Operating Instructions
Roller shutter timer
Timer U26

en

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Important information for:
• Fitters / • Electricians / • Users
Please forward accordingly!
These instructions must be kept safe for future reference.

Application

The timer U26 is an electronic roller shutter timer for operating a 230 V tubular drive. If more than one drive is controlled using the U26, the drives must be decoupled by relay controls. There is no need for decoupling in the case of drives with electronic limit switching.
The U26 timer can easily be extended to form a convenient sun protection control unit, providing additional light-dependent control for the roller shutter, using the LS26 light sensor, which anyone can attach without difficulty. You can obtain the LS26 light sensor, as well as other control elements, from your roller shutter dealer.

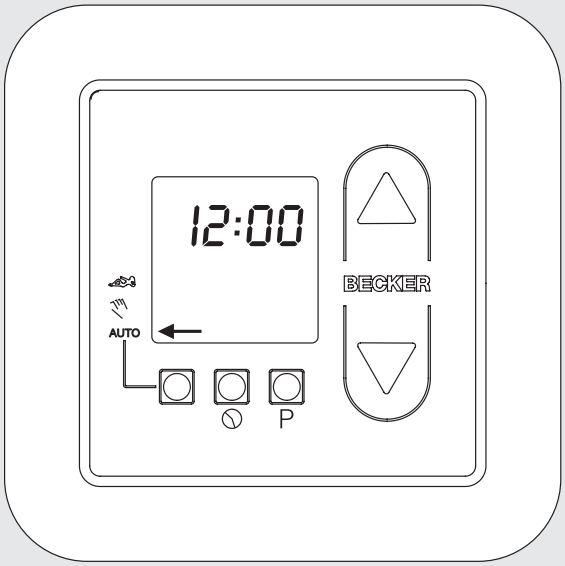
Caution

- **Please keep the instruction manual safe!**
- **Risk of injury due to electric shock.**
- **Connections to the 230 V mains must always be performed by a specialist.**
- **Disconnect the connecting cable from the power prior to installation.**
- **Always comply with regulations of local energy supply companies as well as VDE 100 provisions for wet and damp rooms during installation.**
- **Only use in dry rooms.**
- **Only use unmodified original parts from the control unit manufacturer.**
- **Keep people out of the system's range of travel.**
- **Keep children away from control units.**
- **Observe all pertinent country-specific regulations.**
- **If the system is controlled by one or several appliances, the system's range of travel must always be visible during operation.**
- **When connecting the control cables (protected extra-low voltages), only use cables with sufficient electrical strength.**
- **Device contains small parts that can be swallowed.**

Assembly

The U26 is designed for fitting in a flush-mounted switch box or a surface-mounted housing. Install as follows:
- Remove the front plate by pulling it off.
- Pull the connecting terminal off from the rear of the timer (plug-in terminal), and make the electrical connections according to the connecting diagram (Fig. 1). Avoid unnecessarily long connecting wires.
- Push the connecting terminal on.
- Fasten the timer by inserting the two screws supplied in the holes of the flush-mounted box (Fig. 2).
- Then switch on the power supply. Please note that the first time the unit is operated, there may be a delay in switching on the timer, as the timer must first must initialise itself. The number 12:00 (Fig. 3) will appear flashing on the display within 10 seconds.

If, after a power failure (5 hours), or at the time of initial installation, nothing appears on the display within 10 seconds, press the "Reset" button illustrated on Fig. 2. 12:00 now appears flashing on the display.
- Now check the direction in which the drive is operating using the UP (▲) and DOWN (▼) buttons. If the roller shutter moves in the opposite direction to the button you have pressed, turn off the power to the system and swap the connecting wires for the UP and DOWN commands at the connecting terminal.
- After you have made the settings for the time, the switching times and the sunlight-twilight parameter (the sunlight-twilight parameter can only be adjusted when the sensor is connected), fit the front plate.



