



GB Operating instructions

Please keep these instructions in a safe place.

SG-S SILENTGLISS SPARES
SILENTGLISS SYSTEMS

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Warning!

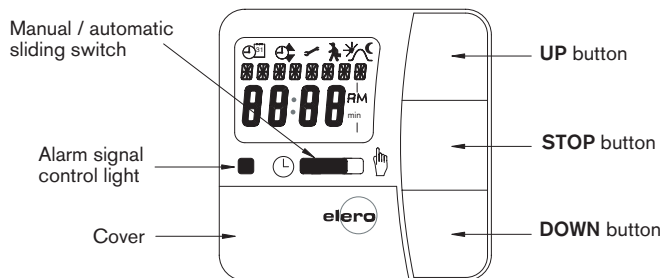


Important safety instructions!

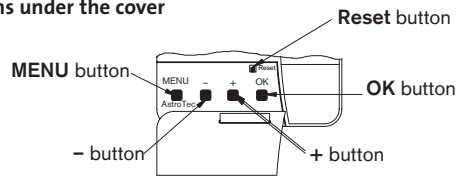
**Always observe the following instructions.
Risk of injury by electric shock.**

- All terminal connections to a 230 V network **must** be made by an authorised electrician.
- Before installation, 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 for 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.
- Dispose of used batteries properly. Replace batteries with identical type (CR 2032) only.
- 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.

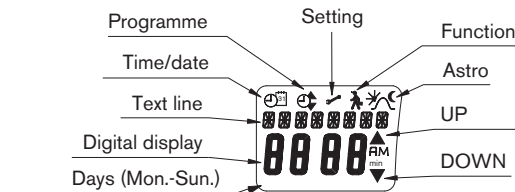
Explanation of displays and buttons



Buttons under the cover



Display symbols



General

The AstroTec, delivered from the factory with current date and time settings (GMT), automatically controls the drive at the astro times (sunrise and sundown).

The AstroTec can be operated manually at any time.

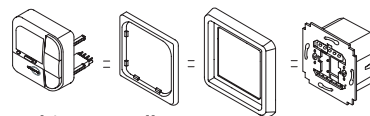
The easy-to-install light sensor allows the AstroTec to be extended to include a convenient sunshade function (shading plants and furniture).

Designated use

The AstroTec may **only** be used to control roller shutter and venetian blind systems.

Connection of other devices must be carried out in consultation with specialised dealers.

Installation



Connection as a drive controller

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

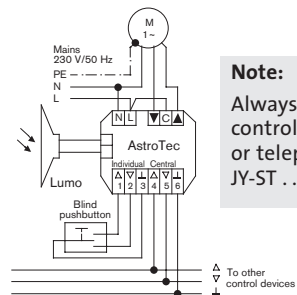


Warning!

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 AstroTec, 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.




Note:

Always use a shielded control wire . . . *o.8 mm ø or telephone line JY-ST . . . *o.6 mm ø.

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 insert it into the power supply unit.

Connection as a group controller

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

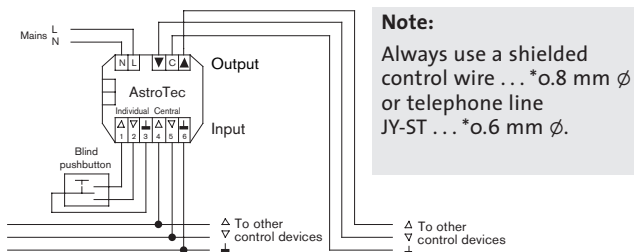


Warning!

Risk of injury by electric shock!

- Terminal connections must be carried out by an authorised electrician!

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.
Insert the operating device into the frame and insert it into the power supply unit.

Initial operation

To activate the AstroTec timer, touch any button on the device. To select the language required use the +/- buttons and confirm your selection with the OK button. The AstroTec is now in automatic operating mode.

Factory settings

TIME/DATE: – Current GMT and current date

PROGRAMME: – ASTRO → BLOCK → IDLE PERIOD (1-5)

- ▲ 06:30 HRS
- ▼ No default idle period

IDLE PERIOD (6,7)

- ▲ 08:00 HRS
- ▼ No default idle period

SETTING: – HOLIDAY OFF
– light sensor SUN 05 sunlight value (if light sensor is connected)
– END LIMIT, location
– SUMMER/WINTER ON

FUNCTION: – ROLLER SHUTTER, DRIVE CONTROLLER, EXTERNAL SWITCH, ALARM SIGNAL ON, EXPERT MODE OFF

Note! Press the RESET button (with a ballpoint pen or similar object) to restore the factory settings of the AstroTec.


