



Tastor Lux Astro

GB

Operating Instructions

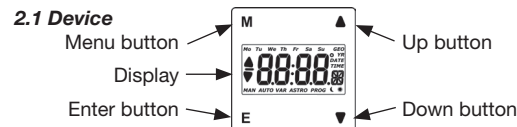
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1. Safety instructions

- Risk of injury through an electric shock. Improper installation can lead to serious damage to persons or property. Terminal connections must be carried out by an authorised electrician.
- Disconnect all connecting cables throughout the system before carrying out installation or maintenance.
- Take security measures against accidental activation.
- The provisions of the local public utilities and stipulations for wet and damp rooms in accordance with VDE 100 must be observed when the system is connected.
- Use in dry rooms only.
- For use with unmodified original Kaiser Nienhaus parts
- Keep persons away from the systems operating range.
- Keep children away from controls.
- Always observe country-specific regulations.
- If the system is controlled by one or more devices, the system operating range must be visible during operation.

2. Explanation of displays and buttons



Menu button:
Briefly press → change the mode
Press for 3 secs → set switching time
Press for 6 secs → activate the menu setting
Press for 9 secs → activate the extended menu

Enter button:
Briefly press → confirm the value set
Press for 10 secs → reset all settings

Up and down button:
Drives the roller shutter in the desired direction, stops the roller shutter and displays the valid switching times.

2.2 Display



3. General

The Tasstor Lux Astro runs the drive in the morning and evening at the programmed switching times or in the evening at the Astro time (sunset). You can also connect a light sensor, which makes it possible to control the device via a sunlight value. Group and central control units can be installed by adding extension inputs (subject to version). Manual operation is possible at any time.

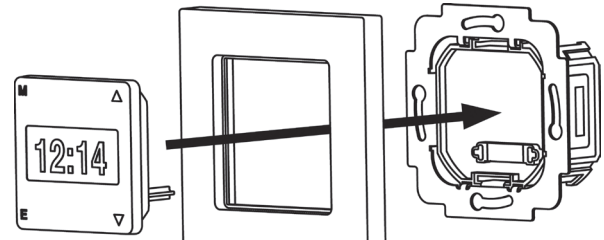
4. Designated use

The Tasstor Lux Astro may only be used for controlling roller shutter systems.

5. Installation/Connection

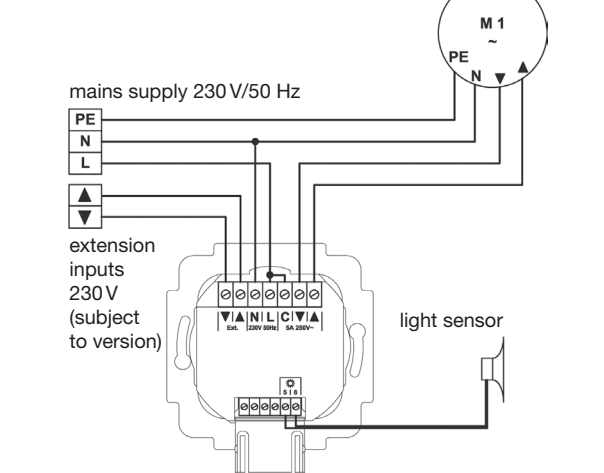
- Risk of injury through an electric shock. Improper installation can lead to serious damage to persons or property. Terminal connections must be carried out by an authorised electrician.
- If two or more motors are being controlled via the Tasstor Lux Astro, the motors must be decoupled by relay controls. The switched current of the device must be observed at all times.

5.1 Installation



Connect the power unit to the mains and secure it in the flush-mounted socket. Attach the the display, including the frame. Thanks to its total dimensions of 50 x 50 mm, the Tasstor Lux Astro will fit into a wide variety of switching devices made by leading manufacturers. A suitable adapter will mostly be required.

