Operating Instructions Busch-Timer®

Comfort timer control element for light control 6455





Operating Instructions Busch-Timer®

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1 Safety



Warning

Electric voltage!

Risk of death and fire due to electrical voltage of 230 V.

- Work on the 230V supply system may only be performed by authorised electricians!
- Disconnect the mains power supply prior to installation and/or disassembly!

2 Intended use

The device is to be used exclusively with the components that are supplied and licensed as described in chapter "Setup and function".

3 Environment



Consider the protection of the environment!

Used electric and electronic devices must not be disposed of with domestic waste.

 The device contains valuable raw materials which can be recycled. Therefore, dispose of the device at the appropriate collecting depot.

All packaging materials and devices bear the markings and test seals for proper disposal. Always dispose of the packaging material and electric devices and their components via the authorized collecting depots and disposal companies.

The products meet the legal requirements, in particular the laws governing electronic and electrical devices and the REACH ordinance.

(EU Directive 2002/96/EC WEEE and 2002/95/EC RoHS)

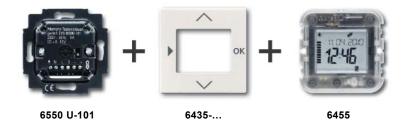
(EU REACH ordinance and law for the implementation of the ordinance (EC) No.1907/2006)

4 Setup and function

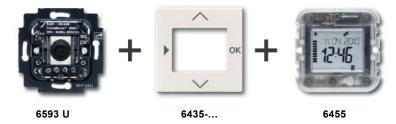
The timer control element described in these instructions serves for the manual and time-controlled switching and dimming of lighting.

4.1 Modules

The following modules are used for controlling lighting. The device can only be operated with a central cover plate 6435-... The cover plate is latched onto the control element as a so-called "floating rocker".



Alternative:



4.2 Features of function and equipment

- With astro program
- · Individual astro displacement and astro blocking time
- The lighting can be manually operated at any time.
- Easy adjustment using menu and text-based display
- Factory-set switching times can be individually adjusted
- Automatic summer/wintertime switch-over
- · Switching times/programs are safely stored in the event of a mains power failure
- 14 hours power reserve for time and date (maintenance-free as a capacitor)
- Simple toggling between manual / automatic / holiday mode
- · Control element is adjustable without flush-mounted insert
- · 4 switching times per day can be freely adjusted for each day of the week
- · Astro switching times and switching times can be combined
- When combined with LED dimmer 6524 U, central dimmer insert 6593 U or memory touch control unit 6550 U-101, the brightness of the lighting can be adjusted for each ON switching time.

5 Operation

5.1 Hints on operation

In the event of a power failure, the internal clock continues to operate for about 14 hours. After this the time and date have to be reprogrammed. All other data remain saved.

The operating element can be removed from the flush-mounting insert for approximately 20 minutes and adjusted separately.

A total of 4 switching times per day can be set (switching times plus additional switching times).

The system changes automatically between winter and summer time.

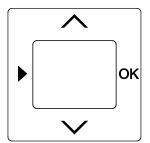
If the display is on --:--, this can mean the following:

- no time has been set
- the memory is not occupied
- the function is not active

Flashing numbers / values can be changed. If no entry is made, the display switches back to the operating mode after 1 minute.

The times of the menus BLOCK, ASTRO, INDIVIDUAL can be combined with one another.

5.2 Key assignment



Button assignment of cover pate

Button	Function	In setting mode	Adjusting values	Deleting switching times
	Calling up menu level and	Return to operating mode		
	switching to setting mode			Press all buttons of the
	Light ON (brighter)		A 11 / 1	rocker switch simultaneously
V	Light OFF (darker)	Select menu item	Adjust values	for approx. 5 seconds
OK	Confirmation	Select menu	Accept value	

5.3 **Manual operation**

Manual operation is always possible. You can control the light manually as follows:

Button	Function	Actuation
	Light ON (brighter)	Brief press of the button:
^		- The light is switched on with the last brightness value set.
		Long button press:
		The brightness increases as long as the button is pressed.
	Light OFF (darker)	Brief press of the button:
\/		- The light is switched off.
•		Long button press:
		- The brightness decreases as long as the button is pressed.

