

EN

## SpeedTimer Operating and Installation Manual Time Switch for 50mm Switch Ranges



Item No: 3650 05 12

VBD 587-2 (07.13)

With your purchase of this **SpeedTimer time switch**, you have decided in favour of a quality product manufactured by RADEMACHER. Thank you for the trust you have placed in us.

This product has been developed with the greatest possible convenience and optimum user-friendliness in mind. Having applied uncompromising quality standards and carried out thorough testing, we are proud to be able to present you with this innovative product.

**These instructions...**

...describe how to install, connect the electrical system and operate your **SpeedTimer time switch**.



Before you begin, please read these instructions through completely and follow all the safety instructions.

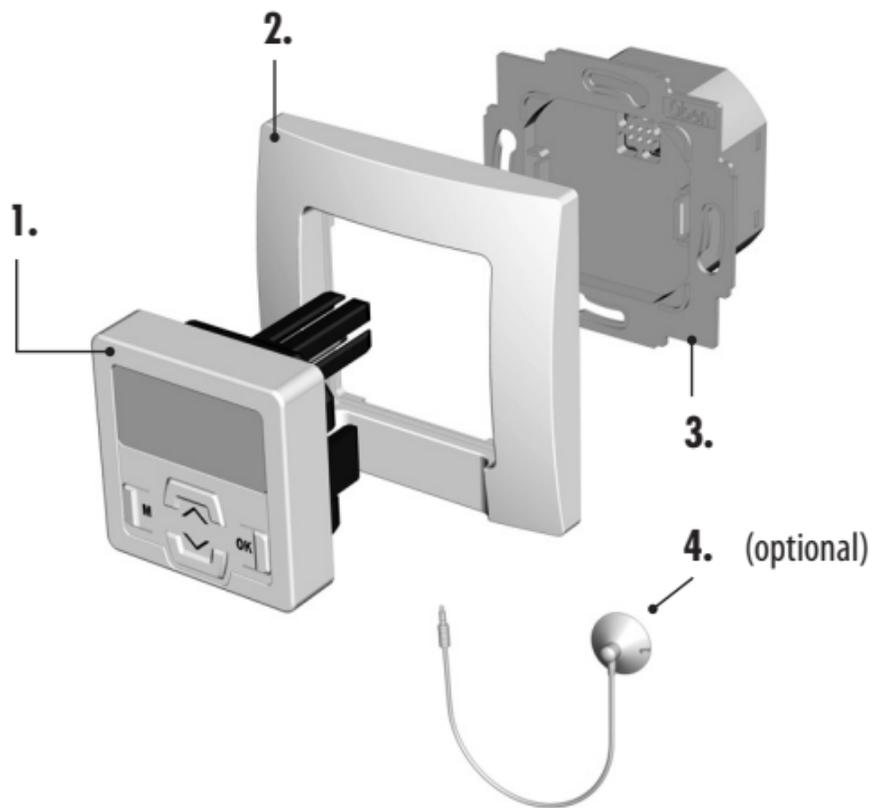
Please store these instructions in a safe place and pass them on to any future owners.

Damage resulting from non-compliance with these instructions and safety instructions will void the guarantee. We assume no liability for any resulting damage.

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## **i** 1. Included in delivery

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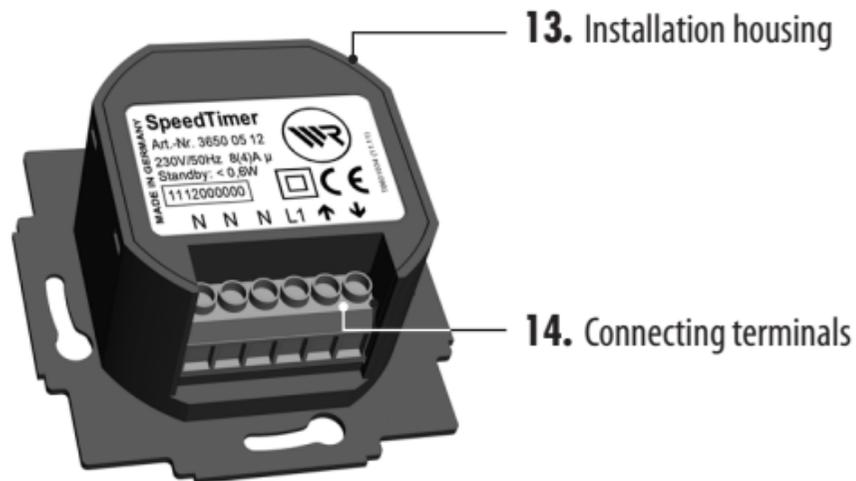
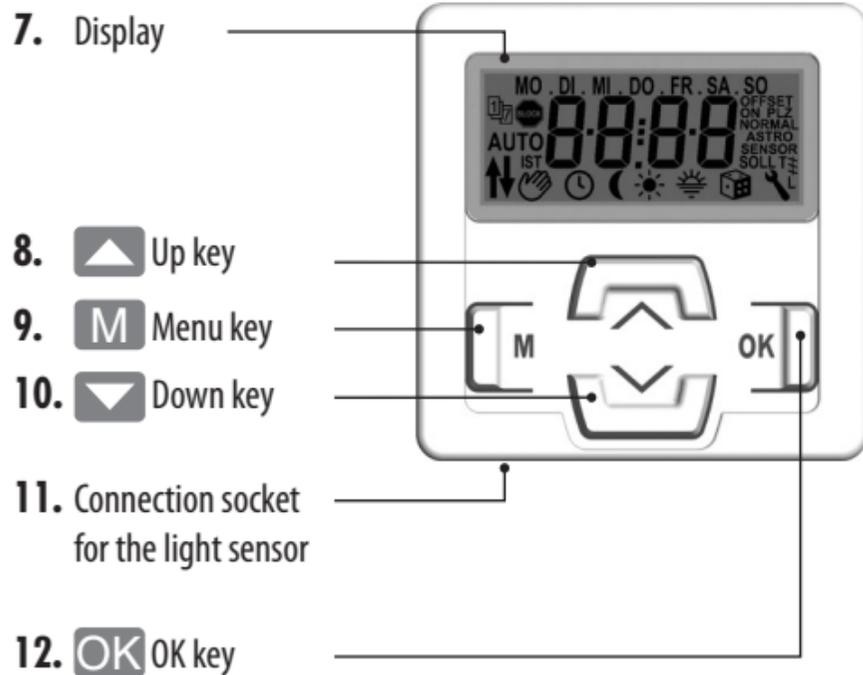


