence at once. The measured light intensity is indicated acoustically by means of differing tone pitches: the brighter the light, the higher the pitch will be.
If **Top SHORT** or **Bottom SHORT** is pressed, the current value measured in lux (the unit for light) is output both by voice and shown on the display as a numerical value.

Independently of the operating state:
Combination **Top+Bottom SHORT** .... To return to the home screen
Middle LONG .... To return to the main menu

6.5.1   Light notifier

This function uses a jingle to indicate when a preselected brightness threshold has been reached (two different jingles, depending on whether the level exceeds or falls short of the preselected threshold).
You can, for example, ask for an indication in the morning as soon as sunlight enters your bedroom.
Or you can learn whether the light in a room has been switched on or off or a control light activated.
For correct measurement, all you need to do is point the Zeitgeist 2 directly at a light source.
Middle SHORT is used during continuous measurement to access the function for setting the threshold value for the light notifier.
Here the range of value in lux extends from "Disabled" (for switched off) through 1 to 80,000 lux, incl. appropriate increments, i.e. 10 is followed by 20 lux, 30,000 by 40,000 lux.
To scroll up or down, press **Top SHORT** or **Bottom SHORT**, and to confirm, **Middle SHORT**.

The threshold value is then announced acoustically, and the display returns to the home screen. An additional icon appears on the top left to show that the light notifier is activated. The light notifier is now running in the background and will not sound until the brightness level passes the threshold value (level exceeds or falls short of the threshold).

The light notifier is switched off by calling up the function again, when the numerical value for the threshold value should be set to "Disabled".

Examples of measured values:
- Dark room or nighttime outdoors .... single-digit lux values
- Weak lighting or shade .... double-digit lux values
- Normally illuminated room,
  sunlight on a cloudy day .... three to four-digit lux values
- Strong lighting, e.g. directly under a
  bright lamp or in direct sunlight .... four to five-digit lux values.

6.6   Compass

The Zeitgeist 2 features a built-in compass, which calibrates itself with movement of the device.

This involves moving the device for example in a figure of eight ∞, with the measuring accuracy increasing subject to sufficient motion. After calling up the compass, you should therefore first improve the measuring accuracy before relying on the measured results.

Then hold the device steady as usual to hear the points of the compass. When doing so, pay attention to how you hold the device or how it is positioned, e.g. on a table: identification of the points of the compass is always made in the longitudinal axis of the Zeitgeist 2.

You will be informed of the compass point both via voice output and on the display, e.g. NNO = north-north-east with the associated angle degrees.

The device does not immediately announce the compass point when you call up this function, although it is already shown on the display.
In this operating state, known as Display north, the device will generate a special jingle when you reach north while moving the device.
If you press **Top SHORT** or **Middle SHORT**, you will hear details of the current direction including the angle degrees and accuracy.
You should, of course, not move the device during this announcement or the voice output will no longer correspond to the constantly updated display.

Note on Display north:
A range of plus/minus 10 degrees around north, i.e. between 350 and 10 degrees, is of significance for playback of the North jingle.
This jingle will sound as soon as the compass enters this range (whether approaching from the east or west), although there is no sound when leaving it.

Continuous mode:
Should the Zeitgeist 2 only ever announce the point of the compass without additionally further specifying north, press the **Bottom** button **SHORT**.

Note: If there is a change in measuring accuracy (for better or worse), the device will respond with relevant jingles. This may interrupt ongoing voice output of the direction.

To return to North mode, press **Bottom SHORT** again.
Before changing the mode, the Zeitgeist 2 may still finish announcing the last compass point.

Independently of the operating state:
Combination **Top+Bottom SHORT** .... To return to the home screen
Middle LONG .... To return to the main menu

Note: As already mentioned in the section about resetting (RESET) the Zeitgeist 2, basic measured values are determined for various sensors directly after RESET. This also affects the compass circuit.
Should you observe major inaccuracies in functioning of the compass, a RESET might help here; see RESET, section 5 for the detailed procedure.
This applies in particular if you hear the acoustic message "Compass initialization failed" when calling up the compass.