Exception: Function menu, language selection and city selection.


Light sensors

Note: If you wish to connect a light sensor to the AstroTec, the instructions provided with the light sensor must be followed.

Explanation of functions

MAN/AUTO sliding switch

In the “**MAN** ” sliding switch setting, only manual command controls and alarm signals are executed.

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

Alarm signal control light

When the alarm signal control light is illuminated, this indicates an alarm signal. A continuous switching signal at the group or individual control inputs for more than 5 seconds signifies an alarm signal.

Group control

Group control refers to the control of several drives at the same time. The chosen group is controlled by executing a control command.

Operating mode

The time is shown in the display.

OK button

When the **OK** button is pressed, the values currently displayed 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 → astro time ▲
- button and **OK** button → astro time ▼

MENU button

By pressing the **MENU** button, you can see an overview of the menu or the operating mode.
The values currently displayed are **not** saved.

RESET button

When the **RESET** button is pressed (with a ballpoint pen or similar object), the AstroTec reverts to the default setting.

Exceptions: 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:

1. PROG1

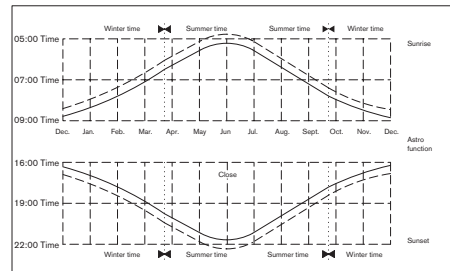
- Astro , astro evening, individual
 - o Week (1-7)
 - o Block 1/2 (1-5 and 6,7)
 - o Individual (1, 2, 3, 4, 5, 6, 7)

2. PROG 2 (e.g. lunch break)

- Individual
 - o Week (1-7)
 - o Block 1/2 (1-5 and 6,7)
 - o Individual (1, 2, 3, 4, 5, 6, 7)
- OFFSET

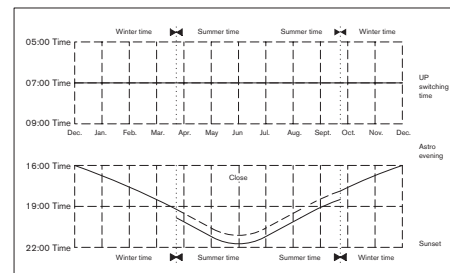
ASTRO

The AstroTec automatically controls your roller shutters or blinds at the pre-set sunrise and sunset times. These times are used as guidelines.



ASTRO EVENING

Shutters are raised according to the set switching time. Shutters are lowered according to the astro function.



INDIVIDUAL

Triggers the UP and DOWN control commands according to the switching times you have set.

WEEK

Using the WEEK menu, you can set the same switching times from Monday – Sunday (1-7).

BLOCK

Using the BLOCK menu, you can set two blocks.

Block 1: sets the switching times for Monday – Friday (1-5).

Block 2: sets the switching times for Saturday and Sunday (6,7).

INDIVIDUAL

Using the INDIVIDUAL menu, you can set separate switching times for every day of the week.

IDLE PERIOD

Prevents the roller shutter from moving up or down too early because of the astro function.

For example:

Astro time ▲: 5:30

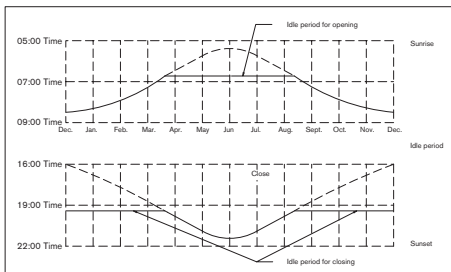
Idle period ▲: 6:30

The roller shutter does **not** move up before 6:30.

Astro time ▼: 17:00

Idle period ▼: 19:30

The roller shutter does **not** move down before 19:30.



SWITCHING TIME

Automatic switching times for roller shutters and blinds to be raised and lowered.

