

AstroTec-868 28 320.0001

AstroTec-868 bidi 28 320.0006

AstroTec-915 bidi 28 320.0906

e l e r o



CE 0682



Operating instructions (translation)

Please keep these instructions in a safe place!

Timer is preprogrammed

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Safety instructions



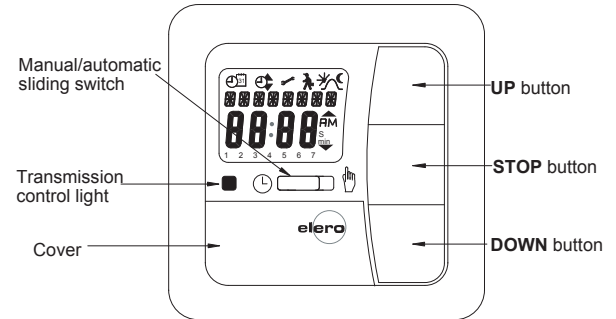
Warning!

Important safety instructions!
Always observe the following instructions.

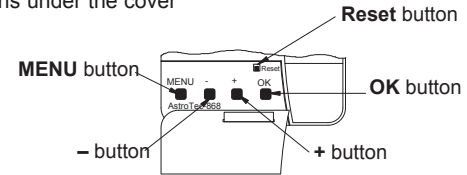
- For use in dry rooms only.
- Use unmodified elero original parts only.
- Keep persons away from the systems guide track.
- Keep children away from controls.
- Always comply with national stipulations.
- Dispose of used batteries properly. Replace batteries with identical type (LR 03/ AAA) only.
- If the system is controlled by one or more devices, the system guide track must be visible during operation.
- The equipment contains small parts that could be swallowed.

Explanation of displays and buttons

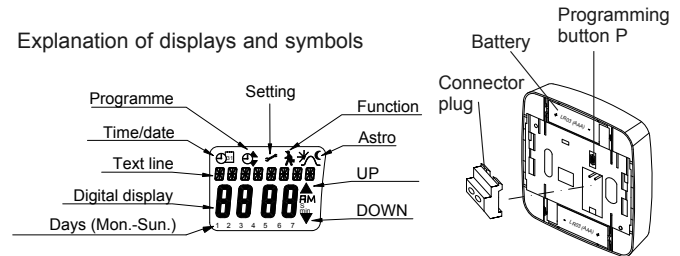
Explanation of displays and buttons



Buttons under the cover



Explanation of displays and symbols



General information

The AstroTec-868/-868 bidi/-915 bidi, delivered from the factory with current date and time settings (GMT), automatically controls the drive at the astro times (sunrise and sundown).

The AstroTec-868/-868 bidi/-915 bidi can be operated manually at any time.

The easy-to-install light sensor allows the AstroTec-868/-868 bidi/-915 bidi to be extended to include a convenient sunshade function (shading plants and furniture).

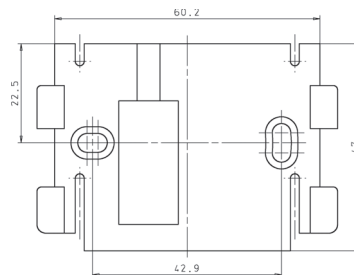
Designated use

The AstroTec-868/-868-bidi/-915 bidi may only be used to control roller shutter and venetian blind systems.

Wall bracket installation

Note: Radio sets transmitting at the same frequency can lead to interference in the reception.

It is to be noted that the range of the radio signal is restricted by legislators and planning regulations.



- Before installation in the required assembly position, check that the transmitter and receiver are functioning properly.
- Fix the bracket onto the wall with the two screws provided.

Initial operation

To activate the AstroTec-868/-868 bidi/-915 bidi 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-868/-868 bidi 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)
– PROG 1 END LIMIT, LONDON
– SUMMER/WINTER ON

FUNCTION: – ROLLER SHUTTER, EXPERT MODE OFF

Note: Press the Reset button (with a ballpoint pen or similar object) to restore the factory settings of the AstroTec 868/-868 bidi.


Exception: Function, language and city menu levels.


Light sensors

Note: If you wish to connect a light sensor to the AstroTec 868/-868 bidi, 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 are executed.

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

Transmission control light

A radio signal is indicated when the transmission control light comes on. If the UP, STOP and DOWN buttons or programming button P on the transmitter are held for a longer period, the transmission control light will go out after 3, 6 and 9 seconds.

