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STEINEL® PROFESSIONAL

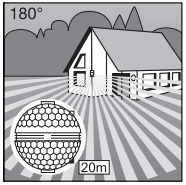
Information

IS 2180-5

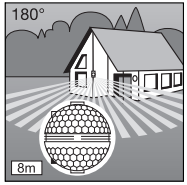
D GB CZ SK PL RO SLO HR EST LT LV RUS BG

Das Prinzip

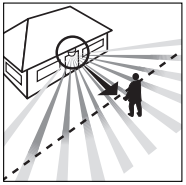
Der IS 2180-5 ist mit zwei 120°-Pyro-Sensoren ausgestattet, die die unsichtbare Wärmestrahlung von sich bewegenden Körpern (Menschen, Tieren etc.) erfassen. Diese so erfasste Wärmestrahlung wird elektronisch umgesetzt, und ein angeschlossener Verbraucher (z.B. eine Leuchte) wird eingeschaltet. Durch Hindernisse wie z.B. Mauern oder Glasscheiben wird keine Wärmestrahlung erkannt, es erfolgt also auch keine Schaltung. Mit Hilfe der zwei Pyro-Sensoren wird ein Erfassungswinkel von 180° mit einem Öffnungswinkel von 90° erreicht. Die Linse ist abnehmbar und drehbar. Dies ermöglicht zwei Reichweiten-Grundeinstellungen von max. 8 m oder 20 m. Mit den beiliegenden Wandhaltern lässt sich der Infrarot-Sensor problemlos an Innen- und Außenecken montieren.



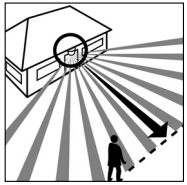
Reichweite max. 20 m



Reichweite max. 8 m



Gehrichtung: frontal

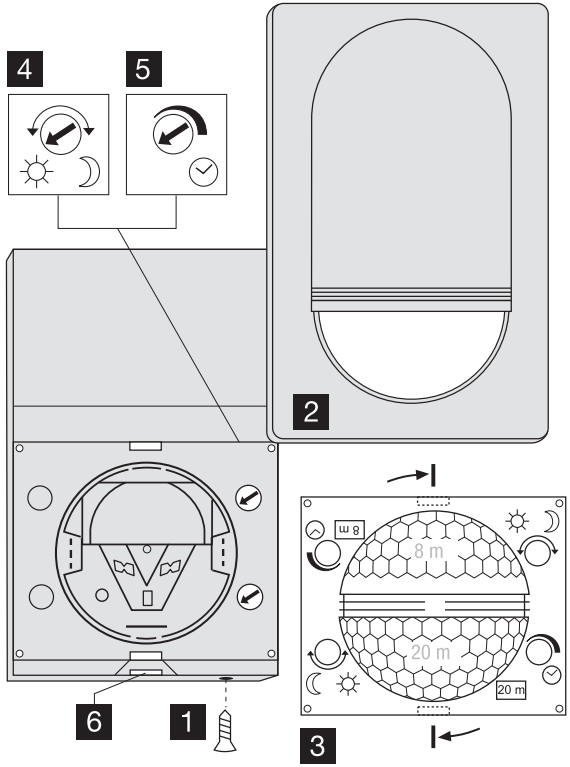


Gehrichtung: seitlich

Wichtig: Die sicherste Bewegungserfassung haben Sie, wenn das Gerät seitlich zur Gehrichtung montiert wird und keine Hindernisse (wie z.B. Bäume, Mauern etc.) die Sicht des Sensors behindern.

⚠ Sicherheitshinweise

- Vor allen Arbeiten am Bewegungsmelder die Spannungszufuhr unterbrechen!
- Bei der Montage muss die anzuschließende elektrische Leitung spannungsfrei sein. Daher als Erstes Strom abschalten und Spannungsfreiheit mit einem Spannungsprüfer überprüfen.
- Bei der Installation des Sensors handelt es sich um eine Arbeit an der Netzspannung. Sie muss daher fachgerecht nach den landesspezifischen Installationsvorschriften und Anschlussbedingungen durchgeführt werden (D - VDE 0100, A - ÖVE-EN 1, CH - SEV 1000).
- Beachten Sie bitte, dass der Sensor mit einem 10 A-Leitungsschutzschalter abgesichert werden muss. Die Netzzuleitung darf max. einen Durchmesser von 10 mm haben.
- Zeit- und Dämmerungseinstellung nur mit montierter Linse vornehmen.