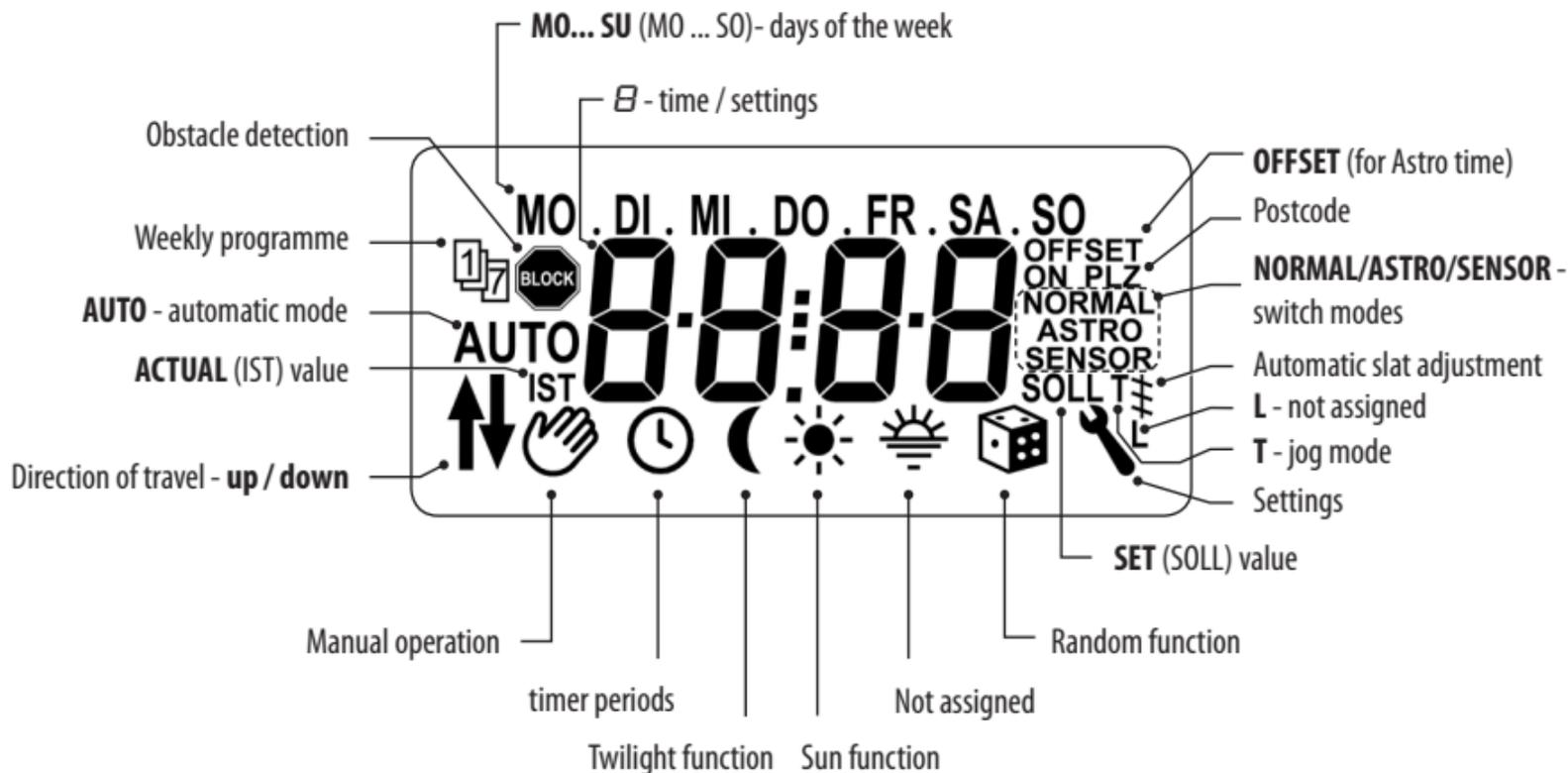
### **Legend**

- 1.** Operating unit (50 x 50) mm
  - 2.** Frame
  - 3.** Installation housing
  - 4.** Light sensor (optional); item no. 7000 00 10 \*
  - 5.** 2 x assembly screws (not illustrated)
  - 6.** 1 x operating manual (not illustrated)
- \* not included

## i 2. Overall view - controls and installation housing

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## **i** 4. Key to symbols



### **Risk of fatal electric shock.**

This symbol warns of danger when working on electrical connections, components, etc. It requires that safety precautions be taken to protect the life and health of the person concerned.



### **This concerns your safety.**

Please pay particular attention and carefully follow all instructions marked with this symbol.

## **i** 5. General safety information



### **Danger due to electric shock when working on all electrical systems.**

- ◆ The electrical connection and all work on electrical systems must only be carried out by a qualified electrician in

### **NOTE/IMPORTANT/CAUTION**

This is to draw your attention to information that is important for trouble-free operation.



Please read the operating instructions for an external device described at this point, (e.g. a tubular motor).

accordance with the connection instructions in these operating instructions, see page 15.

- ◆ Carry out all installation and connection work only in an isolated, de-energised state.

## **i** 5. General safety information



**The use of defective equipment can lead to personal injury and damage to property (electric shocks, short circuiting).**

- ◆ Never use defective or damaged equipment. Please contact our Customer Service department in the event of faults, see page 64.



**Incorrect use leads to an increased risk of injury.**

- ◆ Children must not be permitted to play with the SpeedTimer roller shutter controller.
- ◆ Never remove the operating unit from the installation housing during operation.

## **i** 6. Proper use

Only use the **SpeedTimer** for connecting and controlling the tubular motors on roller shutters or Venetian blinds.

### **Operating conditions:**

- ◆ The tubular motor must be fitted with a mechanical or electronic end position switch.
- ◆ Only use the SpeedTimer in dry areas.

- ◆ A 230V / 50 Hz power supply, together with a site-provided disconnecting device (fuse, MCB), must be available at the installation location.

## **i** 7. Improper use

- ◆ Any other usage of the SpeedTimer will be regarded as improper use.
- ◆ Do not install the SpeedTimer outside.

## **i** 8. Brief description

The **SpeedTimer** is designed for controlling roller shutters / Venetian blinds and slats by connecting a corresponding tubular motor.



### **Roller shutter control**

Various modes make it possible to automate the roller shutters according to time / sun / darkness or per random control.

### **Venetian blinds / slat control**

Convenient control of Venetian blinds or slats, with integrated automatic slat adjustment.

### **Manual operation**

In addition, it is possible to manually control the connected tubular motor at any time by using the controls.

### **Assembly**

SpeedTimer can be integrated into most commercially available switch and frame ranges. Suitable switch ranges are detailed on the following page.

## i 8.1 Compatible switch ranges

Manufacturer	switch range
<b>BERKER</b>	Arsys / K1 / S1
<b>BUSCH-JAEGER</b>	Busch-Duro 2000 Si / Reflex Si / alpha exclusive / alpha nea / solo / impuls
<b>GIRA</b>	<b>Standard-System / S-Color System / stainless steel range / Standard 55</b>
<b>JUNG</b>	<b>CD 500 / ST 550</b> / LS 990 / CDplus and CD, however, with coloured rings
<b>MERTEN</b>	M1 / Atelier / Artec / Tracent / Antik Neu
<b>PEHA</b>	<b>Standard</b> / Dialog / Aura
<b>LEGRAND</b>	Creo / Tenara
<b>VEDDER</b>	<b>Alessa (plus)</b>

### NOTE

The **highlighted** switch ranges are suitable for use with the light sensor.

- ◆ Installation wizard for easy commissioning.
- ◆ Configurable obstacle detection for mechanical tubular motors. \*
- ◆ Manual on-site control via generously-sized UP / DOWN keys.
- ◆ Easy configuration with menu-driven operation.
- ◆ Automatic timer
  - Opening and closing times (up/down) valid for every day of the week.
- ◆ Weekly program including:
  - Individual daily program, individual opening and closing times (up/down) for each day of the week.
- ◆ Astro twilight function with cut-off time ("latest at xx:xx hours").

- ◆ Automatic darkness function (via light sensor) with cut-off time ("latest at xx:xx hours").
- ◆ Automatic solar function (via light sensor)
- ◆ Random function (random delay of 0 to 30 minutes).
- ◆ Easy AUTO / MANU switchover.
- ◆ Jog mode, configurable tilting time (reversing) for Venetian blinds.
- ◆ Configurable motor control time.
- ◆ Automatic summer / winter changeover.
- \* Obstacle detection can only be used in combination with a mechanical tubular motor.

### **Description and configuration of the individual functions.**

A precise description of the individual functions and settings is included starting on page 17.

## **i** 10. Important information prior to electrical installation and mounting

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**Mount and install time switch using the enclosed installation housing only (13).**

The connecting terminals (14) are located on the bottom of the installation housing.



**You must configure the end stops for the tubular motor before using for the first time and making the final electrical connection.**

- ◆ If no end stops are configured, then it is vital that both end points are configured for the tubular motor, as failure to do so can lead to malfunctions.
- ◆ In order to do so, follow the information provided in the operating manual for the respective tubular motor.



**NOTE**

**Parallel connection of electronic tubular motors**

You can connect a maximum of 2 electronic tubular motors in parallel to the SpeedTimer.

**Parallel connection of mechanical tubular motors**

A cut-off relay is required in order to connect mechanical tubular motors in parallel.

## **i** 11. Safety instructions for electrical connection



### **Danger due to electric shock when working on all electrical systems.**

- ◆ The electrical connection and all work on electrical systems must only be carried out by a qualified electrician in accordance with the connection instructions in these operating instructions.
- ◆ Carry out all installation and connection work only in an isolated, zero-volts state.
- ◆ Disconnect all phases of the mains power supply cable and secure it to prevent any reconnection.
- ◆ Check the system for a zero-voltage status.
- ◆ Prior to connecting, compare the information about voltage / frequency on the device with that of the local electrical grid operator.