This function is a counting aid. After 12 seconds the transmission control light will go out completely.

If the batteries are low, the transmission control light flashes during the transmission process. The transmitter power and/or radio range is reduced when the batteries are low. If the transmission control light no longer lights up when a button is pressed, the batteries have to be replaced.

Operating mode

The time is shown in the display.

OK button

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

Explanation of functions

+/- 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.

Explanation of functions

Programme

PROGRAMME 

The PROGRAMME menu allows you to set various switching times:

1. PROG 1

- 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)

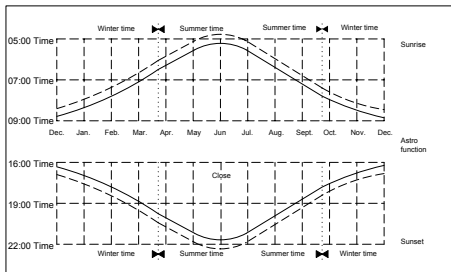
- Individual
 - o Week (1-7)
 - o Block 1/2 (1-5 and 6,7)
 - o Individual (1, 2, 3, 4, 5, 6, 7)

- OFFSET

Explanation of functions

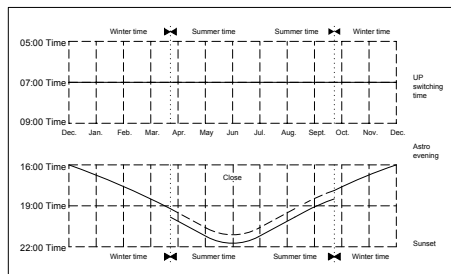
ASTRO

The AstroTec-868/-868 bidi/-915 bidi 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.

Explanation of functions

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

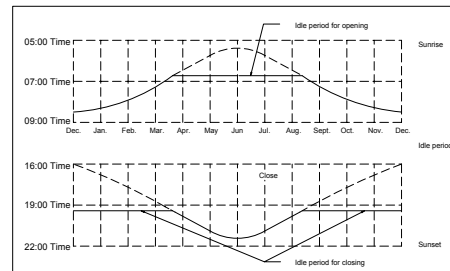
Idle period ▲: 6:30

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.



Explanation of functions

SWITCHING TIME

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

OFFSET

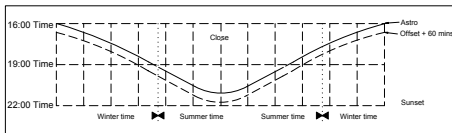
An additional switching time ▼ can be programmed using the OFFSET menu. This depends on the PROG 1 switching time ▼ (max. +/- 240 minutes).

For example:

astro time ▼: 20:00

Offset ▼: +60 minutes

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



Explanation of functions

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 EN)
- ASTRO SHIFT ▲
- ASTRO SHIFT ▼
- City (LONDON)
- LONGITUDE
- LATITUDE
- TIME ZONE
- SUMMER/WINTER (automatic clock adjustment for daylight saving changes)
- PRIORITY
- SHADING

} Only when EXPERT MODE is ON.

} Only when EXPERT MODE is 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 minutes).

END LIMIT

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

Explanation of functions

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 ▼.

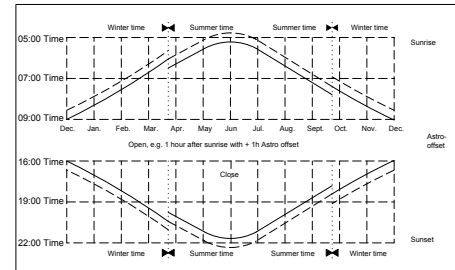
Explanation of functions

Language (ENGLISH EN)

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 minutes).



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

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-868/-868 bidl adjusts itself automatically.

PRIORITY (factory setting priority = OFF, **only visible in expert mode**)

If the priority is switched to "ON", the clock has a higher priority and overrides the manual-automatic sliding switch setting of the hand-held transmitter programmed in the receiver.

Clock commands are executed even if the manual-automatic sliding switch of the hand-held transmitter programmed in the receiver is set to "b".

If the manual-automatic clock sliding switch is set to "b", no clock commands will be executed.

If the priority is "OFF", clock commands are only executed when the manual-automatic sliding switch of the hand-held transmitter programmed in the receiver is set to "c".

