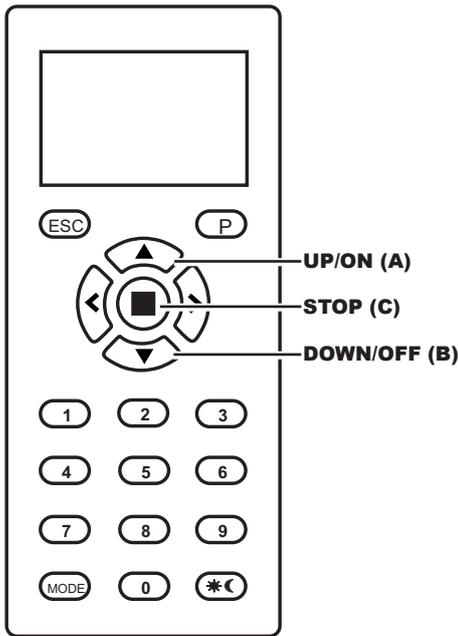


**Model**



RT39E5023-01

**Technical data**

Frequency:	868.30 MHz
Radiated power:	0.02 mW
Modulation:	FSK
Coding:	Easywave
Range:	
- free field conditions	approx. 150 m
- in the building	approx. 30 m
Channels:	30
Memory slots:	99
Voltage supply:	1 x CR2430 or CR2032 (The term of the transmitter shortened by use CR2032.)
Power reserve:	approx. 1 min
Operating Temperature:	0 °C to +50 °C
Dimensions:	approx. 120 x 52 x 13 mm
Weight:	74 g (incl. battery CR2430)

**Scope of delivery**

Hand transmitter incl. timer RT39, operating instructions, battery CR2430

**Intended use**

The hand transmitter RT39 may only be used to operate Easywave radio receivers. The manufacturer shall not be liable for any damage caused by improper or non-intended use!

**Safety instructions**



Please read the operating instructions carefully before using the hand transmitter!

- Also read the operating instructions for the devices to be controlled!
- The automatic control of systems or devices that need to be supervised is not permitted!
- Do not modify the devices!
- Keep the hand transmitter and the batteries away from children!
- Have faulty hand transmitters checked by the manufacturer!

**Factory settings**

The hand transmitter has been programmed with the following settings:

- Time: 00:00 o'clock, date 01. Jan 2015
- Number of channels: 30
- Temporal offset: sunrise/sunset ± 0 minutes
- The ASTRO function has been programmed with the coordinates of Berlin (52° N, 13° E).
- Time zone UTC +1

Switching times have not been programmed. The factory settings can be reset at any time (see page 7).

**Function**

The hand transmitter RT39 is used in order to operate Easywave radio receivers, e. g. lights, shutters or blinds, manually or time-dependent. The hand transmitter has 30 radio channels so that radiograms can be sent to control up to 30 Easywave radio receivers individually or simultaneously. The radio channels can be combined in up to 9 groups for the simultaneous control. It is possible to program up to 99 switching times. In case of any voltage supply interruption, the switching times remain programmed.

**The following operating modes are available:**

**1. Automatic mode:**

Receivers are controlled depending on time or with the help of the ASTRO function. The programmed switching times are active.

**The following settings are available in automatic mode:**

- **Day function:** switching period 24 hours or **week function:** switching period one week
- **Individual switching times:** Different switching times can be programmed for each radio channel, each weekday or several weekdays.
- **Intermediate position:** Lowering shutters to a desired shade position.

**2. Manual mode:**

Receivers are controlled only by pressing a button. Manual operation is possible in all of the modes.

**3. Automatic mode with partial manual mode:**

The programmed switching times as well as the sun protection/twilight mode are deactivated until 00:00 o'clock. All of the radio receivers are controlled manually. At midnight (00:00 o'clock), the clock returns automatically to automatic mode.

**4. Automatic mode with holiday mode:**

Shutters and other Easywave radio receivers are operated with a random temporal offset (max. ±30 minutes) to the programmed times in automatic mode. That way, your house appears to be occupied during your absence.

**Additional functions:**

**Sun protection mode:**

It is possible to activate or deactivate a sun protection mode that is supported by a receiver. If a set brightness value is exceeded and the sun protection mode is activated, the receiver will lower the shutter automatically to a shade position. This function has to be supported by the receiver in order to use it.

**Switching between summertime and wintertime:**

The hand transmitter can be switched to summertime or wintertime by pressing only one button.

**ASTRO function:**

With the ASTRO function it is possible to operate shutters automatically depending on the current position of the sun. Shutters can be raised or lowered intentionally at sunrise or sunset.

**Calculation of the solar time depending on the location:**

By entering the geographical coordinates of your location and the current date, sunset and sunrise can be calculated to the minute.