5.2 Connection



5.3 Installing/Connecting the light sensor

Attach the light sensor as low as possible on a pane of window glass using the suction cup. Make the connection to the Tastor Lux Astro via the plug on the top of the power supply unit. Alternatively, you can also connect individual wires to the low voltage terminal block under the protective cap at positions 5 and 6. Light sensors for outside installation can also be connected in this way.

5.4 Extension inputs (subject to version)

Group and central control units can be installed by adding 230 V extension inputs. Connect up to the Tastor Lux Astro using the long terminal block. Incoming signals are defined as follows:
 • Signals < 1 second mean 'Stop' (or running on for a moment before stopping).
 • Signals > 1 second will switch to automatic mode. Manual operation remains possible.
 • Signals > 3 seconds are emergency signals (showing 'SOS' on the display), manual operation is no longer possible. Signals (with the exception of emergency signals) are executed only in *automatic*, *random* and *astro* mode.

6. Initial operation

Insert the battery provided into the battery compartment in the back of the display and then slide it into the power unit connected up to the mains supply. The first time the device is connected to the power supply the setting menu will open automatically and the clock will begin to run from the preset time.

7. Factory setting

- Menu setting
 - Latitude: 51.3° N
 - Longitude: 9.5° E
 - Time zone: + 1h
 - Astro shift: 0 min.
 - Date and time: 30.06.2013, 12:00
 - Daily program

- Manual mode

- Daily program switching times:
 - Monday to Sunday: Open 7:00, Close 20:00
- Weekly program switching times:
 - Monday to Friday: Open 7:00, Close 20:00
 - Saturday and Sunday: Open 8:00, Close 20:00

8. Explanation of functions/terms used

8.1 Operating possibilities

The clock has four different modes:

- Manual
- Automatic
- Random
- Astro evening

The respective mode can be changed by briefly pressing the menu button.

8.1.1 Manual mode

No automatic opening or closing is executed in this mode. The symbol 'MAN' appears in the display as an indicator.

8.1.2 Automatic mode

In this mode the roller shutter is opened and closed in accordance with the programmed running times. The symbol 'AUTO' appears in the display as an indicator. Should no running time be executed, this can be switched off by setting the switching time between 23:59 and 0:00. 'OFF' appears in the display.

8.1.3 Random mode

In this mode, the programmed running times are changed in a range of +/- 15 minutes. The symbols 'AUTO' and 'VAR' appear in the display.

8.1.4 Astro evening mode

In this mode, the opening times are executed according to the programmed switching times. The closing times are recalculated on a daily basis in accordance with the sunset time at the programmed location. In the display, the symbols 'AUTO' and 'ASTRO' appear at the same time. The astro time course can be adapted in the menu setting in the menu item *Astro shift*.

8.2 Memory function

Once you have configured the clock as a daily timer and selected either the *automatic* or *random* mode, a memory function is integrated in addition. In order to reset an opening time, press the open button until the writing 'donE' appears in the display. This action saves the new current time as opening time. By pressing and holding down the down button, the current time can be saved as the closing time at the same time.

8.3 Menu setting

You can enter menu setting by pressing the M button for 6 secs.

8.3.1 Latitude and longitude

For the Astro function, it is necessary to enter the clock's position in latitude and longitude. Under the first menu item the latitude is entered as a decimal number. The symbols 'GEO' and 'N' appear in the display. Southern latitudes are entered with the negative sign. Under the next menu item the longitude is entered. 'E' appears in the display to indicate the longitude setting. Western longitudes are entered with the negative sign. The data of the city of Kassel is entered as preset latitudes and longitudes. You can find the values for your location from an atlas, a navigation device or on the internet (e.g. www.calsky.com). The values for some large European cities are printed in the city coordinates table.

8.3.2 Time zone

Here you can set your time zone. This menu item is preset to +1h (MEZ). The symbols 'GEO' and 'h' appear in the display.

8.3.3 Astro shift

The *Astro time* course can be adjusted in the range of +/- 120 minutes. The calculated operation times are shifted by the value entered. The symbols 'ASTRO', 'PROG' and 'm' appear in the display.