SHADING (factory setting shading = OFF, **only visible in expert mode**)

If shading is switched to "ON" the automatic shading system is switched off with the "▼" clock command.

The automatic shading system is switched on by the „▲“ clock command.

PREREQUISITE!

The manual-automatic selection switch of the programmed transmitter has to be set to „c“.

As long as the manual-automatic sliding switch of the programmed transmitter is set to "b", the automatic shading is always switched off and is not affected by the timer.

If shading is switched to "OFF", then the automatic shading system is not influenced by the clock.

FUNCTION

This mode is intended for qualified electricians 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 shutter or blind)
- RUNNING TIME
- EXPERT MODE
- INITIAL OPERATION (for service purposes)

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).

Program transmitters / program end positions AstroTec-868

Note: Below is the programming/deleting procedure for the unidirectional version; the procedure for the bidirectional version takes place from page 22

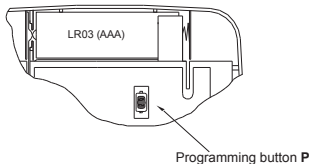
Programming radio channel settings

Programming transmitter/channel

Prerequisite: **The drive must be installed.**

1. With pre-installed electric receivers, the fuse must be disconnected and reconnected after a few seconds. The drive will then remain in programming mode for approximately 5 minutes.

2. Position yourself in front of the roller shutter/blind with the AstroTec-868 in your hand



3. Press programming button P on the back of the device briefly. The shutter/blind will automatically begin to move up and down. This will happen for approximately 2 minutes.

4. To define the keyboard layout, press the UP button of the AstroTec-868 (located on the front of the device) as soon as the shutter/blind begins to move upwards (after approx. 1 second). The shutter/blind will come to a halt briefly. As soon as the shutter/blind begins to move again, press the DOWN button on the AstroTec-868. The shutter/blind will come to a stop. The AstroTec-868 has been successfully programmed.

Program other AstroTec-868 transmitters Delete AstroTec-868 transmitters

Programming additional transmitters

To programme additional transmitters in one receiver, please proceed as follows:

1. Press the UP, DOWN and programming button P on a transmitter that has already been programmed in the receiver until the LED goes out.
2. To define the keyboard layout, press the UP button on the handheld transmitter as soon as the shutter/blind begins to move upwards (after approx. 1 second). The shutter/blind will come briefly to a halt. As soon as the shutter/blind begins to move again, press the DOWN button on the handheld transmitter. The shutter/blind will come to a stop. The transmitter or this channel has been successfully programmed.

Deleting individual transmitters

Disconnect the fuse – and reconnect after a few seconds.

1. Press the following buttons simultaneously:
 - Programming button P (on back of device)
 - STOP button (on front of device)
2. Keep these two buttons pressed until the LED goes out briefly (approx. 3 seconds).

Deleting all transmitters

Disconnect the fuse – and reconnect after a few seconds.

1. Press the following buttons simultaneously:
 - Programming button P (on back of device)
 - UP button
 - STOP button
 - DOWN buttonon front of device
2. Keep all of these buttons pressed until the LED goes out.

The AstroTec-868 bidi (item No 28 320.0006) is a radio wall transmitter for **exclusive use with bi-directional receivers** (use of the AstroTec-868 bidi with unidirectional transmitters and receivers is not possible, in this case please use the previous model AstroTec-868 (item No 28 320.0001) resp. AstroTec-915 (item No 28 320.0906).

Teach-in /deletion of the radio transmitter

As long as the AstroTec-868 bidi/-915 bidi has not been prepared for the teach-in on at least one receiver, an acoustic signal sounds each time a key is activated in order to inform about the omitted teach-in.

Transmitter teach-in

Requirement: The drive must be installed

For bi-directional receivers already installed electrically, please switch the safety control off and switch it on again after a few seconds. The drive is now ready for the teach-in for a period of approx. 5 minutes.

Stand directly in front of the hanging with the AstroTec-868 bidi/-915 bidi.

Press the teach-in button **P** on the rear side of the device. The hanging moves up and down independently for approx. 2 minutes.

To define key allocation, please press the **UP** button (maximum 1 second) on the AstroTec-868 bidi (front-side of the device) directly after an upward movement and the status of bi-directional teach-in is signaled acoustically.

The roller shutter stops briefly and then continues its movement.

Please press the **DOWN** button on the AstroTec-868 bidi/-915 bidi **directly** after the start of a downward movement and the status of the bi-directional teach-in is signaled acoustically.