Display and icons 5.4

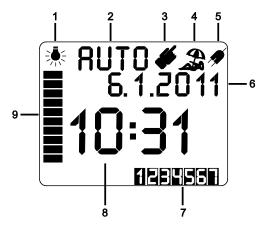


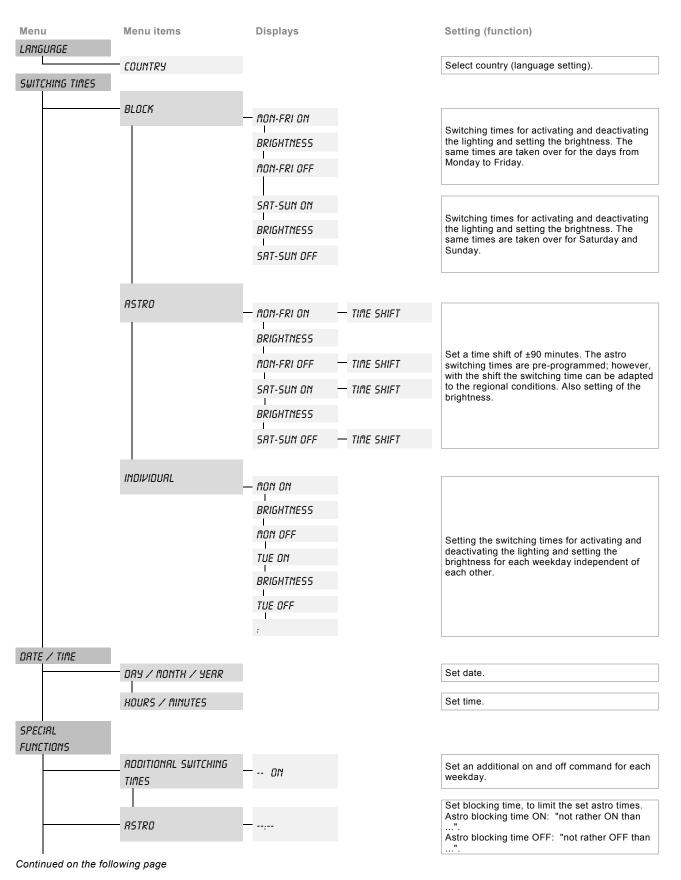
Fig. 2: Display with symbols

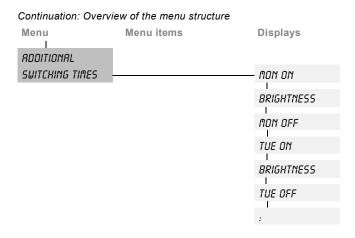
No.	Function
1	Dimmer function
2	"Automatic" operating mode
3	"Manual" operating mode
4	"Holiday" operating mode
5	Mains power failure
6	Info line / date
7	Current weekday
8	Time / switching time
9	Brightness display



If the text is too long for the info line, it will run continuously through the info line.

5.5 Overview of the menu structure





Setting (function)

The menu is only displayed when the additional switching times have been activated beforehand under "Special functions".

Set additional switching times for activating and deactivating the lighting for each weekday independent of each other. Also setting of the brightness.

5.6 Adjusting the device

All settings of the device are carried out supported by text-controlled operator prompting. The language, time and date have to be set first during initial commissioning.

 $^{\circ}$

Note

Values which need to be changed flash and are displayed in grey in the following illustrated examples.

5.6.1 Selecting languages

The language is set via the country selection and the astro time is automatically assigned. The current location (country) of the timer must be selected because of the different time zones.



Note

The astro function daily adjusts the switching times automatically to the yearly process of sunrise and sunset.

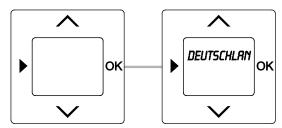


Fig. 3: Country / language selection

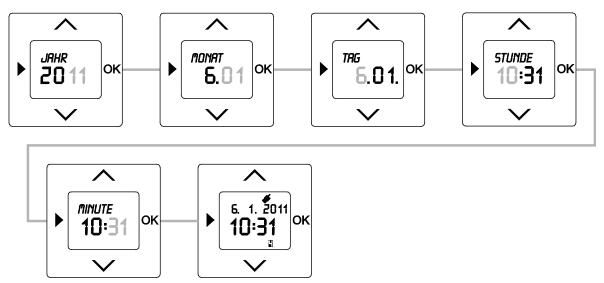
Button	Indication	Entry / Comments
	GERMANY	Selecting languages
		- Select the country via the arrow buttons.
		- Confirm your selection with the OK button.
OK		You simultaneously switch to the next menu item. This is followed by setting the year,
		month, day, hour and minute. See section 5.6.2.



Note

To change the language at a later point in time the device settings must be reset via the reset function. See section 5.6.3.

