

**(DE) Bedienungsanleitung**

Bitte bewahren Sie die Bedienungsanleitung auf!

Uhr ist voreingestellt

(GB) Operating instructions

Please keep these instructions in a safe place!

Timer is preprogrammed

(FR) Instructions d'utilisation

Veillez conserver les présentes instructions d'utilisation !

L'heure est préréglée

Safety instructions	GB- 3
Explanation of displays and buttons	GB- 4
General information	GB- 5
Designated use	GB- 5
Installation/Connection	GB- 6
Connection as a drive controller	GB- 6
Initial operation/Factory settings	GB- 7
Explanations of functions	GB- 8
Manual/Automatic sliding switch, Operating mode..	GB- 8
Buttons	GB- 8
Time/date, Programme, Astro Evening, Separate ...	GB- 9
Blocking time	GB-10
Settings	GB- 11
Holiday function, End limit, Intermediate position..	GB- 11
Ventilation/Reverse, Language selection, Astro shift, City selection, Longitude/Latitude/Time zone	GB- 12
Automatic summer/winter time changeover.....	GB- 13
Function menu (for qualified staff only!)	GB- 13
Expert mode	GB- 13
Programming	GB- 14
Overview of menu	GB- 14
Setting time/date.....	GB- 14
Astro Evening function	GB- 15

Separate switching times ▲▼	GB- 16
Holiday function	GB- 17
Intermediate position, Ventilation/Reverse, End limit.....	GB- 18
Language selection/Astro shift	GB-19
City selection, Expert mode (Longitude/Latitude/Time zone).....	GB-20
Automatic summer/winter time changeover.....	GB- 21
Function (for qualified staff only!)	
Shutter/blind selection, Date of initial operation	GB- 22
Technical data	GB- 23
Changing the batteries	GB- 23
Cleaning	GB- 23
Troubleshooting	GB- 24
General declaration of conformity	GB- 24



Warning!



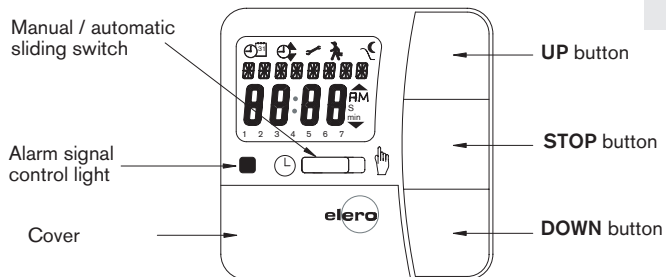
Important safety instructions!

Always observe the following instructions.

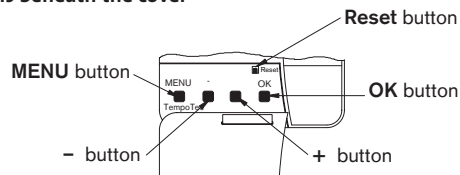
Risk of injury by electric shock.

- All terminal connections to a 230 V network must be made by an authorised electrician.
- Before assembly, always disconnect the mains lead from the power supply.
- The provisions of the local public utilities and stipulations for wet and damp rooms in accordance with VDE 100 must be observed during system installation.
- For use in dry rooms only.
- Use unmodified **elero** original parts only.
- Keep persons away from the systems guide track.
- Keep children away from controls.
- Always comply with national stipulations.
- If the system is controlled by one or more devices, the system guide track must be visible during operation.
- Only cables with sufficient electric strength may be used to connect control cables (protective low voltages).
- The equipment contains small parts that could be swallowed.

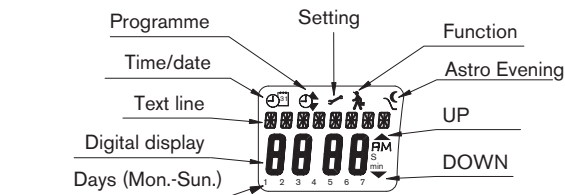
Explanation of displays and buttons



Buttons beneath the cover



Display symbols



General information

The TempoTec, which is supplied with pre-programmed factory date and time settings (CET), operates your drive in the morning at the programmed switching time and in the evening at the set astro time (sunset time).