OFFSET

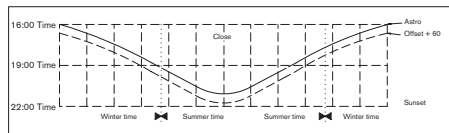
An additional switching time ▼ can be programmed using the OFFSET menu. This depends on the PROG 1 switching time ▼ (max. +/- 240 mins.).

For example:

astro time ▼: 20:00

Offset ▼: +60 mins.

The roller shutter moves to the intermediate position at 20.00 hrs and to the lower end limit at 21.00 hrs.



SETTING

The SETTING menu gives you the following options:

- HOLIDAY
- SUN (when sensor is connected)
- TWILIGHT SETTING (when sensor is connected)
- INTERMEDIATE POSITION
- VENTILATION/REVERSE
- PROG 1 (END LIMIT, INTERMEDIATE POSITION, VENTILATION/REVERSE)
- PROG 2 (END LIMIT, INTERMEDIATE POSITION, VENTILATION/REVERSE)
- TEST MODE
- Language (ENGLISH GB)
- ASTRO SHIFT ▲
- ASTRO SHIFT ▼
- City (LONDON)
- LONGITUDE } Only when EXPERT
- LATITUDE } MODE is **ON**.
- TIME ZONE }
- SO/WI (Automatische Sommer-/Winterzeitumstellung)

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. The slats of the blind will be turned.

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

PROG 1/PROG 2**PROG.1 END LIMIT / PROG. 2 END LIMIT**

With the setting PROG.1 END LIMIT / PROG. 2, the drive moves into the lower limit position according to an automatic control command ▼ executed via the menu level PROG.1 / PROG. 2 END LIMIT.

INTERMEDIATE POSITION

With the setting PROG.1 / PROG. 2 INTERMEDIATE POSITION, the drive moves into the pre-set intermediate position according to an automatic control command ▼.

VENTILATION/REVERSE

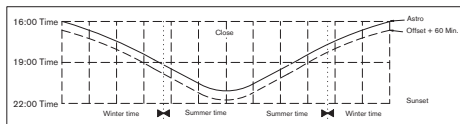
With the setting PROG.1 / PROG. 2 VENTILATION/REVERSE POSITION, the drive first moves into the lower limit position and then into the ventilation/reverse position according to an automatic control command ▼.

Language (ENGLISH GB)

You can select your national language..

ASTRO SHIFT

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



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

This allows you to precisely adapt the astro function to your location.

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)

You can find out your coordinates, for example, 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 AstroTec timer adjusts itself automatically.

FUNCTION

This mode is only intended for qualified electricians!

(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 shutter or blind)
- DRIVE CONTROLLER/GROUP CONTROLLER
- RUNNING TIME
- EXTERNAL (SWITCH/OFF/ON)
(Switches external group inputs)
- ALARM SIGNAL
- EXPERT MODE
- INITIAL OPERATION (for service purposes)
- RELAY (for service purposes)
- TOTAL RUNNING TIME (for service purposes)

DRIVE CONTROLLER

The drive is connected directly to the AstroTec.

GROUP CONTROLLER

The AstroTec controls a group.

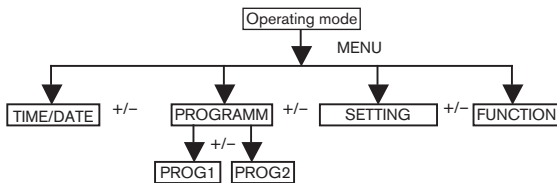
EXTERNAL OFF/ EXTERNAL ON/ EXTERNAL SWITCH

EXTERNAL OFF	group inputs are always switched off.
EXTERNAL ON	group inputs are always switched on.
EXTERNAL SWITCH	group inputs are switched on in auto mode, switched off in manual mode.

EXPERT MODE

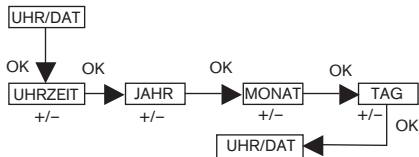
If selecting the city (EXPERT MODE OFF) is not precise enough, you can make a fine adjustment by setting the degrees of longitude and latitude (EXPERT MODE ON).

Main menu (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.

