Model

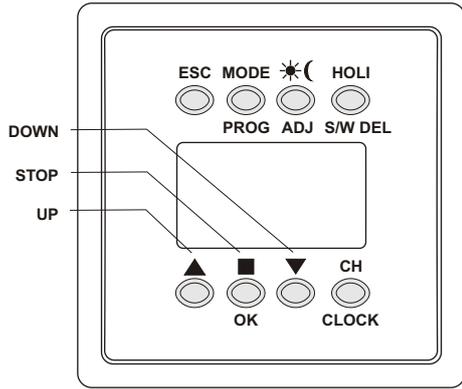**RTS07E5004-01**

Intended Use

The Radio Time Switch RTS07 was exclusively developed and manufactured for the brightness and time-controlled switching of devices with Easywave radio controls.

The manufacturer will not be liable for damage caused by improper or inappropriate use.

Function

The Time Switch RTS07 is a wall-mounted battery-operated radio timer (surface-mounted). The Radio Time Switch allows switching Easywave radio controls (function range: UP/STOP/DOWN) dependent on time and/or brightness. Brightness control is only possible in connection with the Radio Light Sensor SL01.

The Radio Time Switch has four individually coded radio channels so that four different radiograms can be sent to control four devices or groups individually.

It is possible to transmit the four different radiograms together (with a delay of approx. 0.5 seconds per channel) and therefore activate all four devices or groups simultaneously (group function).

The following four operating modes are available:

Time-Controlled:
Automatic Operation: Blinds are raised and lowered either at the programmed switching times or manually.
Automatic Operation with Partially Manual Operation: The programmed switching times as well as the sun protection/twilight mode functions are deactivated until 24:00 hrs. After 24:00 hrs, the timer switches to automatic mode.

Brightness-Controlled:
(only in connection with Radio Light Sensor SL01)
Solar Protection Mode: If a set brightness value is exceeded, the blinds lower to a desired shade position.
Twilight mode: If a set brightness value is undercut, the blinds are lowered completely.
Manual Mode: Raising and lowering of blinds only by pushing the button on the Radio Time Switch.

The Time Switch offers the following additional functions:

Holiday Mode: On holidays, you can activate the switching times programmed for Sundays with only one push of a button.
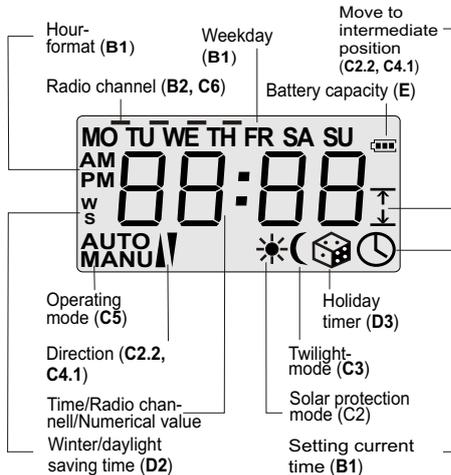
Switching from Normal to Daylight Savings Time: You can switch the Time Switch from normal to daylight savings time with just one push of a button.

Vacation Mode: Shutters/blinds are raised or lowered with a time delay of ± 15 minutes compared to the programmed switching times in automatic mode. This way you can make your house appear inhabited.

The following settings are available in automatic mode and vacation 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 weekday or groups of weekdays.
- **Intermediate Position:** Lowering of blinds/shutters to a desired shade position.

Display Overview

Operating the Radio Time Switch

The following settings have to be made to put the control into operation and for later modifications:

A   Mounting the Radio Time Switch

① Mount the wall mount with the enclosed screws and dowels on the desired installation site.

👆 Avoid installing the time switch in one of the following sites as this may impair the range of the transmitter: in a distribution box or a metal casing, in direct proximity to large metal objects and on the floor or close to it.

② Insert the enclosed battery. **Make sure the Polarity is correct!**

③ Replace the time switch in the wall mount. The snap catches have to lock.

B   Basic Settings

B1   Setting the Time and Weekday

If you do not press a button within 5 minutes during programming, the time switch automatically returns to operating mode.