CE Konformitätserklärung

Dieses Produkt erfüllt die:
- Niederspannungrichtlinie 2006/95/EG
- EMV-Richtlinie 2004/108/EG.

Funktionsgarantie

Dieses STEINEL-Produkt ist mit größter Sorgfalt hergestellt, funktions- und sicherheitsgeprüft nach geltenden Vorschriften und anschließend einer Stichprobenkontrolle unterzogen. STEINEL übernimmt die Garantie für einwandfreie Beschaffenheit und Funktion.

FUNKTIONS-
36 Monate
GARANTIE

Die Garantiefrist beträgt 36 Monate und beginnt mit dem Tag des Verkaufs an den Verbraucher. Wir beseitigen Mängel, die auf Material- oder Fabrikationsfehlern beruhen, die Garantieleistung erfolgt durch Instandsetzung oder Austausch mangelhafter Teile nach unserer Wahl.
Eine Garantieleistung entfällt für Schäden an Verschleißteilen sowie für Schäden und Mängel, die durch unsachgemäße Behandlung oder Wartung auftreten.
Weitergehende Folgeschäden an fremden Gegenständen sind ausgeschlossen.

Die Garantie wird nur gewährt, wenn das unzerlegte Gerät mit Kassenbon oder Rechnung (Kaufdatum und Händlerstempel), gut verpackt, an die zutreffende Servicestation eingesandt oder in den ersten 6 Monaten dem Händler übergeben wird.

Reparaturservice:
Nach Ablauf der Garantiezeit oder Mängeln ohne Garantieanspruch fragen Sie Ihre nächste Servicestation nach der Möglichkeit einer Instandsetzung.

GB Installation instructions

Dear Customer,
Congratulations on purchasing this STEINEL Infrared Sensor and thank you for the confidence you have shown in us. You have chosen a high-quality product that has been manufactured, tested and packed with the greatest care.
Please familiarise yourself with these instructions before attempting to install the sensor since prolonged reliable and trouble-free operation will only be ensured if it is installed properly.

We hope your new infrared sensor will give you lasting satisfaction.

System components

1. Locking screw
2. Designer front trim
3. Lens (can be removed and turned for selecting the max. basic reach settings of 8 m or 20 m)
4. Twilight setting: 2 - 2,000 lux
5. Time setting 5 sec. – 15 min.
6. Clip (housing lifts up for installing and connecting to the mains)

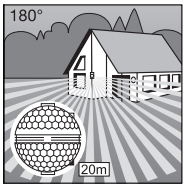
Technical Specifications

Dimensions:	(H x W x D) 120 x 76 x 56 mm
Output:	
	Incandescent lamps, 1000 W max. at 230 V AC
	Fluorescent lamp, 500 W max., at cos φ = 0.5, inductive load at 230 V AC
	6 x 58 W max., C ≤ 132 µF at 230 V AC *1)
Power supply:	230 – 240 V/50 Hz
Angle of coverage:	180° horizontally, 90° vertically
Sensor reach:	Basic setting 1: 8 m max. Basic setting 2: 20 m max. (factory setting) + precision adjustment 1-20 m using shrouds
Time setting:	5 sec. – 15 min. (factory setting: 5 sec.)
Twilight setting:	2 – 2000 lux (factory setting: 2000 lux)
Manual override:	(4 hours)
IP rating:	IP 54

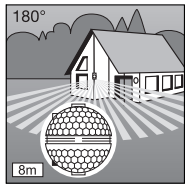
*1) Fluorescent lamps, low-energy lamps, LED lights with electronic ballast (total capacity of all ballasts connected below the level stated).