The roller shutter stops.

The AstroTec-868 bidi/-915 bidi teach-in is now completed.

Teach-in for further transmitters

If you want to teach-in further transmitters on the receiver, you may proceed as follows:

Press the **UP- DOWN** and teach-in **P** button on the already programmed transmitter until the LED extinguishes.

Press the teach-in button **P** on the rear side of the device briefly.

The hanging moves up and down independently for approx. 2 minutes.

To define the key allocation, please press the **UP** button (maximum 1 second) on the AstroTec-868 bidi (front-side of the device) directly after the upward movement and the status of bi-directional teach-in is signaled acoustically.

The roller shutter stops briefly and then continues its movement.

Please press the **DOWN** button on the AstroTec-868 bidi directly after the start of a downward movement and the status of the bi-directional teach-in is signaled acoustically.

The roller shutter stops.

The AstroTec-868 bidi/-915 bidi teach-in is now completed.

Delete individual transmitters

Press the teach-in button **P** (on the rear side of the device) and the **STOP**- button (on the front of the device) **simultaneously**.

Continue to hold this combination of keys until the LED extinguishes briefly a second time (approx. 6 seconds).

Delete all transmitters

Press the teach-in button **P** (on the rear side of the device) and the **UP**, **DOWN** and **STOP** buttons (on the front of the device) simultaneously.

Continue to hold this combination of keys until the LED extinguishes briefly a second time (approx. 6 seconds).

Programming/deletion of the radio transmitter

As long as the AstroTec-868 bidi/-915 bidi has not been programmed for at least one receiver, each press of a button results in an acoustic signal being issued to inform you that programming must yet take place.

Programming the transmitter

Condition: the drive must be installed

1. With electrical, previously installed bidirectional receivers, turn the safety fuse off and after a few seconds on again. The actuator is now in programming mode for a period of approximately 5 minutes.
2. Position yourself in front of the roller shutter with the AstroTec-868 in your hand.
3. Press the programming button **P** on the back of the device briefly. The shutter will automatically begin to move up and down for approx. 2 minutes.
4. In order to define the keyboard layout, press the **UP** button (front of the device) on the AstroTec-868 bidi/AstroTec-915 bidi immediately (max. 1 second) after beginning upward motion; the status of the bidirectional programming is acoustically signalised.

The roller shutter stops briefly and then continues to travel again. Press the **DOWN** button on the AstroTec-868 bidi/-915 bidi immediately after beginning downward travel; the status of bidirectional programming is acoustically signalised. The roller shutter stops.

The AstroTec-868 bidi /-915 bidi is now programmed.

Programming further transmitters

If you wish to program other transmitters to the receiver you can proceed as follows:

1. On a transmitter, which has already been programmed to the receiver, press the **UP**, **DOWN** and the programming button **P** until the LED goes out.
2. Press the programming button **P** on the back of the device briefly. The shutter will automatically begin to move up and down for approx 2 minutes.
3. In order to define the keyboard layout, press the **UP** button (front of the device) on the AstroTec-868 bidi/-915 bidi **immediately** (max. 1 second) after beginning upward motion; the status of the bidirectional programming is acoustically signalled. The roller shutter stops briefly and then continues to travel again. Press the **DOWN** button on the AstroTec-868 bidi/-915 bidi **immediately** after beginning downward travel; the status of bidirectional programming is acoustically signalled. The roller shutter stops. The AstroTec-868 bidi/-915 bidi is **now programmed**.

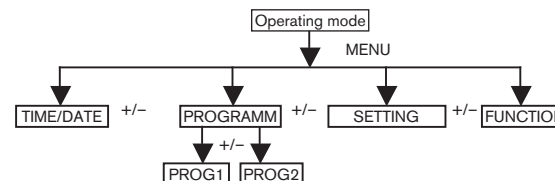
Deletion of individual transmitter

1. **Simultaneously** press programming button **P** (rear of the device) and the **STOP** button (front of the device)
2. Keep this button combination pressed until the LED goes out briefly for a second time (approx. 6 seconds)

Deletion of all transmitters

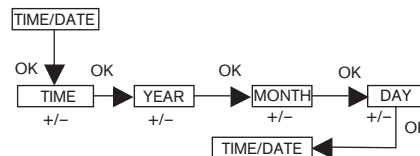
1. Simultaneously press the **programming button P** (rear of the device) and buttons **UP** and **DOWN** and **STOP** (front of the device)
2. Keep this button combination pressed until the LED goes out briefly for a second time (approx. 6 seconds)

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.