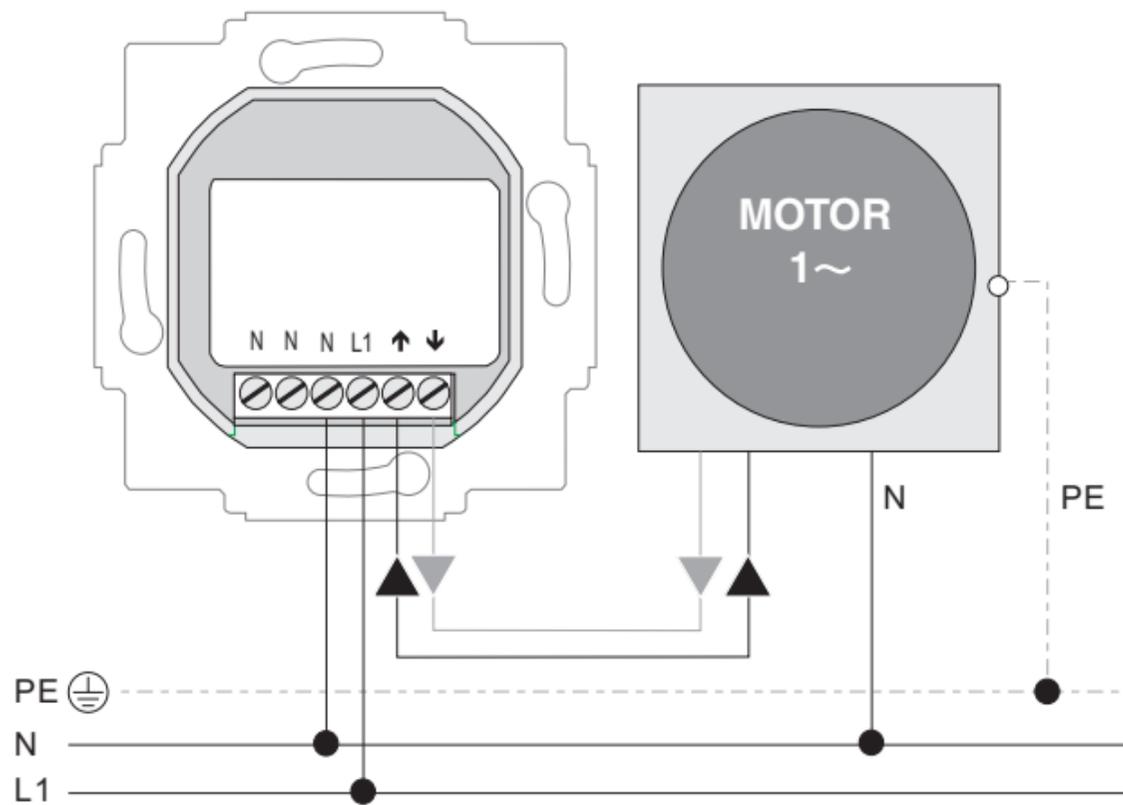


### **Incorrect wiring may lead to short-circuits and destroy the device.**



- ◆ Follow the pin assignment detailed in the wiring diagram.
- ◆ Follow all the electrical connection specifications in the operating instructions of your tubular motor.

## i 12. Electrical connection of the SpeedTimer



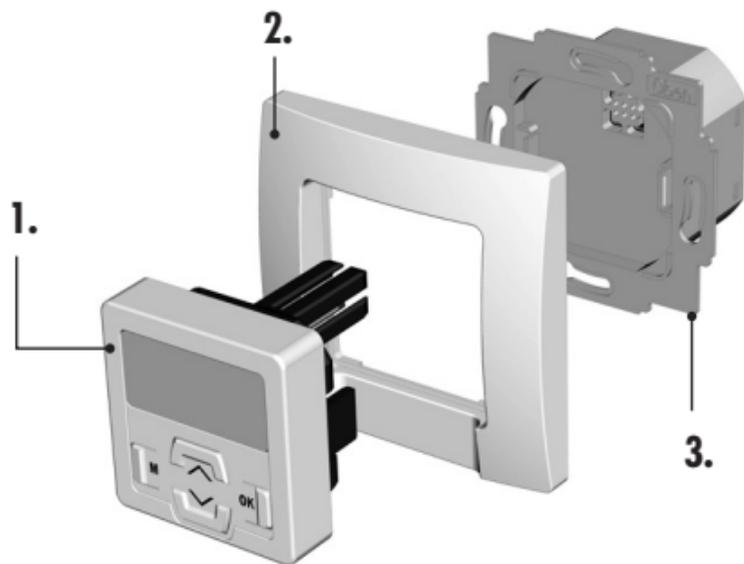
## **i** 13. Assembly

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The SpeedTimer is intended for flush-mounting. We recommend using a deep box.

### **You will need:**

1 x 58mm flush-mounted box



### **Installation procedure:**

1. Switch off the mains.
2. Make the electrical connection according to the wiring diagram (see page 15).
3. Route the power cables to the flush-mounted box.
4. Slide the installation housing (3) into the flush-mounted box and screw in place with the screws.
5. Fit the frame (2).
6. Carefully insert the operating unit (1) into the installation housing (3).
7. Switch the mains power again back on again.

All of the settings are menu-driven. In other words, you will be prompted to carry out the required settings in a logical sequence as shown on the display.

### The operating system

- ◆ The SpeedTimer is operated by means of the four keys on the control module. The individual menu items are shown on the display.
- ◆ Each entry must be confirmed with **[OK]**.

### The key functions:



#### Menu key, [M]-key

- ◆ Calls up the main menu.
- ◆ Back to previous menu or standard display.



#### Up / Down keys



- ◆ Manual operation (Up / Down).
- ◆ Selects the desired menu item.
- ◆ Setting the parameters (pressing and holding a key for an extended period causes the digits to change more quickly).



#### [OK]-key

- ◆ Confirms the selected menu.
- ◆ Confirm and save entry.
- ◆ Continue to next entry.

### The standard display (example)



- ◆ Displays the current date and time.
- ◆ Displays the set mode and active functions.
- ◆ Manual operation of the SpeedTimer is only possible from the standard display.

### The main menu



- ◆ Enables display and selection of the menu items and individual functions.
- ◆ Manual operation is not possible in this view.
- ◆ If no key is pressed within 120 seconds, the display changes back to the standard display. If this happens, any settings that have not been confirmed with **[OK]** will be lost.

## i 14.2 Introduction to opening and closing the menus

1. Pressing the [M]-key in the standard display causes the main menu to open.



2. The desired **menu** can then be selected by using the [Up/Down]-keys.

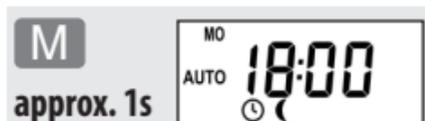


The selected menu is indicated by a number and a flashing icon.

3. The selected **menu** is opened by pressing the [OK]-key.

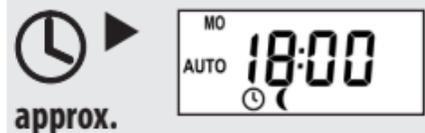


4. Press for **1 second**. Pressing the [M]-key from any of the menus will return you to the standard display.



**Briefly** pressing the [M]-key causes the display to go back one menu step.

If no key is pressed within 120 seconds, the display changes back to the standard display.



## i 15. Initial commissioning with the help of the installation wizard

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An installation wizard is available in order to help you configure the controller quickly and easily. The wizard automatically guides you through the **configuration process** for initial commissioning or after a **software reset** (see page 51)

### Readiness for operation

The SpeedTimer is ready for use as soon as the installation wizard has finished. In addition, you can customise settings and changes at any time from the main menu.

### Configuration sequence for the installation wizard:

1. Set the time.
2. Confirm the time and continue to the next setting.
3. Set and confirm the date.
4. Set and confirm the year.

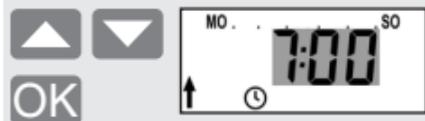


## i 15. Initial commissioning with the help of the installation wizard

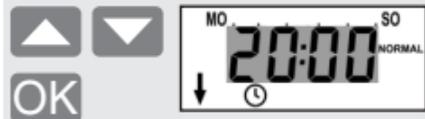
5. Set and confirm the post-code (PLZ).



6. Set and confirm the "Up" opening time.



7. Set and confirm the "Down" closing time.



### NOTE

The timer periods apply to all days of the week.

8. Configure the switch time mode for "Up".



Switch time mode, see page 24.

9. Confirm the timer periods mode and return to standard display.



This concludes the configuration for the most important settings.

The SpeedTimer is now ready for operation.



### Automatic operation

#### Icon in standard display

Automatic mode is active, all automatic functions are switched on, e.g.:

- ◆ Timer periods
- ◆ Automatic solar function
- ◆ Automatic darkness function
- ◆ Manual operation is also possible in automatic mode

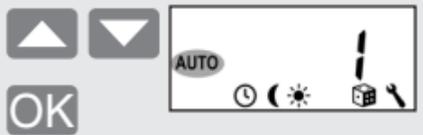
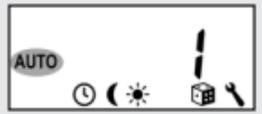


### Manual operation

#### Icon in standard display

- ◆ All automatic functions are deactivated; only manual operation is possible.
- ◆ All automatic icons are switched off in the standard display.