Principle

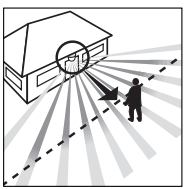
The IS 2180-5 is equipped with two 120° pyro sensors that detect the invisible heat emitted from moving objects (people, animals etc.). The heat detected is electronically converted into a signal that switches on loads (e.g. a light) connected to it. Heat is not detected through obstacles, such. as walls or panes of glass. Heat radiation of this type will, therefore, not trigger the sensor. The two pyro sensors achieve a coverage angle of 180° with an aperture angle of 90°. The lens can be removed and turned, thereby permitting two max. basic reach settings of 8 m or 20 m. Using the wall mounts provided with the unit, the infrared sensor can easily be fitted to internal and external corners.



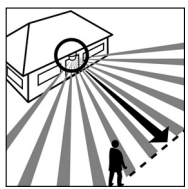
Reach max. 20 m



Reach max. 8 m



Direction of approach: from the front



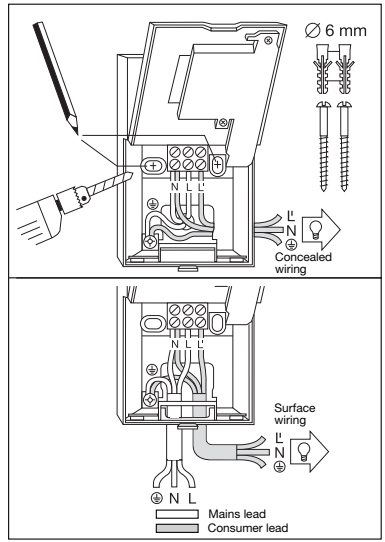
Direction of approach: from the side

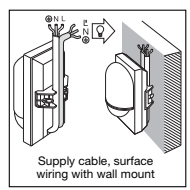
Important: The most reliable way of detecting movement is to install the unit with the sensor aimed across the direction in which a person would walk and by ensuring that no obstacles (such as trees, walls etc.) obstruct the line of sensor vision

⚠ Safety precautions

- Disconnect the power supply before attempting any work on the motion detector.
- During installation, the electric power cable being connected must not be live. Therefore, switch off the power first and use a voltage tester to make sure the wiring is off circuit.
- Installing the sensor involves work on the mains power supply. This work must therefore be carried out professionally in accordance with the applicable national wiring regulations and electrical operating conditions (D - VDE 0100, A - ÖVE-EN 1, CH - SEV 1000).
- Please note that the sensor must be protected by a 10 A circuit breaker. The mains supply lead must be no greater than 10 mm in diameter.
- Only carry out time and twilight settings with the lens fitted.

Installation/Wall mounting





Supply cable, surface wiring with wall mount

Note: The inside corner wall mount can also be used for wall installation with surface-mounted power supply lead. The cables can be conveniently routed down the surface of the wall behind the unit and fed through the cable entry.

The site of installation should be at least 50 cm from a light because heat radiated from it may trigger the sensor unintentionally. To obtain the specified ranges of 8/20 m, the sensor should be installed at a height of approx. 2 m.

Installation procedure:
1. Remove designer front trim 2, **2.** release clip 6 and fold up lower half of enclosure, **3.** mark drill holes, **4.** drill holes, fit wall plugs (Ø 6 mm), **5.** if necessary, break open cable entry if using surface-mounted or concealed wiring.
6. Feed through mains and load power supply lead and connect. Use sealing plugs for surface wiring.

a) Connect mains supply lead

The main supply leads is a 2 to 3-core cable:
L = phase
N = neutral conductor
PE = protective-earth conductor ⏚

If you are in any doubt, identify the conductors using a voltage tester; then disconnect from the power supply again. The phase (**L**) and neutral conductor (**N**) are connected according to terminal assignment. The protective-earth conductor is connected to the earth terminal (⏚).

A mains switch for switching the unit ON and OFF may of course be installed in the mains supply lead. Alternatively, you may use a normally closed contact pushbutton to activate the sensor manually for the duration of the time setting.

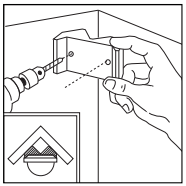
GB

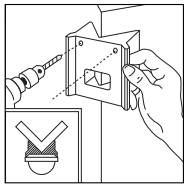
b) Connecting power supply lead for load
The power supply lead to the light is also a 2 - 3-core cable. Connect the light's live conductor to the terminal marked **L'**. Connect the neutral conductor to the terminal marked **N** together with the mains power supply lead's neutral conductor.