The TempoTec can be operated manually at any time.

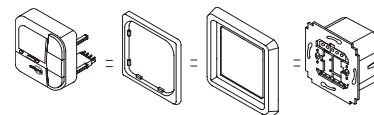
This device runs on battery power, meaning it can be programmed even if the operating element has been removed, as the display does not disappear.

Designated use

The TempoTec may be used to drive roller shutters and venetian blinds systems **only**.

This timer may only be used in connection with equipment from other manufacturers following consultation with your local retailer.

Installation



Connection as a drive controller

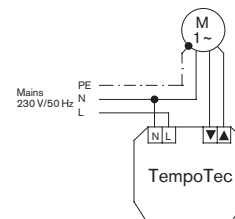
For details on suitable control systems, please refer to the control product catalogue.



Risk of injury by electric shock!

- Terminal connections must be carried out by an authorised electrician!
- If more than one drive is operated using the TempoTec, the drives must be decoupled by relay controls.
- The switched current of the device must be observed at all times!

1. Remove the protective caps.
2. Connect.



3. Replace the protective caps on the power supply unit.
4. Secure the power supply unit in the box..
5. Insert the operating device into the frame and plug it into the power supply unit.

Initial operation

Press any button on the timer to activate it. The +/- buttons can now be used to select the desired language and confirm your selection by pressing the **OK** button. The timer is now in automatic mode.

Factory settings

TIME/DATE: – Current CET and current date

PROGRAMME: – ASTRO EVENING → Switching times Mon-Fri (1-5)

▲ 7:00 a.m.

▼ ASTRO EVENING

Switching times Sat and Sun (6,7)

▲ 8:00 a.m.

▼ ASTRO EVENING

SETTING: – HOLIDAY OFF
– END LIMIT
– SUMMER/WINTER ON


FUNCTION: – ROLLER SHUTTER


Note: When the **RESET** button is pressed (using a ballpoint pen or similar object), the TempoTec reverts to the default factory settings.

Exception: Function, language and city menu levels.

Explanation of functions

MAN/AUTO sliding switch

In the “**MAN** ” sliding switch setting, only manual command controls are carried out.

In the “**AUTO** ” sliding switch setting, automatic command controls are carried out (e.g. time, astro evening function,...)

Operating mode

The time is shown on the timer display.

OK button

When the **OK** button is pressed, the currently displayed values are saved.

+/- buttons

The following operations are possible using the + and - buttons:

- **Menu** → change value
- **Auto mode** → request information
 - + button → next automatic switching time ▲
 - – button → next automatic switching time ▼
 - – button and **OK** button → request astro time ▼

MENU button

By pressing the **MENU** button, you can see an overview of the menu or the operating mode.

The currently displayed values are **not** saved.

RESET button

When the **RESET** button is pressed (using a ballpoint pen or similar object), the TempoTec reverts to the default factory settings.

Exception: Function, language and city menu levels.

Time/date

TIME/DATE

This menu is used to set the time and the date.

Programme

PROGRAMME

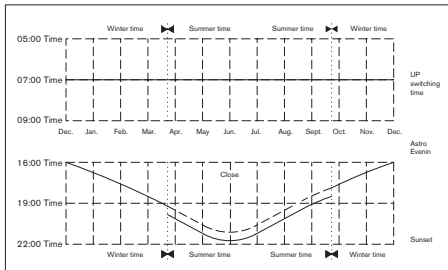
The PROGRAMME menu allows you to set various switching times:

- Astro evening (1-5 and 6,7)
- Separate (1, 2, 3, 4, 5, 6, 7)

ASTRO EVENING

Your roller shutters/blinds are raised according to the set switching time.

Your roller shutters/blinds are lowered on the basis of the astro function.



SEPARATE

Triggers the up and down control commands according to the switching times you have set.