## AUTO 16.1 Menu 1 - Toggling between [AUTO] automatic mode and [👉] manual mode

1.	Call up the main menu.	
2.	Select and open menu "1" [AUTO].	
3.	Select and confirm the desired setting.  <b>On</b> = automatic mode <b>OFF</b> = manual mode	
4.	The main menu appears once this is confirmed.	

### Toggling directly to the standard display

You can also toggle between automatic and manual modes in the normal view.

1. In order to do so, press and hold [OK] for approx. 1 second.

This directly activates and deactivates automatic mode.





## 17. Opening and closing times [↕]

EN

The configured opening and closing times apply to all days of the week.

### Mode for "Down" closing time

An additional switching time mode can be selected for "Down" closing time.

- ◆ **NORMAL**
- ◆ **ASTRO**
- ◆ **SENSOR**

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### ◆ **NORMAL**

The configured switching time applies to all days of the week.

### ◆ **ASTRO**

#### **Closing time calculation via an "Astro" program.**

The closing time is calculated in relation to the date and postcode. Subsequently it is linked to the previously configured closing time.

In doing so, the previously configured time is interpreted as "latest at xx:xx hours".

#### **Example:**

If, for example, 20:00 hours is configured as the closing time, then the "Astro" program would calculate a closing time of approximately 17:00 hours for the winter months, at which time a roller shutter could be closed.

However, during the summer months, the roller shutter would close at 20:00 hours at the latest.



## 17. Opening and closing times [↕]

EN

### ◆ SENSOR

**The closing time is controlled by a light sensor in relation to the level of brightness.**

In addition, the measured twilight value is linked to the previously configured closing time.

In doing so, the previously configured time is interpreted as "latest at xx:xx hours".

#### **Example:**

If, for example, 20:00 hours is configured as the closing time, then the roller shutter would close at approximately 17:00 hours during the winter months (due to the shorter days).

However, during the summer months, the roller shutter would close at 20:00 hours at the latest, due to the longer days.



**Configuring opening and closing times with active weekly program.**

If the **weekly program** is active (see page 40), then an opening and closing time can be configured for each day. The display indicates the respective day of the week in this case, instead of "**Mo - Su**" (**M0.....S0**).

**Timer mode only configurable for Monday [Mo].**

A **closing time** mode setting (**Down**) can only be selected for Monday (NORMAL, ASTRO, SENSOR).

**This closing time mode applies to the entire week.**

This means that it is then not possible to change the closing time mode for the closing times between Tuesday (**DI**) and Sunday (**S0**).



## 17.1 Menu 2 - Configuration of opening and closing times [↕]

EN

1. Call up the main menu.



2. Select and open menu "2" [🕒] switching times.



3. Select and confirm the desired setting.



**On** = Switching times on  
**OFF** = Switching times off

> Continue at point 4  
> Back to main menu

4. Set and confirm an opening time.



5. Set and confirm a closing time.



6. Select and confirm the desired switching time:



**NORMAL**  
**ASTRO**  
**SENSOR**

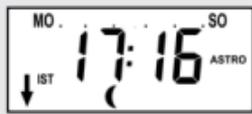
> Back to main menu  
> Continue at point 7  
> Back to main menu



## 17.1 Menu 2 - Configuration of opening and closing times [↕]

EN

7. If [ASTRO] is selected in point 6, then the current closing time is shown as calculated by the "Astro" program.



Example

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8. Return to main menu.

### NOTE

- ◆ The calculated twilight can be individually customised by means of an offset between **-60** and **+60** minutes. This can be configured in **menu 3**, see page 31.
- ◆ If [SENSOR] is selected as the switching time mode, then the desired twilight limit value can be configured in **menu 3**, see page 30.

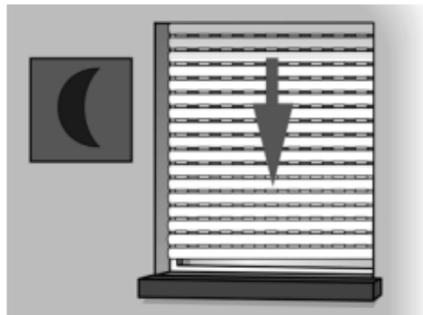
## 18. Automatic darkness function

The automatic darkness function causes the roller shutters to close automatically. It is possible to select between two different automatic darkness functions using:

- ◆ the "Astro" program
- ◆ the connected light sensor

Both functions can be linked to a timer periods. This is then interpreted by the controller as "at the latest xx:xx hours", see page 24.

### Automatic darkness function with "Astro" program



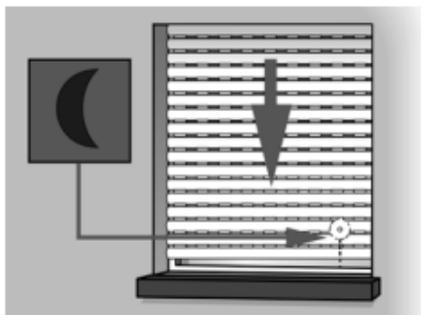
The twilight time is recalculated every day based on the geographical location and the current date (defined by the configured postcode).

The calculated time can then be customised to personal preferences by means of an offset between **-60** and **+60** minutes. This means that it is not necessary to continuously readjust the closing time throughout the year.

A light sensor is not used for this function.

## 18. Automatic darkness function

### Automatic darkness function with connected light sensor



At twilight, the roller shutters will lower to the lower end limit after approx. 10 seconds. The roller shutters will open again once the configured opening time is reached or in the event of a manual command.

The required twilight limit is configurable.

### NOTE

- ◆ The darkness function via light sensor is only executed once per day.
- ◆ The automatic darkness function is activated daily at 12:01 hours.
- ◆ If an automatic closing command is responded to before twilight falls, then the automatic darkness function will not be executed.
- ◆ If the **automatic timer** is deactivated [**OFF**], then the automatic darkness function cannot be configured.

**Mounting the light sensor**  
(see page 32, Automatic solar function)

## ☾ 18.1 Menu 3 - Customising the automatic darkness function [☾]

EN

1. Call up the main menu.



2. Select and open menu "3" [☾] Automatic darkness function.

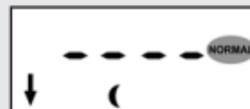


3. The automatic darkness function can be customised as follows, depending on the selected switch time mode [**NORMAL** / **ASTRO** / **SENSOR**].

Select switch time mode, see page 26.

- 3.1 Customisation in switch time mode [**Normal**]

No customisation is required in [**NORMAL**] switch time mode.



- 3.1.1 Return to main menu.

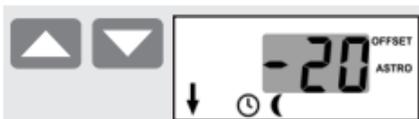


## 18.1 Menu 3 - Customising the automatic darkness function [ ( ]

EN

### 3.2 Customisation in switch time mode [ASTRO]

The offset function can be used to change the closing time for the automatic darkness function by +/- 60 minutes.



#### Example

With a negative offset of, for example, "- 10", the roller shutters will close approx. 10 minutes earlier than the configured closing time.

#### 3.2.1 Continue to display the calculated twilight time, incl. offset.



#### 3.2.2 Return to main menu.



### 3.3 Customisation of the twilight limit value in switch time mode [SENSOR].

If the set limit value is not met due to the onset of twilight, the roller shutters will close.

#### Setting range:

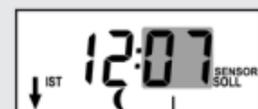
- 1 = 2 lux
- 15 = 50 lux

#### 3.3.1 Return to main menu.



#### ACTUAL value (IST)

Measured brightness.  
"- -" = too bright



#### Configurable set limit (SOLL)

- 1 = very dark
- 15 = less dark





## 19. Automatic solar function

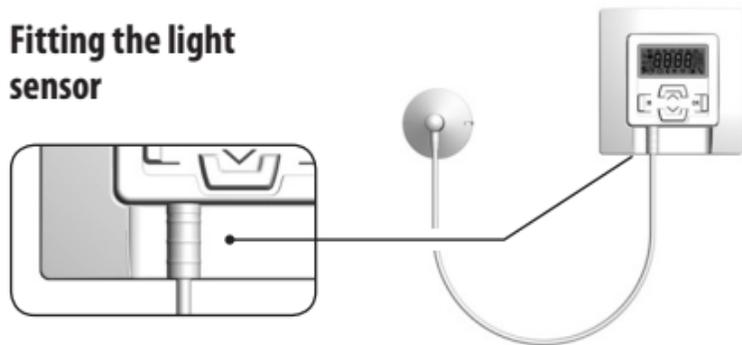
EN

The automatic solar function enables brightness-dependent control of the roller shutters using a light sensor. To do this, the light sensor is secured to the window pane and then plugged into the SpeedTimer.

