

● ● CDS-A/T

ESYLUX

www.esylux.com

Congratulations on your purchase of this high-quality ESYLUX product. To ensure proper operation, please read these user instructions carefully and keep them for future reference.

1 • SAFETY INFORMATION



**CAUTION:** Work on the 230 V power system must be carried out by authorised personnel only with due regard to the applicable installation regulations. Switch off the power supply before installing the system.

Use this product only as intended (as described in the user instructions). Changes or modifications to the product or painting it will result in loss of warranty. You should check the device for damage immediately after unpacking it. If there is any damage, you should not install the device under any circumstances. If you suspect that safe operation of the device cannot be guaranteed, you should turn the device off immediately and make sure that it cannot be operated unintentionally.

2 • DESCRIPTION

The ESYLUX CDS-A/T is a surface-mounted twilight switch with an integrated timer feature to allow lighting equipment to be automatically switched on and off (fig. 1). A light sensor detects the surrounding light intensity. If this falls below the set lighting value the CDS-A/T automatically switches the light on and then off again if the surrounding light intensity exceeds the threshold value. The lighting can also be individually switched on and off again using the integrated time feature. You can, for example, set the CDS-A/T so that this switches the lighting on according to the set lighting value (Lux) – for example at dusk. After 10.15 p.m. the light is, however, no longer required. To program this, set the OFF activation value to 22.15 and the light is then switched off at this time. At 5.00 a.m. light is required again and so you set the ON activation value to 05.00 and the lighting is switched on again. When the set lighting value is exceeded – e.g. at dawn, the lighting is automatically switched off. This also saves energy costs in the time when the lighting is not required.

3 • INSTALLATION / MOUNTING / CONNECTION

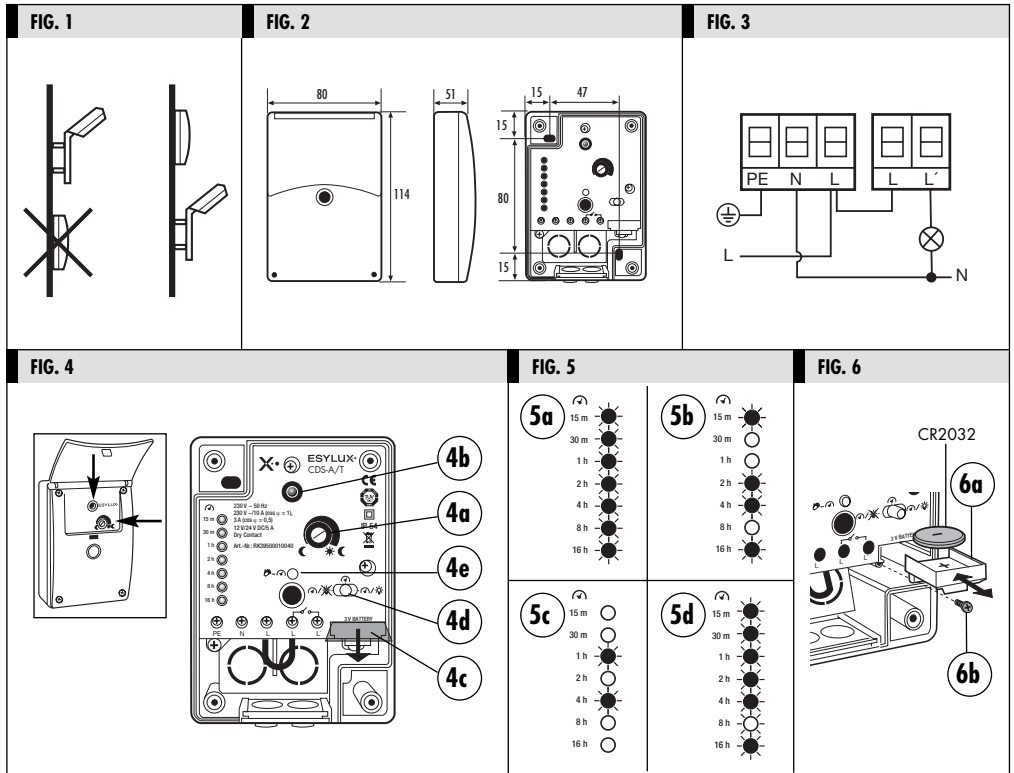
Switch off the mains supply before installing the product. The CDS-A/T should only be installed on flat, vertical surfaces (wall of a house) facing north. If possible, the device should not be exposed to direct sunlight. Please note that an override of the CDS-A/T is connected via the switched lighting (fig. 1). Remove casing lid and fit the base to the selected surface with the cable insert point facing down. The cable must be environmentally sealed (water resistant cable connection). Connect the twilight Switch as shown in the circuit diagram (fig. 3). There is a bridge of 1.5 mm<sup>2</sup> between L (mains voltage) and L (floating output contact). If the relay contact is to be used for low voltage, this bridge has to be removed.

4 • STARTING UP AND SETTING

4.1 Back-up battery

The battery is used to ensure that programmed times are not lost in the event of a power cut, allowing the settings to be stored for up to 30 days. The life of the battery supplied is between about 3 and 4 years.

Remove the protective strip between the battery and the contact (fig. 4c). Switch on the mains voltage.



4.2 Setting the light value (LUX)

The selected light value is set via the potentiometer (fig. 4a). The red LED is used to help with the settings (fig. 4b). When the activation time is reached (e.g. dusk) slowly turn the potentiometer towards the “moon symbol” until the red LED lights up. The set lighting level now corresponds to the actual surrounding light intensity and the CDS-A/T is aligned.



**NB:** Please note that the connected lighting only comes on about 60 seconds after the LED lights up, as it is on a time delay. This switch delay of about 60 seconds prevents unintentional activation for example by car headlights or a dark cloud.