BLOCKING TIME

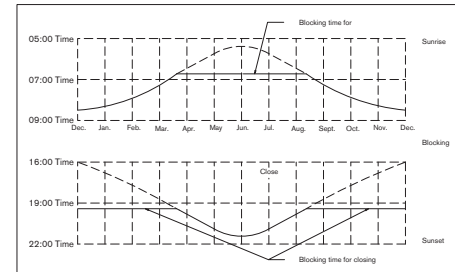
The ASTRO EVENING function prevents your roller shutters/blinds from closing too early.

Example:

Astro time ▼: 17:00

Blocking time ▼: 19:30

The roller shutter/blind will **not** close before 19:30 hrs.



SETTINGS

The following settings can be made via the SETTING menu:

- HOLIDAY
 - INTERMEDIATE POSITION
 - VENTILATION/REVERSE
 - PROG (END LIMIT, INTERMEDIATE POSITION, VENTILATION/REVERSE)
 - Select language (ENGLISH GB)
 - ASTRO SHIFT ▼
 - Select town/city (LONDON)
 - LENGTH
 - WIDTH
 - TIME ZONE
 - SUMMER/WINTER (Automatic summer/winter time changeover)
- } Displayed in
} EXPERT MODE ON

To set a function, press the **OK** button until you come to the required menu level.

HOLIDAY SETTING

The holiday setting simulates an occupied house while you are on holiday. If the function is activated (ON), the roller shutter/blind varies randomly from the programmed times (max.+ 30 mins.).

END LIMIT

The end limit is the point where the roller shutter/blind is in the upper or lower position.

INTERMEDIATE POSITION

The intermediate position is a position of the roller shutter/blind between the upper and lower limits that can be freely selected. This position can also be reached from the upper position after programming. Press the **DOWN** button **twice** in rapid succession to move to the intermediate position.

When the system is in venetian blind mode, it is also possible to programme a reverse position. In this case, this command will be automatically executed following the intermediate position command.

VENTILATION/REVERSE

The ventilation/reverse position is a position of the roller shutter/blind between the upper and lower limits that can be freely selected. Using this function, you can raise the shutter from the lower end limit until the ventilation slits are open. In the case of venetian blinds, the slats will be turned.

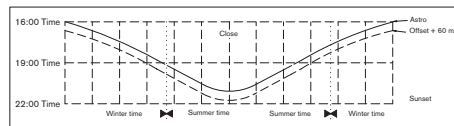
Press the **UP** button **twice** in rapid succession to move to the ventilation/reverse position.

Language (ENGLISH GB)

This menu level can be used to select your national language.

ASTRO SHIFT

With the astro shift setting, the astro time p and astro time ▼ can be shifted independently of one another (max. +/- 120 mins.).

**City (LONDON when the language is set to ENGLISH GB)**

It is important to select a city for the astro function. Select the city nearest to where you are located.

LONGITUDE/LATITUDE/TIME ZONE (only when EXPERT MODE is ON)

This function can be used to adapt the astro function to your location.

Your exact coordinates, for example, can be found with the aid of an atlas.

SUMMER/WINTER

SUMMER/WINTER describes the automatic clock adjustment for daylight saving changes. If the default setting is ON, the timer is adjusted automatically.

FUNCTION MENU

This mode is intended for qualified staff only!

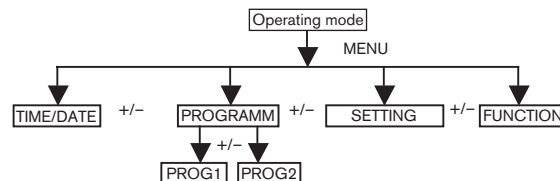
(Will only appear when the operating device is disconnected)

The FUNCTION menu gives you the option of setting the following functions:

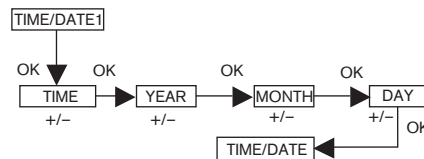
- ROLLER SHUTTER/BLIND (select either roller shutter or venetian blind)
- EXPERT MODE
- INITIAL OPERATION (for service purposes)
- RELAY (for service purposes)
- TOTAL RUNNING TIME (for service purposes)

EXPERT MODE

If the town/city selection (EXPERT MODE OFF) is not precise enough for your requirements, a fine adjustment can be made by setting the degrees of longitude and latitude (EXPERT MODE ON).