### Function

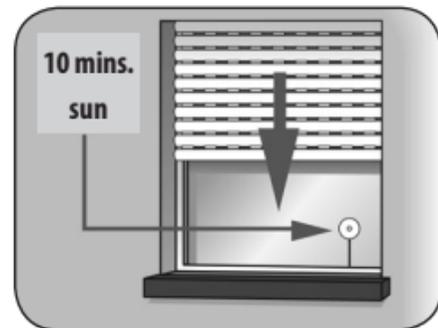
Automatic moving up and down of the roller shutter once a set limit is exceeded. The roller shutter end position can be freely selected by changing the light sensor position.

### Fitting the light sensor



### Automatic lowering

If the sensor detects uninterrupted sunlight for 10 minutes, the shutter will descend until its shadow covers the light sensor.





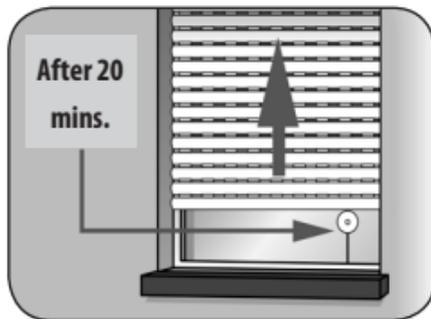
## 19. Automatic solar function

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### Automatic clearing

After approx. 20 minutes, the roller shutter is automatically raised a small amount to uncover the sensor.

If the sun continues to shine, the roller shutter remains in this position. If the brightness decreases, it returns to the upper set limit.



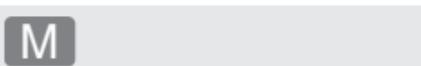
### NOTE

- ◆ The delay times for moving the shutters down (10 minutes) can be exceeded in the event of changing weather conditions.
- ◆ The automatic solar function is cancelled in the event of manual operation or in the event that an automatic function triggers and will be restarted if necessary.

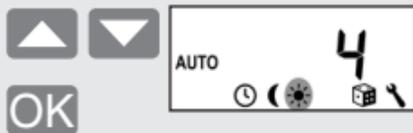


## 19.1 Menu 4 - Configuring the automatic solar function [☀]

1. Call up the main menu.



2. Select and open menu "4" [☀] Automatic solar function.



3. Select and confirm the desired setting.



**On** = automatic solar function on

**OFF** = automatic solar function off

> Continue at point 4

> Back to main menu

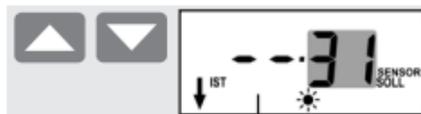
4. Checking the **solar set limit**.

If the set limit is exceeded, then the roller shutter lowers until the light sensor is shaded.

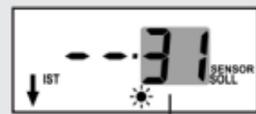
**Setting range:**

31 = 2000 lux

45 = 20000 lux



**ACTUAL value (IST)**  
Measured brightness.  
"- -" = too dark



**Configurable set limit (SOLL)**

31 = mild sunshine

45 = strong sunshine

- 4.1 Return to main menu.





## 20. Random function

EN

The random function enables a random delay of the set timer periods ranging between 0 and 30 minutes.

### **The random function is executed for:**

- ◆ all automatic opening and closing times.
- ◆ all timer periods for the automatic darkness function via the "Astro" program.

### **The random function is not executed for:**

- ◆ manual movement commands
- ◆ automatic movement commands triggered by the automatic solar function
- ◆ automatic movement commands triggered by the automatic darkness control, if triggered by light control.



### **NOTE**

The corresponding icon flashes in the standard display when the random function is activated, during the period that the movement command is being delayed.



## 20.1 Menu 5 - Configuring the random function [Dice]

EN

1. Call up the main menu.

M

2. Select and open menu "5" [Dice] Random function.



OK



3. Select and confirm the desired setting.



OK



**On** = random function  
on

> Back to main menu

**OFF** = random function  
off

> Back to main menu

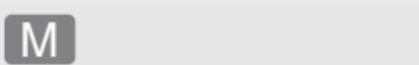


## 21. Menu 6 - System settings [🔧]

This menu enables you to configure additional system settings in order to customise your SpeedTimer to your individual preferences.

### In order to do this, open menu 6

1. Call up the main menu.



2. Select and open menu "6" [🔧] System settings.



3. Select and open the desired menu item (e.g. 6.1).



### The following configurations are possible:

- 6.1 Set time and date
- 6.2 Enter postcode
- 6.3 Switch weekly program on/off
- 6.4 Configure obstacle detection
- 6.5 Automatic summer / winter clock change on/off
- 6.6 Configure total running time and Venetian blinds mode (jog mode)
- 6.7 Display software version



## 21.1 Menu 6.1 - Set time and date [🕒]

EN

1. Select and open menu "6.1" [🔧] "Time and date".



2. Set and confirm the **time**.

Pressing and holding a key causes the digits to change faster.



3. Set and confirm the **date**.



4. Set and confirm the **year**.

**Setting range:**

2000 to 2099



5. Next, the "**System settings**" menu will be displayed again.





## 21.2 Menu 6.2 - Enter postcode [PLZ]

EN

1. Select and open menu "6.2" [🔧] "Postcode" (PLZ).



2. Enter and confirm the **postcode**.



3. Next, the "**System settings**" menu will be displayed again.



### NOTE:

- ◆ Only the first two digits of the code are entered for German cities.
- ◆ Please refer to the time zone table on page 57 for various European cities.
- ◆ If the SpeedTimer is not being used in Germany, it may be necessary to switch off the automatic summer / winter clock change function. In order to do so, please refer to page 45 "Automatic summer / winter changeover".



## 21.3 Menu 6.3 - Weekly program [07] on / off

EN

If the weekly program is activated [**On**], it is possible to configure customised opening and closing times for every day of the week.

If the weekly program is deactivated [**OFF**], then the set opening and closing times will be applied to every day of the week.

The procedure for setting the timer periods is described on page 26, "Configuring opening and closing times".

1. Menu "6.3" [07]  
Select and open  
"Weekly program".



2. Activate or deactivate  
the **weekly program**  
and confirm.



**On** = weekly program  
on

**OFF** = weekly program  
off

3. Subsequently, the "**Sys-  
tem settings**" menu  
will be displayed again.





## 21.4 Menu 6.4 - Configuration of obstacle detection [EN]

EN

### Brief description of obstacle detection function

The SpeedTimer is able to monitor the torque of motors equipped with mechanical end point setting. This enables the controller to switch off the motor in the event of overloading or blockage. As a result, the roller shutters are protected from damage.

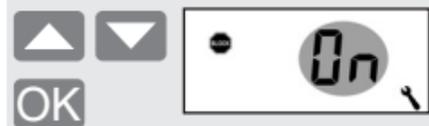
### NOTE

**Obstacle detection** can only be used in combination with a **mechanical tubular motor**.

1. Select and open menu "6.4" [F7] "Obstacle detection".



2. Activate/deactivate and confirm obstacle detection.



**On** = obstacle detection on

> Continue at point 3

**OFF** = obstacle detection off

> Back to system menu



## 21.4 Menu 6.4 - Configuration of obstacle detection [ ]

EN

3. Select and confirm the suitable motor type.



In order to do so, please refer to the operating manual for the respective tubular motor.

### Motor types

	Ø	/ Power
<b>1:06</b>	35 mm	/ 6 Nm
<b>1:10</b>	35 mm	/ to 10 Nm
<b>2:10</b>	45 mm	/ to 10 Nm
<b>2:20</b>	45 mm	/ to 20 Nm
<b>2:30</b>	45 mm	/ to 30 Nm
<b>2:40</b>	45 mm	/ to 40 Nm
<b>2:50</b>	45 mm	/ to 50 Nm



If the installed motor type is unknown, please select:

- 1:06** for roller shutters with areas up to 1.5 m<sup>2</sup>
- 2:30** for larger roller shutters

4. Set and confirm the **sensitivity** level.

It may be necessary to customise the **cut-off sensitivity** depending on the properties of the roller shutters (weight, running characteristics, etc.).

### Setting range:

- 1** = low sensitivity
- 6** = high sensitivity





## 21.4 Menu 6.4 - Configuring obstacle detection [BLOCK]

EN

### NOTE

Test runs should be made to ascertain the highest possible level of sensitivity, in order to protect the roller shutters in the event of blockage.