6.7 Pedometer

Thanks to its built-in motion sensor, the Zeitgeist 2 can also be used as a pedometer (please read the note below).
Here you only have to ensure that your physical movements are properly transmitted to the device, for example by attaching it to your belt.

After you call up the pedometer in the main menu, it has to be switched on with **Top** or **Bottom SHORT**, and this confirmed with **Middle SHORT**.

You will then be asked whether the reading should be set to zero. Respond by pressing **Top** or **Bottom SHORT**, and the **Middle** button **SHORT** to advance.

You have now reached the display for your steps. From this moment on, the device will count movements resembling steps. Press **Top** or **Bottom SHORT** to hear the current counter reading.

You can then use the **Middle** button **SHORT** to return to the home screen. The pedometer will continue running in the background.
The current reading is called up by selecting information retrieval for the pedometer function in the main menu. To do so, press the **Middle** button **SHORT**.

If you no longer want to use the pedometer, you have to switch it off manually with the first query.

Note: Pedometer devices generally recognize certain movements of the casing as countable step-like gestures.

This is triggered by distinct movements made by the wearer, to be more precise, by swiveling and tilting the axes of the human body.

Two different systems are involved here: firstly, classical mechanics, where weights physically swivel round in a casing and secondly, electronic processes of various types. With the Zeitgeist 2 several sensors are coupled to create a motion sensor.

Maximum counting accuracy is attained through running.

Here it is necessary to secure the pedometer relatively tightly to the body, e.g. fastened onto your belt or trousers.

Otherwise the force of your body movements will be dampened, e.g. if kept with handkerchiefs in your trouser pocket, so adversely affecting accuracy.

This equally applies to the Zeitgeist 2 as well as pedometer apps on your mobile or special costly devices from sports shops, with the last two types of device even "cheating" slightly and using additional data such as positioning and other special sensors for calculation.

6.8   Games (sub-menu)

Three games are available: a game clock with two functions, dice, and an oracle game.

6.8.1   Game clock

Two players can measure the duration of their moves, as with a classical chess clock. With the Zeitgeist 2 this function is called "Game clock".
Times are either <u>added</u> up in <u>Accumulate</u> mode or counted down in <u>Countdown</u> mode. The chess clock also counts the rounds.

With Countdown mode you have to set the starting time beforehand, in 15-second increments. The device registers this value and displays it when the Countdown function is called up again.
A gong also sounds when the time comes to an end. Before it ends, a jingle is output with a little clicking sound every 10 seconds and during the final 10 seconds, every second.

- **Top SHORT** ....Relates to Player 1, states this player's current time, switching between the two players to Player 1, i.e. Player 2's clock meanwhile stops.
- **Bottom SHORT** .Ditto for Player 2.
- **Middle SHORT** ...To hear information about the current status of the chess clock of both players.

- **Top LONG** ....To reset the game clock of both players, in Countdown mode reset to the value previously selected, in Accumulate mode to zero.
- **Bottom LONG** ....PAUSE, time is stopped, another long press of button to continue.

Independently of the operating state:
Combination **Top+Bottom SHORT** .... To return to the home screen
Middle LONG .... To return to the main menu

GAME CLOCK			TOP	MIDDLE	BOTTOM
	SHORT	PRESS	• PLAYER 1	• GET INFO	• PLAYER 2
			•	RETURN TO HOME SCREEN	•
	LONG	PRESS	• RESET TIME	• RETURN TO MENU	• PAUSE

6.8.2 Dice

Between one and six dice will move if the Zeitgeist 2 is shaken.

The results for the individual dice will be read out one after the other. The number of dice can be changed at any time.

You can see the dice depicted on the display. If wished, the last result can be read out repeatedly.

After a few seconds the Zeitgeist 2 will prompt you to shake it again to get a new result.

