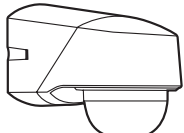
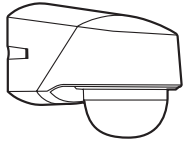


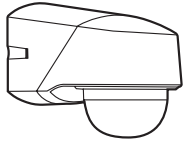
MOTION DETECTORS



●● RC 130i



●● RC 230i



●● RC 280i

ESYLUX

www.esylux.com

GB MOTION DETECTORS

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 INSTRUCTIONS

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

ESYLUX RCi series motion detectors have a 130°/230°/280° field of detection and 360° creep zone protection. ESYLUX motion detectors are passive infrared detectors that react to moving heat sources (people, vehicles) (Fig. 1 (1) 360° creep zone protection (2) Facing detector (3) Diagonal to detector). If the motion detector registers changes in the heat emissions within its field of detection, depending on the set lux level, it switches on the connected load (e.g. lighting) for an adjustable length of time. The ESYLUX RCi motion detector series can be mounted onto a wall or ceiling without the need for any further accessories. A base is available to allow it to be mounted to an internal or external corner. The ESYLUX RCi motion detector has a default programme allowing it to work within predefined parameters (10 Lux, 2 minutes, max. electronic range). There are two different ways of setting the detector – either conventionally using the setting controls on the device itself, or using the convenient optional remote control, ESYLUX MobilRCi or MobilRCi-M.

NB: To activate all functions on the detector, the remote control Mobil-RCi is required.

3 • INSTALLATION/MOUNTING/CONNECTION

Please observe the following points prior to fitting the device:

- The power supply must be disconnected prior to fitting.
- All data concerning the range presume an installation height of 2.50 m.
- (If installed at a different height the values for the range will be affected).
- Best results (max. range) are achieved if the device is installed diagonally to the direction of motion (Fig. 1).
- Ensure that there are no obstacles between the area to be covered and the detector, as infrared rays cannot penetrate solid matter.
- To ensure that the built-in light sensor is not affected, ensure that there is a minimum of 1 m between the motion detector and the connected lighting, and that light sources are not focused directly on the detector.
- Please consider the environment in which the device is to be fitted, such as any neighbouring gardens and the distance to the street.
- The motion detector should only be mounted on a solid, even base (wall/ceiling). The wall base and the sensor can be plugged into one another. To install, disconnect both parts. Insert a screwdriver into the side opening and lever off towards the sensor, pulling the wall connection base away from the sensor (Fig. 2.1). If mounting on a wall, the cable entry points must face downwards. If mounting on ceiling, they must face the front. Insert the cable and mount the wall base in the desired position (Fig. 3). Connect the motion sensor as directed in the circuit diagram (Fig. 4).

CAUTION: The maximum inrush current must not be exceeded when connecting to capacitive loads such as electronic ballasts or fluorescent lamps with parallel compensation.

- (4.1) Standard operating mode
 - (4.2) Parallel switching of max. 8 devices
 - (4.3) If switching inductance (e.g. relays, contactors, series connection units) the use of a quenching circuit (A) may be required
 - (4.4) Standard operating mode with the added option of constant lighting mode using an external switch
 - (4.5) Parallel switching and stairway lighting machine
 - (4.6) Standard operating mode with the added option of manual switching.
- If fitting to a ceiling, the two sensor parts are turned away from each other by 180° (Fig. 5). Fit the detector onto the wall base and press to slot into position (Fig. 2.2).

NB: The motion detector must always be fitted so that the sensor faces down.

4 • STARTING UP AND SETTING

Once the device has been successfully installed and the power supply has been switched back on, the device carries out an auto-test cycle lasting approx. 60 seconds. This is indicated by the focus LED flashing and the connected loads being activated. Once this phase is complete, the device is ready to use. The settings are concealed within the casing. By pressing up and then letting go of the lens, the detector head is unlocked and protrudes from the casing by approx. 1 cm. Repeat this procedure to allow the sensor head to return to its original, locked position (Fig. 6, works like a retractable ball-point pen). A range of further setting options/special functions are available with the optional remote control MobilRCi.

4.1 Test mode

Set the operating mode option button (Fig. 7.1) to "Test".