5.6.2 Setting date and time



Setting the date and time

Sequence of operating steps

The first two steps need only be carried out if the date and time are to be changed later. During initial commissioning you will be asked to enter the year directly after selecting the language.

		, , , , , ,
Button	Indication	Entry / Comments
	SUITCHING TIMES	- Press the menu button to switch to the setting mode.
$\overline{}$	DRTE-TIME	- Select menu "Date - Time" via the arrow buttons.
OK	U508 /	- Confirm your selection with the OK button.
UK	YERR /:	The preset year flashes.
	2011	- Set the year via the arrow buttons.
		- Confirm your entry with the "OK" button.
OK	MONTH /:	You simultaneously switch to the next menu item "Month".
		The preset month flashes.
\wedge	5.01	- Set the month via the arrow buttons.
		- Confirm your entry with the "OK" button.
OK	DRY /:	You simultaneously switch to the next menu item "Day".
		The preset day flashes.
$\overline{}$	6.01	- Set the day via the arrow buttons.
		- Confirm your entry with the "OK" button.
OK	HOUR /:	You simultaneously switch to the next menu item "Hour".
		The preset hour flashes.
\wedge	10:31	- Set the hour via the arrow buttons.
		- Confirm your entry with the "OK" button.
OK	MINUTE /:	You simultaneously switch to the next menu item "Minute".
		The preset minute flashes.
\sim	10:31	- Set the minutes via the arrow buttons.
OK		- Confirm your entry with the "OK" button.
		The timer changes into the operating mode.



Note

Pressing the menu button switches from setting mode to operating mode. All entries that were confirmed previously with the OK button are taken over.

5.6.3 **RESET** (resetting the device)

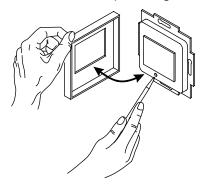


Fig. 5: Reset

- 1. Remove the cover and press the reset button.
- 2. Replace the cover.
- 3. Then, again set the language, the date and the time, see section 5.6.



After a reset the settings of the language, date and time are deleted. The set switching times

Operating modes 5.7







Fig. 6: Display views of operating modes

Symbol	Operating mode
	MANUAL MODE
16	
	Control is executed only manually. The user can always switch to the manual mode and back. Automatic
	switching times are not available.
	General actuation
	You can control the lighting as follows:
	ON / A:
	- Touching the top surface
	The light is switched on or
	- Hold the top surface
	The brightness increases as long as the button is pressed.
	OFF / ▼:
	- Touch the bottom surface
	- The light is switched off or
	- Hold the bottom surface
	The brightness decreases as long as the button is pressed.
	A brief actuation while the brightness increases will stop it immediately.
RUTO	AUTOMATIC MODE
טוטח	The programmed switching times will be executed automatically.
	HOLIDAY MODE
**	Control is executed as in automatic mode. A random generator shifts the switching times by up to 30 minute
	daily.

Press the OK button to change the operating mode. Manual operation of the lighting is always possible via the arrow buttons (UP and DOWN).

5.7.1 Deleting switching times

To be able to delete the switching times during an incorrect entry, the procedure is described here first. For setting the switching times, please continue reading on the next page.

Deleting all switching times

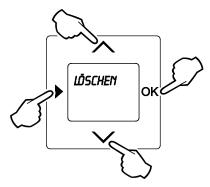


Fig. 7: Delete function

- 1. Press all 4 buttons simultaneously, or the entire operating surface for more than 5 seconds.
- 2. Confirm the enquiry with the OK button.
 All set switching times will now be deleted. The date, time and language settings remain saved.

Deleting the current switching time in the setting mode

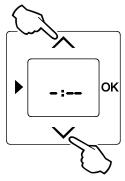


Fig. 8: Delete function of current value

Individual values can be deleted if "Setting mode / switching times" has been selected and the time display flashes.

- 1. Briefly press both arrow buttons.
- Confirm the enquiry with the OK button.
 Only the current value is deleted. The display shows -: - .

5.8 Setting switching times

The settings of the switching times that are available and how the menu items are called up is described here. A detailed description of the individual functions is contained in the following sub-sections.

5.8.1 BLOCK programming

So that the switching times need not be entered again for each individual day, the BLOCK programming function is available. This means that the switching times are entered once for block (Mon - Fri) and once more for block (Sat - Sun).

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Note

Within each block the same switching times apply to each day. If the switching times for each day are to be set independent from each other, see section "Setting individual switching times".