### More information about obstacle detection:

- ◆ if excessively long connecting leads are used (>5 m), it is possible that the obstacle detection system will fail to work correctly due to external interference.
- ◆ The end points may shut off some motors with mechanical switch-off because an obstacle has been detected. Obstacle detection must be deactivated for this type of motor.

5. Activate / deactivate **reversing** after obstacle detection.

**On** = reversing on

**OFF** = reversing off

### NOTE

A brief description of the function is provided on the following page.





### Automatic reversing in the event of meeting an obstacle.

In the event of meeting an obstacle, the motor runs in the opposite direction for approx. 2 seconds in order to release the obstacle or to relieve the roller shutters.

#### NOTE:

Some motors can trigger undesired reversing when reaching the end positions (e.g. Atypical internal motor loads, long leads, etc.). In such cases it is recommended to deactivate the reversing function.

6. As soon as the setting is confirmed, the "**System settings**" menu will be displayed again.



The SpeedTimer features an automatic summer/winter changeover function.

### **When is the clock altered?**

- ◆ The clock is changed to summer time on the last Sunday in March. In doing so, the clock is set forward one hour at 2:00 AM.
- ◆ The clock is changed to winter time (standard time) on the last Sunday in October. In doing so, the clock is set back one hour at 3:00 AM.

### **Recommendation for operating the SpeedTimer outside Germany.**

If the controller is not being used in Germany, it may be necessary to switch off the automatic summer / winter clock change function.

### **NOTE:**

- ◆ If timer periods have been programmed prior to 2 AM and 3 AM, then they will either be executed twice (changeover from summer time to winter time) or not at all (changeover from winter time to summer time).
- ◆ Please also follow the postcode settings for purposes of localisation, see page 39.

## 21.5 Menu 6.5 - Automatic summer/winter changeover on/off

EN

1. Select and open menu "6.5" summer/winter changeover.



2. Activate/deactivate **summer/winter changeover** and confirm.

**On** = activated

**OFF** = deactivated



3. Next, the "**System settings**" menu will be displayed again.





If the SpeedTimer is being used to control the Venetian blinds, the controller can be configured correspondingly for this purpose.

### The following configurations are possible:

- ◆ Total running time
- ◆ Jog mode
- ◆ Automatic slat adjustment

### Brief description of total running time

The total running time sets the relay on-period for the respective direction of travel. This avoids unnecessary waiting times, for example, as a result of reversing after closing Venetian blinds.

### IMPORTANT

The required time for completely opening the roller shutters or Venetian blinds must be measured with a stopwatch prior to configuration.

### NOTE

If obstacle detection is activated (see page 41), then it is not necessary to configure the total running time, as the controller will detect when the end point is reached.

### Brief description of jog mode

Jog mode enables Venetian blinds slats to be conveniently configured. In doing so, the Venetian blinds motor is powered for as long as the control key is actuated.

In order to conveniently move the Venetian blinds to the end points, actuate the control key for 1 second longer than the configured tilting time. Once the key is released, the Venetian blinds will move to the end point without stopping.



## 21.6 Menu 6.6 - Configuring total running time and Venetian blinds mode [T]

EN

### Brief description of automatic slat adjustment function

Automatic slat adjustment is a function for operating Venetian blinds. If the controller operates the motor in the up-direction until the total running time has elapsed, then the motor reverses automatically for a brief period (automatic slat adjustment). This serves to position the slats to the desired angle, in order to provide sun shading to the room.

### NOTE

If the motor is actuated by the automatic solar function, then automatic slat adjustment is not executed.

1. Select and open menu "6.6" total running time and Venetian blinds mode.



2. Set and confirm the **total running time**.



The total running time must be measured beforehand, see page 47.

### Setting range:

**10 to 150** seconds

## 21.6 Menu 6.6 - Set total running time and Venetian blinds mode [T]

3. Activate or deactivate **jog mode** and confirm.



**On** = jog mode  
activated

**OFF** = jog mode  
deactivated

> Continue at point 4

> Back to system menu

4. Set and confirm the tilting time.



**Setting range:**

**OFF** or

**0.1 to 4.00** seconds

5. Confirm the previous setting and return to the "**System settings**" menu.





## 21.7 Menu 6.7 - Display software version

EN

1. Select and open menu "6.7" "Software version".

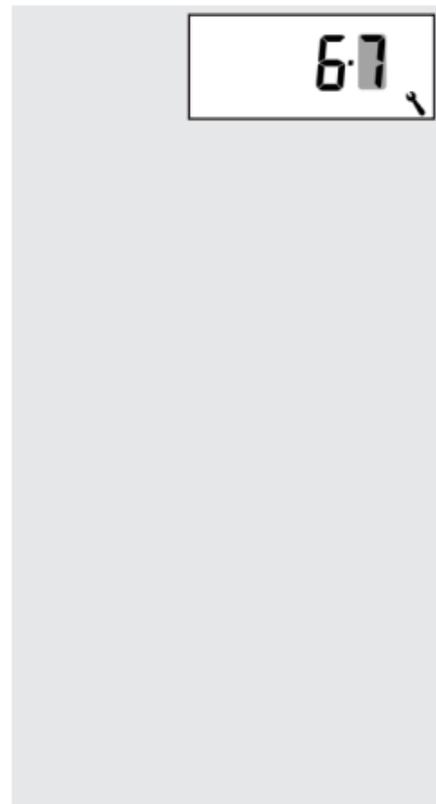


2. The **current software version** is displayed.

**Display range:**  
**1.00 to 99.99**



3. Confirm the previous display and return to the "**System settings**" menu.



## R 22. Software reset (restore factory settings)

1. Simultaneously press and hold all four keys for 5 seconds, until all of the icons are shown on the display.



2. Next, the device's software version will be displayed for a few seconds.



3. All settings will be erased and reset to the default factory settings.

## R 23. Carry out hardware reset

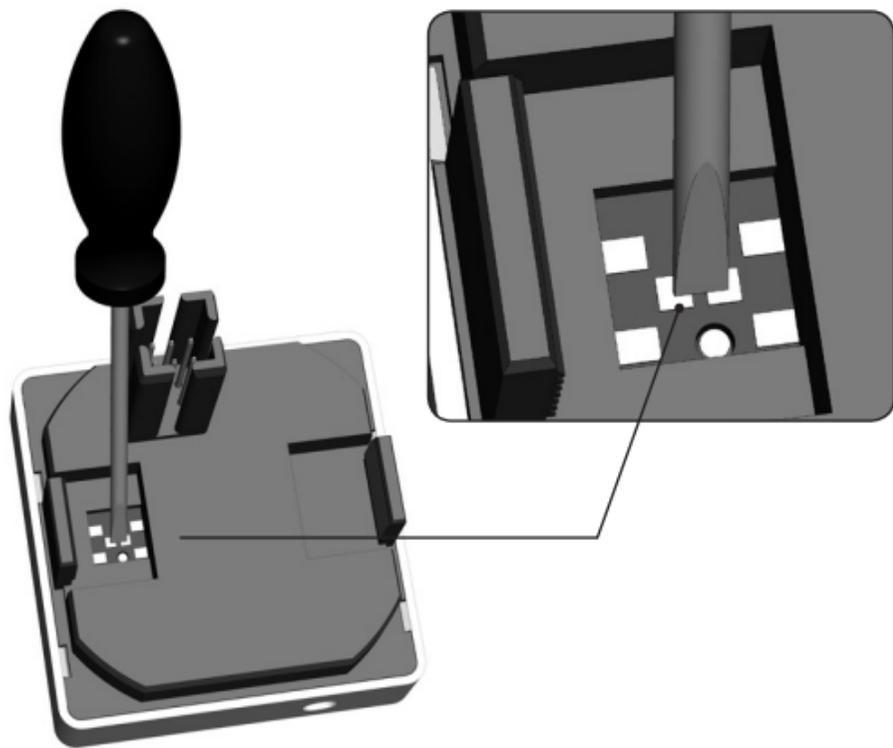
EN

A hardware reset can be carried out in the event that the controller fails to react to commands. In order to do so, pull out the upper section of the controller from the lower part.

There is an opening on the rear of the upper section. The centre of the opening contains two contacts which should be carefully bridged for a few seconds with the help of a tool, for example, a flat-head screwdriver.

The upper section of the controller can be replaced onto the lower part as soon as the screwdriver has been removed from the contacts.

The time and date will be lost during a hardware reset. All other settings are retained.





**There is also a risk of fatal electric shock while dismantling the SpeedTimer.**

Follow the safety instructions for electrical connection on page 14.

**Procedure for dismantling:**

1. Switch off the mains.
2. Secure the connector against reconnection and check that the system is de-energised.
3. Carefully remove the operating unit from the installation housing.
4. Remove the frame.
5. Release the installation housing from the flush-mounted box and disconnect from the mains lead.
6. Leave the connector so that it is secured against reconnection or fit with a new unit if required.