- **Top SHORT** ....To add one dice, maximum six
- **Bottom SHORT** ..To take a dice away again
- **Middle SHORT** ...Last result for the dice is read out

Independently of the operating state:
Combination **Top+Bottom SHORT** .... To return to the home screen
Middle LONG .... To return to the main menu

ROLL A DICE			TOP	MIDDLE	BOTTOM
	SHORT	PRESS	• + DICE	• GET INFO	• - DICE
			•	RETURN TO HOME SCREEN	•
	LONG	PRESS		• RETURN TO MENU	

6.8.3 8 Ball

This is a version of the game "Magic 8 Ball" that is popular in America.

This involves asking questions that can be answered with "yes" or "no", e.g. whether you should treat yourself to a piece of chocolate.☺ The device then responds at random.

To play, you repeatedly shake the Zeitgeist 2 or press the buttons. It will give a response acoustically and on the display.

The answers given by the "oracle" are either affirmative, negative, or neutral.

After calling up the function, the Zeitgeist 2 will prompt you to shake it. This is followed by a jingle and the response is read out.

- **Top SHORT** or **Bottom SHORT** or Shake .....To generate a new response
- **Middle SHORT** ....To repeat the last response

Independently of the operating state:
Combination **Top+Bottom SHORT** .... To return to the home screen
Middle LONG .... To return to the main menu

Ask 8 Ball			TOP	MIDDLE	BOTTOM
	SHORT PRESS		CONTACT ORACLE	GET INFO	CONTACT ORACLE
				RETURN TO HOME SCREEN	
	LONG PRESS			RETURN TO MENU	

6.9   Period calendar

The Zeitgeist 2 also includes a mathematical-statistical function in the form of a period calendar designed to help women with managing their periods. Once they have entered the dates of previous periods, the algorithms used here estimate when subsequent ones are to be expected. The more data input here and the more precise it is, the more accurate each prediction will be.

This function cannot, of course, take account of physical changes resulting from illness, diet, or weather conditions. This equally applies to similar period calendars available online or on cell phones.

If you have already kept a record of your periods, you can then enter them in the period calendar and get a reliable statistical result right away. However, if you are entering dates for the first time, it will then take several cycles before the results become sufficiently accurate, particularly for periods that are a long time in the future.

After calling up the function in the main menu, you have two options: "New" and "Periods".

If you are using this function for the first time, you can of course input dates for several previous periods under "Enter new period". Always enter the first day of your period, beginning with the one that dates back **the longest**, e.g. six months ago.

Here you will be asked the relevant date (year/month/day). Your entries will be summarized with an acoustic message and confirmed by the device returning to the home screen.

It is not possible to enter dates in the future: the earliest date is the current one (today), as it is only then that you will of course know for sure whether your expected period is starting.

When you arrive at your ongoing period in your list, the second item "Periods" will then indicate when new periods are scheduled to begin in the future. When you call up the list, the algorithm shows the dates of your ongoing period and next one it has calculated for you.

You can scroll through this list at will. The **Bottom** button **SHORT** takes you back in time, i.e. to the dates you entered, with previous periods being numbered "-1,-2,-3,...". If you press the **Top** button **SHORT**, you will see the start dates calculated for future periods, numbered "+1,+2,+3,...".

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If you have made a mistake in entering your dates, you can <u>delete</u> the <u>period entered last</u> and correct it if you call the function up again. If you want to correct a previous period, you have to delete all values entered up to that point and then re-enter them all again.

To do this, press **Top LONG** if you are currently on your ongoing period in the list (i.e. not +1 or -1, etc.).

PERIOD CALENDAR / LIST			TOP	MIDDLE	BOTTOM
	SHORT PRESS		PREVIOUS PERIOD	GET INFO	NEXT PERIOD
			RETURN TO HOME SCREEN		
	LONG PRESS		DELETE LAST PERIOD *(ITEM MUST BE SELECTED)*	RETURN TO MENU	

<u>*Note:*</u> *Previous periods entered will be retained with RESET of the Zeitgeist 2.*

7   System settings (Settings sub-menu)

All settings of the Zeitgeist 2 are configured here, e.g. manual time setting, etc.
To call up individual system settings, select the Settings sub-menu in the main menu and scroll through the available options with **Top** or **Bottom SHORT**. You can then start the function you require with **Middle LONG**.
As in the main menu, **Middle SHORT** is used to output the current settings of the individual entry.
The same operating principles apply here, i.e. use **Top** or **Bottom SHORT** to edit numerical values and select options and **Middle SHORT** to confirm or move forward to further options.
If you wish to cancel in the middle of a setting, you can return to the home screen as usual with the combination **Top+Bottom SHORT**, without saving the settings just entered.