Operating mode (Overview of the menu)

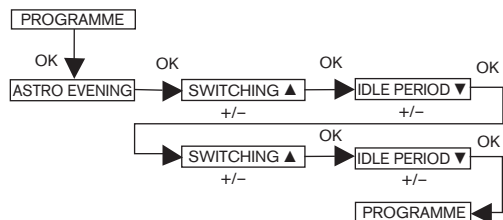
1. Press the **MENU** button until TIME/DATE appears.
2. To select further menus, press the **+/-** buttons.
3. Press the **MENU** button to switch to operating mode.

TIME/DATE (to set the time and date)

1. Press the **MENU** button until TIME/DATE appears.
2. By pressing **OK**, you get to the time menu level.
3. Now set the current time using the **+/-** buttons.
4. If the time is set correctly, confirm by pressing **OK**.
5. Repeat the above procedure for the settings YEAR, MONTH and DAY. TIME/DATE appears.
6. Press the **MENU** button to switch to operating mode.

PROGRAMME

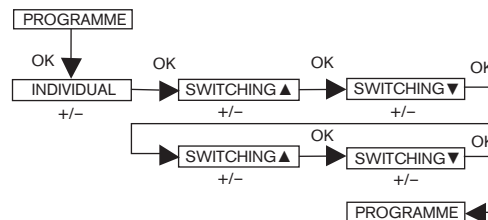
ASTRO EVENING (UP → switching time, DOWN → sunset)



1. Press the **MENU** button.
2. To select the PROGRAMME menu press the **+** button until PROGRAMME appears.
3. Press **OK** to confirm.
4. Press the **+** button again until ASTRO EVENING appears.
5. Press **OK** to confirm.
6. Now set the SWITCHING TIME ▲ for Monday - Friday (1-5) using the +/- buttons.
7. Press **OK** to confirm.
8. Now set the BLOCKING TIME ▼ for Monday - Friday (1-5) using the +/- buttons.
9. Press **OK** to confirm.
10. Now set the SWITCHING TIME ▲ for Saturday and Sunday (6,7) using the +/- buttons.
11. Press **OK** to confirm.
12. Now set the BLOCKING TIME ▼ for Saturday and Sunday (6,7) using the +/- buttons.
13. Press **OK** to confirm. PROGRAMME appears.
14. Press the **MENU** button to switch to operating mode.

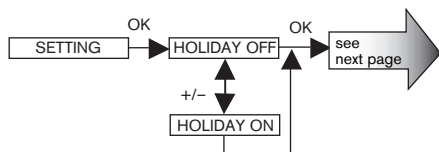
PROGRAMME

SEPARATE (UP/DOWN command → switching times)



1. Press the **MENU** button.
2. To select the PROGRAMME menu press the **+** button until PROGRAMME appears.
3. Press **OK** to confirm.
4. Press the **+** button again until SEPARATE appears.
5. Press **OK** to confirm.
6. Now set the SWITCHING TIME ▲ and the SWITCHING TIME ▼ for Monday - Friday (1-5) and Saturday and Sunday (6,7) using the +/- buttons.
7. Press **OK** to confirm.
8. Press the **MENU** button to switch to operating mode.