With ESC you can cancel all programming steps at any time and return to operating mode.

In this case the settings are not saved.

Setting/Changing the Time:

Press the CLOCK button for more than 3 seconds. The time on the display starts to blink.

Set the time with the UP or DOWN button.

▲ Advancing the minutes   ▼ Resetting the minutes

Setting Daylight Savings Time:

Press the S/W button to switch between daylight savings and normal time.

The display switches between **W** and **S**.

Setting the Hour Format (12-/24 hours):

Press the MODE button for more than 3 seconds. The hour format switches between 12 hour display (AM/PM) and 24 hour display.

Setting the Weekday:

Press the OK button. The weekday blinks on the display.

Now select the respective day with the UP and DOWN buttons.

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

Press the OK button again. The settings are saved and the Time Switch returns to Operating Mode.

B2   Memorizing Radio Channels in the Controls

The codes for each radio channel must be memorized in the radio controls first, so that the radio controls can receive the transmission code of the clock. Memorizing the codes in the group function is not possible.

Set the control into programming mode. For this, read the operating instructions of the radio controls. Select the favoured radio channel of the control in the time switch and transfer the Easywavecode to the radio control:

Press the CH button shortly. The display shows channel CH1. By pressing the CH button repeatedly the desired channel can be selected.

Keep the UP button depressed shortly. The code is transferred to the control.

Repeat the procedure for each channel (shutter or other devices).

B3   Measuring and Saving the Runtimes

For moving the shutter/blind into a desired shade position, the time switch has to measure and save the runtime for raising and lowering the shutters once.

Raise the shutter completely with the UP button.

Set the time switch into operating mode (ESC).

Press the ADJ button for more than 3 seconds to change to the setup mode ADJ.

Press the OK button. The display shows the last channel.

Press the CH button to select the desired channel (shutter).

Keep the DOWN button depressed until the shutter is completely closed.

The lowering time is measured and saved.

Keep the UP button depressed until the shutter is completely open.

The raising time is measured and saved.

Press ESC twice to return to operating mode.

B4 Putting the Light Sensor into Operation

To be able to use solar protection and twilight mode, you have to establish the radio connection between the light sensor and the time switch.

For this, read the operating instructions of the Radio Light Sensor SL01.

C   Operating Shutters/Blinds

The shutters can also be raised or lowered manually in all operating modes by pressing a button on the timeswitch.

If the shutter raises or lowers automatically, you can stop it by briefly pressing the STOP button.

C1   Factory Settings

Factory setting for channel CH1 is the automatic mode without intermediate position. The following switching times are pre-programmed:
- Shutter rises completely Monday through Sunday at 7:00 hrs,
- Shutter closes completely Monday through Sunday at 21:00 hrs.

Practical preset values are also programmed for solarprotection and twilight mode.

C2   Solar Protection Mode

Solar protection mode can only be activated when the shutter was completely raised with the Time Switch either manually or automatically. Do not interrupt the raising procedure with the STOP button.

The radio connection between the light sensor and the time switch must be established.

If you want to move the shutter to a certain shade position, please program the intermediate position.

C2.1   Setting the Brightness Value

Here you can program the value for the brightness at which your shutter is to move to the desired shade position.

We recommend initially using the factory settings.

Set the time switch to operating mode (ESC).

Press the ADJ button for more than 3 seconds to change to the Setup Mode.

Press the UP button. The display shows two brightness values.

The left figure is the currently measured value, the right one the default value or an already programmed value.

With the CH button you can check, which channel is selected.

Press the CH button again to show the brightness value.

Press the OK button. The right value starts to blink on the display.

Select a new value with UP or DOWN in a range between 0 and 29.

Program the brightness value on a time of day at which the sun is so intense that you want to lower the shutters or orient yourself on the currently measured value.

If you want to update the measured value once again beforehand, briefly press the connection button on the light sensor.

Press the OK button again. The selected channel starts to blink on the display.

Select a new channel with UP or DOWN.

To confirm the setting press the OK button again. The display shows the programmed value.

Press the DOWN button to change back to the Setup Mode. You can either make further adjustments

or

press ESC to return to operating mode.