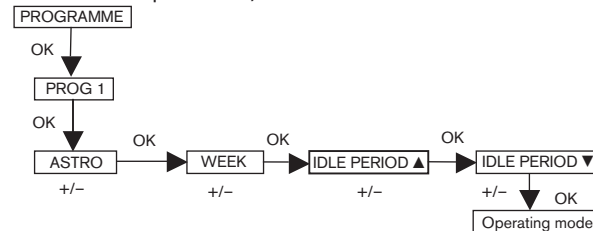
TIME/DATE (to set the time and date)



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

- PROG 1/ ASTRO WEEK** (Astro function for week + idle period ▲▼)
- PROG 1/ ASTRO BLOCK** (Astro function for block1/2 + idle period ▲▼)
- PROG 1/ ASTRO INDIVIDUAL** (Astro function for individual + idle period ▲▼)



1. Press the **MENU** button.
2. To select the PROGRAMME menu, press the + button until PROGRAMME appears.
3. Confirm by pressing **OK**. PROG1 appears.
4. Confirm by pressing **OK**.
5. Press the + button until the ASTRO menu appears.
6. Confirm by pressing **OK**.
7. Now select the PROG1 ASTRO function you require using the +/- buttons:
BLOCK
 Press +/- for the BLOCK menu level (BLOCK 1 (1-5), BLOCK 2 (6,7)). All further entries now refer to BLOCK 1 (1-5) and BLOCK 2 (6,7).
 Confirm by pressing **OK**.
INDIVIDUAL
 Press +/- for the INDIVIDUAL menu level (1,2,3,4,5,6,7).
 All further entries now refer to each individual day of the week.
 Confirm by pressing **OK**.

WEEK

Press +/- for the WEEK menu level (1-7). All further entries now refer to every day of the week.

Confirm by pressing **OK**.

8. Now set the IDLE PERIOD ▲ and IDLE PERIOD ▼ using the +/- buttons.
9. Confirm each entry by pressing **OK**.
10. Press the **MENU** button to switch to operating mode.

PROGRAMME

PROG 1/ ASTRO EVENING WEEK

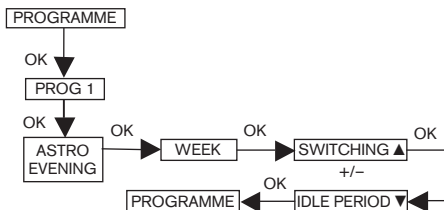
(Astro function evening for week + switching time ▲ idle period ▼)

PROG 1/ ASTRO EVENING BLOCK

(Astro function evening for block 1/2 + switching time ▲ + idle period ▼)

PROG 1/ ASTRO EVENING INDIVIDUAL

(Astro function evening for individual + switching time ▲ idle period ▼)



1. Press the **MENU** button..
2. To select the PROGAMME menu, press the + button until PROGRAMME appears.
3. Confirm by pressing **OK**. PROG1 appears.

4. Confirm by pressing **OK**. ASTRO EVENING appears.

5. Confirm by pressing **OK**.

6. Now select the PROG1 ASTRO function you require using +/- : **WEEK**

Press OK for the WEEK menu level (1-7). All further entries now refer to every day of the week.

Confirm by pressing **OK**.

BLOCK

Press OK for the BLOCK menu level (BLOCK 1 (1-5), BLOCK 2 (6,7)). All further entries now refer to BLOCK 1 (1-5) and BLOCK 2 (6,7).

Confirm by pressing **OK**.

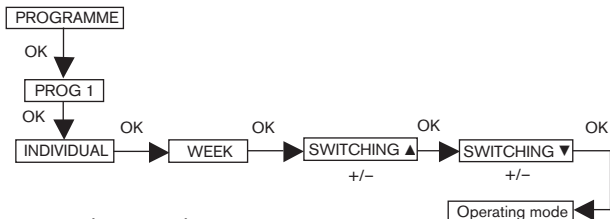
INDIVIDUAL

Press OK for the INDIVIDUAL menu level (1,2,3,4,5,6,7). All further entries now refer to each individual day of the week. Confirm by pressing **OK**.

7. Now set the SWITCHING TIME ▲ using the +/- buttons.
8. Confirm your entry by pressing **OK**.
9. Now set the IDLE PERIOD ▼ using the +/- buttons.
10. Confirm your entry by pressing **OK**.
11. Press the **MENU** button to switch to operating mode.