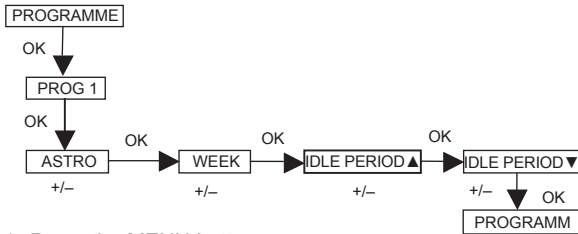
TIME/DATE (to set the time and date)



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 block 1/2 + 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:
 ASTRO 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.
 ASTRO 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.

ASTRO 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.
 Confirm each entry by pressing OK.
9. Press the MENU button to switch to operating mode.

PROGRAMME

PROG 1/ASTRO EVENING WEEK

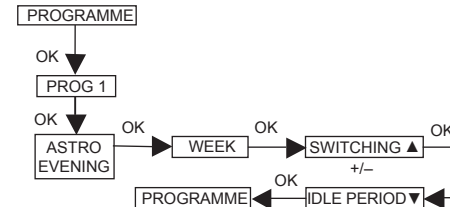
(Astro function evening for week + switching time ▲ + idle period ▼)

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 ▼)

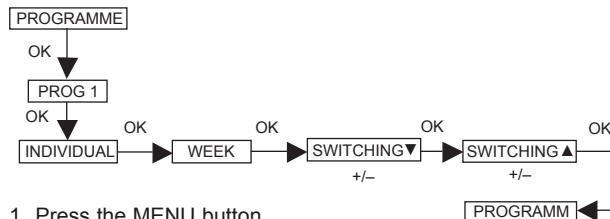


1. Press the MENU button.
2. To select the PROGRAMME menu, press the + button until PROGRAMME appears.
3. Confirm by pressing OK. PROG1 appears.

4. Confirm by pressing OK. ASTRO EVENING appears.
5. Confirm by pressing OK.
6. Now select the PROG1 ASTRO function you require using +/- :
 ASTRO EVENING 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.
 ASTRO EVENING 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.
 ASTRO EVENING 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.
 Confirm your entry by pressing OK.
8. Now set the IDLE PERIOD ▼ using the +/- buttons.
 Confirm your entry by pressing OK.
9. Press the MENU button to switch to operating mode.

PROGRAMME

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



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

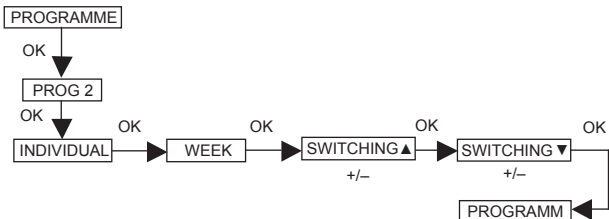
- Now set the SWITCHING TIME ▲ and the SWITCHING TIME ▼ using the +/- buttons. Confirm each entry by pressing OK.
- Press the MENU button to switch to operating mode.

PROGRAMME

PROG 2/INDIVIDUAL WEEK (Individual switching time ▼▲ for week)

PROG 2/INDIVIDUAL BLOCK (Individual switching time ▼▲ for block 1/2)

PROG 2/INDIVIDUAL INDIVIDUAL (Individual switching time ▼▲ for individual day)



- Press the MENU button.
- To select the PROGRAMME menu, press the + button until PROGRAMME appears.
- Confirm by pressing OK.
- Press the + button. PROG 2 appears.
- Confirm by pressing OK.
- Press the + button until INDIVIDUAL appears.
- Confirm by pressing OK.

- Now select the PROG 2 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 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.

INDIVIDUELL WOCH

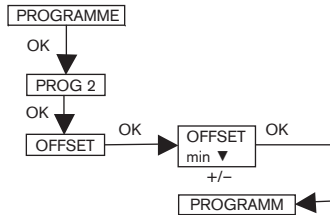
Press +/- for the WEEK menu level (1-7). All further entries now refer to every day of the week.

Confirm by pressing OK.

- Now set the SWITCHING TIME ▲ and the SWITCHING TIME ▼ using the +/- buttons. Confirm your entry by pressing OK.
- Press the MENU button to switch to operating mode.