**Blocking times:**

It is possible to program the earliest and the latest switching time for the ASTRO function.

The **earliest** blocking time defines the point of time from which a switching command may be carried out.

If the sun rises/sets before this point of time, the shutter will raise/lower only at the programmed blocking time.

The latest blocking time defines the point of time on which a switching command has had to be carried out at the latest.

If the sunrise has been calculated only after this point of time, the switching command will be carried out regardless of current position of the sun.

**Programming individual offsets for sunset and sunrise:**

It is possible to offset the switching times calculated for sunrise and sunset manually from -120 minutes to +120 minutes.

This temporal offset can be programmed individually in the basic settings (system menu 545) of the hand transmitter for sunrise and sunset.

The setting is valid for all of the channels which use the ASTRO function.

## Product overview

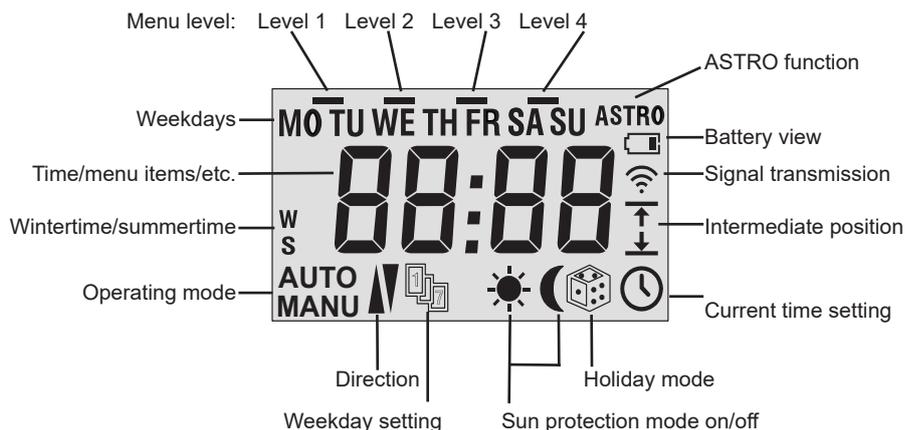
### Display

In standby, the weekday, time, summertime or wintertime and the set operating mode are displayed.

In programming mode however, the user can see which settings can be changed by different displayed symbols. The meaning of the symbols is explained in the adjacent figure.

#### Weekdays:

MO	Monday
TU	Tuesday
WE	Wednesday
TH	Thursday
FR	Friday
SA	Saturday
SU	Sunday



## Buttons

### Standby

Buttons used to control Easywave radio receivers manually:

#### ESC button:



Return to the start screen.

#### P button:



Hold the button pressed to open the programming menu.

#### Direction buttons:

**left/right** Switching between channels and groups. < >

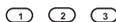
**up/down** Raising and lowering shutters, for example. ▲ ▼

#### Stop button:

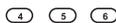


Stops the raising/lowering.

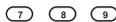
#### Number buttons:



#### Press briefly:



Direct selection of a channel.



#### Press and hold:



Direct selection of a group.

In order to enter 2-digit numbers (channels), press the corresponding number buttons successively fast (< 2 s).

If an invalid channel value is entered during standby, the hand transmitter will detect the invalidity. In this case, the hand transmitter shows the latest selected channel.

#### MODE button:



Switching between the 4 operating modes.

#### Sun/moon button:



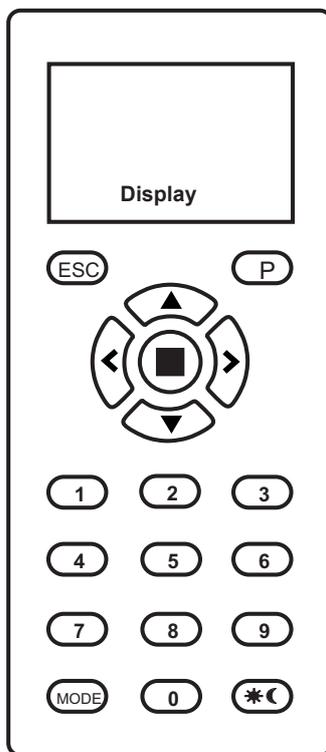
#### Press briefly:

Activating or deactivating the sun protection mode in compatible receivers.

#### Press and hold:

Switching between summertime and wintertime.

**If you do not press a button within 30 seconds during programming, the hand transmitter will automatically return to standby.**



#### Press briefly:

Press the button for less than 1.6 seconds.

#### Press and hold:

Press the button for more than 1.6 seconds.

### Programming mode:

Buttons used to navigate and to operate in the programming menu:

#### ESC button:



Moving one step back in the menu or quitting programming without saving. By holding the button pressed, the hand transmitter returns to standby.