## **i** 25. CE Mark and EC Conformity

The **SpeedTimer** (item no. 3650 05 12) complies with the requirements of the following directives and standards:



**2006/95/EC**  
**Low-voltage directive**

**2004/108/EC**  
**EMC directive**

Conformity has been verified. The corresponding declarations and documentation are available on file at the manufacturer's premises.

RADEMACHER Geräte-Elektronik GmbH  
Buschkamp 7  
46414 Rhede (Germany)

## **i** 26. Technical Specifications

**EN**

External dimensions controller:	50 x 50 mm
Colour:	Ultra-white, glossy
Nominal voltage:	230V / 50 Hz
Max. switching capacity:	8 (4) A $\mu$ (Type 1B)
Standby consumption:	<0.6 W
Cable size:	1.5 mm <sup>2</sup>
Installation depth:	34 mm
Permissible ambient temperature:	0 to 40°C
Power reserve for clock in the event of power failure:	>2.5h
Sunlight sensitivity setting range:	2,000 – 20,000 lux
Darkness sensitivity setting range:	2 – 50 lux

## **i** 27. Factory settings

EN

Automatic:	On
Automatic time:	On
Up time:	07:00
Down time:	20:00 hours, "Normal" mode
Automatic solar function:	OFF
random function:	OFF
Time / date:	12:00 / 01.01.2012
Postcode:	46
Weekly program:	OFF
Obstacle detection:	OFF
- Motor type:	2 (45mm / 30 Nm)
- Sensitivity:	2
- Reversing:	OFF

Automatic summer / winter changeover:	On
Total running time:	150 sec.
Log mode:	OFF
Tilting time	OFF (1.50 seconds)

**Belgium**

- 101 Antwerp
- 102 Bruges
- 103 Brussels
- 104 Liege
- 105 Mechelen
- 106 Mons
- 107 Ostend

**Denmark**

- 108 Aalborg
- 109 Ringsted
- 110 Esbjerg
- 111 Horsens
- 112 Kolding
- 113 Copenhagen
- 114 Svendborg
- 115 Randers

**England**

- 116 Aberdeen
- 117 Birmingham
- 118 Bristol
- 119 Glasgow
- 120 London
- 121 Manchester
- 122 Newcastle

**Estonia**

- 123 Tallinn

**Finland**

- 124 Helsinki
- 125 Jyväskylä
- 126 Oulu
- 127 Tampere
- 128 Turku
- 129 Vasa

**France**

- 130 Bordeaux
- 131 Brest
- 132 Dijon
- 133 Le Havre
- 134 Lyon
- 135 Montpellier
- 136 Nantes
- 137 Nice
- 138 Paris
- 139 Reims
- 140 Strasbourg
- 141 Toulon

**Italy**

- 142 Bologna
- 143 Bolzano
- 144 Florence
- 145 Genoa

- 146 Milan
- 147 Naples
- 148 Palermo
- 149 Rome
- 150 Turin
- 151 Venice

**Ireland**

- 152 Cork
- 153 Dublin
- 154 Belfast

**Latvia**

- 155 Riga

**Liechtenstein**

- 156 Vaduz

**Lithuania**

- 157 Vilnius

**Luxembourg**

- 158 Luxembourg

**The Netherlands**

- 159 Amsterdam
- 160 Eindhoven
- 161 Enschede
- 162 Groningen
- 163 Maastricht
- 164 Rotterdam
- 165 Utrecht

**Norway**

- 166 Oslo
- 167 Stavanger
- 168 Bergen
- 169 Trondheim

**Austria**

- 170 Amstetten

- 171 Baden
- 172 Braunau
- 173 Brixen
- 174 Bruck/Mur
- 175 Eisenstadt
- 176 Graz
- 177 Innsbruck
- 178 Klagenfurt
- 179 Landeck
- 180 Linz
- 181 Nenzing
- 182 Salzburg
- 183 Vienna

**Poland**

- 184 Breslau
- 185 Bromberg
- 186 Danzig
- 187 Kattowitz

188 Krakow  
189 Lodz  
190 Lublin  
191 Posen  
192 Stettin  
193 Warsaw

**Portugal**

194 Faro  
195 Lisbon  
196 Porto

**Switzerland**

197 Basel  
198 Bern  
199 Andermatt  
200 Chur  
201 Lausanne  
202 Lucerne

203 Zurich

**Sweden**

204 Boras  
205 Gavle  
206 Göteborg  
207 Helsingborg  
208 Jönköping  
209 Östersund  
210 Malmö  
211 Stockholm  
212 Sundsvall  
213 Umea