Connect the protective-earth conductor to the earth terminal (⏚).
7. Screw on enclosure and re-close.
8. Fit sensor lens (reach either 8 m or 20 m max.), see section on setting reach.

9. Select time setting 5 and twilight setting 4 (see 'Functions').
10. Fit designer front trim 2 and secure in place with lock screw 1 to prevent unauthorised removal.
Important: Reversing the connections may result in damage to the unit.

Installing corner wall mount



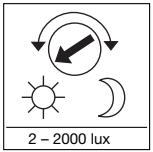


The corner wall mounts provided with the unit make it easy to install the IS 2180-5 on internal and external corners. Use the corner wall mount as a template for drilling holes. This way, you will drill the hole at the right angle, allowing you to fit the wall mount with ease.

Functions

Once you have connected the unit to the mains power supply, closed the housing and fitted the lens, you are ready to put the system into operation. Two setting options are concealed behind the designer front trim 2.

Important: Only select time and twilight setting with the lens in place.

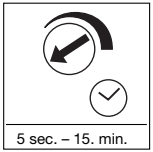


Twilight setting (response threshold) 4
(Factory setting: daylight operation 2000 lux)

The sensor's response threshold can be infinitely varied from 2 – 2000 lux.
Control dial set to ☼ = daylight operation at approx. 2000 lux.

Control dial set to ☽ = twilight operation at approx. 2 lux.

To adjust the detection zone in daylight, the control dial must be set to ☼ (daylight operation).



Switch-OFF delay (time setting) 5
(factory setting: 5 sec.)

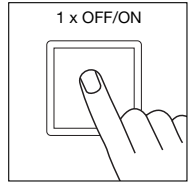
Light ON duration can be infinitely varied from 5 sec. to 15 min.
Control dial turned fully anticlockwise) = shortest time (5 sec.)
Control dial turned fully clockwise = longest time (15 min.)

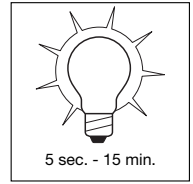
When setting the detection zone, it is recommended to select the shortest time (dial turned fully anticlockwise).

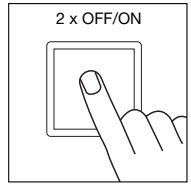
Manual override function

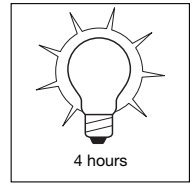
If a mains switch is installed in the mains supply lead, the following functions are provided in addition to simply switching light ON and OFF:

Important:
The switch should be actuated in rapid succession (in the 0.5 –1 sec. range).









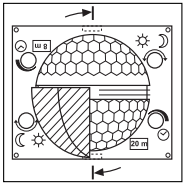
Sensor mode
1) Switch light ON:
Switch OFF and ON once. Light stays on for the period selected.

2) Switch light OFF:
Switch OFF and ON once. Light goes out or switches to sensor mode.

3) Manual override:
Turn switch OFF and ON twice. The light is set to stay ON permanently for 4 hours (LED - below the lens - lights up) and then automatically returns to sensor mode (LED OFF).

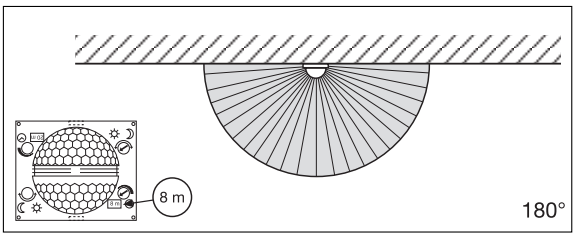
Manual override can also be deactivated during the 4-hour period by switching OFF and back ON again. The light then returns to sensor mode.