#### Direction buttons:

**left/right** Navigation in the menu. < >

**up/down** Change of settings. ▲ ▼

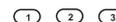
Holding the button pressed accelerates the run.

#### OK button:



Opens menu items. Verifies and saves entries.

#### Number buttons:



Used to enter numerical values (e. g. time, date, channel quick search)



In order to enter 2-digit numbers (values), press the corresponding number buttons successively fast (< 2 s).

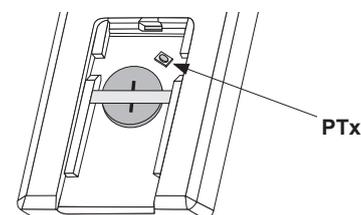


**If you do not press a button within 5 minutes during programming, the hand transmitter will automatically return to standby.**

## Learning button PTx

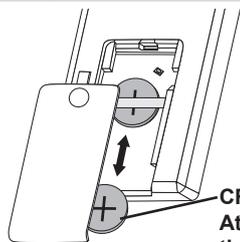
The learning button **PTx** is located on the back of the transmitter under the battery cover.

With the help of the learning button you can program new radio transmitters into receivers which are already installed so that the learning button is inaccessible (see page 3, "Programming receivers via radio").



## Start-up

### Inserting the battery



**CR2430**  
**Attention! The positive pole has to be visible.**

1. Open the battery compartment.
2. (Remove the battery.)
3. Insert a new battery.
4. Slide the cover until it locks.

After removing the battery, the programming will be maintained indefinitely. Time and date settings are retained for at least one minute.

### Programming the transmission codes

In order to control Easywave receivers with the RT39 transmitter, the individual channels have to be programmed into the appropriate receivers at first.

**Please read the operating instructions supplied with the particular receivers.**

### Programming a channel into the receiver:

1. Activate the learning mode on the receiver.
2. Select a channel on the hand transmitter.
3. Press the or button.
4. Quit the learning mode on the receiver.

### Programming a low voltage telegram

**This function has to be supported by the receiver.**

In case of a low battery, the RT39 transmitter sends a low voltage telegram. This telegram can be evaluated by receivers with the corresponding functionality.

For this, the telegram has to be programmed into the receiver.

1. Activate the learning mode on the receiver with low voltage detection.
2. Set the RT39 transmitter to standby (time is shown).
3. Hold the MODE button on the transmitter pressed (> 1.6 s).
4. Quit the learning mode on the receiver.  
→ the telegram has been programmed

In case of a low battery, the RT39 transmitter sends a low voltage telegram every six hours (00:00, 06:00, 12:00, 18:00). Change the battery as soon as possible.

### Programming receivers via radio



**This function has to be supported by the receiver. For further information, please read the relevant operating instructions.**

**In order to use this function, the transmitter had to be programmed into the particular receiver already.**

All receivers, which are located in the reception area and are programmed with the selected channel, will be activated.

### Sending a learn and delete telegram:

1. Open the battery compartment.
2. Press the learning button **PTx** briefly (< 1.6 s).  
→ is shown
3. Select the channel of the desired radio receiver (e. g. ).
4. Press the or button briefly (< 1.6 s) in order to send the learn telegram **OR**  
Hold the or button pressed (> 5 s) in order to send the delete telegram.

→ The learning or deleting mode was activated in the corresponding receiver and may be used according to the operating instructions supplied with the receiver.

### Sending a reset telegram:

1. Open the battery compartment.
2. Hold the learning button **PTx** pressed (> 5 s).  
→ is shown
3. Select the channel of the desired radio receiver (e. g. ).
4. Hold the or button pressed (> 5 s).  
→ The reset telegram will be sent. Please read the operating instructions supplied with the receiver.

**Press the ESC button in order to abort programming at any time and to return to standby.**

**If you do not press a button within 30 seconds during programming, the hand transmitter will automatically return to standby.**

### Setting summertime/wintertime

In standby, the current time is shown. Hold the button pressed (> 1.6 s) in order to switch between summertime and wintertime.

The first adjustment should be done in the programming menu.

### Setting the operating mode

In all operating modes, shutters can be raised, lowered and stopped also manually. Press the MODE button briefly (repeatedly) in order to switch between the operating modes.

#### "AUTO"

In automatic mode, shutters are controlled at the programmed switching times.

It is possible to move shutters to intermediate positions automatically as well as to operate manually.

#### "MANU"

Manual operation by pressing the and button. In this operating mode, programmed switching times won't be considered.

#### "AUTO/MANU"

The automatic mode is deactivated until midnight (00:00 o'clock). After midnight, the radio timer returns automatically to the operating mode "AUTO" so that the hand transmitter controls the shutters again at the programmed switching times.