7.1   Volume

Five volume levels are available here. When the device is delivered, it is set to volume level four.

7.2   Rechargeable battery

The charging status of the battery is displayed in percent.
This function can also be called up directly from the home screen, using quick access with the button combination **Top+Bottom SHORT**.

7.3   Date and time

If you do not wish to use automatic time setting via GPS (see section 7.8) or this feature is not available due to poor reception, you can also select these settings manually. The two items "Date" and "Time" are available for this purpose in the Settings menu.

With "Date" you are prompted to enter the year, month and day one after the other. At the end of this process, the function outputs the selected values so you can check them. The procedure is similar for "Time", where you are prompted to enter the hours and minutes. First, select your preferred format, either a 24-hour (0:00 to 23:59) or a 12-hour (a.m. and p.m.) format. In the 12-hour format, the voice output and the display both indicate either a.m. or p.m.

Please note: With tactile indication of the time via vibrations, the device always uses the 12-hour format.

7.4   Time zone

If you take the Zeitgeist 2 with you on vacation, you can adjust the time zone to the individual country.
To do so, select the time difference from Greenwich Mean Time in the quarter-hour increments (plus or minus is also possible).
In the case of Central Europe (including Germany, Austria and Switzerland) this time difference is "plus one hour" and is known as CET or Central European Time (also colloquially referred to as winter time).

Ask your tour guide about the time zone at your destination or look it up, e.g. online in Wikipedia.

Examples: For Rio de Janeiro in Brazil the time difference is "minus three hours", although there are also some places where this does not involve full hours, e.g. India with "plus 5 hours 30 minutes". There are other exotic destinations such as the Marquesas Islands with "minus 9 hours 15 minutes" or certain parts of the neighboring island group Kiribati, which is "plus 14 hours" through crossing the Date Line.

7.5   Daylight saving time

Daylight saving time is governed by a number of different regulations, which all have nothing to do with the actual time zone.

Europe is subject to provisions that were standardized by the EU and have been in force since 1996. The entire central part of Europe, extending from Spain to Poland and from Italy to Sweden, uses what is known as CEST, Central European Summer Time.

You can find out what regulations apply in other regions of the world from Wikipedia for example, where this is explained in great detail.

Many of these provisions are included in the Zeitgeist 2 with examples of countries.

Here you can choose between Europe, USA, Canada, Mexico, Greenland, Israel, Australia, New Zealand, and "Disabled". With "Disabled", CET then applies again instead of CEST, i.e. winter time in place of daylight saving time.

For clarification: If "Daylight saving time" is selected in the Settings menu for one of the above countries, the device will automatically switch over to daylight saving time according to that country's rules, i.e. on the relevant days in spring and fall.

The time zone mentioned above in section 7.4 must be set to the normal time of that part of the world, i.e. its "winter time".

The Zeitgeist 2 does not offer any separate options for specifying whether daylight saving time currently applies: this is solely determined by selection of the date and the country above.

7.6   Normal reset / Factory reset

This menu item can be used for two different purposes:

1. To determine the version number of the installed software WITHOUT resetting the settings.
   It may be possible that customer service will ask for this before sending the device in for repair.

2. To restore the factory settings, i.e. to re-adjust the Zeitgeist 2 if its settings are totally incorrect.
   When this process is performed, all settings will of course be lost.
   Please note here: The Zeitgeist 2 features two types of reset (RESET) as described in the section 5, "Operating states and Reset".
   If the computer of the Zeitgeist 2 has merely become "frozen", it is sufficient to perform a normal RESET by pressing the Top and Bottom button for around 12 seconds. The device will then restart and your settings will be retained, except for the alarms.