HOLIDAY (Holiday OFF/ON)

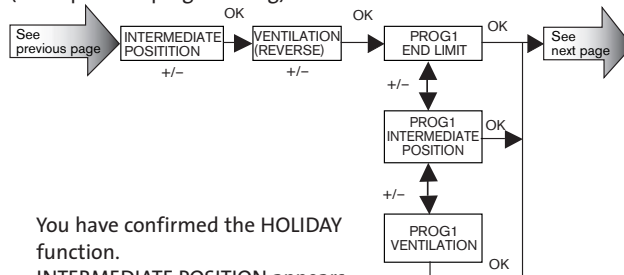


1. Press the **MENU** button
2. To select the **SETTING** menu press the **+** button until **SETTING** appears.
3. Press **OK** to confirm. **HOLIDAY ON/OFF** appears.
4. The holiday function can be set to **ON** or **OFF** using the **+/-** buttons.
5. Confirm your selection by pressing **OK**.
The **HOLIDAY** function is now set.

For further programme settings in the **SETTING** menu, see below.

SETTING

INTERMEDIATE POSITION, VENTILATION/REVERSE, PROG END LIMIT
(Time/position programming)



You have confirmed the **HOLIDAY** function.
INTERMEDIATE POSITION appears.

1. The switching time for the **INTERMEDIATE POSITION** can be set using the **+/-** buttons. The switching time can be set in a few seconds. Alternatively, you can move the shutter/blind from the upper end limit into the **INTERMEDIATE POSITION** using the **DOWN** button.
2. Press **OK** to confirm. **VENTILATION/REVERSE** appears.
3. The switching time for the **VENTILATION/REVERSE** position can be set using the **+/-** buttons. The switching time can be set in a few seconds. Alternatively, you can move the shutter/blind from the lower end limit into the **VENTILATION/REVERSE** position using the **UP** button. Press **OK** to confirm.
4. You can choose between **PROG END LIMIT**, **PROG INTERMEDIATE POSITION** and **PROG VENTILATION/REVERSE** using the **+/-** buttons.
5. Confirm your selection by pressing **OK**.

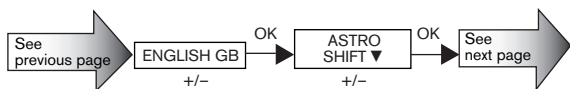
The **PROG END LIMIT** function is now set.

For further programme settings in the **SETTING** menu, see below.

SETTING

ENGLISH GB/ ASTRO SHIFT ▼

(Language selection, astro shift)



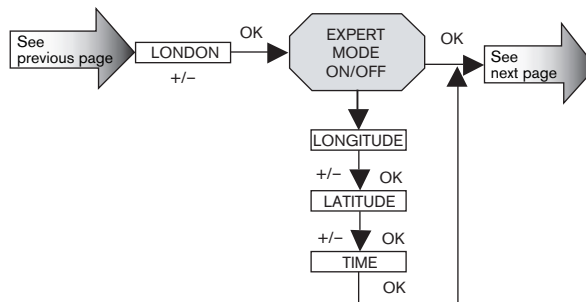
You have confirmed the PROG END LIMIT function.
ENGLISH GB appears.

1. You can select the desired language using the +/- buttons.
2. Confirm your language selection by pressing **OK**.
ASTRO SHIFT ▼ appears.
3. The desired astro shift ▼ can be set (max. +/- 120 mins.) using the +/- buttons.
4. Press **OK** to confirm.
The ASTRO SHIFT ▼ function is now set.

For further programme settings in the SETTING menu, see below.

SETTING

(Town/city selection, LONDON, EXPERT MODE (LONGITUDE, LATITUDE, TIME ZONE))



You have confirmed the function ASTRO SHIFT ▼.
The city selected (LONDON) will appear.

1. You can set your nearest town using the +/- button.
2. Press **OK** to confirm. LONGITUDE will appear.
(If you prefer to define your location more precisely, you can do so by setting the degrees longitude and latitude.)

N.B.: These dialog windows are only displayed when the EXPERT MODE in the function menu is ON.

3. You can set the degrees LONGITUDE using the +/- button.
4. Press **OK** to confirm. LATITUDE will appear.
5. You can set the degrees LATITUDE using the +/- button.