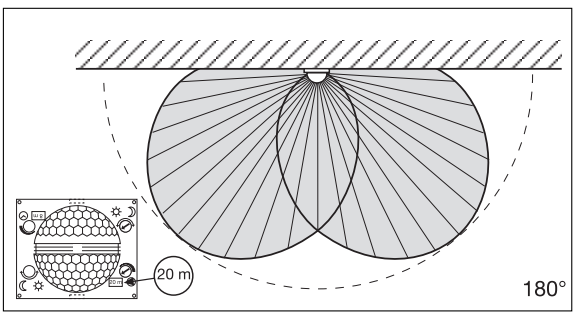
Basic reach settings



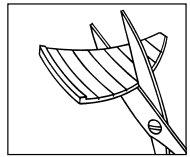
The lens of the IS 2180-5 is divided into two detection zones. One half covers a max. reach of 8 m, the other half a max. reach of 20 m (when installed at a height of approx. 2 m). After fitting the lens (firmly clamp lens into the slot provided), the max. 20 m or 8 m reach setting selected is indicated at the bottom right). Using a screwdriver, the lens can be unclipped from the groove at the side and re-positioned for the reach you require.

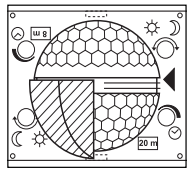
Examples





Precision adjustment using shrouds

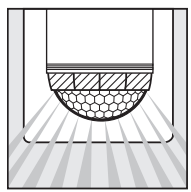


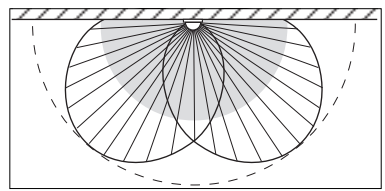


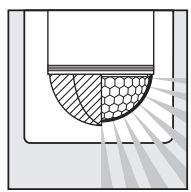
Shrouds may be used to define the detection zone exactly as you require in order, for example, to blank out or specifically target paths or neighbouring premises.
The shrouds can be divided or cut with a pair of scissors along the vertical and horizontal grooves. They can be then clipped into the top channel around the centre of the lens. They are fixed in place by fitting the designer front trim.

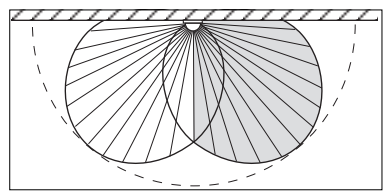
(See below: examples showing how to reduce the angle of coverage and shorten reach.)

Examples

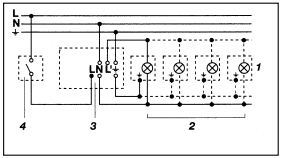




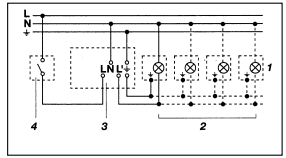




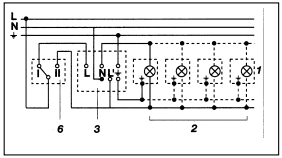
Connection examples



1. Light without neutral conductor



2. Light with neutral conductor



3. Connection using an indoor two-way switch for manual override and automatic operation
Setting I: Automatic operation
Setting II: Manual operation, light permanently ON
Note: The system cannot be switched OFF, it is only possible to select operation at setting I or II.

1) e. g. 1-4 x 100 W incandescent lamps
2) load, lighting 1000 W max. (refer to Technical specifications)
3) IS 2180-5 connection terminals
4) Indoor switch
5) Indoor two-circuit single interruption switch, manual operation, automatic operation
6) Indoor two-way switch, automatic operation, manual override

Operation/Maintenance

The infrared sensor can be used for switching light ON and OFF automatically. The unit is not suitable for burglar alarm systems as it is not tamperproof in the manner prescribed for such systems.

Weather conditions may affect the way the motion detector works. Strong gusts of wind, snow, rain or hail may cause the light to come ON when it is not wanted because the sensor is unable to distinguish sudden changes of temperature from sources of heat. The detector lens may be cleaned with a damp cloth if it gets dirty (do not use cleaning agents).