PROGRAMME

- PROG 1/ INDIVIDUELL WEEK** (Individual switching time ▲▼ for week)
- PROG 1/ INDIVIDUELL BLOCK** (Individual switching time ▲▼ for block1/2)
- PROG 1/ INDIVIDUELL INDIVIDUAL** (Individual switching time ▲▼ for individual day)



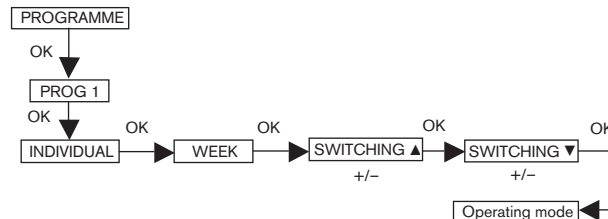
1. Press the **MENU** button.
2. To select the PROGAMME menu, press the + button until PRO-
GRAMME appears
3. Confirm by pressing **OK**. PROG1 will appear.
4. Confirm by pressing **OK**.
5. Press the + button until INDIVIDUAL appears.
6. Confirm by pressing **OK**.
7. Now select the PROG1 INDIVIDUAL function you require using the +/- buttons:
WEEK
Press +/- for the WEEK menu level (1-7). All further entries now refer to every day of the week.
Confirm by pressing **OK**.
BLOCK
Press +/- for the BLOCK menu level (BLOCK 1 (1-5),
BLOCK 2 (6,7)). All further entries now refer to BLOCK 1 (1-5) and
BLOCK 2 (6,7).
Confirm by pressing **OK**.

INDIVIDUAL

- Press +/- for the INDIVIDUAL menu level (1,2,3,4,5,6,7).
- All further entries now refer to every individual day of the week.
Confirm by pressing **OK**.
- 8. Now set the SWITCHING TIME ▲ and the SWITCHING TIME ▼
using the +/- buttons.
Confirm your entry by pressing **OK**.
- 9. Press the **MENU** button to switch to operating mode.

PROGRAMME

- PROG 2/ INDIVIDUELL WEEK** (Individual switching time ▼▲ for week)
- PROG 2/ INDIVIDUELL BLOCK** (Individual switching time ▼▲ for block 1/2)
- PROG 2/ INDIVIDUELL EINZEL** (Individual switching time ▼▲ for individual day)

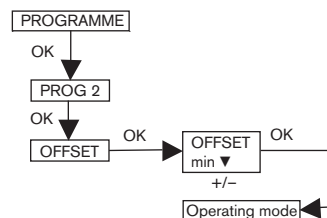


1. Press the **MENU** button.
2. To select the PROGAMME menu, press the + button until
PROGAMME appears.
3. Confirm by pressing **OK**. PROG2 appears.
4. Confirm by pressing **OK**.
5. Press the + button until INDIVIDUAL appears.
6. Confirm by pressing **OK**.

7. Now select the PROG2 INDIVIDUAL function you require using the +/- buttons:
INDIVIDUAL BLOCK
 Press +/- for the BLOCK menu level (BLOCK 1 (1-5), BLOCK 2 (6,7)). All further entries now refer to BLOCK 1 (1-5) and BLOCK 2 (6,7).
 Confirm by pressing **OK**.
INDIVIDUAL:
 Press +/- for the INDIVIDUAL menu level (1,2,3,4,5,6,7). All further entries now refer to every individual day of the week.
 Confirm by pressing **OK**.
WEEK:
 Press +/- for the WEEK menu level (1-7). All further entries now refer to every day of the week.
 Confirm by pressing **OK**.
8. Now set the SWITCHING TIME ▲ and the SWITCHING TIME ▼ using the +/- buttons.
 Confirm your entry by pressing **OK**.
9. Press the **MENU** button to switch to operating mode.