C2.2   Setting the Intermediate Position

Here you can define how far the shutters are to be lowered for solar protection.

If an intermediate position is programmed, the shutter first moves to the top end position and then into the desired intermediate position.

When making your setting, make sure that the shutter does not obscure the light sensor in the shade position.

Set the Time Switch to Operating Mode (ESC).

Press the ADJ button for more than 3 seconds to change to the setup mode.

Press the UP button twice. The display shows the current value for the intermediate position as well as the symbols for the direction and the intermediate position.

Press the OK button. The value starts to blink on the display.

Select a new value in 5% steps with UP or DOWN.

0%   25%   75%   100%

To confirm the setting press the OK button. The display shows the programmed value.

Press the UP button twice to change to the setup mode. You can either make further adjustments

or

press ESC to return to operating mode.

C2.3   Activating Solar Protection Mode

If the Time Switch is in Operating Mode, you can activate the Solar Protection Mode.

Briefly press the SUN/MOON button; the display shows the sun icon.

Now the solar protection mode is activated. If the measured brightness value is equal or larger than the set value for approx. 12 minutes, the shutter lowers to the shade position. (see C2.2, "Setting the Intermediate Position"). If the measured value falls below half of the set value for approx. 30 minutes, the shutter opens completely again.

The sun icon blinks if the radio reception between the time switch and the light sensor is disrupted (see also the operating instructions of the Light Sensor SL01). If the disruption persists for more than 45 minutes, the Solar Protection Mode is automatically turned off. To reactive this function, press the SUN/MOON button.

C3   Twilight Mode

Here you can program the value for the brightness at which your shutter is to be closed.

We recommend initially using the factory settings.

C3.1 Setting the Twilight Value

Set the time switch to operating mode (ESC).

☀ 🌙 **>3s** ADJ — Press the ADJ button for more than 3 seconds to change to the setup mode. `AdJ`

3x — Press the UP button three times. The display shows two brightness values and the moon icon. The left figure is the currently measured value, the right one the default value or an already programmed value. `29 20`

CH CLOCK — With the CH button you can check, which channel is selected. Press the CH button again. The display shows the twilight value. `CH 1`

OK — Press the OK button. The right value starts to blink on the display. `29 -20`

Select a new value with UP or DOWN in a range between 0 and 29.

Program the twilight value on a time of day at which the brightness has the value at which you want to lower the shutters or orient yourself on the currently measured value. If you want to update the measured value once again beforehand, briefly press the connection button on the light sensor.

OK — Press the OK button again. The selected channel starts to blink on the display. `CH 1`

Select a new channel with UP or DOWN

OK — To confirm the setting press the OK button again. The display shows the programmed value. `29 28`

Press the UP button to change to the setup mode. You can either make further adjustments `AdJ`

ESC or press ESC to return to operating mode.

C3.2 Activating Twilight Mode

If the timer is in operating mode, you can now activate twilight mode.

☀ 🌙 ADJ — Briefly press the SUN/MOON button; the display shows the moon icon. `15:35`

The twilight mode is now active. The shutter lowers completely when the measured brightness is less than the set value for approx. 6 minutes. However, beforehand the brightness level must have been higher than the set value for more than one hour .

The shutter is not raised again automatically in twilight mode. Open the shutter manually or use a switching time programmed for automatic mode.

☞ **In case the radio reception between the time switch and the light sensor is disrupted the moon icon blinks (see also operating instructions of the Light Sensor SL01).**

If the disruption persists for more than 45 minutes, the Twilight Protection Mode is automatically turned off.

To reactive this function, press the SUN/MOON button.

C4 Automatic Mode

To be able to use the automatic operation modes, the switching times and the intermediate positions for the shade position have to be programmed.

To do so, change to programming mode. If you do not press a button in programming mode within 5 minutes, the time switch automatically returns to operating mode.

The switching times programmed in automatic mode take precedence over the settings for solar protection or twilight mode. You can program 50 switching times altogether.

If the timer is set to 12-hour display, the switching times are also displayed in 12-hour format.