8.3.4 Date and time

Firstly program the year. The symbol 'YR' appears in the display. After confirming, enter the month and day in one step. The symbol 'DATE' appears in the display. The weekday automatically changes with the date. Finally, enter the time. The symbol 'TIME' appears in the display. The summer/winter time is automatically changed by the calendar stored in the Tasstor Lux Astro

8.3.5 Daily/weekly program

In this menu item you determine whether the clock works with the daily program (each day with the same opening and closing time) or with the weekly program (different opening and closing times for each day). In the case of the daily program, all weekday symbols and a '1' appear in the display. By pressing the up button, you retrieve the weekly program, the symbol 'Mo' and '1..7' appear in the display. By pressing the down button you return to the daily program.

8.4 Extended menu

By pressing the M button for 9 seconds you can make the extended menu appear.

8.4.1 Sunshine values

If you have connected up a light sensor, the 'Prog' symbol and 'Sun' will appear on the display. The light sensor is disabled by default, and the word 'OFF' is displayed. By pressing the ▲ you will cause two values between 1 (dark) and 15 (bright) to appear. The first number indicates the current intensity of light and the second shows an adjustable threshold value. If the value currently being measured is too dark or too bright for the measurable interval, then '–' is displayed. If no light sensor is connected, then the setting for sunlight values is disabled.

If the measured value is higher than the set threshold value for 3 minutes, the roller shutters will move into the intermediate position (or into their lower end position if no intermediate position has been set).

If the light sensor is covered by shade before the roller shutters reach the intermediate position, then the roller shutters will run back up until the sensor is once more out of the shade.

If the sunlight value remains below the set threshold value for 15 minutes in this position, then the roller shutters move back up again until the light sensor is back out of the shade or it reaches its upper end position.

The sunlight function is executed only in *automatic*, *random* and *astro* mode.

8.4.2 Twilight values

The light sensor also supplies values to be used for the twilight function: however, these values differ from sunlight values. If you have a light sensor connected, the 'Prog' symbol and 'Moon' will appear on the display. The light sensor is disabled by default, and the word 'OFF' is displayed. By pressing the ▲ you will make two values between 1 (dark) and 15 (bright) appear. The first number indicates the current intensity of light and the second shows an adjustable threshold value. If the value currently being measured is too dark or too bright for the measurable interval, then '–' is displayed. If no light sensor is fitted, then the setting for twilight values is disabled. If light value remains under the set threshold value for 3 minutes, the roller shutters move down to their lower end position. The twilight function is only enabled between 15:00 and 00:00. During this time the roller shutters will be moved down only once.

The twilight function is executed only in *automatic*, *random* and *astro* mode.

8.4.3 Runtime of the roller shutter

This function allows you to restrict the runtime of the roller shutters. To do this, find out the time that the roller shutters need to get from their lower to their upper end position. The display shows the 'Prog' symbol and '180s'. You can choose from an interval of between 2 and 180 seconds for your time setting. The '∞' symbol stands for an infinite time; if the time is set to this then the relay remains open until the relay in the opposite direction is actuated.

8.4.4. Intermediate position

This menu item is used for setting the time of how long you want the roller shutters to move down in order to reach their intermediate position. The display shows '–', '▼' and 'Prog'. The intermediate position is disabled by default, which the display indicates by showing the word 'OFF'. In this state the intermediate position is the same as the lower end position. You can set these times for the roller shutters to anything between 2 seconds and the set runtime of the roller shutters, which has a maximum of 180 seconds, by pressing the ▲ button. You can make the roller shutters move from their upper end position to the intermediate position by pressing the ▼ button for a short time (< 1 second). The sunshine function will also have this effect. You can make the roller shutters move to their lower end position by pressing the ▼ button for a little longer (> 1 second).

8.4.5. Ventilation position

This menu item is used for setting the time of how long the blinds should move back up again after moving down automatically in order to reach their ventilation position. The display shows '–', '▲' and 'Prog'. The ventilation position is disabled by default, which the display indicates by showing the word 'OFF'. You can set the times for the roller shutters to anything between 0.1 seconds and 25 seconds, up to a maximum of the runtime set for them, by pressing the ▲ button. You can make the roller shutters move to the ventilation position using the timer or twilight function.