This mode prevents shutters temporarily from lowering automatically at undesired times, e. g. on a terrace door during a party.

#### "AUTO [holiday]"

Automatic mode where the programmed switching times vary randomly for at most ± 30 minutes.

### Activating/deactivating the sun protection



**In order to use the sun protection function, a suitable receiver has to be available.**

By pressing the button, a sun protection function in the receiver can be switched on or off alternately for selected channels and/or groups. In sun protection mode, the shutter lowers automatically to the shade position.

**For further information, please read the operating instructions supplied with the receivers.**

### Deactivating/activating the sun protection mode:

1. Select a channel or group.
2. Press the button briefly in order to **activate** the sun protection function.  
→ the sun icon flashes
3. Press the button briefly again in order to **deactivate** the sun protection function.  
→ the moon icon flashes



By pressing the button again, the sun protection mode is activated or deactivated alternately.

## Programming

### General

You can set and change the basic settings for the hand transmitter incl. timer in the system menu. Furthermore, you can configure channels and program switching times.

Open the programming menu by holding the P button pressed (> 1.6 s). The current programming level is shown by horizontal bars on the display (see page 2).

If you do not press a button for 5 minutes during programming, the hand transmitter will automatically return to standby.

### Navigating in the programming menu

Navigate in the menu via . Adjustable values are blinking and may be changed via . By pressing the button you can select individual menu items and save settings.

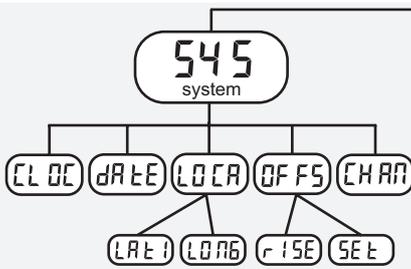
Press the ESC button in order to navigate to the superior menu level or to quit the menu item without saving.

Hold the ESC button pressed (> 1.6 s) in order to quit the programming menu and to return to standby.

### Programming individual switching times

Switching times control the operation of the receivers in the programming modes "AUTO" or "AUTO/MANU". For this purpose, you can change the following settings in the menu item : time, weekdays, direction of motion, intermediate position and ASTRO function.

The switching time will only be saved if all of the settings mentioned above have been processed. If you press the button before having processed all of the settings, you will proceed to the next setting.



### SYS (system menu)

Includes all of the basic settings such as time, location, temporal offset for sunrise/sunset, time zone and number of the usable channels on the device.

#### Entering system data

##### Setting the time: CL OC

- Press **■** to open the menu item **CL OC**.  
→ clock icon appears at the bottom → values to be set are blinking
- Use **<>** to switch between hour, minute and summertime/wintertime.
- Use **▲** or number buttons to enter hour, minute and summertime/wintertime.
- Press **■** to save settings and quit.

##### Setting the date: dAtE

- Press **■** to open the menu item **dAtE**.  
→ date icon appears at the bottom → values to be set are blinking
- Use **<>** to switch between day, month and year.
- Use **▲** or number buttons to enter day, month and year.
- Press **■** to save settings and quit.

##### Entering the coordinates: LOCAt

- Press **■** to open the menu item **LOCAt**.  
→ "ASTRO" appears above the indication
- Use **<>** to switch between **LAt I** (latitude), **LONg** (longitude) or **WtC** (time zone).
- Press **■**.
- Use **▲** or number buttons to enter an integer value (-90 to 90, -180 to 180, -11 to 12 change sign with **<>**, see page 6).
- Press **■** to save settings.
- Repeat the process for the other value or quit with ESC.

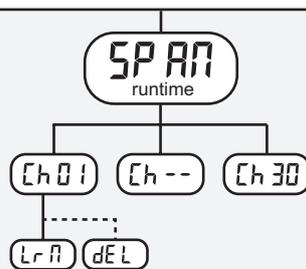
##### Setting the offset: OFFS

Define a temporal offset to the calculated time of sunrise (**r ISE**) and sunset (**SEt**) in **OFFS**.

- Press **■** to open the menu item **OFFS**.
- Use **<>** to switch between **r ISE** and **SEt**
- Press **■**.
- Use **▲** or number buttons to enter an integer value (-120 to 120, change sign with **<>**).
- Press **■** to save settings and quit.
- Repeat the process for the other value or quit with ESC.

##### Defining the number of channels: CH AN

- Press **■** to open the menu item **CH AN**.
- Use **▲** or number buttons to select the desired channel number **Ch --** (max. 30).
- Press **■** to save settings and quit.



### SPAN (measurement of runtimes)

The hand transmitter can move shutters to intermediate positions. In order to use this function, you have to measure the runtimes of the respective channels in this menu.