Troubleshooting

Malfunction	Cause	Remedy
IS 2180-5 without power	■ Fuse faulty, not switched ON ■ Short circuit ■ Mains switch OFF	■ Replace fuse, turn ON mains switch, check lead with voltage tester ■ Check connections ■ Switch ON
IS 2180-5 will not switch ON	■ Twilight setting in night-time mode during daytime operation ■ Bulb faulty ■ Mains switch OFF ■ Fuse faulty ■ Detection zone not properly targeted	■ Adjust setting ■ Change bulb ■ Switch ON ■ Fit new fuse, check connection if necessary ■ Re-adjust
IS 2180-5 will not switch OFF	■ Continued movement in detection zone ■ Light being operated is located in detection zone and keeps switching ON as a result of temperature change ■ Set to continuous operation by indoor two-circuit single interruption switch	■ Check detection zone and re-adjust if necessary or fit shrouds ■ Adjust detection zone or fit shrouds ■ Set two-circuit single interruption switch to automatic operation
IS 2180-5 keeps switching ON/OFF	■ Lamp being operated in located the detection zone ■ Animals moving in detection zone ■ Heat source (e.g. extractor hood outlet) in detection zone	■ Adjust detection zone or fit shrouds, increase distance ■ Adjust detection zone or fit shrouds ■ Adjust detection zone or fit shrouds
IS 2180-5 switches ON when it should not	■ Wind is moving trees and bushes in the detection zone ■ Cars in the street are being detected ■ Sudden temperature changes due to weather (wind, rain, snow) or air expelled from fans, open windows	■ Fit shrouds to mask out zones ■ Fit shrouds to mask out zones ■ Change zone, move site of installation

GB

CE Declaration of Conformity

This product meets:
- Low-Voltage Directive 2006/95/EC
- EMC Directive 2004/108/EC.

Functional warranty

This STEINEL product has been manufactured with utmost care, tested for proper operation and safety and then subjected to random sample inspection. STEINEL guarantees that it is in perfect condition and proper working order.

FUNCTIONAL
36 month
WARRANTY

The warranty period is 36 months and starts on the date of sale to the consumer. We will remedy defects caused by material flaws or manufacturing faults. The warranty will be met by repair or replacement of defective parts at our own discretion. The warranty shall not cover damage to wear parts, damage or defects caused by improper treatment or maintenance.
Further consequential damage to other objects shall be excluded.

Claims under warranty shall only be accepted if the product is sent fully assembled and well packed complete with receipt or invoice (date of purchase and dealer's stamp) to the appropriate service centre or handed in to the dealer within the first 6 months.

Repair service:
If defects occur outside the warranty period or are not covered by warranty, ask your nearest service station for the possibility of repair.

CZ Montážní návod

Vážený zákazníku, děkujeme vám za důvěru, kterou jste nám projevil zakoupením tohoto nového infračerveného senzoru značky STEINEL. Rozhodl jste se pro vysoce kvalitní produkt, který byl vyroben, testován a zabalen s největší možnou pečlivostí. Před instalací se, prosím, seznamte s tímto montážním návodem. Pouze odborně provedená instalace a zprovoznění totiž zaručí dlouhý, spolehlivý a bezporuchový provoz.

Přejeme vám, abyste byl s novým infračerveným senzorem naprosto spokojen.

Popis přístroje

1 Pojistný šroub
2 Tvarová clona
3 Čočka (odnímatelná a otočná za účelem základního nastavení dosahu - max. 8 m nebo 20 m)
4 Soumrakové nastavení 2 – 2000 lx
5 Časové nastavení 5 s – 15 min.
6 Zarážka (těleso senzoru je výklopné za účelem montáže a připojení k síti)

Technické parametry

Rozměry:	(v x š x h) 120 x 76 x 56 mm
Výkon:	žárovky, max. 1000 W při 230 V AC osvětlovací trubice, max. 500 W při cos φ = 0,5, induktivní zatížení při 230 V AC 6 x max. po 58 W, C ≤132 µF při 230 V AC *1)
Připojení k elektrické síti:	230 – 240 V, 50 Hz
Úhel záchytu	180° vodorovně, 90° svisle
Dosah senzoru:	základní nastavení 1: max. 8 m základní nastavení 2: max. 20 m (nastavení z výroby) + jemné doladění krycími miskami 1-20 m
Časové nastavení:	5 s – 15 min. (nastavení z výroby: 5 s)
Soumrakové nastavení:	2 – 2000 lx (nastavení z výroby: 2000 lx)
Trvalé osvětlení:	spínatelné (4 hodiny)
Krytí:	IP 54

*1) Zářivky, úsporné žárovky, LED lampy s elektronickým předřadným zařízením (celková kapacita všech připojených předřadných zařízení pod uvedenou hodnotou).