Preset block switching Mon–Fri ON: 20:00 If the display is on -:--, this can mean the following: times: Mon–Fri OFF: 07:00 – no time has been set

Sat–Sun ON: 21:00 – the memory is not occupied Sat–Sun OFF: 08:00 – the function is not active

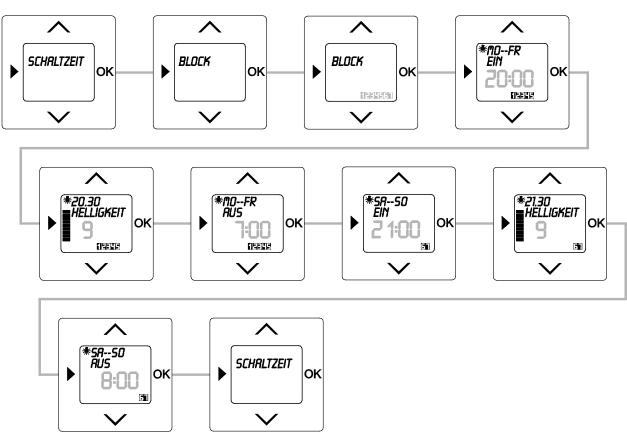


Fig. 9: Menu item - Block

Button	Display	Entry / Comments
•	SUITCHING TIMES	- Press the menu button to switch to the setting mode.
OK	8LOCK	- Press the OK button to select menu item "Block".
OK	1234567	The weekdays flash Press the OK button again.
OK	MONFRI ON / 20:00	The preset switch-on time flashes.
/ \/	20:30	- Set the desired switch-on time via the arrow buttons. In this example the switch-on time has been set at 20:30.
OK	BRIGHTNESS	- Confirm your entry with the OK button. You simultaneously switch to the next menu item "Brightness". The preset brightness value flashes.
/ //	9	- Set the desired brightness value via the arrow buttons. In this example the value "9" has been set.
OK	ᲝᲔNFRI OFF ∕ 7:00	- Confirm your entry with the OK button. You simultaneously switch to the next menu item "Mon - Fri OFF". The preset switch-off time flashes.
/ //	7:30	- Set the desired switch-off time via the arrow buttons. In this example the switch-off time has been set at 7:30.
OK	SAT-SUN ON / 21:00	- Press the OK button again. You simultaneously switch to the next menu item "Sat - Sun ON". The preset switch-on time flashes.
///	21:30	- Set the desired switch-on time via the arrow buttons. In this example the switch-on time has been set at 21:30.
OK	BRIGHTNESS	Confirm your entry with the OK button. You simultaneously switch to the next menu item "Brightness". The preset brightness value flashes.
/ //	9	- Set the desired brightness value via the arrow buttons. In this example the value "9" has been set.
OK	SAT-SUN OFF / 8:00	- Confirm your entry with the OK button. You simultaneously switch to the next menu item "Sat - Sun OFF". The preset switch-off time flashes.
/ //	8:30	- Set the desired switch-off time via the arrow buttons. In this example the switch-off time has been set at 8:30.
ОК	SWITCHING TIMES	- Confirm your entry with the OK button. The switching times have been set.
•		- Press the menu button to switch to the operating mode.

5.8.2 ASTRO function

By activating the astro function the switching times are automatically adjusted each day to the yearly process of sunrise and sunset.

The astro switching times are designed as blocks for Mon-Fri and Sat-Sun. Also the entry of a time shift (±90 minutes) is possible in addition to the astro time. With the time shift the astro time can be adapted to the regional conditions.