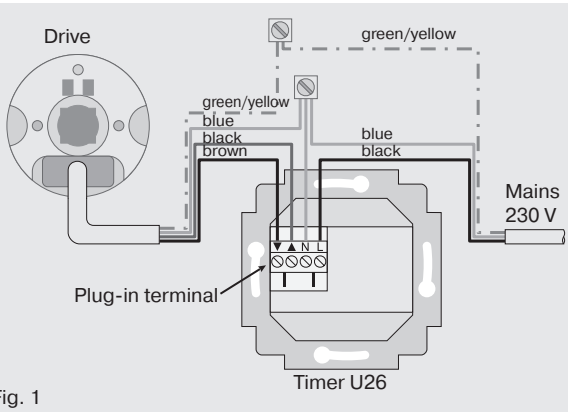


Fig. 1

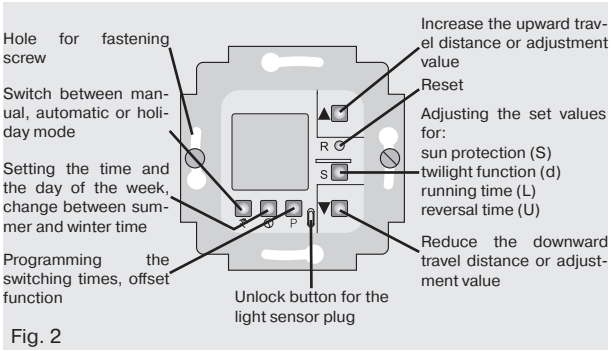


Fig. 2

Fig. 3

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Operating Instructions

Adjustment of the time and of the day of the week

Press the ⏲ button briefly to set the current time. The symbol ⏲ flashes on the LCD display (Fig. 4). The current time can now be adjusted using the ▲ and ▼ buttons.
The time that has been set is saved by pressing the ⏲ button again. At the same time, the day of the week (Fig. 5) will appear on the display (this is the setting mode for the day of the week). You now decide whether the timer is to be operated using a daily or weekly program.

Daily program:
If the timer is to operate at the same times every day, press the ⏲ button again. The U26 then does not save the current day of the week, and executes the programmed switching times for UP and DOWN every day.

Weekly program:
If the timer is to switch at different times each day, set the current day of the week now by appropriately pressing the ▲ and ▼ buttons (e.g.: number 1 for Monday).
Now press the ⏲ button again. The U26 saves the day of the week that has been set, and executes the switching times programmed for each day.
If you want to change from the weekly program to the daily program, select the day of the week by pressing the ⏲ button twice. Now press the ▲ button until all the numbers (1-7) are shown on the display. Confirm the new setting by pressing the ⏲ button.

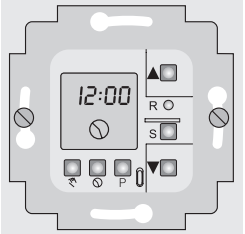


Fig. 4

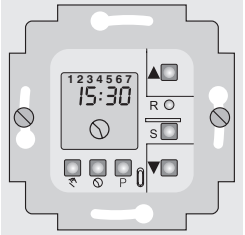


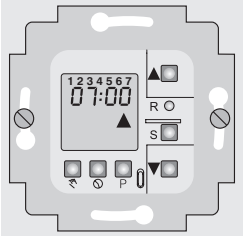
Fig. 5

Setting/programming the switching times

Switching times of 7.00 a.m (for UP) and 8.00 p.m. (for DOWN) are factory programmed. To change these switching times, briefly press the "P" button. The display now shows the switching time for the UP command (Fig. 6). This switching time can be changed using the ▲ and ▼ buttons. Press the "P" button again briefly to change the switching time for the DOWN command. The display now shows the switching time for the DOWN command (Fig. 6). This switching time can again be changed using the ▲ and ▼ buttons.
If the U26 is being operated in the **daily program**, then when the "P" button is pressed again, the display changes to the current time. The changed switching times are saved at the same time.
If the U26 is being operated in the **weekly program**, the time jumps to the UP command for the following day. Through repeatedly pressing the "P" button, the switching times for each weekday are called up, and can again be changed using the ▲ and ▼ buttons. Finally, after day 7, you return to the display of the current time. The changed switching times are saved at the same time.
If the roller shutter being operated is not to carry out an UP command on one day, delete the displayed value by pressing the ✋ button; **– – : – –** appears on the display (Fig. 7).