PROGRAMME

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

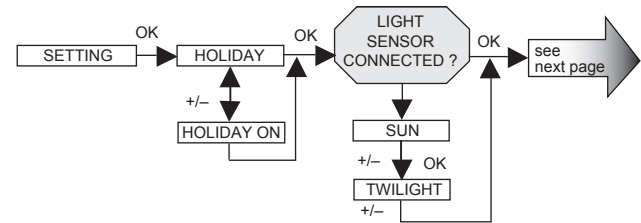


1. Press the MENU button.
2. To select the PROGRAMME menu, press the + button until PROGRAMME appears.
3. Confirm by pressing OK.
4. Press the + button until PROG 2 appears.
5. Confirm by pressing OK.
6. Press the + button until the OFFSET menu appears.
7. Confirm by pressing OK.
8. You can set the time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

N.B.: 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 on the left of the display show the current light value)
7. Confirm your entry by pressing OK.

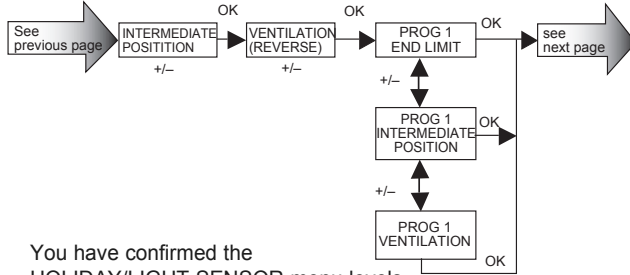
To set the TWILIGHT SETTING, follow the same procedure as for SUN.

The SUN/TWILIGHT function 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.

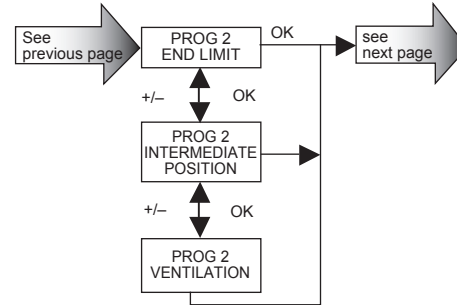
1. You can set the switching time to move to the INTERMEDIATE POSITION using the +/- button. The switching time is indicated in a few seconds or you can move to the INTERMEDIATE POSITION from the upper end limit using the UP/DOWN button.
2. Confirm by pressing OK.
3. You can set the switching time to 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. PROG 1 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 PROG 1 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 PROG 1 END LIMIT menu level.
PROG 2 END LIMIT will appear.

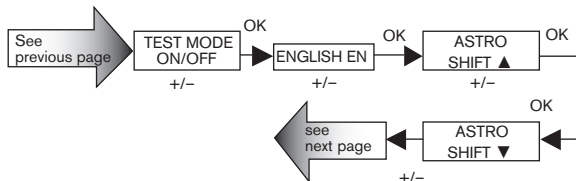
1. You can select PROG 2 END LIMIT, PROG 2 INTERMEDIATE POSITION and PROG 2 VENTILATION/REVERSE using the +/- button.
2. Confirm your selection by pressing OK.

The function PROG 2 POSITION has now been set.

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

SETTING

ENGLISH EN/ 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 PROG 2 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 EN 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 minutes) using the +/- button.
6. Confirm by pressing OK. ASTRO SHIFT ▼ will appear.

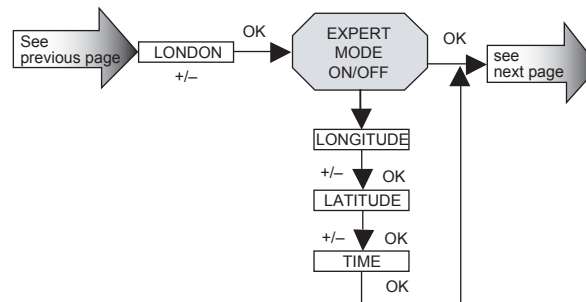
7. You can set the required astro shift ▼ (max. +/- 120 minutes) using the +/- button.
8. Confirm by pressing OK.

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.