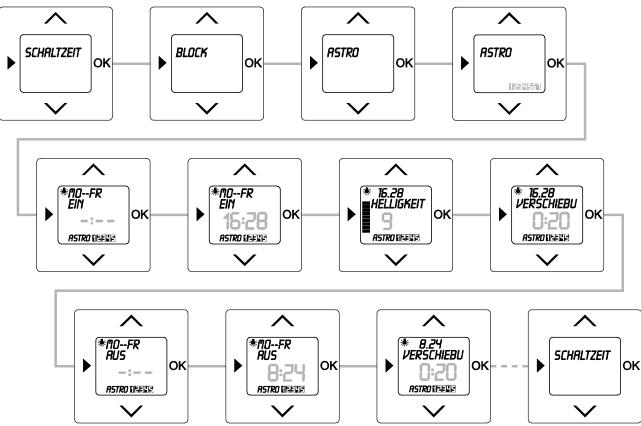


Fig. 10: Menu item - Astro

oequence	or operating steps	
Button	Display	Entry / Comments
	SWITCHING TIMES	- Press the menu button to switch to the setting mode.
ок	BLOCK	- Press the OK button. Menu item "Block" is displayed.
	ASTRO	- Select menu item "Astro" via the arrow buttons.
		- Press the OK button.
OK	MONFRI ON /:	You simultaneously switch to the next menu item "Mon - Fri ON".
		The display flashes.
\wedge	MONFRI ON / 16:28	- Press one of the arrow buttons.
		The switch-on time flashes. The astro time for sundown is fixed and cannot be changed.
	BRIGHTNESS	- Confirm the time with the OK button.
OK		You simultaneously switch to the next menu item "Brightness".
		The preset brightness value flashes.
\wedge	9	- Set the desired brightness value via the arrow buttons.
		In this example the value "9" has been set.
OK	TIME SHIFT	- Confirm your entry with the OK button.
	ווווכ אורו	You simultaneously switch to the next menu item "Time shift".

Continuation: Sequence of operating steps

Button	Display	Entry / Comments
		- Set the time shift for the specified astro time via the arrow buttons, so that the switching
$\wedge\!\!\vee$	0.70	time is adapted to the regional conditions.
	0:20	In this example the switch-on time has been pushed back 20 minutes.
		No shift will be set if a flashing display -: is confirmed.
		- Confirm your entry with the OK button.
OK	MONFRI OFF /:	You simultaneously switch to the next menu item "Mon - Fri OFF".
		The display flashes.
///	MON CD1055 / 0 711	- Press one of the arrow buttons.
/ \ \	MONFRI OFF / 8:24	The switch-off time flashes. The astro time for sunrise is fixed and cannot be changed.
OK	TIME CLUET	- Confirm the time with the OK button.
OK	TIME SHIFT	You simultaneously switch to the next menu item "Time shift".
		- Set the time shift for the specified astro time via the arrow buttons, so that the switching
^\ /	0.30	time is adapted to the regional conditions.
$\wedge \vee$	0:20	In this example the switch-off time has been pushed back 20 minutes.
		No shift will be set if a flashing display -: is confirmed.
Olć	0.30	- Confirm your entry with the OK button.
OK	0:20	You simultaneously switch to the next menu item "Sat - Sun ON".
^ ^ /		- Press one of the arrow buttons.
\sim	SAT-SUN ON / 16:28	The switch-on time flashes. The astro time for sundown is fixed and cannot be changed.
		- Confirm the time with the OK button.
OK	BRIGHTNESS	You simultaneously switch to the next menu item "Brightness".
		The preset brightness value flashes.
	9	- Set the desired brightness value via the arrow buttons.
$\wedge \vee$		In this example the value "9" has been set.
		- Confirm the time with the OK button.
OK	TIME SHIFT	You simultaneously switch to the next menu item "Time shift".
		- Set the time shift for the specified astro time via the arrow buttons, so that the switching
		time is adapted to the regional conditions.
$\wedge \vee$	0:20	In this example the switch-on time has been pushed back 20 minutes.
		No shift will be set if a flashing display -: is confirmed.
		- Confirm your entry with the OK button.
OK	0:20	You simultaneously switch to the next menu item "Sat - Sun OFF".
	SRT-SUN OFF /:	The display flashes.
		- Press one of the arrow buttons.
$\wedge \vee$	SRT-SUN OFF / 8:24	The switch-off time flashes. The astro time for sunrise is fixed and cannot be changed.
		- Confirm the time with the OK button.
OK	TIME SHIFT	You simultaneously switch to the next menu item "Time shift".
		- Set the time shift for the specified astro time via the arrow buttons, so that the switching
	0:20	time is adapted to the regional conditions.
$\wedge \vee$		
		In this example the switch-off time has been pushed back 20 minutes.
		No shift will be set if a flashing display -: is confirmed.
OK	SWITCHING TIMES	- Confirm your entry with the OK button.
		The switching times have been set.
7		Press the menu button to switch to the operating mode.

5.8.3 Individual switching times

The times for the switch-on and switch-off for each day can be set independent of each other via menu item "Individual".