Offset function:
The offset function moves all the programmed switching times, separated according to opening and closing time, by a certain amount all at once. This allows the times selected in the weekly program to be adjusted easily to the seasonal changes in sunrise and sunset. This is how it is done:
Press the "P" button for at least 3 seconds. "o 00" appears on the display. Now use the ▲ and ▼ buttons to enter the period of time by which you want to shift the times currently programmed for the UP commands. Negative values shift the switching time to an earlier moment, positive values to a later moment.
Confirm your input by pressing the "P" button once. Now enter the period of time by which you want to shift all the programmed DOWN commands. Again acknowledge the input by pressing the "P" button.

Reset:
All the programmed values are deleted by pressing the Reset button. The program is restarted, and adopts the specified standard values.



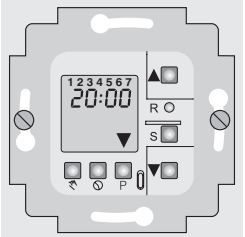


Fig. 6

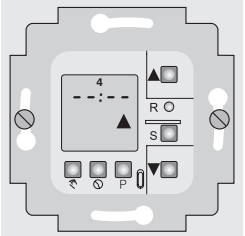


Fig. 7

Switch between manual, automatic or holiday mode

Press the Manual/Auto/Holiday mode button. The current mode is indicated on the display.

Automatic mode:
The UP and DOWN commands that have been set are executed. If the sun and twilight sensor is used, the sun and twilight functions are executed. Manual operation is also possible at any time (Fig. 8).

Manual mode:
The UP and DOWN commands that have been set are not executed.

Note
If the sun and twilight sensor is used, the sun and twilight functions are not executed. Manual operation is nevertheless possible at any time.

Holiday mode:
In this mode, the set switching times are operated with a randomly generated delay of between 1 and 31 minutes. The resulting irregularity of the switching commands simulates an occupied house. Here again, manual operation is possible at any time, and if the sun and twilight sensor is used, the sun and twilight function is executed.

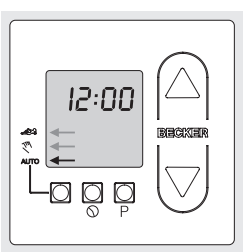


Fig. 8

Operation of the U26 with the sun-twilight sensor

The "LS26" combined sun-twilight sensor is necessary to provide shade in intense sunshine, or for closing the roller shutter at dusk. This sensor is pressed onto the window with a suction cup (Fig. 9). The sensor is plugged into the timer at the bottom right when the front plate is off. Use a suitable screwdriver to hold the unlock button down while fitting (Fig. 10). When disassembling, release the latch with a suitable screwdriver, and pull the plug out of the housing (Fig. 11).

The function of the sensor, and adjusting the sun and twilight parameter:

Sun protection function

A mean light value of 40, corresponding to about 25 thousand lux, is factory set for the intensity of sunshine. If the brightness of the sunshine stays above the set value, then a DOWN command is issued after a waiting period of 1.5 minutes. The roller shutter travels to the level of the sensor, stops and then clears it, so that the light intensity can continue to be measured. A tracking function ensures that the sensor is cleared again if the sensor is shaded by the roller shutter when the sun's position changes.

If the intensity of the sunshine stays below the set value after the roller shutter has lowered, then an UP command is executed after a waiting period of about 15 minutes.