#### Measuring the runtimes

**The shutter has to be raised completely in order to start measuring the runtimes.**

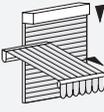
The runtime can be measured and overwritten as often as desired for each channel.

For channels, where the runtime has already been measured, the icon for the intermediate position **I** is shown in the menu **SPAN**.

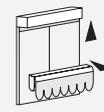
##### Measuring the runtime for a channel: Lr n

- Use **<>** or the number buttons to select the channel **Ch --** for the runtime measurement.
- Press **■**.  
→ **Lr n** is shown 
- Press **■**.  
→ the shutter raises automatically and → **CL S** is shown

##### Measuring the runtime to lower the shutter

- Hold **▼** pressed until the shutter is lowered completely. (**HOLd** is shown)   
Then, release the button.  
→ **OPEN** is shown

##### Measuring the runtime to raise the shutter

- Hold **▲** pressed until the shutter is raised completely. (**HOLd** is shown)   
Then, release the button.  
→ **dONE** is shown (2 s)

→ you return to the channel selection  
→ the settings have been saved

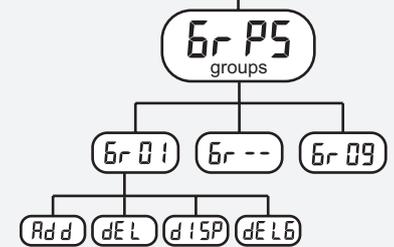
- Repeat the process, if necessary.

##### Deleting the runtime for a channel: dEL

The runtime can be deleted in order to use the channel for other Easywave radio receivers.

- Use **<>** to select a channel.
- Press **■**.
- Use **<>** to select a menu item **dEL**.  
(only available when a runtime has been measured)
- Press **■**.
- Use **▲** to switch to **YES**.  
(at **NO** the runtime is not deleted)
- Press **■** to delete the runtime and quit.  
→ **dONE** is shown (2 s)  
→ you return to the channel selection (1.)

### programming menu



### GRPS (groups)

Permits to combine several channels in groups and to control them simultaneously. It is possible to define up to 9 different groups (**Gr 01** to **Gr 09**).

#### Defining groups

##### Adding channels to a group: Add

A channel can be added to several groups.

- Use **<>** to select a group.
- Press **■**.
- Use **<>** to select the menu item **Add**.
- Press **■**.
- Use **▲** or the number buttons to select the channel you want to add.  
→ channels that have already been added cannot be selected
- Press **■** to save.  
→ you return to the menu item **Add**.
- If necessary, repeat the process in order to add further channels to the group.

##### Deleting channels from a group: dEL

Deleted channels are no longer in the group.

- Use **<>** to select a group.
- Press **■**.
- Use **<>** to select the menu item **dEL**.
- Press **■**.
- Use **▲** to select the channel you want to delete from the group.
- Press **■** to confirm and quit.  
→ you return to the menu item **dEL**
- If necessary, repeat the process in order to delete further channels from the group.

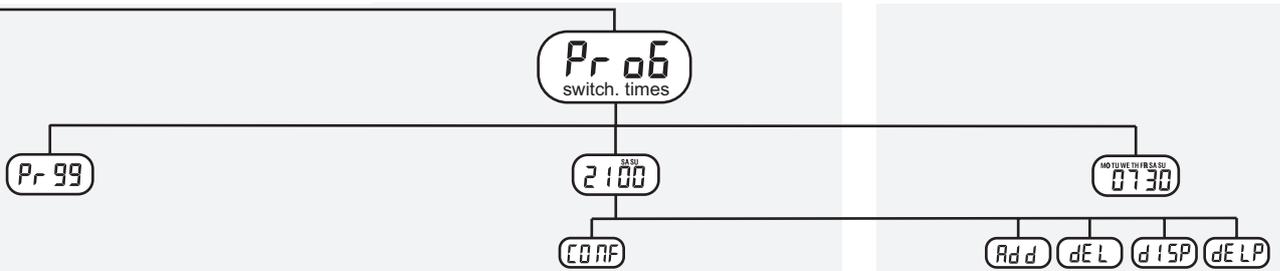
##### Displaying channels of a group: dISP

The menu item only serves for checking purposes. You cannot change settings.

- Use **<>** to select a group.
- Press **■**.
- Use **<>** to select the menu item **dISP**.
- Press **■**.
- Use **▲** to display channels.
- Press **■** or ESC to quit the menu.

##### Deleting all channels from a group: dELB

- Use **<>** to select a group.
- Press **■**.
- Use **<>** to select the menu item **dELB**.
- Press **■**.
- Use **▲** to switch to **YES**.  
(at **NO** the channels are not deleted from the group)
- Press **■** to delete and quit.  
→ **dONE** is shown (2 s)  
→ you return to the group selection (1.)