NB: Test mode can also be activated using the remote control MobilRCi (see section 6).

During test mode the focus LED is permanently switched on. Each time motion is detected, regardless of the light exposure level, the detector switches the load ON for 1 second and OFF for 2 seconds. The following options allow you to adjust the field of detection to suit the environment in which the device is installed:

FIG. 1

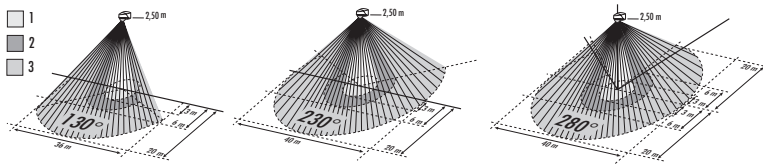


FIG. 2

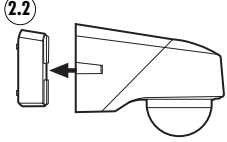
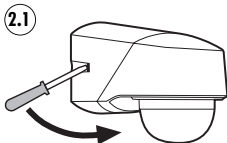


FIG. 3

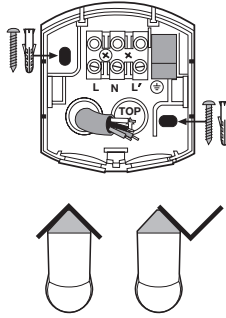


FIG. 4

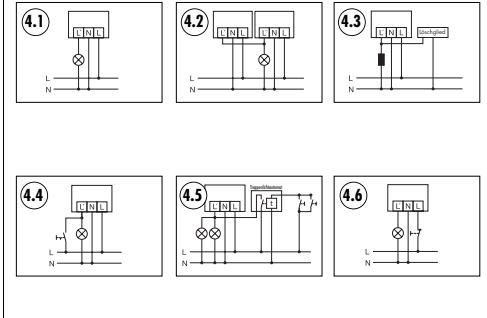


FIG. 5

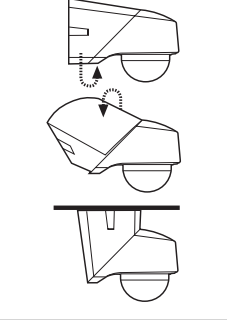


FIG. 6

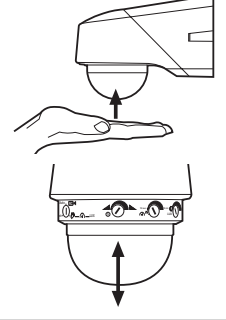


FIG. 7

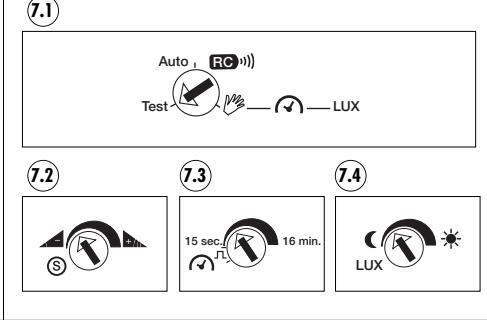


FIG. 8

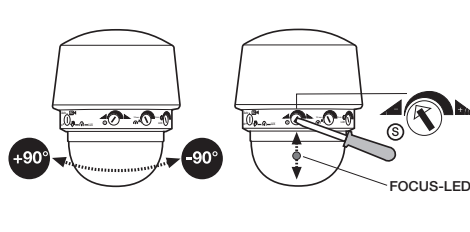


FIG. 9

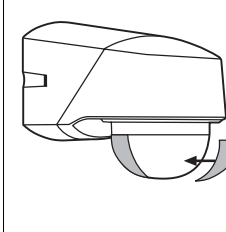
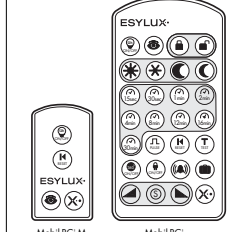


FIG. 10



5 • OPERATING/PROGRAMMING

Every time movement is detected the focus LED lights up for 2 seconds. This function can be switched off (see section 6). The motion detector switches the load on for the set length of time, depending on the set light exposure level.

Setting unit operating mode button (Fig. 7.1).