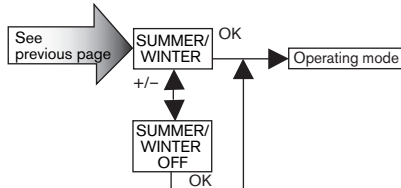
6. Press **OK** to confirm. TIME ZONE will appear.
7. You can set the TIME ZONE you are in using the +/- button.
8. Press **OK** to confirm.

The TIME ZONE function has now been set.

Please read on for further programming options using the SETTING menu.

SETTING

SUMMER/WINTER (Automatic clock adjustment for daylight saving changes)



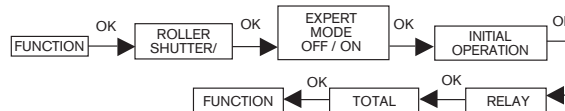
You have confirmed the TIME ZONE function. SUMMER/WINTER will appear.

1. You can switch the SUMMER/WINTER function on or off using the +/- button.
2. Confirm your selection by pressing **OK**.
3. Press the **MENU** button to switch to operating mode.

FUNCTION (The operating element must be removed. For experts only.)

ROLLER SHUTTER/VENETIAN BLIND, INITIAL OPERATION

(Shutter/blind selection, date of initial operation)

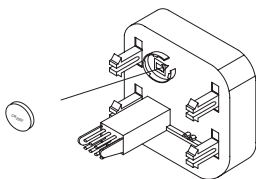


1. Press the **MENU** button.
2. To select the FUNCTION menu press the + button until FUNCTION appears.
3. Press **OK** to confirm. ROLLER SHUTTER/BLIND appears.
4. You can choose between roller shutter/blind using the +/- button.
5. Press OK to confirm. EXPERT MODE OFF/ON appears.
6. The desired setting can be selected using the +/- button.
7. Confirm your selection by pressing **OK**. INITIAL OPERATION appears.
8. Press **OK** to confirm. RELAY appears. (RELAY refers to the duty rating of the relay)
9. Press **OK** to confirm. TOTAL RUNNING TIME appears. (TOTAL RUNNING TIME refers to the total running time of the timer)
10. Confirm by pressing **OK**.
11. Press the **MENU** button to switch to operating mode.

Technical data

Nominal voltage	230-240 V AC / 50-60 Hz
Switched current	5 A /250 V AC for $\cos \varphi =1$
Battery type	CR 2032
System of protection	IP 20
The protection class II is guaranteed only after a correct installation.	
Permissible ambient temperature	0 to +55 °C
Type of installation	Concealed \varnothing 58 mm wall-mounted Exposed in appropriate exposed casing

Changing the batteries





1. Disconnect the operating device.
2. Remove the battery.
3. Insert the new battery properly.
4. Reset the time.

Note: Any settings made will remain stored.

Cleaning

Clean the device with a damp cloth only. Do not use a cleansing agent as this may damage the plastic.

Troubleshooting

Problem	Cause	Remedy
Drive is not functioning.	Faulty connection.	Check the connection.
Drive is operating in the wrong direction.	Faulty connection.	Exchange Δ and ∇ wires in the power supply unit.
Astro function is not operating properly.	<ol style="list-style-type: none"> 1. Date is incorrect. 2. Wrong city or wrong latitude / longitude setting. 3. Holiday function is switched on. 4. Astro shift is set. 	<ol style="list-style-type: none"> 1. Set correct date. 2. Set correct city or exact degrees latitude / longitude. 3. Switch holiday function off. 4. Adjust astro shift.
The TempoTec does not carry out the programmed control commands.	The sliding switch is set to "MAN  ".	Change the sliding switch to "AUTO  ".
The TempoTec does not carry out the switching commands precisely.	Holiday function is switched on.	Switch holiday function off.
Roller shutter does not move to the end limit position.	No end limit position is set.	Set the end limit position via PROG END LIMIT SETTING.

General declaration of conformity:

The company elero GmbH hereby declares that the TempoTec device complies with the basic requirements and other relevant provisions of the European Directive 1999/5/EC.