Twilight function

Note

The twilight function is not active between 12 am and 3 pm.

A mean twilight value of 20 is set at the factory. This corresponds to about 60 lux. When the brightness falls below this value, a DOWN command is executed after 15 minutes. It is possible that the DOWN command resulting from the onset of twilight is issued before the time programmed for closing the roller shutter. The roller shutter opens again on the following day at the set switching time.

Changing the preset sun and twilight values:

If a sensor is connected to the timer, it is possible to enter the "Adjust settings" mode by briefly pressing the "S" button (only possible when the front plate is off). The preset threshold value for the light intensity (S 40) appears on the display. An indicator bar shows whether the light value currently being measured is smaller than (S_ 40, Fig. 12), equal to (S- 40) or larger than (S¯ 40) than the set value on the display. The ▲ and ▼ buttons can be used to change this value between 01 and 99. The numerical value 99 corresponds approximately to a light value of 60 klx (thousand lux).

Note

Setting a high value means that the roller shutter will not move down until the sunshine is very bright, while a low value means that the roller shutter will move downwards earlier.

By pressing the "S" button briefly, you now move on to adjustment of the twilight value. The display now shows d 20 for twilight, while the value that has just been set for the sunshine is stored at the same time.

The indicator bar shows whether the twilight value currently being measured is smaller than (d_ 20, Fig. 13), equal to (d- 20) or larger than (d¯ 20) than the displayed value. The indicator bar only appears when the twilight value measured is less than 300 lux. The ▲ and ▼ buttons can be used to change this value between 01 and 99. The numerical value 99 corresponds to about 300 lux.

Note

Setting a low value delays closure of the roller shutter at twilight, while a higher value causes the roller shutter to close as soon as twilight begins.

You switch into operating mode by pressing the "S" button again briefly. The current time appears on the display, and the settings for the twilight function have been stored.

Note

In order to switch off the sun or twilight function, enter setting mode and set the corresponding value to "--" by pressing the "⊘" button.

Attention

Do not cover the sensor to "switch off" the sun protection function. Shading the sensor can simulate twilight, and the roller shutter will then close when you don't want it to. Closing in response to the twilight sensor can be delayed or entirely inhibited if street lights shine on the sensor, or through switching on the room lighting. In that case it will close in response to the programmed DOWN command.

Note

If the DOWN command is programmed to a late time (e.g. 11 p.m.), the roller shutter will move down earlier in response to the twilight setting. This allows the roller shutter to be closed in response to the twilight, independently of the programmed switching time. In winter the roller shutter closes earlier, and remains open for longer in the summer.

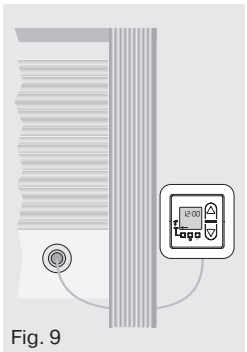


Fig. 9

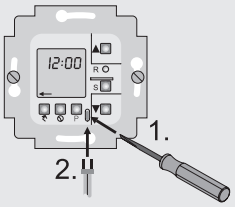


Fig. 10

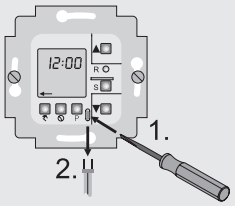


Fig. 11

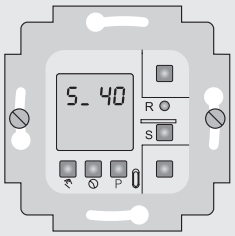


Fig. 12

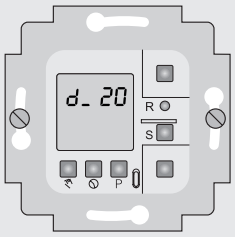


Fig. 13

Setting summer/winter time and vice versa

A changeover between summer/winter time is made by holding the ⊘ button down for at least 3 seconds. (It may be necessary to change over repeatedly the first time in order to make the time setting you want.) Watch what is shown on the display!