C4.1 Programming Switching Times and Intermediate Positions

Set the time switch to operating mode (ESC).

MODE >3s PROG — Press the PROG button for more than 3 seconds to change to Programming Mode. The display shows the free memory slots on the right. `--:48`

OK — Briefly press the OK button. The switching time starts to blink on the display. `12:00`

If the display shows FULL, the memory for the switching times is full. Delete a time setting before programming. `FULL`

Set a new switching time with UP or DOWN.

OK — Press OK again and the weekdays blink on the display. `19:30`

Select the weekday or a combination of weekdays with UP or DOWN.

MO Monday
TU Tuesday
WE Wednesay
TH Thursay
FR Friday
SA Saturday
SU Sunday

MO-FR Monday to Friday
SA-SU Saturday and Sunday
MO-SU daily (day function)

OK — Press the OK button again. The channel no. starts to blink on the display. `CH 1`

Select a new channel or the group function ALL with UP or DOWN.

OK — Press OK again. The direction of the shutter motion blinks on the display. `19:30`

With UP or DOWN you can select which direction the changed switching time is supposed to apply to.

↑ RAISE   ↓ LOWER

+ — Press UP and DOWN at the same time. The intermediate position blinks on the display.

Select a new value in 5% steps with UP or DOWN. (Also see chapter C2.2)

The intermediate position is programmed and indicated with the two direction arrows. `60`

C4.2 Deleting Switching Times

Set the time switch to operating mode (ESC).

MODE >3s PROG — Press the PROG button for more than 3 seconds. The display shows the free memory slots. `--:48`

Select the switching time to be deleted with UP or DOWN.

HOLI >3s S/W DEL — Press the DEL button for more than 3 seconds. The switching time is deleted and the display shows the memory slots again. Return to operating mode with ESC.

OK — Briefly press the OK button. The saved switching time is displayed. `21:00`

ESC — Press ESC to return to operating mode.

C4.3 Changing Switching Times

Set the time switch to operating mode (ESC).

MODE >3s PROG — Press the PROG button for more than 3 seconds. The display shows the free memory slots. `--:48`

Select the switching time you want to change with UP or DOWN.

OK — Briefly press the OK button. The switching time starts to blink on the display. `12:00`

Set a new switching time with UP or DOWN.

OK — Press OK again and the weekday blinks on the display. `19:30`

Select a new weekday with UP or DOWN.

OK — Briefly press the OK button. The channel starts to blink on the display. `CH 1`

Select a new channel with UP or DOWN.

OK — Press OK briefly. The direction of the shutter motion blinks on the display. `19:30`

With UP or DOWN you can select which direction the changed switching time is supposed to apply to.

The intermediate position blinks on the display. `60`

Enter a new value in 5% steps with UP or DOWN.

OK — Briefly press the OK button. The saved switching time is displayed. `21:00`

ESC — Press ESC to return to operatingmode.

C5 Changing the Operating Mode

Automatic Mode

Set the time switch to operating mode (ESC).

By briefly pressing the MODE button, select the operating mode AUTO (automatic mode) or AUTOMANU (automatic mode with partial manual operation).

Solar Protection/Twilight Mode

Set the time switch to operating mode (ESC).

By briefly pressing the SUN/MOON button, activate/deactivate solar protection, twilight or both modes.
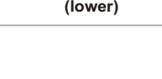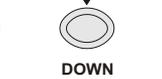
C6 Manual Mode

In manual mode you can only raise or lower the shutters by pushing a button.

Set the time switch to operating mode (ESC).

Press the CH button repeatedly until the correct channel is displayed.

Press the UP, DOWN or STOP button; the shutter moves in the desired direction or stops.

CH 1
CH 2
CH 3
CH 4
CH All

UP (raise)   STOP   DOWN (lower)

D Additional Functions

D1 Activating the Holiday Mode

Set the time switch to operating mode (ESC).

Switch the holiday mode ON or OFF by pressing the HOLI button.
The weekday SU blinks on the display.

If you have activated the holiday mode prior to 18:00 hrs, it is automatically deactivated at 24:00 hrs of the same day.