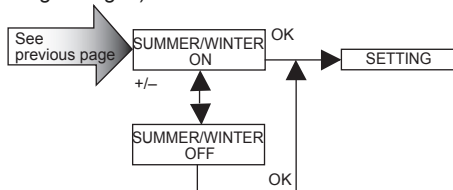
3. You can set the degrees LONGITUDE using the +/- button.
4. Confirm by pressing OK. LATITUDE will appear.
5. You can set the degrees LATITUDE using the +/- button.
6. Confirm by pressing OK. TIME ZONE will appear.
7. You can set the TIME ZONE you are in using the +/- button. Confirm by pressing OK.

The TIME ZONE function has now been set.

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

SETTING

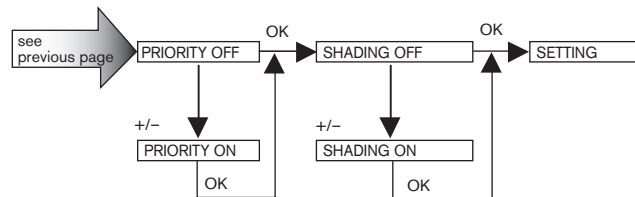
SUMMER/WINTER (Automatic clock adjustment for daylight saving changes)



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.

(PRIORITY FOR CLOCK/HAND-HELD TRANSMITTER, SHADING FUNCTION)



You have confirmed the SU/WI menu item. PRIORITY appears.

1. You can switch the priority function on or off with the +/- key.
2. Confirm your selection with **OK**. The PRIORITY function is set now.

You have confirmed the PRIORITY menu item. SHADING appears.

1. You can switch the shading function on or off with the +/- key.
2. Confirm your selection with **OK**. The SHADING function is set now.
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)

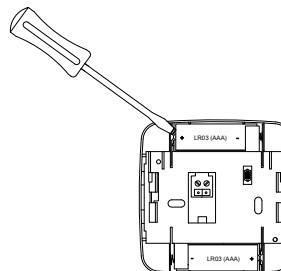


1. Press the MENU button.
2. To select the FUNCTION menu, press the + button until FUNCTION appears.
3. Confirm by pressing OK. ROLLER SHUTTER/BLIND will appear.
4. You can select either roller shutter or blind using the +/- button.
5. Confirm by pressing OK. RUNNING TIME will appear.
6. You can set the required running time using the +/- button. (Default setting: 120 seconds).
7. Confirm by pressing OK. EXPERT MODE ON/OFF will appear.
8. You can make the setting you require using the +/- button.
9. Confirm your selection by pressing OK. INITIAL OPERATION will appear.
10. Confirm by pressing OK.
11. Press the MENU button to switch to operating mode.

Technical data

Nominal voltage	3 V DC
Battery type	2 x LR 03 (AAA)
System of protection	IP20
Permissible ambient temperature	0 to +55 °C
Type of installation	Wall-mounted
Radio frequency	868 / 915 MHz

Battery replacement





1. Remove the batteries.
2. Insert the new batteries properly.

Note! The batteries must be replaced within one minute. When changing the batteries, ensure that no buttons are pressed.

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 is not functioning. Transmission control light is not illuminated.	1. Batteries are low. 2. Batteries are inserted	1. Replace batteries. 2. Remove batteries and re-insert correctly.
Drive is not functioning. Transmission control light is illuminated.	1. Receiver is outside the radio operating range. 2. Transmitter has not been programmed into the receiver.	1. Reduce the distance to the receiver. 2. Programme the transmitter.
Astro programme doesn't function properly.	1. Date is incorrect. 2. Wrong city or wrong latitude/ longitude setting. 3. Holiday function is switched on. 4. Astro shift is set.	1. Set correct date. 2. Set correct city or exact degrees latitude/longitude. 3. Switch holiday function off. 4. Adjust astro shift.
The AstroTec-868 does not carry out the switching commands.	The sliding switch is set to "MAN  .	Move the sliding switch to "AUTO  .
The AstroTec-868 does not carry out the switching commands precisely.	Holiday function is switched on.	Switch holiday function off.

Troubleshooting

Problem	Cause	Remedy
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.	No end limit position is set.	Set the end limit position using the setting menu PROG1/2.
Transmission control light is flashing.	Batteries are low.	Replace batteries.
Transmitter doesn't respond following battery replacement.	Power supply was interrupted for too long.	Press RESET button. Check settings.

Declaration of conformity:

elero GmbH hereby declares that the AstroTec 868 / AstroTec-868 bidi / AstroTec-915 bidi complies with the basic prerequisites and the other relevant provisions of the EC directives. The complete declaration of conformity can be found in the download area of our website.

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