Operating Instructions

Changing the factory-set running time/reversal time

The running time is the length of time that the drive stays on.
If the "S" button is held down for longer than 3 seconds, L 1:30 will appear on the display (Fig. 14, standard value 1 minute and 30 seconds). The running time can now be changed using the ▲ and ▼ buttons. After the running time has elapsed, electrical power is removed from the drive, and reversal is carried out if active. By pressing the "S" button repeatedly, you enter the "Set reversal time" mode. This is shown by a U, and the running time that has been set is saved at the same time. The value for the reversal time can be varied between "01" and "99" (Fig. 13).

By pressing the "" button, the reversal time is switched off (U --, Fig. 13). The maximum reversal time ("99" on the display) corresponds to about 3.2 seconds. Press the "S" button again to return to operating mode. If the reversal time is active, then after the running time has elapsed, the drive is operated in the "UP" direction for the duration of the set reversal time. Depending on the setting and on the speed of the drive, the first slats of the roller shutter are then cleared again to provide ventilation, for example. When the set running time has completely elapsed, the roller shutter can be closed completely by hand.

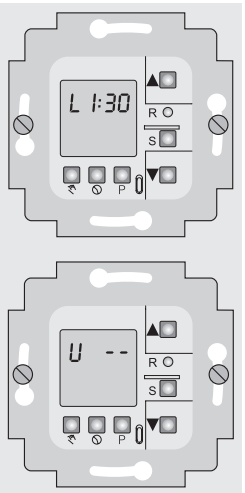


Fig. 14

What to do if…?

Problem	Cause	Remedy
The roller shutter moves downwards about 15 minutes after it has been opened.	The set twilight value has been reached, or the sensor is covered.	Check the twilight value and the position of the sensor on the window. It may have become detached from the pane.
The U26 does not carry out the set switching commands, or does so after a delay.	The time is set to manual or holiday operation.	Put the time into "automatic mode".
The sun and twilight parameters that have been set cannot be changed, or are not displayed.	A sensor is not inserted, or else either the sensor or its connecting cable is faulty.	Check the sensor, the sensor cable and the connecting plug.

Disposal

The crossed-out bin symbol on the product indicates that the device is subject to mandatory disposal separate from household waste. This product must be handed over to a collection point for electrical and electronic equipment at the end of its service life.
The packaging material must be disposed of properly.

Technical data

Supply voltage:	230 V±10%, 50-60 Hz	Display:	LCD
Output:	Phase connected via two relay contacts for UP and DOWN	Ambient temperature:	0 to +55 °C
		Mounting:	fits in a flush-mounted switch box
Switched power:	5A at cos φ=1	Connection type:	plug-in screw terminals
Power reserve:	approx. 5 hrs.	Power consumption when relay is not energised:	0.7 W

Switching range

The controller can be integrated into switching units from many other manufacturers with central board dimensions of 55 x 55 mm.
Examples:

Manufacturer	Type
Berker	S1, B3, B7
Gira	Standard, E2, Event, Esprit
Jung	AS, A500, A-Creation, A-Creation-Glas, A-Plus
Merten	M-Smart, M-Arc, M-Plan, M-Plan-Glas, M1, Atelier, M-Star

Warranty

Structural modifications and incorrect installation which are not in accordance with these and our other instructions can result in serious injuries, e.g., crushing of limbs. Therefore, structural modifications may only be carried out with our prior approval and strictly in accordance with our instructions, particularly the information contained in these Assembly and Operating Instructions.
Any further processing of the products which does not comply with their intended use is not permitted.
The end product manufacturer and fitter have to ensure that all the relevant current statutory, official and, in particular, EMC regulations are adhered to during utilisation of our products, especially with regard to end product manufacture, installation and customer advice.

Subject to technical changes without notice.

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