If you have activated the holiday mode after 18:00 hrs, it is first automatically deactivated at 24:00 hrs on the next day.

In vacation mode, the holiday mode is deactivated with a random difference of 15 minutes.

D2 Activating Daylight Savings Time

Set the time switch to operating mode (ESC).

Press the S/W button for more than 3 seconds. The display changes from **W** to **S** and the clock is moved forwards/backwards one hour.

D3 Activate Vacation Mode

Set the time switch to operating mode (ESC).

Press MODE until the dice appears on the display.

In vacation mode, the holiday mode is deactivated with a random offset of ±15 minutes.

D4 Deleting all Data (Reset)

Press ESC and the DEL button at the same time for more than 3 seconds.

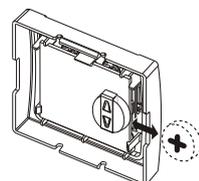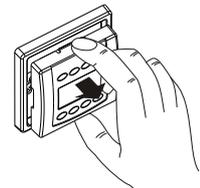All saved data are deleted and the factory settings are restored.

After a RESET the radio channels do not have to be learned into the radio control again.

E Exchanging the Battery

The battery capacity is shown in the display with the symbol. If the complete battery symbol blinks the battery needs to be exchanged.

① Press the radio timeswitch together in the center on the top and the bottom and pull it out of the wall mount.

② Exchange the battery. Only use batteries of the type CR2032.

Observe the correct polarity!

③ Replace the time switch in the wall mount. The latches have to snap into place.

The clock has a power reserve of some minutes. If the radio time switch is without voltage supply for a longer period, only the time has to be reset. All other settings remain as they were.

If the bar of the battery icon blinks and the contur shows permanently on the display of the time switch, the battery of the light sensor needs to be exchanged. Also see the operating instructions of the Light Sensor SL01.

F Troubleshooting

- Blinking symbol: exchange the battery.
- If there is no visible display: check the batterie´s polarity or exchange the battery (see chapter E).
- If the control does not react to pressing buttons in manual operation: re-enter the radio channels of the Radio Time Switch into the radio controls (see chapter B2).
- If the radio control does not react to the programmed switching commands in Automatic Mode: check whether the Time Switch is in "Automatic Mode" (see chapter C5). Check the programmed switching times (see chapter C4.1). If necessary, re-enter the radio channels of the radio timer into the radio controls (see chapter B2).
- Solar protection/twilight mode cannot be activated: re-establish the connection between the light sensor and the ttime switch (see the operating instructions for the Light Sensor SL01).
- The radio control does not move the shutter into the intermediate position: set the runtime again (see chapter B3).
- After changing the sensor´s battery, the light sensor reception is disrupted and the SUN/MOON icon blinks: Wait approx. 35 minutes until reception is restored automatically.

G General Information

Safety Advice

Please read these instructions carefully before using the product

Also observe the operating instructions of the devices to be controlled!

The automatic control of systems or devices that need to be supervised is not permitted.

Do not make any unauthorized modifications to the device!

Have faulty Radio Time Switches checked by the manufacturer!

Scope of Delivery

Radio Time Switch RTS07, battery CR2032, attachment frame, attachment set, operating instructions

Technical Details

Frequency:	868,30 MHz
Radiated power:	0.43 mW
Modulation:	FSK
Coding:	Easywave
Voltage supply:	1x 3 V-battery, CR2032
Power consumption:	
- Static current	approx. 13 µA
- for a long faulty radio reception of the Light Sensor	approx. 510 µA (max. 20 min)
- Transmission current	approx. 14 mA
Operating temperature:	0°C bis 50°C
Range:	
- with good free field conditions	approx. 150 m
- in buildings	approx. 30 m
Dimensions:	approx. 80 x 80 x 16 mm
Weight:	approx. 50 g

Disposal

Waste electrical products and batteries should not be disposed of with household waste!

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

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

Put the packaging material into the recycling bins for cardboard, paper and plastics.

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 RTS07 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

Customer Service

If, despite correct handling, faults or malfunctions occur or if the product was damaged, please contact your retailer or the manufacturer.

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