After you call up the function using the Settings menu, an audio message will first be output for reset and the buttons will then assigned as follows:

- **Top SHORT** or **Middle SHORT** .... To play the reset message again
- **Top LONG** ....CAREFUL: To reset the device to the factory settings!

- **Bottom SHORT** .. To output the software version numbers, involving
                        three numbers, each separated by a dot, e.g. "1.0.159"
- **Middle LONG** .... To return to the Settings menu
- Combination **Top+Bottom SHORT** .. To return to the home screen

RESET TO FACTORY DEFAULTS		TOP	MIDDLE	BOTTOM
	SHORT PRESS	GET INFO	GET INFO	GET VERSION INFO
		RETURN TO HOME SCREEN		
	LONG PRESS	RESET TO FACTORY DEFAULTS	RETURN TO MENU	

*<u>**Note:**</u> After the device is reset to the factory settings, the last active internal clock time will be retained, although the time zone will be set to CET ("plus one hour") and daylight saving time to "Europe". If you also want to have the precise clock time, you should perform time synchronization immediately after reset using the function "GPS time"; see section 7.8.*

7.7   Hourly signal / Hourly reminder

The Zeitgeist 2 can be set to announce the full hour using a range of different signals. After calling up this function, you will see a list in which you can select the type of acoustic signal you wish to hear every hour.

Each entry is selected as usual with **Top** or **Bottom SHORT** and confirmed with **Middle SHORT.**

You can choose between:
- Disabled
- Single beep..................The full hour is indicated with a single beep.
- Say time.......................The time is output in words every full hour.
- Cuckoo clock ....The number of times the cuckoo calls corresponds to the hour number (clock time, full hour) in 12-hour format.

You then specify the time period during which the hourly signal is to be output:
- <u>Full day</u>, i.e. on the hour throughout a 24-hour period every day.
- <u>Part of a day</u>, i.e. you specify the time period in which the selected hourly signal is to be activated. You will next be prompted to enter the relevant start and end time for the above period.
  The hourly signal is not heard during the inactive time period, e.g. at night.

The Zeitgeist 2 finishes by giving an acoustic summary and returning to the home screen.

7.8   GPS time

Automatic setting of the time is a handy feature for compact portable timepieces such as the Zeitgeist 2.

This process does not however involve the DCF function of the tried and tested radio clock, but is carried out via GPS satellite.

Although reception of Germany's "DCF77" signal is good in the middle of Europe, there are difficulties outside of its German-speaking regions, and in the rest of the world the

signal is not available at all. In contrast, GPS (Global Positioning System), which is operated by the USA via satellite signals, can be used anywhere on the planet.

Note: *Of the extensive GPS data involved here, the Zeitgeist 2 only uses information relating to the time of day, i.e. it cannot be used to determine your geographic location.*

All radio-based systems need good reception of radio sources without any interference or obstructions, preferably outside without metal parts in the vicinity. Time synchronization is generally also possible if the device is placed on a suitably positioned windowsill.

As the GPS module consumes a relatively high level of power, the Zeitgeist 2 will try to perform satellite measurement only for around half an hour. If this fails, it will be aborted with a message to this effect. Try again in a more suitable location.

With good reception time synchronization is normally complete within one or two minutes.

You can start the function either with the Settings menu or via quick access in the home screen using the button combination **Top+Middle LONG**.

Following the prompt, you then change "GPS time" from "Disabled" to "Enabled". The Zeitgeist 2 will then confirm this acoustically, return to the home screen and show the corresponding status icon on the display; see picture in section 2.3.

Then place the device in a suitable location and wait until there is an acoustic message confirming the operation was successful. If this is not the case, you will hear a message stating GPS has been cancelled after 30 minutes max. Both messages then disable GPS reception to save battery power and remove the status icon on the display.

Note: *Automatic GPS time setting does not affect setting of the time zone and daylight saving time.*

This means that if you return from vacation in another time zone, you have to set these values manually again, for example to "Europe" and "plus 1 hour".