PROGRAMME

PROG 2/OFFSET (e.g. shutters are lowered to ventilation position in the evening)

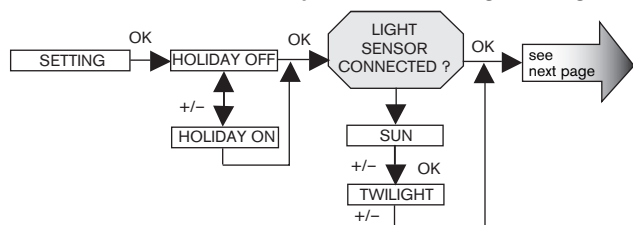


1. Press the **MENU** button.
2. To select the PROGRAMME menu, press the + button until PROGRAMME appears.
3. Confirm by pressing **OK**.
4. Press the + button until PROG2 appears.
5. Confirm by pressing **OK**.
6. Press the + button until the OFFSET menu appears.
7. Confirm by pressing **OK**.
8. You can set the time for the DOWN control command to be triggered separately using the +/- button (max. +/- 240 mins, depending on PROG1 SWITCHING TIME ▼).
 Confirm by pressing **OK**.
9. Press the **MENU** button to switch to operating mode.

Note: Using the SETTING menu level, you must enter the switching time of the intermediate position and select PROG 2 VENTILATION for the position of the end limits.

SETTING

HOLIDAY, LIGHT SENSOR (Holiday OFF/ON, sun/twilight setting)



1. Press the **MENU** button.
2. To select the SETTING menu, press the + button until SETTING appears.
3. Confirm by pressing **OK**. HOLIDAY ON / OFF will appear.
4. You can set the holiday function to ON or OFF by pressing the +/- button.
5. Confirm your selection by pressing **OK**.

Note: This dialog window will only be displayed if a light sensor is connected to the device.

You have confirmed the holiday function. SUN will appear. The value set is displayed.

6. You can reset the sunlight setting by pressing the +/- button. (The two digits at the left of the display show the current light value)
7. Confirm your entry by pressing **OK**.

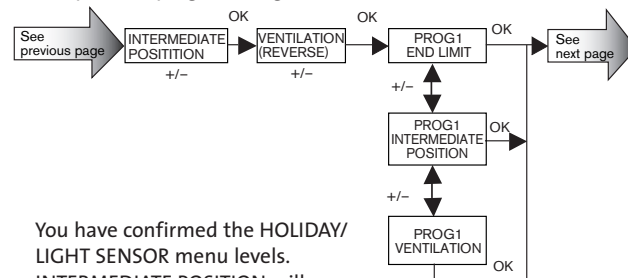
To set the TWILIGHT SETTING, follow the same procedure as for SUN.

The function SUN/TWILIGHT SETTING has now been set.

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

SETTING

INTERMEDIATE POSITION, VENTILATION/REVERSE, PROG 1 END LIMIT (Time/ position programming)



You have confirmed the HOLIDAY/ LIGHT SENSOR menu levels. INTERMEDIATE POSITION will appear.

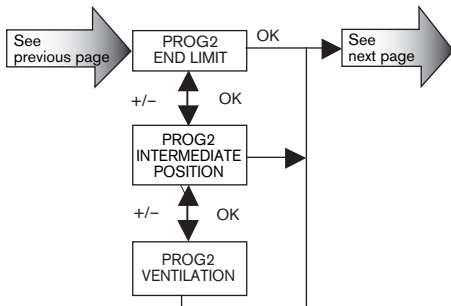
1. You can set the switching time to move to the INTERMEDIATE POSITION using the +/- button. The switching time is indicated in a few seconds or you can move to the INTERMEDIATE POSITION from the upper end limit using the **UP/DOWN** button.
2. Confirm by pressing **OK**.
3. You can set the switching time to move to VENTILATION/REVERSE using the +/- button. The switching time is indicated in a few seconds or you can move to the VENTILATION/REVERSE from the lower end limit using the **UP/DOWN** button.
4. Confirm by pressing **OK**. PROG1 END LIMIT appears.
5. You can select PROG 1 END LIMIT, PROG 1 INTERMEDIATE POSITION and PROG 1 VENTILATION/REVERSE using the +/- button.
6. Confirm your selection by pressing **OK**.

The function PROG1 END LIMIT has now been set.

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

SETTING

PROG 2 END LIMIT (Time/ position programming)



Note: This dialog window will only be displayed if a time is set in PROG2.

You have confirmed the PROG1 END LIMIT menu level. PROG2 END LIMIT will appear.