8.4.6. Group control

If Tasstor Lux Astro is used as central control or group control unit, different signals are sent to the connected devices. Therefor the group control has to be enabled. The symbols 'G' and 'Prog' are shown on the display. This function is disabled by default, which the display indicates by showing the word 'OFF'. You can enable the group function by pressing the ▲ button. The word 'On' then appears on the display. When a command is given to move the roller shutters in group mode, the relay is switched on for a period of 1.5 seconds, and the roller shutters continue to move internally as if the relay was switched on the whole time. Once the run has been completed (e.g. once the roller shutter has been stopped manually or has arrived at its intermediate position) a short counter-impulse (lasting 0.1 seconds) is sent for the opposite direction.

8.5 Reset

By pressing and holding down the enter button for 10 seconds, you restore all settings to the factory settings.

9. Technical data

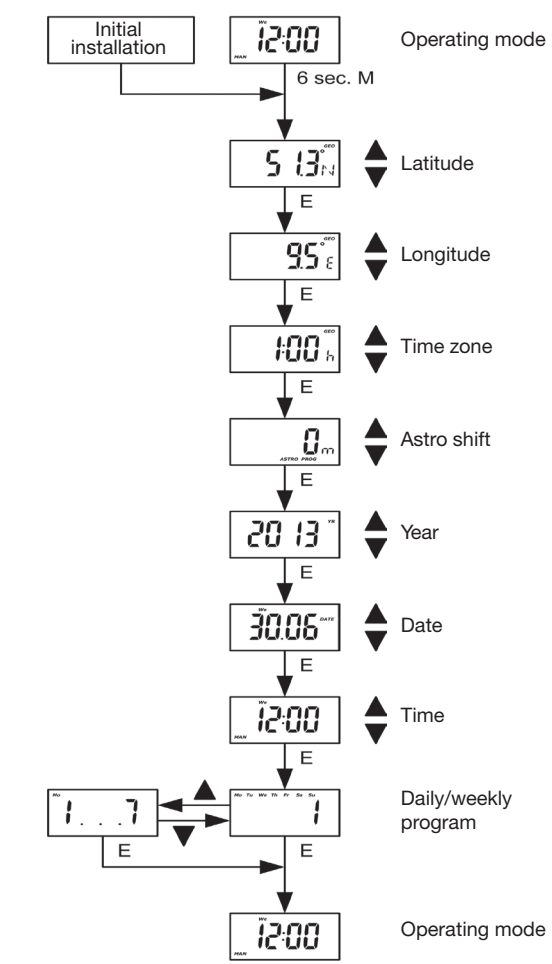
- Nominal voltage: 230 V AC/50 Hz
- Switched current: 5 A/250 V AC for cos φ=1
- Contact voltage of the extension inputs: 230 V
- System of protection: IP 20
- Protection class: II provided the device has been properly installed in accordance with the specifications
- Permissible ambient temperature: 0 to +55 °C
- Power reserve: min. 10,000 hrs
- Battery: CR 2032
- Type of installation: Concealed Ø 58 mm wall-mounted, exposed in appropriate exposed casing

10. General conformity declaration

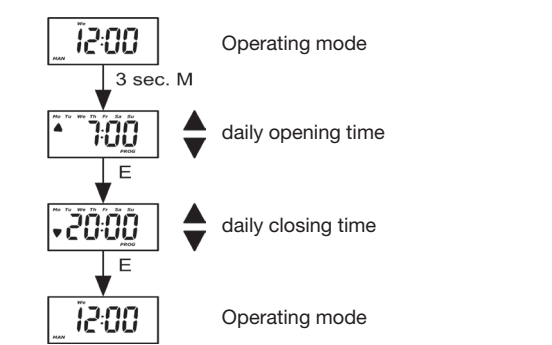
The company Kaiser Nienhaus GmbH, hereby declares that the Tasstor Lux Astro is in conformity with the basic requirements and other relevant provisions of the Directive 2006/95/EG and 2004/108/EG.