NB: The operating mode button allows you to set the parameters for the device. You can either simply select the values using the settings (Figs 7.3 and 7.4) on the device or use the default programme, or the set parameters using the remote control. You can switch the settings at any time; the defined values apply.

Test mode: Device operates according to the parameters on the settings (Fig. 7.3 and 7.4).

Auto/RC Modus Auto (RC-ii): Devices operates according to the default programme or the parameters defined using the remote control.

Default programme

Set the operating button (Fig. 7.1) to "Auto (RC-ii)". If no values have yet been defined with the remote control, the detector operates according to the default programme. This consists of two fixed values for the length of time the device is switched on, the electronic setting for the field of detection and the light exposure level (2 minutes/maximum electronic range/10 lux). These values can be individually adjusted using the remote control. To return settings to the original default values, press the (S) button (ensure that you are in programming mode) on the remote control MobilRCi.

Activation time setting button (Fig. 7.3)

Activation time adjustable: impulse, 15 seconds – 16 minutes. Impulse means that the device is activated for approx. 1 second followed by a break of approx. 9 seconds in which no movement is detected. The focus LED is activated for 2 seconds for each sequence. After the break time a new sequence is triggered if motion is detected. This is suitable, for example, to activate a gong.

Light exposure level setting button (Fig. 7.4)

The light exposure level is infinitely variable between 2 – 2500 lux.

Range control setting button (Fig. 7.2)

Depending on the model there are 1 to 3 setting buttons. The control unit for setting the range depends on the settings on the operating mode button. Range control: from approx. 20 m – approx. 5 m.

6 • REMOTE CONTROL

NB: To use the remote control Mobil-RCi, the operating mode button must be set to "Auto (RC-ii)" (Fig. 7.1). If the operating button is set to "Auto (RC-ii)" and if no parameters have yet been entered via the remote control, the device operates using a preset default programme (10 Lux/2 minutes/max. electronic range).

All entries made by remote control are saved permanently. If there is a power cut, the settings are restored. The settings can conveniently be made from the ground without the need for a ladder or tools using the MobilRCi or MobilRCi-M (Fig. 10) remote control. For best results, point the remote control at the motion detector when programming the device. Please note that if exposed to direct sunlight, the standard range of approx. 6 m is considerably reduced on account of the infrared emissions from the sun.

6.1 Confirmation of commands on the device:

Command understood and carried out. Focus-LED 2 seconds ON, the relay switches on twice for 1 second. **Command not understood.** Focus-LED flashes twice, the relay is not responding.

6.2 Standard functions/programming mode

There are basically two difference options for entering values via the remote control.

Standard functions

These functions can be selected directly:

- Test mode
- Continuous light mode ON/OFF
- Reading the current light exposure level
- Reset (reset the current modes)
- Master X
- Programming mode

Programming mode

These functions can only be selected/set if the device is in programming mode button (S).

- Predefined light levels
- Predefined activation time
- Activating the impulse mode
- Holiday mode
- Alarm mode
- Creep zone protection ON/OFF
- Focus-LED ON/OFF
- Electronic range control
- Reset – (reset to default programme/factory settings)

NB: The special features impulse, vacation and alarm mode cannot be used at the same time. The programme activated most recently is active.