**Spain**

214 Almería  
215 Alicante  
216 Barcelona  
217 Bilbao

218 Badajoz

219 Burgos

220 Cáceres

221 Castellón

222 Granada

223 Guadalajara

224 La Coruña

225 Lérida

226 León

227 Madrid

228 Murcia

229 Oviedo

230 Palma

231 Pamplona

232 San

Sebastián

233 Seville

234 Santander

235 Valencia

236 Valladolid

237 Vitoria

238 Saragossa

239 La Palma

240 Tenerife

241 Grand

Canaria

242 Fuerteventura

**Southeast Europe**

243 Athens

244 Belgrade

245 Bratislava

246 Bucharest

247 Budapest

248 Istanbul

249 Maribor

250 Prague

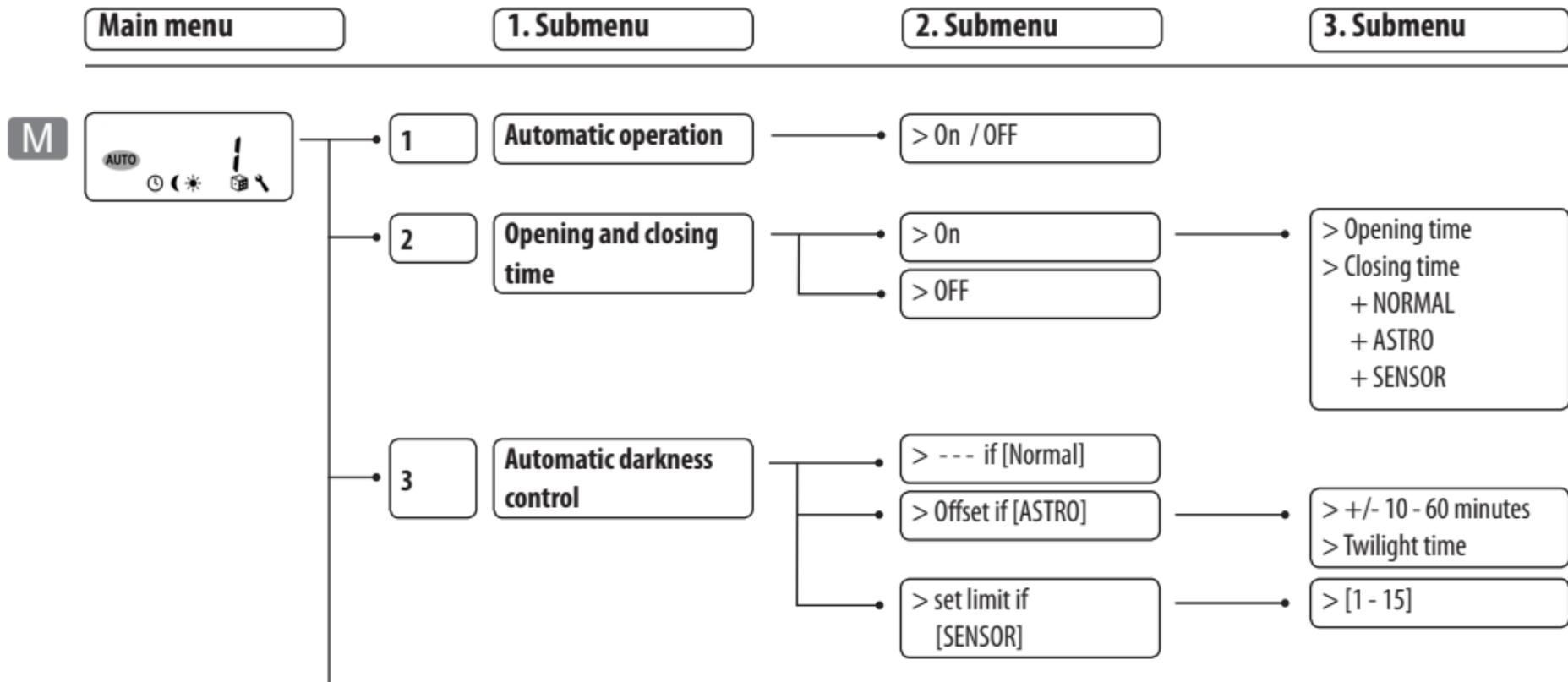
251 Sarajevo

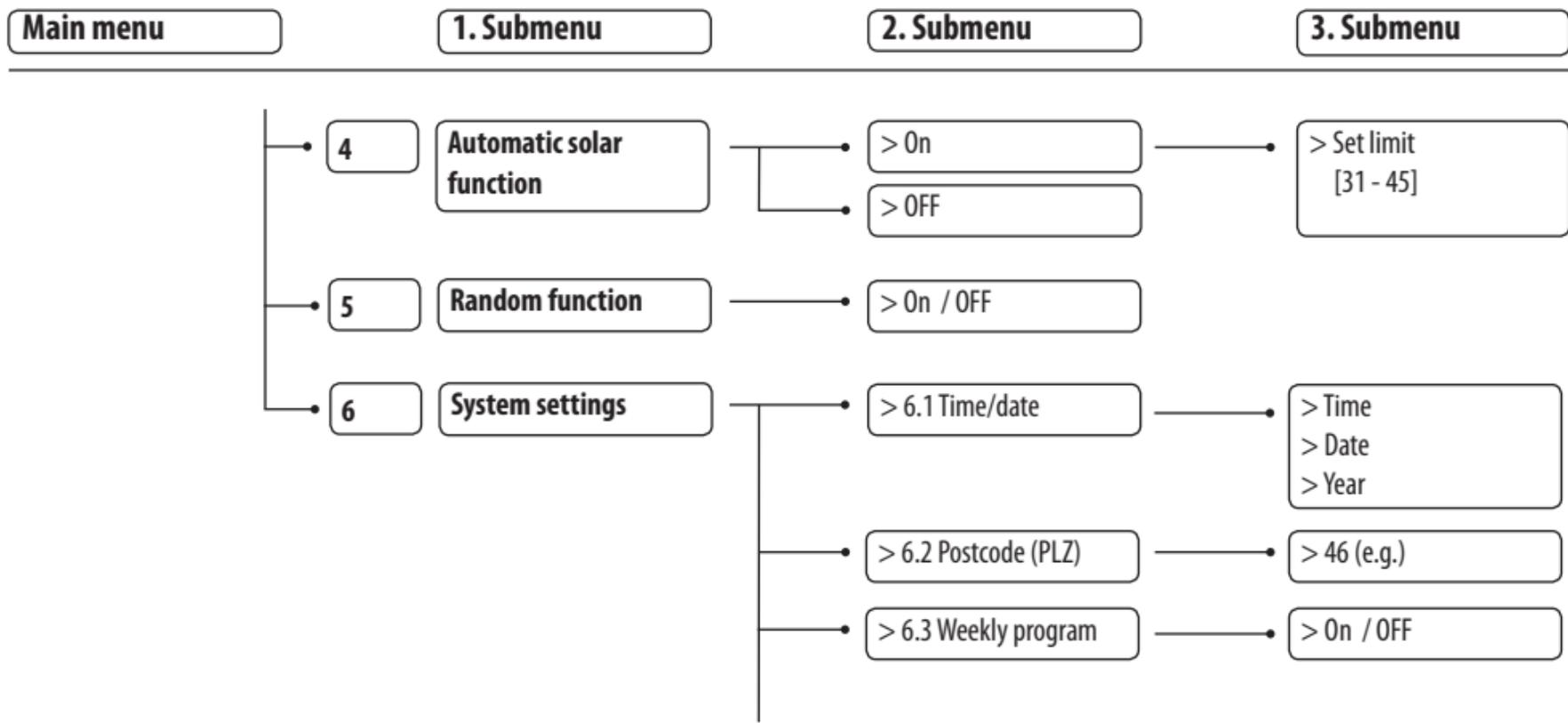
252 Sofia

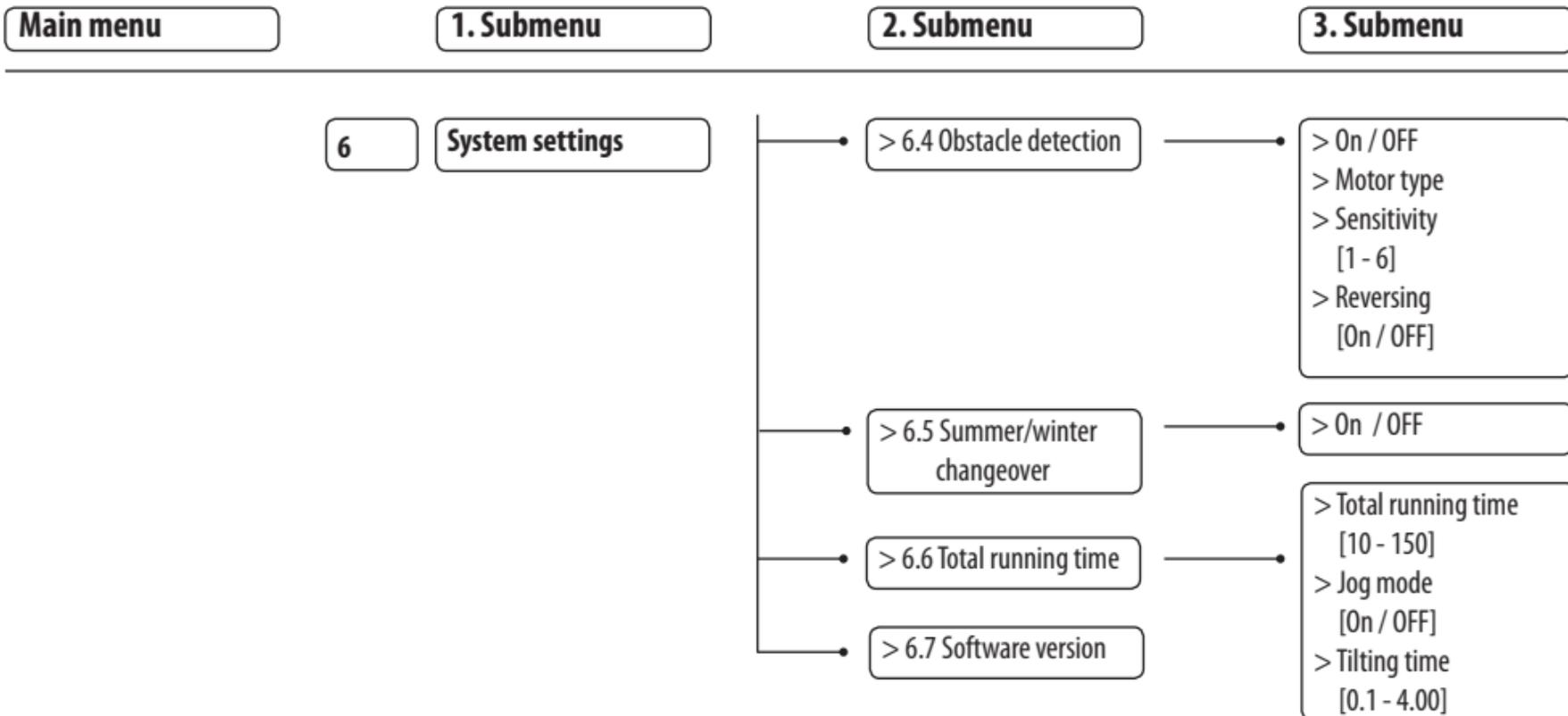
253 Skopje

254 Thessaloniki

255 Zagreb







RADEMACHER Geräte-Elektronik GmbH provides a 24-month warranty for new systems that have been installed in compliance with the installation instructions. All construction faults, material defects and manufacturing defects are covered by the warranty.

### **The following are not covered by the warranty:**

- ◆ Incorrect fitting or installation
- ◆ Non-observance of the installation and operating instructions
- ◆ Improper operation or wear and tear
- ◆ External influences, such as impacts, knocks or weathering
- ◆ Repairs and modifications by third-party, unauthorised persons
- ◆ Use of unsuitable accessories
- ◆ Damage caused by unacceptable excess voltage (e.g. lightning)
- ◆ Operational malfunctions caused by radio frequency overlapping and other such radio interference

RADEMACHER shall remedy any defects that fall under the warranty period free of charge, either by repairing or replacing the affected parts, or by supplying a new replacement unit or one of equivalent value. There is no general extension of the original warranty period upon delivery of a replacement or due to repair, as per the terms of the warranty.



**RADEMACHER**

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service@rademacher.de

\* 30 seconds free of charge, subsequently 14 cents / minute from German fixed line networks and max. 42 cents / minute from German cellular networks.