11. Programming

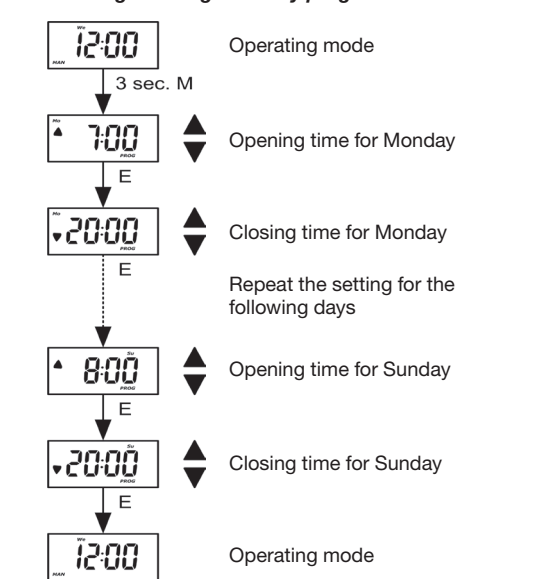
11.1 Programming – Setting and initial installation



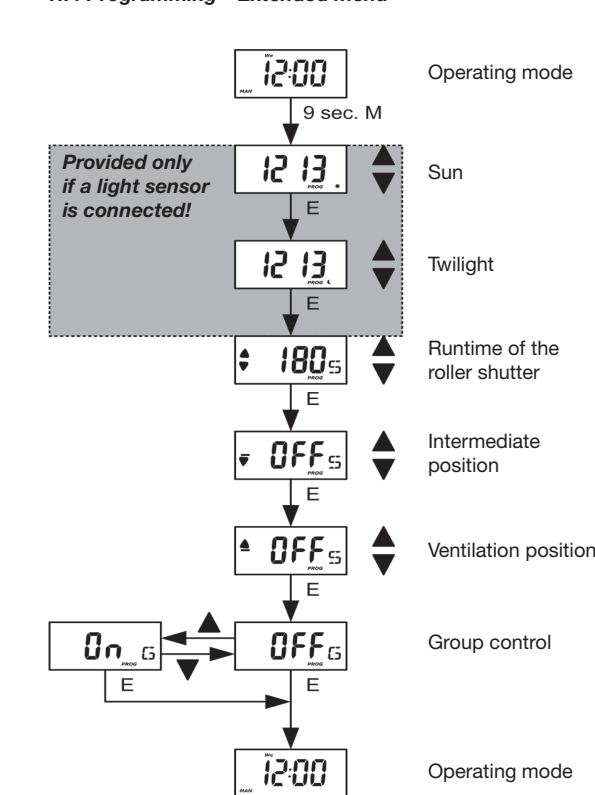
11.2 Programming – Daily program



11.3 Programming – Weekly program



11.4 Programming – Extended menu



12. City coordinates

City	Latitude (N)	Longitude
Kassel	51.3	9.5
Berlin	52.5	13.4
Hamburg	53.6	10.0
Cologne	50.9	7.0
Stuttgart	48.8	9.2
Munich	48.1	11.6
Vienna	48.2	16.4
Klagenfurt	46.6	14.3
Bern	46.9	7.4
Paris	48.8	2.4
Rennes	48.1	-1.7
Bordeaux	44.8	-0.6
Lyon	45.8	4.8
Brussels	50.8	4.4
Amsterdam	52.4	4.9
Warsaw	52.2	21.0
Poznan	52.4	17.0
Prague	50.1	14.4
Budapest	47.5	19.0
Zagreb	45.8	16.0
Madrid	40.4	-3.7
Barcelona	41.4	2.2
Lisbon	38.7	-9.1



KAISER NIENHAUS GmbH
Münsterstraße 30b
46395 Bocholt

Tel.: +49/2871/246506
Fax: +49/2871/2465070
E-mail: info@kaiser-nienhaus.de