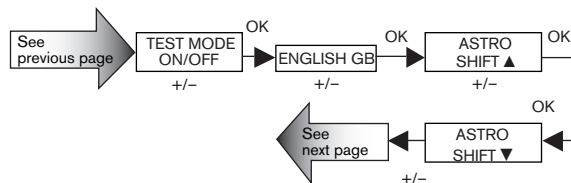
1. You can select PROG 2 END LIMIT, PROG 2 INTERMEDIATE POSITION and PROG 2 VENTILATION/REVERSE using the +/- button
2. Confirm your selection by pressing OK.

The function PROG2 POSITION has now been set.

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

SETTING

ENGLISH GB/ ASTRO SHIFT ▲▼
(Language, astro shift)



Note: The TEST MODE menu level will only be displayed if a light sensor is connected to the device.

You have confirmed the PROG2 END LIMIT menu level. TEST MODE ON/OFF will appear.

1. You can activate or deactivate the TEST MODE (ON/OFF) using the +/- button.
2. Confirm by pressing OK. ENGLISH GB will appear.

Note: To exit from TEST MODE, press the OK button in operating mode.

3. You can set the language required using the +/- button.
4. Confirm the language selected by pressing OK. ASTRO SHIFT ▲ will appear.
5. You can set the required astro shift ▲ (max. +/- 120 mins.) using the +/- button.
6. Confirm by pressing OK. ASTRO SHIFT ▼ will appear.

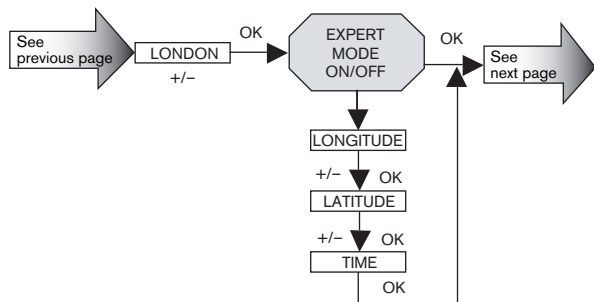
7. You can set the required astro shift ▼ (max. +/- 120 mins.) using the +/- button.
8. Confirm by pressing **OK**.

The function ASTRO SHIFT ▼ has now been set.

Please read on for further programming options using the SETTING menu

SETTING

(City, EXPERT MODE (LONGITUDE, LATITUDE, TIME ZONE))



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

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

Note: These dialog windows (LONGITUDE, LATITUDE, TIME ZONE) are only displayed when the EXPERT MODE in the function menu is ON.

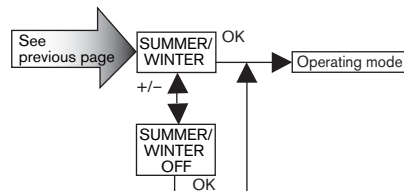
3. You can set the degrees LONGITUDE using the +/- button.
4. Confirm by pressing **OK**. LATITUDE will appear.
5. You can set the degrees LATITUDE using the +/- button.
6. Confirm by pressing **OK**. TIME ZONE will appear.
7. You can set the TIME ZONE you are in using the +/- button. Confirm by pressing **OK**.

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)



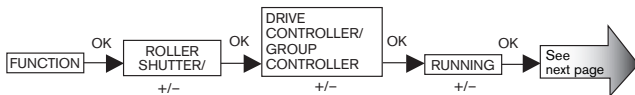
You have confirmed the TIME ZONE function. SUMMER/WINTER will appear.

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

FUNCTION (only when the operating device is disconnected, only for qualified electricians)

ROLLER SHUTTER/BLIND, DRIVE CONTROLLER/ GROUP CONTROLLER, RUNNING TIME

(Selection of shutter/blind, selection of the drive controller/ group controller, running time of the roller shutter/blind)



1. Press the **MENU** button.
2. To select the **FUNCTION** menu, press the **+** button until **FUNCTION** appears.
3. Confirm by pressing **OK**. **ROLLER SHUTTER/BLIND** will appear.
4. You can select either roller shutter or blind using the **+/-** button.
5. Confirm by pressing **OK**. **DRIVE CONTROL DEVICE/GROUP CONTROLLER** will appear.
6. You can select the control device required using the **+/-** button (**DRIVE CONTROL DEVICE/GROUP CONTROLLER**).
7. Confirm by pressing **OK**. **RUNNING TIME** will appear.
8. You can set the required running time using the **+/-** button. (Default setting: 120 seconds).
9. Confirm by pressing **OK**.