### Programming new switching times

You can define new switching times in *Pr 99*. The numerical value behind "Pr" indicates how many free memory slots are still available (*Pr--* = all memory slots are occupied). You can program only one switching time per direction of motion.

#### 1. Switching time

Press **■** to open or add a switching time.

→ values to be set are blinking

→ appears at the bottom



1. Use **<>** to switch between hour and minute.
2. Use **▲** or number buttons to enter hour and minutes.
3. Press the direction button **>** to move on to the next item.

### Changing existing switching times

Existing switching times are displayed under the set time (e. g. *2 100*) in the menu item *Pr 06*. If the switching time was selected by **■** it can be changed in the menu item *CONF*.

This is where you define the switching time at which a switching command will be carried out.

**When editing existing switching times you can save changes in the whole *Pr 06* menu immediately and return to *CONF* by pressing **■**. Abort programming by pressing **ESC**.**

### ADD, DEL, DISP, DELP

This is where channels/groups are defined which shall be added to a new or existing switching time. Only added channels/groups are controlled by a switching time.

#### Configuring switching times

##### Adding channels/groups to switching times:

**Add**

A channel/group can be added to several switching times.

1. Use **<>** to select a switching time.
2. Press **■**.
3. Use **<>** to select the menu item *Add*.
4. Press **■**.
5. Use **▲** to select the channel/group you want to add to the switching time.  
→ channels/groups that have already been added cannot be selected
6. Press **■** to save and quit.  
→ move back to the menu item *Add*
7. If necessary, repeat the process in order to add further channels/groups.

##### Deleting channels/groups from switching times:

**dEL**

Deleted channels are no longer part of the switching time.

1. Use **<>** to select a switching time.
2. Press **■**.
3. Use **<>** to select a menu item *dEL*.
4. Press **■**.
5. Use **▲** to select the channel/group you want to delete from the switching time.
6. Press **■** to delete and quit.  
→ move back to the menu item *dEL*
7. If necessary, repeat the process in order to delete further channels.

##### Displaying channels/groups of switching times:

**dISP**

The menu item only serves for checking purposes. You cannot change settings.

1. Use **<>** to select a switching time.
2. Press **■**.
3. Use **<>** to select the menu item *dISP*.
4. Press **■**.
5. Use **▲** to display channels/groups.
6. Press **■** or **ESC** to quit the menu.  
→ move back to the menu item *dISP*

##### Deleting a switching time including all settings:

**dELP**

1. Use **<>** to select a switching time.
2. Press **■**.
3. Use **<>** to select the menu item *dELP*.
4. Press **■**.
5. Use **▲** to switch to *YES*.  
(at *NO* the switching time is not deleted)
6. Press **■** to delete and quit.  
→ *dONE* is shown (2 s)  
→ move back to the menu item *Prxx*

#### 2. Weekdays

→ the weekdays are blinking

→ appears at the bottom



4. Use **▲** to select the desired weekdays.
5. Press **>** to move on to the next item.  
(press **<** to move back to the previous item)

This is where the weekdays are defined at which a switching command will be carried out.

The following settings are possible:

- whole week (MO - SU)
- work week (MO - FR)
- weekend (SA, SU)
- individual days (e. g. TH)

#### 3. Direction of motion

→ the direction of motion *UP* is blinking

→ appears at the bottom



6. Select the direction of motion *UP* or *dn* by using **▲**.
7. Move on to the next item by pressing **>**.  
(move back to the previous item by pressing **<**)

The direction of motion of the shutters is defined.

The following settings are possible:

- raise the shutters (*UP*)
- lower the shutters (*dn*)

#### 4. Intermediate position

→ the intermediate position *100* is blinking

→ appears



8. Use **▲** to set the intermediate position in steps of five. The percentages refer to the runtimes, they are not the absolute position of the shutter!
9. Press **>** to move on to the next item.  
(press **<** to move back to the previous item)

The intermediate positions define how far the shutters raise or lower.

In case of the setting "100 %" at:

*dn*: the shutter is lowered and at *UP*: the shutter is raised.

The percentage for the intermediate positions is set in steps of five.

#### 5. ASTRO function

→ the ASTRO function *OFF* is blinking

→ **ASTRO** appears



10. Use the direction buttons **▲** to select the ASTRO mode.
11. Press **■** to save the set switching times and quit.

When programming a new switching time takes place a change in the menu *Add*, to add the switching time to the channels (see „Configuring switching times“).

Please find detailed information about the ASTRO function on the next page.