7.9   Vibration

The Zeitgeist 2 can emit the clock time in vibration code from the home screen and additionally vibrates as haptic feedback when various buttons are pressed.
You can use the Vibration item in the Settings menu to change the speed of the clock-time vibrations and the intensity of vibrations emitted in response to all situations of the device.

After you select this function in the Settings menu, you will hear the current values if you press the **Middle** button **SHORT**.
Middle LONG starts the setting. You first set the vibration intensity using **Top** or **Bottom SHORT** in 25% increments including "Disabled" for switched off. ("Disabled" does not apply to the vibrations for output of the clock time; the previous value is retained here). A relevant tactile demonstration of the intensity level takes place for each increment. Confirm with **Middle SHORT**. The next step is to set the vibration speed for the tactile clock time, with Slow, Medium and Fast available for selection here, likewise including a tactile demonstration. The Zeitgeist 2 returns to the home screen following confirmation.

On delivery, the device has defaults of "100%" for vibration intensity and "Medium" for vibration speed.

**Note:** The vibration settings selected here have nothing to do with Pillow / Bed shaker.
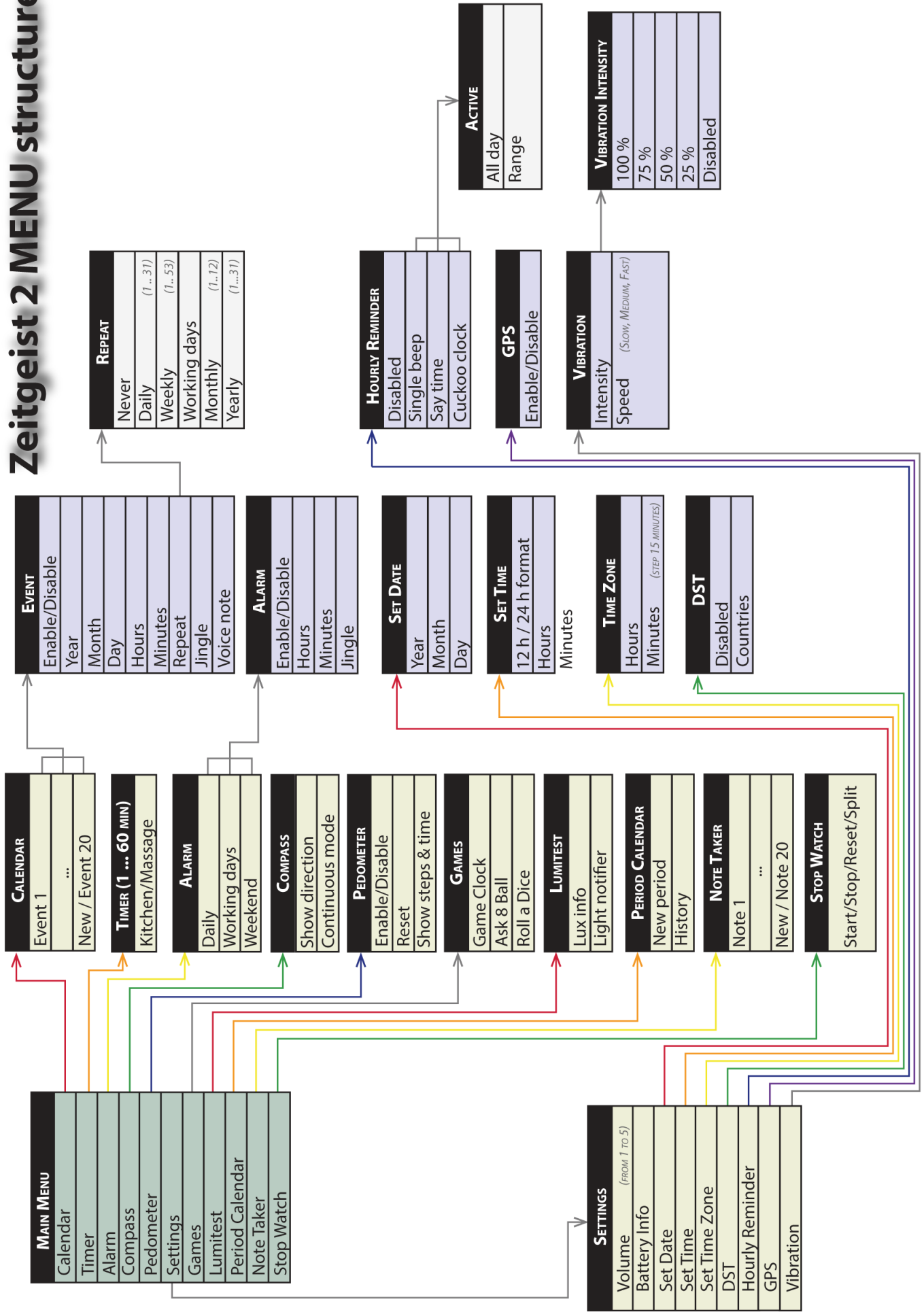
8 Technical data / Overview diagram