4.3 Setting the time functions



**NB:** The ON and OFF times must be set before the current time is set, as the CDS-A/T will otherwise take 24 hours to adjust. During this time the connected lighting would not switch on and off as defined in the program.

4.3.1 Basic setting

When the mains current is switched on, all LEDs light up (fig. 5a). The CDS-A/T switches on when the lighting level falls below the set light value and then switches off again when this lighting level is exceeded. In this setting the CDS-A/T works without the time feature. If you have already programmed the times or the ON/OFF times and would like to return to the basic setting, disconnect the device from the power supply for at least 30 seconds and remove the batteries while it is disconnected.

4.3.2 Setting the OFF time

Set the time switch to for the OFF time (fig. 4d). Now press the button “timer” (fig. 4e) once and the LEDs cease to light up. Each time you press this button the time is advanced by 15 minutes. To advance the time more quickly hold the button down. Now set your selected OFF time.  
**Example:** To set the OFF time for 10:15 p.m., the LED display would be as shown in fig. 5b.

4.3.3. Setting the ON time

Set the timer to for the ON time (fig. 4d). Now press the “time adjustment” button (fig. 4e) and set the selected activation time.  
**Example:** To set the activation time for 5:00 a.m. the LED is as shown in fig. 5c.

4.3.4. Setting the time

Set the timer (fig. 4d) to “”. Before setting the current time hold the “time adjustment” button until all LEDs (11.45 p.m.) except LED 8 h (fig. 5d) light up. Then set the current time. This process is necessary to ensure that the CDS-A/T is in the set mode. When the time is set turn the timer (fig. 4d) to the “” setting. The CDS-A/T is now programmed.

If you need to change the on/off times again you will need to reprogram the current time.

Close the lid and screw tight.



**PLEASE NOTE:** When the timer (fig. 4d) is in one setting for over 20 minutes the LED lights switch off. They are only used as programming aids. This does not mean that the device is not working properly. When the timer (fig. 4d) is moved again they light up and you can change the settings.

5 • CHANGING BATTERIES

The battery is used to ensure that time settings are not lost in the event of a power cut, allowing the settings to be stored for up to 30 days. The life of the battery supplied is between about 3 and 4 years. To change the batteries remove the screw (fig. 6b) and insert the new battery in the battery compartment as shown in fig. 6a and screw it into the correct position in the device. Always ensure that the battery is suitable.



**NB:** The end user must recycle all used batteries. Disposing of the batteries in household waste is strictly forbidden (Directive 91/157 EEC).

6 • PRACTICAL ADVICE

Fault	Cause
1. None or only some of the LEDs (clock light up when the device is connected to the power supply or during programming.	Disconnect the device from the mains power supply and remove the battery. Check the wiring. Wait 30 seconds and then reconnect to the power supply and replace the batteries.
2. The LED (Lux) does not light up although the lighting value is set to max and the light sensor has been covered.	Ensure that the light sensor is covered with a non-transparent material. Check the wiring.
3. The lighting is not switched on and off according to the programmed on/off times.	When the on/off times are set there is a 24 hour cycle to run through for the auto-adjustment feature of the CDS-A/T. Press the “time adjustment” button to run through the time. Check to ensure whether the timer for ON, OFF and the current time have been properly selected and whether the times are correctly set. The values should be as exact as possible, particularly for the time.
4. The clock timer does not switch on again if the power is disconnected and then reconnected.	The power must be disconnected for at least 15 minutes. Using the LEDs you can then check if the correct time is displayed. (time display every 15 minutes) Check to ensure that the battery is fitted correctly.

## 7 • ESYLUX GUARANTEE

ESYLUX products are tested in accordance with applicable regulations and manufactured with the utmost care. The duration of the warranty is based on statutory guidelines. The warranty can only be honoured if the appliance is sent back with the receipt, unchanged, packed and with sufficient postage to ESYLUX GmbH or to the relevant distributor in your country. (Visit [www.esylux.com](http://www.esylux.com) for a complete overview.) Please include a brief written description of the fault with any device you send back. If the warranty claim proves justified, ESYLUX GmbH will, within a reasonable period, either repair the device or replace it. If a claim is unfounded (e.g. because the warranty has expired or the fault is not covered by the warranty), then ESYLUX GmbH will attempt to repair the device for you in a cost-effective manner. The warranty does not apply to natural wear and tear, changes caused by environmental factors or damage in transit, nor to damage caused as a result of failure to follow the installation or user instructions. Any batteries or bulbs supplied with the device are not covered by the warranty. ESYLUX GmbH shall not be liable for any indirect, consequential or financial losses.

## TECHNICAL DATA

MAINS VOLTAGE	230 V ~ 50 Hz
LIGHT EXPOSURE RANGE	approx. 5 - 300 Lux
ON / OFF SWITCH DELAY	approx. 60 seconds
BREAKING CAPACITY	230 V ~, 10 A $\cos \varphi = 1$ , 3 A $\cos \varphi = 0,5$ , 12/24 V DC/5 A, no safety low voltage
SWITCHING OUTPUT	floating output, 1 normally open contact
BATTERY	Lithium CR 2032, 3 V
MEMORY CAPACITY	1 x ON / 1 x OFF
TIME SETTING	approx. 15 min. - approx. 23 hours 45 min.
PROGRAMMING STEPS	every 15 minutes
OPERATING TEMPERATURE RANGE	-25 °C...+55 °C
PROTECTION TYPE	IP 54
PROTECTION CLASS	II
TEST SYMBOL	TÜV
APPROX. DIMENSIONS	width 80 mm height 114 mm depth 51 mm
COLOUR	white, similar to RAL 9010

Technical and design features may be subject to change.

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# ESYLUX•

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