Button	Function
	Opens programming mode Display by flashing Focus LED. The set values are active once the programming mode is closed, (🔒) or are automatically activated after 5 minutes.
	Closes programming mode
	Test mode During test mode the focus LED is switched on permanently. Each time movement is detected, regardless of how the light exposure level, the detector switches ON for 1 second and OFF for 2 seconds. Press the (🔒) button to quit test mode.
	Setting the light source (programming mode) Day and night operating mode
	The sun is starting to set (approx. 100 Lux)
	The sun is almost set (approx. 25 Lux)
	Night mode (approx. 2 Lux)
	Recording the current light exposure level Records the current light exposure level.
	Switching time (programming mode) Adjustable from 15 seconds to 30 minutes.
	Impulse mode (programming mode) Impulse means that the device is activated for 1 second followed by a break of 9 seconds in which no movement is detected. The focus LED is activated for 2 seconds for each sequence. After the break time a new sequence is triggered if motion is detected. This is suitable, for example, to activate a gong.
	Continuous light mode ON/OFF Load is switched ON/OFF for max. 12 hours, regardless of the light exposure level or movements. ! NB: The function continuous light mode OFF is deactivated by the manufacturer so that the device cannot be tampered with. It can only be activated during an auto-test cycle. To run this, connect the power supply and press the (🔒) button. The function continuous light mode OFF is now activated. To deactivate this function press the (🔒) button when the device is in programming mode (reset to default setting). Operating continuous light mode ON/OFF Continuous light mode OFF deactivated – Every time the (🔒) button is pressed, the light switches ON for 12 hours. Continuous light mode OFF activated – Pressing the (🔒) button once switches the light ON for 12 hours. If the (🔒) button is pressed again, the light is switched OFF for 12 hours. Pressing the (🔒) button a further time switches the light ON – OFF – ON in sequence. ! NB: Pressing the (🔒) button deactivates the special function impulse mode, alarm mode and holiday mode. Once the 12 hours have expired, or the continuous light mode is cancelled by pressing the (🔒) button, the detector switches to automatic mode.
	360° creep zone protection ON/OFF (programming mode) Deactivate the 360° sensor, which should be facing down, to avoid the device switching on accidentally. Press the (🔒) button again to reactivate creep zone protection.
	Focus LED ON/OFF (programming mode) Press this button once to switch off the Focus LED – press again to switch it back on. The Focus LED briefly lights up to indicate that it is active. It continues to confirm that a function has been activated.
	Alarm mode (programming mode) If movement is detected the detector switches ON for 1 second and OFF for 1 seconds. This continues for 30 seconds (flashing phase). Then the light switches to continuous mode for the rest of the activation time, or another alarm phase is triggered if motion is detected. To cancel this function, press the (🔒) button. To end the alarm function, press the (🔒) button.
	Holiday mode (programming mode) This function activates the connected lighting for 4 hours once a predefined light level is reached, regardless of whether motion is detected or not. Once the 4 hours have expired, the motion detector switches back to automatic mode. The process is repeated every day. To cancel, press the (🔒) button. To quit holiday mode, press the (🔒) button.
	Reset Reset to automatic mode. This cancels alarm mode, holiday mode, test mode and night activation time. Reset – in programming mode (🔒) Reset to default settings. Deletes all values set by the remote control and resets all functions. The device operates according to its predefined default programme (10 Lux/2 minutes/max. electronic range). ! NB: If the continuous light mode OFF function is to be used, this will need to be reactivated.
	Master X This is used to activate the continuous light OFF function (see continuous light ON / OFF) and to cancel the night activation times.
	Electronic range control This function electronically increases or decreases the range by +15 % and -30 % respectively. The (🔒) button resets the default settings.

7 • PRACTICAL ADVICE

- The device can be activated by small animals or branches and bushes swaying in the wind.
- The range can be greatly decreased if the person/vehicle approaches the detector head on.

• TECHNICAL DATA

MAINS VOLTAGE	230 V ~ 50 Hz
FIELD OF DETECTION	130° (1 x 130° can be set independently) and 360° creep zone protection 230° (2 x 115° can be set independently) and 360° creep zone protection 280° (3 x 95° can be set independently) and 360° creep zone protection
RANGE	approx. 20 m, at an installation height of 2.50 m
SETTINGS	Mechanically using the setting controls, electronically using the infrared remote control
SWITCHING CAPACITY	230 V ~ 50 Hz, 2300 W/10 A (cos φ = 1), 1150 VA/5 A (cos φ = 0,5)
MAX INRUSH CURRENT	100A/250µs 100A/250µs 100A/250µs
TIME SETTING	Impulse/approx. 15 seconds - 30 minutes
LIGHT EXPOSURE VALUE APPROX.	2 - 2500 Lux
PROTECTION TYPE/CLASS	IP 54, II
TEST SYMBOL	TÜV Süd
OPERATING TEMPERATURE RANGE	-25 °C...+55 °C
CASING	UV-stabilised polycarbonate
COLOUR	white, similar to RAL 9010, brown, similar to RAL 8017, black, similar to RAL 9005, Stainless steel look
APPROX. DIMENSION	Width 78 mm, Height 105 mm, Depth 135 mm

Technical and design features may be subject to change.