- **Device purpose:** A multi-functional speaking watch for the visually impaired, partially sighted and sighted persons
- **Casing:** Ergonomic, slightly oval shape, with a smooth casing of black plastic, a loop for a neck strap and three metal buttons
- **Dimensions, always at the longest point:**
  Length 72mm, width 44mm, height 11mm
- **Weight:** 29 g
- **Voice output:** Available in German or in English, with first-rate acoustic quality (in future the manufacturer plans to make the device available in other languages)
- **Volume control:** 5 different volume levels
- **Sensors:** Microphone, light sensor, motion sensor, compass circuit
- **Display:** Graphics-enabled, reflective LCD
- **Vibration motor:** For tactile feedback and tactile output of the clock time
- **Radio technology:** GPS (only clock time, not location data)
- **Temperature range for usage:** Between 0 and 35 degrees Celsius
- **Temperature range for storage:** Between -10 and 45 degrees Celsius

- **Power supply:** Integrated rechargeable lithium-polymer battery, capacity 3.7 V and 400 mAh, with protection circuit
- **Length of charge:** Several weeks to months, depending on usage of the device and age (wear) of the battery
- **Charging port on device:** USB-C. This means that the Zeitgeist 2 can also be charged via a standard notebook or similar device. No exchange of data takes place via the USB connection during this process.
- **Charger:** Included, 5V / 1A, USB-A-port (commercially available)
- **Charging cable:** Included, USB-A to USB-C connector (USB2 assignment), around 1m in length (commercially available)

Scope of supply:
- Zeitgeist 2 basic device
- Neck strap
- USB power adapter
- USB charging cable
- User guide as hard copy and on a USB stick

The overview diagram on the next page is provided for fast understanding of the menu structure used for the Zeitgeist 2. It includes an overview of both the functions and the settings of the device.

Zeitgeist 2 MENU structure

MAIN MENU
- Calendar
- Timer
- Alarm
- Compass
- Pedometer
- Settings
- Games
- Lumitest
- Period Calendar
- Note Taker
- Stop Watch

CALENDAR
- Event 1
- …
- New / Event 20

EVENT
- Enable/Disable
- Year
- Month
- Day
- Hours
- Minutes
- Repeat
- Jingle
- Voice note

REPEAT
- Never
- Daily
- Weekly *(1..53)*
- Working days
- Monthly *(1..12)*
- Yearly *(1...31)*

(1..31)

TIMER (1 … 60 MIN)
- Kitchen/Massage

ALARM
- Daily
- Working days
- Weekend

ALARM
- Enable/Disable
- Hours
- Minutes
- Jingle

COMPASS
- Show direction
- Continuous mode

PEDOMETER
- Enable/Disable
- Reset
- Show steps & time

GAMES
- Game Clock
- Ask 8 Ball
- Roll a Dice

LUMITEST
- Lux info
- Light notifier

PERIOD CALENDAR
- New period
- History

NOTE TAKER
- Note 1
- …
- New / Note 20

STOP WATCH
- Start/Stop/Reset/Split

SETTINGS *(FROM 1 TO 5)*
- Volume
- Battery Info
- Set Date
- Set Time
- Set Time Zone
- DST
- Hourly Reminder
- GPS
- Vibration