**In order to use the Astro-function, the following values you have to be set in the *545* menu correctly: time, date, coordinates, time zone.**

## ASTRO modes



The sunset/sunrise switching times are calculated as follows:

Sunrise/sunset at set coordinates  $\pm$  temporal offset in the **OFFS** settings in the system menu.

The following settings are possible:

1. **OFF**
2. **ON**
3. **EARL** (early)
4. **LATE** (late)

**For the ASTRO function, the following is essential:**

If the set switching time is before noon, the ASTRO function will operate based on the sunrise time. After noon, the ASTRO function operates based on the sunset time.

In case of the **LATE** and **EARL** function, the switching times are called blocking times.

Switching commands **before** the blocking time in case of **EARL** or **after** the blocking time in case of **LATE** are adapted by the system accordingly.

**Sunrise**



Switching time before noon

**Sunset**



Switching time after noon

## ASTRO OFF



The ASTRO function is deactivated. The shutters raise/lower at the programmed switching time. Sunrise/sunset are not considered.

## ASTRO ON



The shutters are raised/lowered at the calculated sunrise or sunset time (+/- a possibly defined offset). The programmed switching time will be ignored.

## ASTRO LATE (latest possible blocking time)



The programmed switching time will be used as the latest possible blocking time.

The switching command to raise/lower the shutter will be carried out at the latest with the programmed switching time.

**Example:**

Latest blocking time	Sunrise time	Carried out at
7:30 o'clock ( $<$ noon = sunrise)	06:30 o'clock	06:30 o'clock
	08:00 o'clock	7:30 o'clock
Latest blocking time	Sunset time	Carried out at
09:00 o'clock ( $>$ noon = sunset)	20:30 o'clock	20:30 o'clock
	22:00 o'clock	21:00 o'clock

## ASTRO EARL (earliest possible blocking time)



The programmed switching time will be used as the earliest possible blocking time.

The switching command to raise/lower the shutter will be carried out at the earliest with the programmed switching time.

**Example:**

Earliest blocking time	Sunrise time	Carried out at
7:30 o'clock ( $<$ noon = sunrise)	06:30 o'clock	7:30 o'clock
	08:00 o'clock	08:00 o'clock
Earliest blocking time	Sunset time	Carried out at
09:00 o'clock ( $>$ noon = sunset)	20:30 o'clock	21:00 o'clock
	22:00 o'clock	22:00 o'clock

## Coordinates of German cities

City	Latitude *)	Longitude **)	Time zone (UTC) ***)
Berlin	52°	13°	+1
Bremen	53°	9°	+1
Dusseldorf	51°	7°	+1
Dresden	51°	14°	+1
Erfurt	51°	11°	+1
Hanover	52°	10°	+1
Hamburg	54°	10°	+1
Kiel	54°	10°	+1
Magdeburg	52°	12°	+1
Mainz	50°	8°	+1
Munich	48°	12°	+1
Potsdam	52°	13°	+1
Saarbrücken	49°	7°	+1
Schwerin	54°	11°	+1
Stuttgart	49°	9°	+1
Wiesbaden	50°	8°	+1

## Coordinates of European cities

City	Latitude *)	Longitude **)	Time zone (UTC) ***)
Amsterdam	52°	5°	+1
Andorra la Vella	43°	2°	+1
Athens	38°	24°	+2
Belgrade	45°	20°	+1
Bern	47°	7°	+1
Bratislava	48°	17°	+1
Brussels	51°	4°	+1
Budapest	47°	19°	+1
Bucharest	44°	26°	+2
Chisinau	47°	29°	+2
Dublin	53°	-6°	0
Helsinki	60°	25°	+2
Copenhagen	56°	13°	+1
Lisbon	39°	-9°	0
Ljubljana	46°	15°	+1
London	52°	0°	0
Luxembourg	50°	6°	+1
Madrid	40°	-4°	+1
Minsk	54°	28°	+2
Monaco	44°	7°	+1
Moscow	56°	38°	+3
Nicosia	35°	33°	+2
Oslo	60°	11°	+1
Paris	49°	2°	+1
Podgorica	42°	19°	+1
Prague	50°	14°	+1
Reykjavík	64°	-22°	0
Riga	57°	24°	+2
Rome	42°	12°	+1
San Marino	44°	12°	+1
Sarajevo	44°	18°	+1
Skopje	42°	21°	+1
Sofia	43°	23°	+2
Stockholm	59°	18°	+1
Tallinn	59°	25°	+2
Tirana	41°	20°	+1
Vaduz	47°	10°	+1
Valletta	36°	15°	+1
Vatican City	42°	12°	+1
Vilnius	55°	25°	+2
Warsaw	52°	21°	+1
Vienna	48°	16°	+1
Zagreb	46°	16°	+1

\*) Latitude, adjustable from -90° to 90°  
north: + (positive values)  
south: - (negative values)

**LATE**

\*\*) Longitude, adjustable from -180° to 180°  
east: + (positive values)  
west: - (negative values)

**LONG**

\*\*\*) Time zone (UTC), adjustable from -11 h to 12 h  
is used for ASTRO function only,  
does not affect the set time.