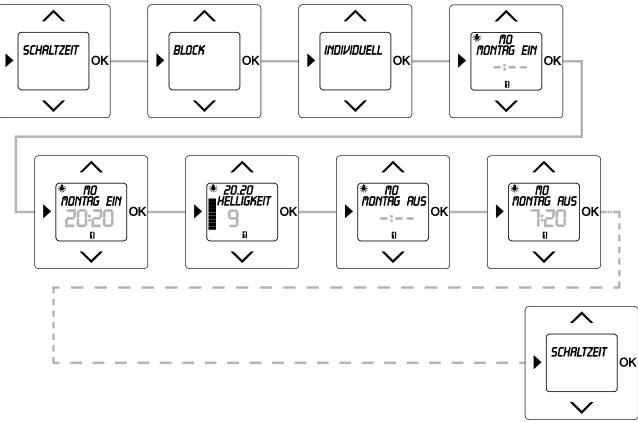


Fig. 11: Menu item – Individual

Button	Display	Entry / Comments
	SWITCHING TIMES	- Press the menu button to switch to the setting mode.
ОК	BLOCK	- Press the OK button. Menu item "Block" is displayed.
\wedge	INDIVIOURL	- Select menu item "Individual" via the arrow buttons.
ОК	<i>MONDRY ON ∕ -:</i>	- Press the OK button. You simultaneously switch to the next menu item "Monday ON". The display flashes.
^	MONDAY ON / 20:00	- Press one of the arrow buttons. The suggested switch-on time flashes.
///	20:20	- Change the time via the arrow buttons. In this example the switch-on time has been set at 20:20. No switching time will be set if the flashing display -: is confirmed.
OK	BRIGHTNESS	- Confirm your entry with the OK button. You simultaneously switch to the next menu item "Brightness". The preset brightness value flashes.
^	9	- Set the desired brightness value via the arrow buttons. In this example the value "9" has been set.

Continuation: Sequence of operating steps

	ontinuation. Ocquence of operating steps				
Button	Display	Entry / Comments			
		- Confirm your entry with the OK button.			
OK	MONDRY OFF / -:	You simultaneously switch to the next menu item "Monday OFF".			
		The display flashes.			
///	MONDOU OFF / 7.00	- Press one of the arrow buttons.			
/ \ \	MONDRY OFF / 7:00	The suggested switch-off time flashes.			
	7:20	- Change the time via the arrow buttons.			
$\wedge \vee$		In this example the switch-off time has been set at 7:20.			
		No switching time will be set if the flashing display -: is confirmed.			
	TUESDRY ON / 20:00	- Confirm your entry with the OK button.			
OK		You simultaneously switch to the next weekday. If desired, use the same procedure for			
		every further weekday.			
OK	SWITCHING TIMES	- Confirm your entry with the OK button.			
OK .		The switching times have been set.			
		- Press the menu button to switch to the operating mode.			

5.8.4 Additional switching times

An additional On and Off switching command can be set for each weekday in menu item "Additional switching times". This makes it possible to reproduce a lunch break, for example.

To enable the additional switching times to be entered, the menu item must first be activated in menu "Special functions". See section 5.9.1. Only then will the additional switching times appear on the "Menus" level.

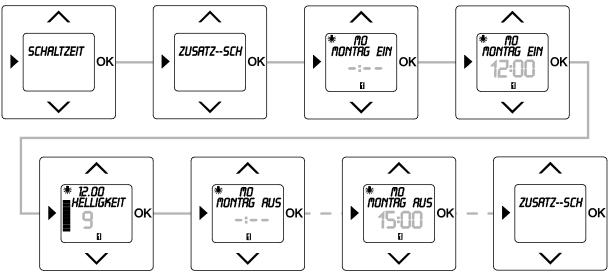


Fig. 12: Menu item - Individual

Button	Display	Entry / Comments
	SWITCHING TIMES	- Press the menu button to switch to the setting mode.
^	ADDITIONAL SUITCHING TIMES	- Select menu item "Additional switching times" via the arrow buttons.
OK	MONDRY ON / -:	You simultaneously switch to the next menu item "Monday ON". The display flashes.
<i>~</i>	MONDRY ON / 12:00	- Press one of the arrow buttons. The suggested switch-on time flashes.
/ \/	12:00	- Change the time via the arrow buttons. In this example the switch-on time of 12:00 has been taken over. No switching time will be set if the flashing display -: is confirmed.
ОК	BRIGHTNESS	- Confirm your entry with the OK button. You simultaneously switch to the next menu item "Brightness". The preset brightness value flashes.
	9	- Set the desired brightness value via the arrow buttons. In this example the value "9" has been set.
ОК	<i>MONDRY OFF ∕ -:</i>	Confirm your entry with the OK button. You simultaneously switch to the next menu item "Monday OFF". The display flashes.
	MONDRY OFF / 15:00	- Press one of the arrow buttons. The suggested switch-off time flashes.