SET DATE
- Year
- Month
- Day

SET TIME
- 12 h / 24 h format
- Hours
- Minutes

TIME ZONE
- Hours
- Minutes *(STEP 15 MINUTES)*

DST
- Disabled
- Countries

HOURLY REMINDER
- Disabled
- Single beep
- Say time
- Cuckoo clock

ACTIVE
- All day
- Range

GPS
- Enable/Disable

VIBRATION
- Intensity
- Speed *(SLOW, MEDIUM, FAST)*

VIBRATION INTENSITY
- 100 %
- 75 %
- 50 %
- 25 %
- Disabled

9   Safety information and disposal

- The Zeitgeist 2 should only ever be used in an undamaged condition.
- The device may only be opened by a qualified technician.
- Protect the device from improper handling and adverse weather conditions (see terms of warranty).
- As the device is not waterproof, make sure you keep it well away from any liquids or fluids. If it comes into contact with moisture, always dry it immediately with an absorbent cloth and leave it to dry out completely.
- Recommended temperature ranges (similar to those of a cell phone):
  For usage: Temperatures between 0 and 35 degrees Celsius
  For storage: Temperatures between -10 and 45 degrees Celsius
- Please note that this device is not a children's toy.
- The Zeitgeist 2 includes a speaker with selectable volume levels. Please ensure you use an appropriate (low) volume setting to protect your hearing.

9.1   Disposal of waste electronic equipment

When the Zeitgeist 2 ultimately comes to the end of its service life, it must be disposed of in accordance with the environmental regulations to ensure that valuable materials are recycled.

	Therefore, please do not discard the device with your normal household trash. It must be disposed of as per the Directive 2012/19/EU on waste electrical and electronic equipment (WEEE) or your local regulations and submitted for recycling at waste collection points. You can obtain further information from your local authority, waste disposal utility, or the store where you purchased the product.

The Zeitgeist 2 is powered by a small lithium-polymer battery. This battery is not accessible to the customer but will be treated properly at a professional recycling center.

10 Warranty, servicing, and manufacturer

Warranty from date of invoice:
- 24-month warranty on the device
- 12-month warranty on accessories
- 6-month warranty on the battery and charger

No warranty can be given for external data carriers such as USB sticks.
In the event of a warranty claim, the device will be either repaired by the manufacturer free of charge or replaced by a new one if necessary.
CareTec reserves the right to make improvements to the device without prior notice.

Warranty claims will be invalidated in the event of improper handling, e.g. contact with liquids, mechanical stress, exposure to extreme temperatures, tampering with the device, etc.

In the event of complaints, repairs, and servicing enquiries, please contact your dealer first.

10.1 Identification of manufacturer

	This device was manufactured by: CareTec International GmbH Stubenbastei 1 A-1010 Vienna Austria Phone: (+43 1) 513 80 81 - 0 Fax: (+43 1) 513 80 81 - 9 Email: office@caretec.at Internet: www.caretec.at

 International GmbH

The CareTec company has been developing and manufacturing speaking and tactile aids for severely visually impaired, blind, deaf-blind, and colorblind people since 1988. Distributors in numerous countries sell CareTec products, which include simple aids such as signature templates, battery testers, sock pairers, Braille label makers, coin boxes, and devices for identifying banknotes and coins, with over 1 million users in many countries, as well as sophisticated tactile and/or speaking products such as aids for tactile freehand and geometrical drawing on special foils, color and light detectors, kitchen and bathroom scales, commercial and scientific calculators, label readers, ultrasound obstacle detectors, battery chargers, tape measures, watches, and white canes.

Awards: "Louis Braille Prize" of the German Federation of the Blind and Partially Sighted and the "Winston Gordon Award of Excellence" of the CNIB / Canadian National Institute for the Blind; First Prize and five Honorable Mentions in the "Mercur" Innovation Award of the Vienna Economic Chamber.