**UTC**



The coordinates can be entered as integer values only. Due to this, slight inaccuracies in the calculation of sun set and sun rises may occur.

## Switching time - examples

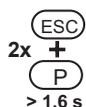
Example	At the weekend, all shutters shall raise with sunset but at 07:30 o'clock at the earliest.	During the work week, the shutters on the ground floor shall be lowered at 21:00 o'clock.	In the evening, the shutters shall be lowered halfway 30 minutes after the sunset but at the latest at 20:30 o'clock.	The shutters in the bedroom shall raise slightly every day as soon as it is bright outside (approx. 20 minutes before sunrise).	On Wednesdays, the shutters in the living room shall lower at sunset but be raised until at least 21:30 o'clock.
<b>OFFS settings</b>	RISE ± 0 minutes	-	SET + 30 minutes	RISE - 20 minutes	SET ± 0 minutes
<b>Switching time</b>	7:30 o'clock	20:00 o'clock	20:30 o'clock	before noon	21:30 o'clock
<b>Weekday</b>	SA, SU	MO - FR	MO - SU	MO - SU	WE
<b>Direction of motion</b>	▲ UP	▼ DN	▼ DN	▲ UP	▼ DN
<b>Intermediate position</b>	100 %	100 %	50 %	25 %	100 %
<b>ASTRO</b>	EARL	OFF	LATE	ON	EARL
<b>Channels/group(s)</b>	all shutters	ground floor shutters	all shutters	bedroom shutters	living room shutters

## Troubleshooting

Description of faults	Fault	Remedy
The battery symbol  appears on the display, if the transmitter is in operating mode.	The battery is weak.	Replace the battery (see page 3).
There is no visible display.	The battery is inserted incorrectly or empty.	Check the batteries polarity or replace the battery (see page 3).
The radio control does not react to the press of a button in manual mode.	Channels are not programmed into the receiver correctly.	Reprogram the channels (see page 3).
The hand transmitter does not react to the programmed switching commands.	A wrong operating mode has been set. Switching times have been programmed incorrectly. Channels are not programmed into the receiver correctly.	Switch to the operating mode "automatic mode" (see page 3). Check the switching times (see page 5 - 7). Reprogram the channels, if necessary (page 3).
The shutter is not driving into the desired position.	The runtimes are incorrect.	Measure the runtimes again (see page 4).
It is not possible to select a channel in the menu item <i>SP RN</i> .	The number of the usable channels is too low.	Add more channels under <i>CH RN</i> (see page 4).
The ASTRO function calculates inexact times.	The ASTRO settings have been configured in exactly.	Set the correct coordinates and the exact date in the system menu.
When creating a new switching time „doub“ appears on the display.	There is already an identically switching time programmed.	Choose another combination of time, direction and days.
Entered numbers are not accepted.	Invalid value entered.	Enter valid values.

## Resetting the transmitter

The reset function is used to apply the factory settings of the hand transmitter. All saved settings will be deleted.



1. Hold both buttons pressed simultaneously (> 1.6 s).  
→ all numbers are blinking
2. Hold both buttons pressed again (> 1.6 s).  
→ all numbers are flashing for 3 seconds (reset was successful)

The transmitter has returned to standby. The factory settings have been reset.

## General information

### Disposal

**Waste electronic equipment must not be disposed of with household waste!**

Dispose of the waste product via collection facilities for electronic scrap or via your specialist dealer.



Dispose of used batteries in a recycling bin for batteries or via the specialist trade.



Dispose of packaging material in the recycling bins for cardboard, paper and plastic.

### Warranty

Within the statutory warranty period we undertake to rectify free of charge by repair or replacement any product defects arising from material or production faults. Any unauthorized tampering with, or modifications to, the product shall render this warranty null and void.

### Conformity

Hereby, ELDAT GmbH declares that the radio equipment type RT39 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: [www.eldat.de](http://www.eldat.de)



### Customer service

If the device does not work properly despite proper handling or in case of damage, please contact the manufacturer or your retailer.

#### ELDAT GmbH

Im Gewerbepark 14  
15711 Königs Wusterhausen  
Germany

Phone: + 49 (0) 33 75 / 90 37-310

Fax: + 49 (0) 33 75 / 90 37-90

Internet: [www.eldat.de](http://www.eldat.de)

E-mail: [info@eldat.de](mailto:info@eldat.de)