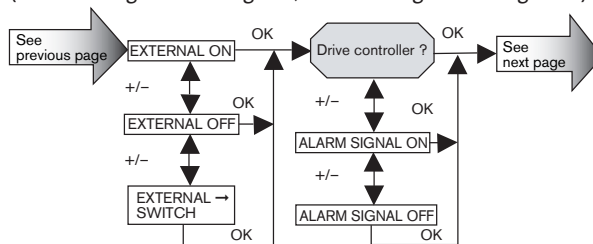
The **RUNNING TIME** function has now been set.

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

FUNCTION (only when the operating device is disconnected, only for qualified electricians)

EXTERNAL ON/OFF/SWITCH, ALARM SIGNAL ON/OFF

(Verarbeitung externer Signale, Verarbeitung von Notsignalen)



You have confirmed the **RUNNING TIME** function. **EXTERNAL ON** will appear.

(**EXTERNAL ON/ OFF/ SWITCH** describes the external control signals. Default setting is **EXTERNAL SWITCH**)

1. You can select the required setting for the control inputs using the **+/-** button.
2. Confirm your selection by pressing **OK**.

Note: The following dialog window will only be displayed if you have selected **DRIVE CONTROLLER**.

ALARM SIGNAL ON will appear. (The default setting is **ALARM SIGNAL ON**.)

3. You can switch the **ALARM SIGNAL** to **ON** or **OFF** using the **+/-** button.
4. Confirm by pressing **OK**.

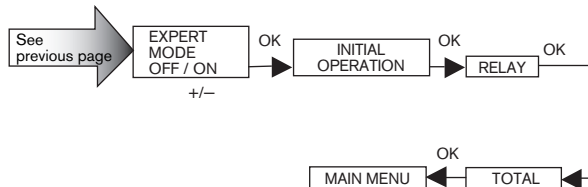
The function **ALARM SIGNAL ON/OFF** has now been set.

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

FUNCTION (only when the operating device is disconnected, only for qualified electricians)

INITIAL OPERATION, RELAY, TOTAL RUNNING TIME

(Date of initial operation, relay switching rate, total running time)



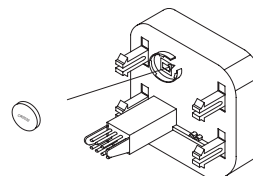
You have confirmed the ALARM SIGNAL ON/OFF. EXPERT MODE OFF/ON will appear.

1. You can select the required setting using the +/- button.
2. Confirm your selection by pressing **OK**. INITIAL OPERATION will appear.
3. Confirm by pressing **OK**. RELAY will appear. (RELAY denotes the relay switching rate.)
4. Confirm by pressing **OK**. TOTAL RUNNING TIME will appear. (TOTAL RUNNING TIME denotes the overall running time of the timer.)
5. Confirm your selection by pressing **OK**.
6. 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 φ =1
Battery type	CR 2032
System of protection	IP 20
Protection class	II
Permissible ambient temperature	0 to +55 °C
Type of installation	Concealed ø 58 mm wall-mounted Exposed in appropriate exposed casing

Battery replacement




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

Note: The values set are still saved.

Cleaning

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

Troubleshooting

Problem	Cause	Remedy
Drive is not functioning.	Faulty connection.	Check the connection.
Drive moves in wrong direction.	Faulty connection.	Exchange Δ and ∇ wires in the power supply unit.
Astro programme doesn't function 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 AstroTec does not carry out the switching commands.	The sliding switch is set to manual  .	Move the sliding switch to automatic.
The AstroTec does not carry out the switching commands precisely.	Holiday function is switched on.	Switch holiday function off.
The sun and twilight parameters cannot be changed and/or are not displayed.	No light sensor is connected or the light sensor and/or the connecting cable is faulty.	Check the light sensor, connecting cable and connector plug.
Roller shutter does not move to the end limit.	<ol style="list-style-type: none"> 1. The set running time is not long enough. 2. No end limit position is set. 	<ol style="list-style-type: none"> 1. Adjust the running time in the function menu. 2. Set the end limit position using the setting menu PROG1/2.

The company elero GmbH hereby declares that the AstroTec is in conformity with the basic requirements and other relevant provisions of the Directive 1999/5/EC.