Continuation: Sequence of operating steps

sontinuation. Ocquence of operating steps		
Button	Display	Entry / Comments
///	15:00	- Change the time via the arrow buttons. In this example the switch-off time of 15:00 has been taken over. No switching time will be set if the flashing display -: is confirmed.
OK	TUESDAY ON / 12:00	- Confirm your entry with the OK button. You simultaneously switch to the next weekday. If desired, use the same procedure for every further weekday.
ОК	RODITIONAL SUITCHING TIMES	- Confirm your entry with the OK button. The switching times have been set.
•		- Press the menu button to switch to the operating mode.

Calling up special functions 5.9

The settings of the special functions that are available and how the menu items are called up is described here. A detailed description of the individual functions is contained in the following sub-sections.

5.9.1 Activating additional switching times

To enable additional switching times to be entered, menu item "Additional switching times" must first be activated. See the following description:

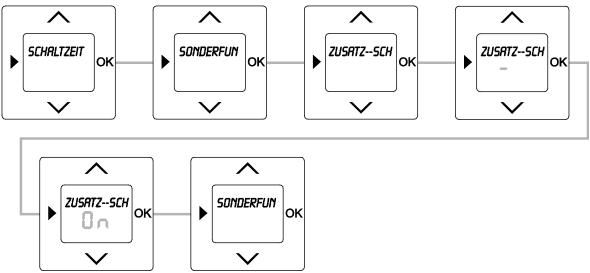


Fig. 13: Menu item – Special functions / Additional switching times

Button	Display	Entry / Comments
	SWITCHING TIMES	- Press the menu button to switch to the setting mode.
$\wedge \vee$	SPECIAL FUNCTIONS	- Select menu "Special functions" via the arrow buttons.
OK	ADDITIONAL SUITCHING TIMES	- Press the OK button.
^	- ON	 Activate or deactivate the additional switching times via the arrow buttons. Automatic switching times are not available. Two additional switching times per day can be executed.
ОК	SPECIAL FUNCTIONS	- Confirm your selection with the OK button. The selection is stored. You simultaneously switch to menu "Special functions". When selecting On: The further procedure for setting the "Additional switching times" is described in section 5.8.4.
•		- Press the menu button to switch to the operating mode.

5.9.2 **ASTRO** blocking time

The set switching times of the astro function can be limited with the "Astro blockage time" function.

ASTRO blocking	
time	Meaning
ON	Not earlier ON than o'clock
OFF	Not earlier OFF than o'clock

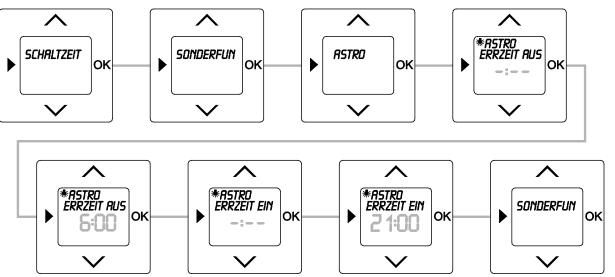


Fig. 14: Menu item – Astro blocking time

Button	Display	Entry / Comments
	SWITCHING TIMES	- Press the menu button to switch to the setting mode.
	SPECIAL FUNCTIONS	- Select menu "Special functions" via the arrow buttons.
ОК	ADDITIONAL SUITCHING	- Press the OK button.
	TIMES	Menu item "Additional switching times" is displayed.
\wedge	ASTRO	- Select menu item "Astro" via the arrow buttons.
	ASTRO	- Confirm your selection with the OK button.
OK	BLOCKING TIME OFF	You simultaneously switch to the next menu item "Astro blocking time OFF".
	-;	The display flashes.
/ \/	6:00	- Set the earliest time via the arrow buttons from which the light is to be switched off.
		In this example the preset time of 6:00 has been taken over.
OK	ASTRO	- Confirm your selection with the OK button.
	BLOCKING TIME ON	You simultaneously switch to the next menu item "Astro blocking time ON".
	-;	The display flashes.
\\\	21:00	- Set the earliest time via the arrow buttons from which the light is to be switched on.
		In this example the preset time of 21:00 has been taken over.
ОК	SPECIAL FUNCTIONS	- Confirm your entry with the OK button.
		You simultaneously switch to menu "Special functions".
		- Press the menu button to switch to the operating mode.

5.10 Display during mains power failure

The illustration on the right shows an example of a display with the mains voltage activated.



Fig. 15: Display during normal operation

The illustration on the right shows the display during a mains voltage failure or the control element unplugged. Prerequisite, however, is that the timer was charged previously for several hours.

The flashing plug symbol (see magnification) shows that the mains voltage supply to the timer is deactivated. The time continues to run in the background, but is not displayed to save energy.

If the timer is again supplied by the mains network within a period of 14 hours, the current time will be shown in the display.

Operation of the unplugged control element

If the control element (the timer) was unplugged for programming, the menu level must first be called up with a long press of the button.

Operation is then carried out as normal.

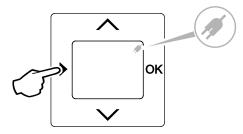


Fig. 16: Display during mains power failure

Busch-Timer®

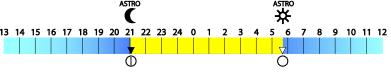
5.11 Example for application of the ASTRO-program with additional switching time

The following example shows how a twilight light can be implemented, which switches on at sundown and switches off again at 11 p.m., so that it does not burn throughout the night.

To illustrate this task, a time line from 1 p.m. to midday the following day is graphically shown with the corresponding switching times. The symbols are described in the legend on the right.

Icon	Meaning
ASTRO 🔆	ASTRO switching time for sunrise
ASTRO	ASTRO switching time for sundown
V	Switching time ON (lighting ON)
Ŏ	Switching time OFF (lighting OFF)

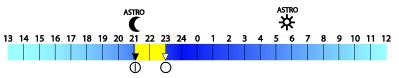
ASTRO programming



1.In menu item "ASTRO" confirm the preset switching times: 5:47 OFF and 21:05 ON

Objective

The lighting is to go OFF at 11 p.m.

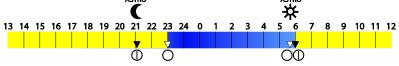


2. In menu "Special functions" activate the additional switching times (Setting: On).

3.In menu "Additional switching times" program the switching times: 6:00 ON and 23:00 OFF

Note: When programming an additional switching time, the entry of an ON switching time and an OFF switching time is required.

Programmed actual status



- The timer switches ON via astro at 21:05.
- The timer switches OFF at 23:00 via additional switching time.
- The timer switches OFF at 5:47 via astro, even though the lighting is already OFF.
- The timer switches ON at 6:00 via additional switching time.

This means that the lighting would remain switched on for the whole day until 23:00.

ASTRO
ASTRO
ASTRO
ASTRO
ASTRO

4

13 14 15 16 17 18 19 20 21 22 23 24 0 1 2

6 8 9 10 11 12

Solution

To prevent this, the astro OFF time must lie past the additional switching time of ON.

 $4. In \ menu \ "Special functions / \ astro", \ program \ an \ astro \ blocking \ time \ for \ the \ OFF \ command \ at \ 6.01.$

Result: At a sunrise before 6:00 the lighting switches ON at 6:00 and OFF again at 6:01 due to the blocking time.

Technical data 6

General		
Power reserve	4 h	
Protection type	IP 20	
Ambient temperature	0 35°C	

Busch-Timer®

7 Mounting / Installation



Warning

Electric voltage!

Risk of death and fire due to electrical voltage of 230 V.

- Work on the 230V supply system may only be performed by authorised electricians!
- Disconnect the mains power supply prior to installation and/or disassembly!



Notes on electrical connection

Prerequisite for mounting or attaching the control element is that the flush-mounted insert has been installed and electrically connected beforehand. The electrical connection is described in the separate instructions of the flush-mounted insert.

- 1. Pull the attachment off.
 - If the device is already mounted or assembled, pull off the attachment from the flush-mounted insert with the aid of the frame.

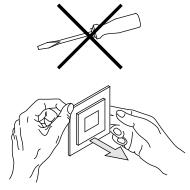


Fig. 17: Wall mounting: Pulling the attachment off

- If the state of the device is at the point of delivery, pull off the attachment from the flush-mounted insert with your hands.
- Pull the attachment off only with your hands.
 Do not lever parts off with screwdrivers or similar hard objects. This damages the device.
- When pulling off, first the resistance of the plastic clamps must be overcome.



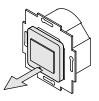


Fig. 18: State of the device at the point of delivery: pulling off the attachment

- 2. Plug the attachment together with the frame onto the flush-mounted insert.
 - Make sure that the plug-in connection on the rear side does not get jammed.
 - If mounting is difficult, check whether a burr has formed at the lock-in opening of the flush-mounted insert and remove it.

The device is now mounted.

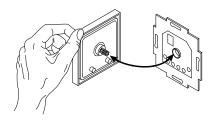


Fig. 19: Plug-on of attachment

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